The Economic Security of Business Transactions
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INTRODUCTION

“Every year around one trillion euro’s is lost in EU Member States because of tax evasion and tax avoidance. (…). Tax evasion is unfair to citizens who work hard and pay their share of taxes for a society to work. It is unfair to companies that pay their taxes – but find it hard to compete because others don't. Finally tax evasion is a serious problem for countries that need resources to restore sound public finances.”

Herman van Rompuy
European Council, May 22, 2013

Providing you with this book, we are aware that it merely opens a discussion on the security of the contemporary business transactions. To what extent is the international economic order of the past thirty years, determined e.g. in the United Nations Convention on Contracts for the International Sale of Goods, a fiction of equality and mutual benefits, which is separated from the risk of the business transactions in the 21st century, and to what extent does it refer to actual mutual obligations and respect of the belief and trust in international trade? To what extent has the process of establishing and developing individual multinational corporations introduced asymmetry in the accumulation of capital and its use for subjective purposes? How strong can the temptation and actions aimed at treating tax law subjectively, through commercial
and collective tax evasion be? And finally, how can the countries – which are national by name rather than actually, ensure their own economic security, protecting their own budgets against drainage and counteracting an uncontrolled increase in public debt? These are only some of the questions which should be posed when talking in general about managing a country, and especially a business.

We are convinced that the economic security of business transactions should be discussed systematically, within the scope of two distinguished, yet merging categories: economic, including the exchange of goods and services determined by supply and demand, and legal, determined by economic law within the scope of civil law. A kind of a superordinate category in this system should be a management system which enables entrepreneurs, contractors, or final consumers to make managerial decisions. Only such a situation, considered from an individual’s, entrepreneur’s or state’s point of view, enables minimizing risk through carrying out an analysis and presenting a forecast for the security of the business transactions. However it is important to remember that there is often an information gap, and if this happens too often, in the long term it always leads to making irrational decisions, which threatens the economic security of the business transactions of a given entity.

This edited volume includes 24 articles, prepared in the form of chapters by 35 authors – researchers. The whole is divided into three topic areas: Shadow Economy and Tax Evasion, Economy and Business transactions, and Management and Economic Security. The first area includes five chapters in which the unofficial economy is described in the context of tax evasion and the chances and threats related to their elimination. Particularly noteworthy is the survey which has been carried out in Poland and in its neighbouring countries for the first time, which concerns VAT evasion and evading the tax from self-employment activities. This topic was intentionally placed at the beginning of the book to emphasise its importance and relevance now that many entrepreneurs, the public finances of many countries are in crisis and there are no appropriate solutions, as it stands, to the present and/or any future problems.

The second topic area (economy and business transactions) includes eleven chapters which refer to the economy in a broad sense and crisis, budget planning, tax competition, public transfers, economic intel-
Introduction

ligence, risk systematization, bank guarantee and supervision, and the role of the Supreme Chamber of Control in the economic processes.

Management and economic security is the third part of the book which includes eight chapters. In this part the following issues are presented in the context of the economic security: process management, local government cooperation networks, foreign trade, non-military threats, rules for input VAT deduction, management of companies’ real estate, security of electronic transactions, or industry-based attitudes towards the protection of the national economic security.

We hope that the review of the fundamental, but not the only problems of economic security presented in this monograph will give you a different, holistic perspective on business transactions, in which the rules of the game change much faster than the decisions at political and organisational level which sanction what is already taking place. However, this requires politicians in individual countries to have a conscious knowledge of economic processes and threats, which they would use in practice, not subjectively and in lobbying, since that would enable a real and not apparent elimination of the incapability of state and market.

Konrad Raczkowski
Friedrich Schneider
PART I

SHADOW ECONOMY AND TAX EVASION
CHAPTER 1

Size and development of the shadow economy and of tax evasion within Poland and of its neighbouring countries from 2003 to 2013: some new facts

Friedrich Schneider* and Konrad Raczkowski**

Abstract

In this paper the size and development of the shadow economy and of tax evasion within Poland and neighbouring countries (except for the Ukraine) are calculated over the period 2003 to 2010. The size and development of the shadow economies is also shown for 36 highly developed OECD countries. The average size of the shadow economy in 27 EU-Countries was 22.3% in 2003 and decreased to 18.4% (of official GDP) in 2013. We also consider the

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most important driving forces of the shadow economy in 38 OECD countries. The biggest ones are with 14.6% unemployment and self-employment, followed by tax morale with 14.5% and GDP growth with 14.3%. The proportion of tax evasion (accounting for indirect taxation and self-employment activities) was on average 4.2% (of official GDP) in Poland, 1.9% in Germany and 2.9% in the Czech Republic.

**Keywords:** shadow economies of 36 OECD countries, tax evasion within Poland, the Czech Republic, Germany, Lithuania and the Slovak Republic, driving forces of the shadow economy, tax pressure, state regulation

### 1. Introduction

For the first time in this paper the size and development of the shadow economy and the size and development of tax evasion of Poland and its neighbouring countries are investigated. With respect to tax evasion the paper concentrates on two important aspects: tax evasion by not paying the VAT and tax evasion which originates from activities from self-employment. Hence, this paper is an attempt to estimate the size and development of tax evasion over the period 1999 to 2010 and to investigate whether the amount of tax evasion has been reduced or has been increased over time. This is a purely empirically orientated paper.

Chapter 2 presents the shadow economy in terms of its semantic scope as well as the characteristics of its expansion.

In the chapter 3 the size and development of the shadow economies in 36 OECD countries are shown over the period from 2003 to 2013. We also concentrate on Poland and its neighbouring countries (except for the Ukraine). Chapter 4 is a short remark about the most important driving forces. In chapter 5 (the core chapter of this paper), the size and development of tax evasion of Poland and its neighbouring countries is shown. Finally, chapter 6 provides some concluding remarks.
2. Unofficial economy vs. grey economy – what we know about it

Because of inconsistencies in defining the “unofficial economy,” research literature, legislative acts and media publications contain descriptions of the unofficial economy that are not always synonymous to the potential readers. Also it should be very strongly stressed that the grey economy is just one of more components of the unofficial economy that, in turn, is an inherent component of the functioning of each national economy. The unofficial (informal) economy (which is also defined as the shadow economy being its most corresponding synonym) is divided into (Fig. 1) [Raczkowski, 2013, pp. 353–354]:

a) Semi-legal or grey economy;
b) Wholly illegal economy or the so-called “black market.”

“The grey economy (unofficial semi-legal economy) is both a deliverance and a threat to the state. Everything depends on whether the person engaged in such business, which typically applies tax optimization on purpose and, at the same time, evades taxes, is motivated by the account of unlimited profits and calculated losses or struggles to keep the company on the market” [Raczkowski, 2013, p. 360]. On the other hand, the black market (unofficial wholly illegal economy) with its inherently criminal nature is nothing more but a threat. The existence of the black market directly undercuts or blocks the pursuits of legal business and threatens the state as an organization [Raczkowski, 2013, p. 356].

Usually, the participants of the unofficial semi-legal (grey) economy undertake two types of activities at the same time: lawful tax optimization (tax avoidance) and illegal tax evasion. Provided that tax avoidance can “bear the marks of lawfulness” only in nominal terms, in fact being a form of tax evasion or typical organized crime (component of the unofficial wholly illegal economy). These are overlapping areas that grow or shrink depending on the stringency of the legal and organizational system of the state (resource emigration filter).

“If we assume that the taxpayer gives preference to solution A (semi-legal, unlawful) over solution B (legal), so in the transitivity of preferences he always chooses solution A (semi-legal, unlawful). Whilst the taxpayer more favours solutions generating actual added value (profit) – resources A than those causing its decline by means of
Shadow economy and tax evasion

* Insider trading – use of non-public information in transaction with securities of their own companies by the persons employed in a given company (insiders), or persons having privileged access to it (brokers, auditors).

**Figure 1.** Unofficial economy in the context of the whole economic operations carried out by the state

tax optimization (loss – negative financial outcome) – resources B, at
the same time favouring resources A over other resources C (legality
of conduct), so in the ultimate choice the taxpayer gives preference to
resource A over resource C. In other words it is more beneficial to opt
for the semi-legal solution, being unlawful to some extent” [Racz-
kowski, p. 355].

Many national states, noticing the phenomena of tax evasion and
tax avoidance are implementing or going to implement specific re-
forms, such as the following:¹

a) Bulgaria, 2012: Adopted a fiscal strategy to improve tax collec-
tion and control the avoidance of taxation.

b) Cyprus, December 2012: Allocated special funds for tax avoid-
ance and financial abuse control in their successive budget for
2013. Imposed a number of obligations on both the business
and the tax administration to improve information sharing and
tighten tax regulations. Non-residents are required to file annual
tax returns and foundations are expected to account for divi-
dends and interest.

c) Latvia: Adopted the so-called “zero declaration” for the legal
notification of non-declared income to combat tax evasion and
tax avoidance.

d) Portugal, 2010: Adopted solutions enabling more control of tax
evasion.

e) Estonia: Reinforced their controls against tax avoidance by con-
trolled foreign companies (CFC), including specifically the re-
strictions on the use of transfer pricing systems.

f) UK: Seems to be the most successful and far going in its strug-
gle against tax avoidance and evasion. Since 2010 they have
earmarked almost 1 billion pounds for the control of tax abuses,
tax avoidance (tax optimization) and tax evasion. They em-
ployed almost 2.5 thousand new employees at HMRC and allo-
cated a special team of Offshore Co-ordination Unit to combat
tax offenses in tax havens. They have provided for a possibility
of publishing names of tax legislation abusers or offenders and
established a penal tax rate of up to 200% against their tax
evaders [No save…, 2013, p. 2]. On July 17, 2013, they passed

¹ Taxation trends in the European Union. Data for the UE Member States, Iceland
a General Anti Abuse Rule (GAAR), effective since April 1, 2013, enacted as part of their budgetary law (Finance Act’s grant of Royal Assent), the purpose of which is to enable the management of the tax avoidance risks [Aaronson, 2011; Freedman, 2012, pp. 22–27; General…, 2013, pp. 1–3]. The overall goal is to deter businesses from aggressive tax planning and make them take into account the effect of GAAR each year as part of the planning as such [UK Finance, 2013].

g) A group of states including Indonesia, Japan, Mexico, Poland and Russia do not yet have any statutory regulations addressing strictly the avoidance of taxes (tax optimization) similar to or coinciding with GAAR [GAAR…, 2013, pp. 32–84].

It seems that tax abuse, including specifically the cadging of VAT returns from the governments, can become more common as part of the EU’s common market with its intra-community transactions for the supply and purchase of goods and the related entitlement to use the 0% VAT rate. This not only leads to lower government revenues, which requires increasing the debt or cutting on the spend (resulting in slower economic growth) but, first of all, suppresses fair competition by questioning the purpose of paying taxes. It is estimated that “around one trillion Euros is lost to tax evasion and avoidance every year in the EU” [Clamping…, 2012]. In view of the rise of this adverse trend, the European Parliament passed a resolution of 19 April 2012 on the call for concrete ways to combat tax fraud and tax evasion. And on December 6, 2012, the European Commission adopted an “Action Plan to strengthen the fight against tax fraud and tax evasion” together with recommendations with respect to aggressive tax planning. On the same day, the Commission passed also a “Recommendation regarding measures intended to encourage third countries to apply minimum standards of good governance in tax matters” that demonstrates how serious the problem of tax abuse is in the European

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Union as such. There are 13 tax havens in Europe “as such” and the Mediterranean: Andorra, Guernsey, Jersey, Cyprus, Gibraltar, Isle of Man, Ireland, Lichtenstein, Luxembourg, Malta, Monaco, San Marino and Switzerland. And there are almost 51 tax havens worldwide (Fig. 2) [Gravelle, 2013, p. 4]. The difference in the number of tax havens between the cited paper (51) and the table (50) results from the fact that the Channel Islands have not been counted as a single tax haven but split into two separate islands of Guernsey and Jersey. At the same time, Oxfam included two large tax havens (the state of Delaware and the Netherlands) in the aggregate classification.

As shown by the Oxfam research, as much as US$ 18.5 trillion has been hidden in tax havens, which means a US$ 156 billion per year tax gap in the aggregate budget of the EU states. Of this amount, US$ 12 trillion is held in the 21 tax havens associated with the EU states (which represents two thirds of the whole number). Almost one third of the tax havens are associated with UK (10 states: Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Gibraltar, Guernsey,
Isle of Man, Jersey, Montserrat and the Turks and Caicos Islands) [Oxfam, 2013], which demonstrates that both EU and particularly UK have to suppress or eliminate the functioning of the tax havens first to make the combat against tax avoidance and evasion possible at all.

3. Size and Development of the Shadow Economies in 36 OECD Countries

In the Tables 1 to 4 the size and development of 31 European and of five non-European shadow economies over the period 2003–2013 is presented. If we first consider the size and development of the shadow economy of Poland it had a value of 27.7% in the year 2003, which then steadily declined to 25.3% in the year 2008, increased slightly to 25.9% in the year 2009 and since then decreased to 23.8% for the year 2013 (forecast). If we consider the direct neighbours of Poland, Germany, the Czech Republic, Slovakia and Lithuania, Germany had a shadow economy of 17.1% in the year 2003 which declined to 14.2% in the year 2008 and increased to 14.6% in 2009 and then decreased again to 13.0% in the year 2013 (forecast) (see also Figures 3 and 4). In the Czech Republic we had a shadow economy of 19.5% in 2003 which decreased to 16.6% in 2008, increased to 16.9% in 2009 and decreased again to 15.5% in 2013 (forecast). In Slovakia we had a shadow economy of 18.4% in 2003 which decreased to 16.0% in 2008, increased to 16.8% in 2009 and decreased again to 15.0% in 2013 (forecast). In Lithuania we had a shadow economy of 32.0% in 2003 which decreased to 29.1% in 2008, increased to 29.6% in 2009 and decreased again to 28.0% in 2013 (forecast). If we consider the results of the average size of the shadow economy of the 27 European Union countries, we realize, that the shadow economy in the

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5 The calculation of the size and development of the shadow economy is done with the MIMIC (Multiple Indicators and Multiple Courses) estimation procedure. Using the MIMIC estimation procedure one gets only relative values and one needs other methods like the currency demand approach, to calibrate the MIMIC values into absolute ones. For a detailed explanation see Friedrich Schneider, editor, Handbook on the Shadow Economy, Cheltenham (UK): Edward Elgar Publishing Company, 2011.

6 The calculated values for 2013 are projections based on the forecasts of the official figures (GDP, unemployment, etc.) of these countries.
year 2003 was 22.3% (of official GDP), decreased to 19.2% in 2008 and increased to 19.8% in 2009 and then decreased again to 18.4% in 2013 (Table 1). If we compare the average of 31 European countries, in 2003 the average size was 22.4%, decreased to 19.4% in 2008, and increased to 19.9% in 2009 and decreased to 18.5% in 2013 (Table 2). If we consider the development of the shadow economy of Australia, Canada, Japan, New Zealand and the USA, we find a similar movement over time (see Table 3); in 2013 these 5 countries had an average size of the shadow economy of 8.6%, in 2010 this value was 9.7%.

**Table 1. Size of the Shadow Economy of 27 European Countries over 2003–2013 (in % of off. GDP)**

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## Shadow economy and tax evasion

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| 27 EU-Countries/ Average (unweighted) | 22.3 | 21.9 | 21.5 | 20.8 | 19.9 | 19.2 | 19.8 | 19.6 | 19.2 | 18.9 | 18.4 |

Source: Own Calculations, December 2012.

### Table 2. Size of the Shadow Economy of 4 European Countries (Non EU-Members) over 2003–2013 (in % of off. GDP)

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Source: Own Calculations, December 2012.
Size and development of the shadow economy and of tax evasion within Poland...

**Table 3.** Size of the Shadow Economy of 5 Highly Developed Non-European Countries over 2003–2013 (in % of off. GDP)

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**Other OECD Countries/ Unweighted Average**

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Source: Own Calculations, December 2012.

**Table 4.** Size of the Shadow Economy of Various Unweighted Averages over 2003–2013 (in % of off. GDP)

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<td>All 36 Countries/ Average (unweighted)</td>
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Source: Own Calculations, December 2012.
If we consider the last 2 years (2012 and 2013, see also Figures 3 and 4) and compare them with the year 2008, we realize that, in most countries, we had again a decrease of the size and development of the shadow economy. This is due to the recovery from the worldwide economic and financial crises. Hence, the most important reason for this decrease is, that, if the official economy is recovering or booming, people have less incentive to undertake additional activities in the shadow economy and to earn extra “black” money. The only exceptions are Greece and Spain, where the recession of the official economy is so strong, that it even reduced the demand of the shadow economy activities due to the severe income losses of the Greek (Spanish) people; the Greek (Spanish) shadow economy will decrease to 23.6% (18.6%) of official GDP in 2013; a decrease of 0.4 (0.6) percentage points compared to the year 2012!

**Figure 3.** Size of the Shadow Economy of 31 European Countries in 2013 (in % of off. GDP)

Source: Own calculations, December 2012.
Furthermore, there are three different developments with respect to the size of the shadow economy:

1. The eastern countries or the “new” European Union members, such as Bulgaria, South-Cyprus, the Czech Republic, Latvia, Lithuania and Poland have higher shadow economies than the “old” European Union countries, like Austria, Belgium, Germany, Italy; hence, one can observe an increase of the size of the shadow economy from west to east.

2. Also, I observe an increase in the size and development of the shadow economy from north to south. On average, the southern European countries have considerably higher shadow economies than those of Central and Western Europe. This can also be demonstrated by Figures 3 and 4.

3. The five other highly developed OECD countries (Australia, Canada, Japan, New Zealand and the United States in Table 3) have much lower shadow economies with about 10.1 % of GDP average in 2009 which decreased to 9.2% in 2012.
4. Shadow Economies in Developed OECD Countries: What are the Driving Forces?

In two papers by Friedrich Schneider and Andreas Buehn, 2013, and Andreas Buehn and Friedrich Schneider, 2012, new investigations have been undertaken to tackle two questions:

1) what are the driving forces of shadow economy in highly developed OECD countries?, and

2) can we make a calculation of the size and development of tax evasion of OECD countries over the period 1999 to 2010? [compare here the studies Schneider and Buehn, 2013; Buehn and Schneider 2012].

In Table 5, we first show the average relative impact (in per cent) of the shadow economy determinants in 38 OECD countries over the period 1999 to 2010. If we consider Table 5 we clearly see that unemployment and self-employment have the biggest average impact of 14.6% (in per cent) on the shadow economy of the 38 OECD countries over the period 1999 to 2010. This is followed by tax morale with 14.5% and GDP growth with 14.3%, followed by business freedom with 14.2%. Poland shows a slightly different picture. Self-employment has the biggest influence on the size and development of the shadow economy of 14.5%, followed by indirect taxes, tax morale and business freedom with 14.4%.

Table 5. Average relative impact (in %) of the causal variables on the shadow economy of 38 OECD countries over 1999 to 2010

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<th>Country</th>
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<th>Personal income tax</th>
<th>Indirect taxes</th>
<th>Tax morale</th>
<th>Unemployment</th>
<th>Self-employment</th>
<th>GDP growth</th>
<th>Business freedom</th>
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</table>
5. The size and development of tax evasion

5.1. Methodological remarks

From some time we have been hearing proposals that certain forms of typically criminal business activity (unofficial wholly illegal economy) should be included in the official GDP statistics. Greece and Hungary have implemented such solutions already and Bulgaria, Czech Republic, Estonia and UK have partial statistics of such activities. Also Africa has been taking account of the statistics of criminal activities in its official GDP from some time even if they have an adverse effect on the households, enterprises and the state as an organization. This is because where a state concedes to the commitment of “legally prohibited acts” or where the institutions of the state are incapable of fighting crime (mainly of economic nature), then we see a natural growth of demand (driving the economy in this industry) for tax consultants, accountants and lawyers that will defend both honest citizens harmed by offenders, those harmed by the state and the offenders themselves. They create demand for new integrated computer technologies (ICT) and the whole technical infrastructure, the task of which is to reduce the risk of committing “legally prohibited acts.” Finally, they create demand for new jobs that are assumed to serve the same purpose: counteracting the rising threats.

The proposed inclusion of a part of the unofficial wholly illegal economy as part of individual consumption by households (drugs, prostitution and contraband) in the EU’s GDP statistics, the solution that will come into force in autumn 2014, is an absurd and an instance

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7 This chapter closely follows Buehn and Schneider (2012).
of creative accounting.\textsuperscript{8} Does it mean that offenders are supposed to change their social status on the account of creating jobs? Or, maybe, should they apply for old age benefits in the future since they contribute to the growth of GDP? Obviously, these are rhetorical questions.

According to the United Nations Office on Drugs and Crime (UNODC), proceeds from criminal activity represented almost 3.6\% of the global GDP, or US$ 2.1 trillion, in 2009 [\textit{Estimating...}, 2011, pp. 4, 38]. However, there are no statistics taking account of the potential loss of GDP caused by this criminal activity (which, at this point in time, is very difficult to measure). Accordingly, note that our research indicating on a reduction of the share of the grey economy in the overall economy can be affected by an estimation error related to the computation of GDP as such in individual states. We should also admit that the MIMIC statistics do not address a large part of the wholly illegal economy (of typically criminal nature) and, accordingly, it is not an absolute magnitude [Breusch, 2005, pp. 367–391; Breusch, 2005, pp. 1–35] of the whole unofficial economy. However, it does not seem that other, alternative [Gemmel and Hasseldine, 2012, p. 26] methods of measuring the unofficial economy (e.g., Fig. 4) are better in individual terms. This results particularly from the lack of fixed data. This is because it is hard to expect that persons or organizations evading taxes by way of committing various “legally prohibited acts” will declare how and how much they benefit from this very business or what per cent of taxes they have not declared or paid.

The study of Schneider and Buehn [2012] and their results which originate from Table 6, allows us to present – for the first time – macroeconomic time series evidence for the potential level of tax evasion across OECD countries, also using insights from the survey on the German shadow economy presented in Feld and Schneider [2010]. In their survey, Feld and Schneider compare the size of the shadow economy estimated using surveys (microeconomic approach) with estimates derived – and most widely published – by the macroeconomic MIMIC-model and/or currency demand approaches. They argue that the rather large differences originate from the survey method, which does typically not record the total value added but only the value

\textsuperscript{8} Regulation by the European Parliament and Council (EU) No. 549/2013 of May 21, 2013, on the European system of national and regional accounts in EU, Official Journal U. L174/1.
added of undeclared work [Feld and Schneider, 2010]. If one takes into account material, another 3–4% may be added to the survey estimates. Moreover, illegal activities such as prostitution and illegally firms in the construction sector contribute another 4–5% of official GDP to the size of the shadow economy. Finally, statistical offices in OECD countries usually impute informal activities in officially published GDP measures; hence some shadow activities are already included in the “official” GDP. Thus another 1–2% of black activities from official GDP may be further added to the survey figures. The analysis of Feld and Schneider allows two conclusions: first, the shadow economy estimates derived by the MIMIC and/or currency demand approaches, and the survey approach can be reconciled with each other. Second and more importantly, the shadow economy can be disaggregated into different kinds of legal and illegal activities.

Applying the approach of Feld and Schneider (2010) we are able to derive estimates for legal undeclared work or – as we would like to define it – explicit shadow economic activities such as unreported income from self-employment; wages, salaries and assets from unreported work related to legal services and goods; and tax evasion. Using the size of the German shadow economy of 15% in 2010 as estimated by Schneider and Buehn (2012), we calculate an average size of the legal or explicit German shadow economy of approximately one third of the official GDP as demonstrated in Table 6. To compute time series estimates of tax evasion across OECD countries on the basis of the results of Feld and Schneider (2010) and Schneider and Buehn (2012), we make two assumptions. The first – to our view uncritical – assumption is that behavioural patterns across OECD countries are reasonably comparable. This assumption allows us to disaggregate the MIMIC model shadow economy estimates of Schneider and Buehn (2012) in a similar way for all OECD countries as demonstrated for Germany in Table 6. The second assumption – maybe a bit more debatable – is that the dynamics of tax evasion may be attributable to impact of the indirect tax burden and of self-employment. This assumption may be justified as for the majority of citizens direct taxes such as the personal income tax are automatically deducted, which leaves no room for evasion. All other determinants (except self-employment) Schneider and Buehn (2012) have identified as the driving forces of the shadow economy are rather linked to undeclared work.
than pure tax evasion. Hence, the relative impact of the indirect tax burden and of self-employment may explain that proportion of legal shadow economic activities due to tax evasion.

For Germany, the average contribution of the indirect tax burden to the dynamics of the shadow economy is approximately one fourth (compare Table 6). Following our line of reasoning this means that one fourth of the shadow economy and its dynamics is due to tax evasion. Position (7) in Table 6 shows the so computed size of tax evasion in Germany in 2010, if we only consider indirect taxation.

**Table 6.** The proportion of explicit shadow economic, but legal activities in Germany

<table>
<thead>
<tr>
<th>Kinds of shadow economy activities</th>
<th>Size in % of official GDP</th>
<th>Proportion of the overall shadow economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total shadow economy (estimated by the MIMIC and calibrated by the currency demand procedures)</td>
<td>15.0</td>
<td>100</td>
</tr>
<tr>
<td>Material (used)</td>
<td>3.0–4.0</td>
<td>20–25</td>
</tr>
<tr>
<td>Illegal activities (goods and services)</td>
<td>4.0–5.0</td>
<td>26–33</td>
</tr>
<tr>
<td>Already in the official GDP included illegal activities</td>
<td>1.0–2.0</td>
<td>7–13</td>
</tr>
<tr>
<td>Sum (2) to (4)</td>
<td>8.0–11.0</td>
<td>53–71</td>
</tr>
<tr>
<td>Explicit shadow economic, but legal activities (position (1) minus position (5))</td>
<td>4.0–7.0</td>
<td>29–47</td>
</tr>
<tr>
<td>Tax evasion (approx. 35% of the explicit shadow economy, driving forces: indirect taxation and self-employment)</td>
<td>1.4–2.5</td>
<td>10–16</td>
</tr>
</tbody>
</table>

Source: Adapted from Feld and Schneider (2010).

As Table 6 shows, material used and illegal shadow economic activities, i.e., non-explicit shadow economic activities, account for up to 71% of the size of the shadow economy. Hence, explicit shadow activities, i.e., shadow activities from “black” hours worked, make up approximately one third of the size of the shadow economy. Assuming
that the size of the non-explicit shadow economy has not changed a lot between 1999 and 2010, we deduct the 11% of non-explicit shadow economic activities from Schneider and Buehn’s (2012) MIMIC model shadow economy estimates for each year during 1999 and 2010. This yields estimates of the explicit shadow economy for Germany between 3.6 and 5.4% of official GDP.

5.2. Empirical results of tax evasion figures

The computed tax evasion estimates for 38 OECD countries between 1999 and 2010 following the methodology proposed in the previous section are presented in Table 7. As discussed above, we assume that behavioural patterns across OECD are reasonably comparable. This assumption makes it possible to apply the proportion of the explicit shadow economy in percentage of the total shadow economy computed for Germany across all OECD countries. The average size of “legal,” explicit shadow economic activities in the 38 OECD countries was 6.0% averaged over 1999 to 2010; it had decreased from 6.9% of official GDP in 1999 to 4.8% and 5.2% of official GDP in the years 2009 and 2010, respectively. We clearly see that the negative trend of the overall size of the shadow economies of the 38 countries over the years 1999 to 2010 also holds for the “legal,” explicit activities of the shadow economy (e.g. repairing a car, constructing a house, doing a cleaning service, etc.). The highest level of the size and development of “legal, explicit activities” of the five countries had Poland with an average value over 1999 to 2010 of 7.9%. It had a value of 9.1% in the year 1999 which decreased to 6.1% in 2009 and 6.5% in 2010. In Lithuania the size of the “legal,” explicit shadow economic activities was 9.0% in 1999 which decreased to a value of 5.8% in 2009 and 6.9% in 2010. The average over these years was 7.6%. In the Slovak Republic the size of the “legal,” explicit shadow economic activities was 6.2% in 1999 which decreased to a value of 3.9% in 2009 and 4.3% in 2010. The average over these years was 5.3%. In the Czech Republic the size of the “legal,” explicit shadow economic activities was 6.4% in 1999 which decreased to a value of 3.9% in 2009 and 4.2% in 2010. The average over these years was 5.3%. The lowest level of the size and development of “legal, explicit activities” of the five countries had Germany with an average value over 1999 to
2010 of 4.7%. It had a value of 5.4% in the year 1999 which decreased to 3.6% in 2009 and 4.1% in 2010.

Table 7. Size and development of explicit shadow economic, but “legal” activities (in % of GDP) in Poland and its neighbouring countries

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<td>6.6</td>
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<td>4.9</td>
<td>4.8</td>
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<td>6.0</td>
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</table>

Source: Schneider and Buehn (2012) and own calculations.

It is often argued that self-employed have the most opportunities working in the shadow economy or evading taxes. The impact of self-employment on the shadow economy is less or only partly controllable by the government and may be ambiguous from a welfare perspective. A government can deregulate the economy or incentivize “to be your own entrepreneur,” which would make self-employment easier, potentially reducing unemployment and positively contributing to efforts in controlling the size of the shadow economy. Such actions however need to be accompanied with a strengthening of institutions and tax morale to reduce the probability that self-employed shift reasonable proportions of their economic activities into the shadow economy or evade taxes on a large scale.

The losses of VAT of the Polish Ministry of Finance have been investigated by a study of PwC (2013). In this study an attempt is made to estimate the size of the tax gap caused by VAT-fraud and a description of the mechanism of tax frauds in Poland and the European Union is given. Moreover, the study also gives a description of identified systematic problems which lead to abuses resulting in the increase in...
tax frauds on a large scale. The study also presents some proposals of systemic solutions (which could have been helpful to fight against tax offenses and consequently to decrease the tax gap or tax fraud originating from VAT). One of the main results of the study is that the tax gap (or tax evasion from VAT) as a percentage of GDP was 2.4% in 2006 (maximum value) and 1.0% in 2006 (minimum value). It decreased to 2.0% (maximum value) and 0.6% (minimum value) in 2007 and then more or less consequently increased to 3.7% (maximum value) or 2.3% (minimum value) of GDP. These results are somewhat different with respect to the increase than the results we achieve in our paper where we have a slight decrease. But in both studies it is clearly shown how important tax fraud and consequently the fight against tax fraud are.9

Schneider and Buehn (2012) also show that self-employment is a very important determinant of the shadow economy, explaining approximately 17% of its variation. Seeing that self-employment is such an important determinant of the total shadow economy, one might argue that it of course determines “legal” shadow economic activities and also tax evasion. This suggests to also taking into account the relative impact of self-employment when calculating time series estimates of tax evasion.

Table 8 shows the tax evasion estimates for Poland and its neighbouring countries over the period 1999 to 2010 that do not only account for the indirect tax burden (see Table 9) but also for the impact of self-employment.

Table 8. Size and development of tax evasion (in % of GDP) in Poland and its neighbouring countries accounting for indirect taxation and self-employment

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<td>2.7</td>
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<td>3.5</td>
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9 For a more detailed analysis compare PwC (2013) and Reckon, (2009).
Size and development of the shadow economy and of tax evasion within Poland...

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</table>

Source: Schneider and Buehn (2012) and own calculations.

If we first look at the average values of the 38 countries and over the period 1999 to 2010 we get an average value of tax evasion of 3.2% of official GDP. We again find for the average but also for the single countries a negative trend, meaning that the size of tax evasion is decreasing over the period 1999 to 2010. The average size of tax evasion of the 38 OECD countries in the year 1999 was 3.6% of GDP and this value more or less steadily clines to 2.5% or 2.8% of the official GDP in the years 2009 and 2010. If we consider single countries, the highest value of tax evasion (measured in % of GDP) accounting for indirect taxation as well as self-employment had Poland with a value of 4.9% in 1999 which decreased to 3.2% and 3.5% in 2009 and 2010, respectively. Poland had an average value over 1999 to 2010 of 4.2%. In Lithuania the level of tax evasion had a value of 4.1% in the year 1999. This value decreased to 2.7% in 2009 and 3.2% in the year 2010. The average value was 3.5%. In the Czech Republic tax evasion had a value of 3.4% in the year 1999. This value decreased to 2.1% in the year 2009 and 2.3% in the year 2010. The average value over the period 1999 to 2010 was 2.9%. In the Slovak Republic the size of tax evasion accounting for indirect taxation and self-employment was 2.8% in 1999 which decreased to a value of 1.8% in 2009 and 1.9% in 2010. The average over these years was 2.4%. The lowest level of the size and development of tax evasion of the five countries had Germany with an average value over 1999 to 2010 of 1.9%. It had a value of 2.2% in the year 1999 which decreased to 1.5% in 2009 and 1.7% in 2010.

In Table 9 the size and development of tax evasion (in % of GDP) in 5 countries is shown if we only consider indirect taxation as driving force of tax evasion. Look at the average values of the 38 OECD countries first; we see – also true for single countries – a negative trend, meaning that the size of tax evasion had decreased during the period 1999 to 2010.
Table 9. Size and development of tax evasion (in % of GDP) in Poland and its neighbouring countries accounting for indirect taxation

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Source: Schneider and Buehn (2012) and own calculations.

The average size of tax evasion across all 38 OECD countries was 2.0% of GDP in the year 1999 and had declined more or less steadily to 1.4% or 1.5% of official GDP in the years 2009 and 2010. If we consider single countries, the highest value of tax evasion (measured in % of GDP) had Lithuania with a value of 2.6% in 1999 which decreased to 1.7% and 2.0% in 2009 and 2010, respectively. Lithuania had an average value over 1999 to 2010 of 2.2%. The second highest size of tax evasion had Poland with a value of 2.5% in the year 1999. This value decreased to 1.7% in 2009 and 1.8% in the year 2010. Poland also had an average value of 2.2%. Then comes the Slovak Republic with a value of 2.0% in the year 1999. This value decreased to 1.2% in 2009 and 1.4% in the year 2010. The average value over the period 1999 to 2010 was 1.7%. In the Czech Republic the size of tax evasion accounting only for indirect taxation was 2.0% in 1999 which decreased to a value of 1.2% in 2009 and 1.3% in 2010. The average over these years was 1.6%. The lowest level of the size and development of tax evasion of the five countries had Germany with an average value over 1999 to 2010 of 1.1%. It had a value of 1.3% in the year 1999 which decreased to 0.9% in 2009 and 1.0% in 2010.
In Table 10 the size and development of tax evasion (in % of GDP) in 5 countries is shown if we only consider self-employment as driving force of tax evasion.

**Table 10.** Size and development of tax evasion (in % of GDP) in Poland and its neighbouring countries *accounting for self-employment*

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<td>Germany</td>
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<td>Lithuania</td>
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<tr>
<td>Poland</td>
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<td>Slovak Rep.</td>
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<tr>
<td>Average over 38 OECD countries</td>
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Source: Schneider and Buehn (2012) and own calculations.

Look at the average values of the 38 OECD countries first; we see – also true for single countries – a negative trend, meaning that the size of tax evasion had decreased during the period 1999 to 2010. The average size of tax evasion across all 38 OECD countries was 1.6% of GDP in the year 1999 and had declined more or less steadily to 1.1% or 1.3% of official GDP in the years 2009 and 2010. If we consider single countries, the highest value of tax evasion (measured in % of GDP) accounting only for self-employment had the Czech Republic with an average value of 2.0%. It had a value of 2.4% in 1999 which decreased to 1.5% and 1.7% in 2009 and 2010, respectively. The next is Lithuania with a value of 1.5% in 1999 which decreased to 1.0% and 1.2% in 2009 and 2010, respectively. Lithuania had an average value over 1999 to 2010 of 1.3%. In Poland tax evasion reaches a value of 1.4% in the year 1999. This value decreased to 0.9% in 2009 and 1.0%
in the year 2010. Poland also had an average value of 1.3%. Then comes Germany with a value of 0.9% in the year 1999. This value decreased to 0.6% in 2009 and 0.7% in the year 2010. The average value over the period 1999 to 2010 was 0.8. The lowest level of the size and development of tax evasion of the five countries had the Slovak Republic with an average value over 1999 to 2010 of 0.7%. It had a value of 0.8% in the year 1999 which decreased to 0.6% in 2009 and 0.5% in 2010.

6. Summary and concluding remarks

In this paper, the size and development of the shadow economy and of tax evasion of Poland and of Poland’s neighbours (except for the Ukraine) are shown over the period 2003 to 2010. The size and development of the shadow economies is also shown for 36 highly developed OECD countries. The average size of the shadow economy in 27 EU-Countries is 22.3% in 2003 and decreased to 18.4% (of official GDP) in 2013. We also consider the most important driving forces of the shadow economy in 38 OECD countries. The biggest ones are with 14.6% unemployment and self-employment, followed by tax morale with 14.5% and GDP growth with 14.3%. The size of tax evasion (accounting for indirect taxation and self-employment activities) was on average 4.2% (of official GDP) in Poland, 1.9% in Germany and 2.9% in the Czech Republic. What type of policy conclusions can we draw from these results?

1. Our paper clearly shows that a reduction of the shadow economy can be achieved using various channels that governments can influence. The main challenge still is to bring shadow economy activities into the official economy in a way that goods and services previously produced in the shadow economy are still produced and provided in the official economy. Only then the government gets additional taxes and social security contributions and transfers value added from the shadow into the official economy.

2. The main driving forces of the shadow economy are indirect taxes, followed by self-employment and unemployment. Hence,
Size and development of the shadow economy and of tax evasion within Poland...

to reduce the shadow economy these are the most efficient policy options.

3. It is essential to liquidate tax havens which are currently a tool for commercial and wholesale tax evasion through complicated structure of tax avoidance – which appears to be difficult in the medium term or even long term– due to increasing number of beneficiaries who have the possibilities of hampering political and organizational precautions through their accumulation of the capital.

4. Fighting tax evasion from VAT-fraud is maybe the most important policy goal. If also in the European Union all member states try to efficiently fight tax fraud by making the VAT-system more efficient with clear-cut rules and little exemptions, then this would lead to great success in reducing this type of tax fraud. Due to the lack of the common fiscal policy it is unlikely to, among others, harmonize tax rates, and therefore the EU states having the highest tax rates should expect heightened risk of the tax reclaim fraud through numerous dummy transactions and buffer companies within intra-Community trade. Thus, it may lead to elimination of some honest business entities from the market which will be unable to compete with fraudulent entities in terms of the price. Budget losses triggered by the growing tax gap because of tax refunds undue will increase the deficit (and thus the public debt), and they may translate into spending cuts in the following tax year, which may impact the rate of economic growth.

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CHAPTER 2

How to curtail Poland’s shadow economy: the viewpoints of business and tax authorities

Bogdan Mróz* and Mariusz Sokolek**

Abstract

Reducing the shadow economy is among the most serious challenges facing economic policy in many countries. The paper discusses methods used to scale down the extent of undeclared economic activity in Poland. Findings are presented of the authors’ own empirical research among business people and tax officials in April and May 2013, to find out both groups’ opinions about combating the Polish shadow economy. As these findings indicate, tax officials put greater store on repressive, administrative methods,
whereas business people perceive the following approaches as more effective: tax system reform and streamlining, tax burden reduction and economic education of the public.

**Keywords:** shadow economy, tax, viewpoints, business people, tax officials

### 1. Introduction

Given the widely shared conviction about the shadow economy’s adverse, multifaceted impact on economic indices, and in view of the findings of diverse empirical research, both the research community and, perhaps even more strongly, the economic policy-makers put the fight against the shadow economy among economic policy priorities. Measures taken towards this end may take different forms, from educational to punitive, but what is needed most – remembering about a mounting competition between global markets and a growing pressure resulting from the shadow economy’s sheer extent – is the pursuit of a rational economic policy, taking a systemic approach to the problem and shunning short-termism [Schneider and Enste, 2002, pp. 105, 178–179].

There are several reasons why economists take interest in this part of the economy. For one, growth of the informal sector may be viewed as society’s reaction to state-imposed burdens, with citizens opting to withdraw from that field of economic activity which falls under state control. If their motive is growing taxation, accompanied by continual bureaucratisation of institutions, then this poses an added threat to the state’s budget stability and welfare functions, thus leading inevitably to wider and wider budget deficits and rising tax rates. To OECD experts, the shadow economy is an “absolute evil” [Kabaj, 2009, p. 6].

Furthermore, when the extent of the informal economy increases, the stability and dependability of economic indicators – measuring unemployment, labour force participation, income and consumption levels, etc. – tend to come into question. It is then next to impossible to plan the state’s economic activities, because a financial policy based on unreliable data is at best ineffective, and at worst leads to outcomes which run counter to what was originally planned.
2. The notion of shadow economy

Even though the existence of the shadow (informal) economy is now universally admitted, it is only since quite recently that researchers of varied specialisations have taken interest in it. The beginnings of a formalised, systematised approach to undeclared economic activity should be traced back to the 1960s and 1970s (in capitalist countries such as Italy, the US, and West Germany), but only in the 1980s and in the next decades did interest in the subject increase to perceptible proportions. It was at that time that first studies into the shadow economy emerged in Polish literature [Kalecki, 1984, pp. 236–241; Mróz, 2002, p. 11].

The notion is fairly broad in scope, it should be emphasised, and it often eludes unequivocal categorisation. Consequently, attempts to coin a universal term describing the subject have often provoked controversy among specialists in the field [Kalecki, 1984, pp. 236–241; Wiśniewski, 1985; Bednarski and Kokoszczyński, 1988; Grabowski, 1995; Kloc, 1998; Mróz, 2002, p. 11].

An early impulse has been provided by realisation of a dual nature of economic activity – the coexistence within a single economic system of two separate sub-systems: official, where players observe the norms and rules laid down by legislative bodies; and unofficial, encompassing all forms of economic activity ignoring these norms and rules. Starting from that point, Friedrich Schneider and Dominik H. Enste propose to view the official economy as contributing to the Gross Domestic Product and comprising activities conducted by both government institutions and private business. This aggregate does not exclude households’ value-added creating activities which are legal, government-overseen, and taxed. The shadow economy is seen by Friedrich Schneider and Dominik H. Enste as any economic activity which does not contribute to the official GDP but which adds to the final value-added, whether legal or illegal [Schneider and Enste, 2002, pp. 105, 178–179].

The informal economy can be described in a variety of ways, as comprising:

– legal market transactions not included in official GDP estimation,
– legal market transactions not reported to tax authorities,
How to curtail Poland’s shadow economy: the viewpoints of business...

– legal and illegal market transactions not included in official GDP estimation,
– legal and illegal market transactions not reported to tax authorities,
– legal and illegal market and non-market transactions which remain undetected or are purposely excluded from GDP estimation [Tedds, 2005, p. 158].

According to Owen Lippert and Michael Walker [Lippert and Walker, 1997, p. 5], the informal economy comprises all economic activities which would be subject to taxation if reported to tax authorities.

With so many approaches to the shadow economy and its multiple definitions, researchers have yet to reach agreement on terminology. Many actually admit that an accurate definition may prove not only extremely difficult but, in fact, impossible to achieve, given the informal economy’s enormous flexibility and capacity to adjust to changes in taxes, penalties and universally accepted moral norms [Mogensen, Gunnar, Kvist, Körmendi and Pedersen, 1995, p. 5].

3. Methods to scale down the shadow economy
   – an attempt at typology

3.1. Repressive measures

Various kinds of repression, usually in the wake of an inspection, are the measures to which government resorts most frequently when seeking to restrict the size of the shadow economy. This being an area of citizens’ behaviours aiming to dodge their obligations to the state budget, the said inspections are taken by specialised institutions, such as tax authorities, social security authorities, labour inspectorates, and business crime departments of prosecutor offices [Materiały…, 2008, p. 5].

As it turns out, tax evasion is an issue already identified by, and well known to the Ministry of Finance. A 2011 report of the Ministry’s Department of Inspection includes a passage stating that, in addition to uncovering offences related to the distribution of fuels and scrap metals, the tax authorities devote much attention precisely to “taxpayers’ practices of concealing the actual sources of income, under-
reporting, and failing to register their economic activity for tax purposes” [Sprawozdanie..., 2011].

The effectiveness of inspections is measured by the Ministry on an annual basis, as a ratio of tax arrears-detecting inspections to all inspections. In recent years, with the numbers of inspections falling, their effectiveness proved to be improving: 59% in 2008, 65% in 2009, 69% in 2010, and as much as 75% in 2011 [Sprawozdanie..., 2012].

3.2. Liberalisation of tax, labour and social security regulations

Among the measures recommended to counter the informal economy, the OECD’s 2004 report [OECD, 2004] points to changes in regulations and administrative procedures towards strengthening labour-market mechanisms and making it easier for businesses to enter the official economy. In order to control the legality of employment, tougher regulations are proposed, even if this is criticised by some researchers [Enste, 2003]. Other recommendations include tighter co-operation between institutions dealing with employment registry/inspection and with social security [Enste, 2003], but also encouragement to increase legal employment, for example, by giving up on social security contributions in respect of relatively low wages. In Germany, for example, for wages below €4,200 a year, contributions are either not collected at all or collected only in part; and in the UK, as from 2000, wages of up to £4,200 a year are free of insurance contributions (for the excess, employers and employees are taxed at 22.2%) [Na dobre..., 2011].

A key direction of curbing growth in undeclared employment, as presented in the report, is the introduction of systemic changes, such as:

1) tax relief,
2) reduced social security rates,
3) deregulation,
4) subsidies to employment,
5) more flexible regulations on labour contracts (temporary work, seasonal work, etc.),
6) cutting back on administrative procedures which impede entering the formal economy [Renooy and Mateman, 2001, pp. 75–76].

The European Commission’s recipe is to liberalise markets for goods and services, streamline administrative procedures for start-ups,
provide a legal framework which encourages registration of economic activity by bringing down operational costs (mainly the taxation of labour and income), and to remove impediments – on the part of employers and employees – to transforming undeclared work into regular employment [Renooy and Mateman, 2001, pp. 75–76].

In Poland, the Ministry of Labour has analysed undeclared employment and, in a report, compiled a long list of measures that have to be taken to counter it effectively. These include organisational and administrative improvements, such as reducing the number of insurance declarations submitted by employers (especially in small business); simplifying the documents sent to the ZUS national social security board; removing the high upfront costs of employment (by financing medical check-ups and training in occupational health and safety out of the national Labour Fund); revising (towards greater flexibility) the regulations on firing, overtime financing and co-operation with trade unions [Przyczyny..., 2008, pp. 280–285]; and creating instruments of individual assistance to undeclared employees.

Regulations can also be liberalised by means of tax abolition, an exceptional arrangement involving taxpayer debt forgiveness by the Treasury. The idea has been for citizens to voluntarily report their undeclared and untaxed income, instead of being liable for a flat tax of 75% of undeclared income.\(^1\) It was put forward by the then Polish Deputy Prime Minister and Minister of Finance, Grzegorz Kołodko, who in 2002–2003, in a bid to stimulate economic growth, launched a series of measures to bring a public finances crisis under control [Owsiak, 2006]. Taxpayers were to be enticed by an uncommonly low rate, just 7.5% (and 12% in the final version of the law, as passed by the Sejm), instead of the personal income tax (PIT) rates of 19%, 30% and 40%, then in force. But following protests from many quarters, the abolition law was struck down by the Constitutional Court,\(^2\) citing the violation of the principle of citizens’ equality before law (in respect of the tax rate). It was noted that the law, paradoxically, offered privileged treatment to tax laggards.

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2 Wyrok Trybunału Konstytucyjnego z 20 listopada 2002 r. w sprawie jednorazowego opodatkowania nieujawnionego dochodu (MP No. 56, item 763).
3.3. Tax instruments

Following Poland’s EU accession in 2004, some experts view the legislative part of its tax system as modern and in line with EU arrangements [Brodecki, 1999], but there is no shortage of suggestions that the tax system should be modified further, especially in the context of the fight against the informal economy.

3.3.1. Streamlining the tax system

An intricate tax system, impeding the application of tax legislation, is among the reasons why taxpayers migrate into the shadow economy. The Polish tax system is perceived as complicated and one which has been revised all too often. What, and how frequently, has been changed in areas such as VAT, income tax and tax code comes under scrutiny in a detailed report of a group of tax experts, released by ECDDP group [Na dobre..., 2011]. It says that over the past decade, an amendment to a tax-related statute was adopted every other day (on average), affecting a total of 1,600 provisions.

Another cause of trouble for taxpayers are the wide differences in interpretation of applicable regulations by various segments of tax authorities (heads of tax offices, the Ministry of Finance) and administrative courts at the voivodship (provincial) and national levels. According to World Bank data, Poland comes 121st in the world in terms of friendliness and transparency of tax regulations. At an Adam Smith Centre conference, the Polish tax system was referred to as “unpredictable” [Aktualności..., 2011]. Incongruence of the regulations and lack of their uniform interpretations do great damage to the credibility of tax authorities and to taxpayers’ trust in the state. As revealed in the ECDDP report, a total of 60,000 specific interpretations, rulings, resolutions and memorandums concerning the provisions of tax regulations were added to the Ministry of Finance’s archives over the period of 2001–2011.

A similar tone can be heard in pronouncements by experts of the Polish Confederation of Businesspeople and Employers (ZPP). In their paper, citing data from the report Doing Business 2012, they call

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for a simplification of the Polish tax system which was assigned 128\textsuperscript{th} position among the 183 countries ranked.

3.3.2. Cutting tax rates

Among the factors most frequently cited as underpinning the shadow economy are excessive taxes and other burdens such as social insurance contributions. Demand for them, as a source from which to finance increasing state expenditures, has been growing in step with the expansion of the state’s functions and administrative structures [Gol-dyn, 1996]. The taxes, in their broad sense, are thus part of public finances, which have come into being against the background of the fiscal process, which is “linked precisely to the collection of taxes” [Grądalski, 2006, pp. 1, 17].

The state’s impact is made primarily by setting the tax rates, but citizens are willing to tolerate tax burden only to a certain level. This is finely represented by the Laffer curve, known not only to economists, where a gradual increase in the rate of taxation leads to a proportional increase in budget revenue – but only to a certain point, after which rising rates bring about a gradual decline in revenue. The question has long been discussed in finance theory and economics, but a golden mean – an optimal tax rate benefitting the taxpayer and the state budget alike – has yet to be found. A signal that the tax limit has been crossed is provided when rising tax rates produce a fall in budget revenue, instead of pushing it up. The taxpayers’ reactions are “in line with the law of increasing resistance, reflected in emerging symptoms such as: moving activity away from the official to unofficial economy, growth in undeclared employment, a fall in propensity to invest, intensification of passive and active resistance to taxation” [Grądalski, 2006, pp. 1, 17].

In 2004, Polish business people liable to personal income tax were offered an option to settle their tax liabilities at a flat rate. In addition to bringing down the rate of taxation, the flat tax is also seen as an instrument to streamline the system. Under flat tax arrangements, taxpayers pay income tax at the same rate (e.g. 19\%) irrespective of their income level. At the opposite end lies taxation according to a tax scale, where the tax rate rises in step with the taxpayer’s income.
3.4. Tax morale

Tax morale is an “internalisation of tax liability and recognition of the state’s authority in tax matters” [Gomułowicz and Małecki, 2008, p. 222]. Ryszard Sowiński lists its three preconditions:

1. The taxpayers finds the tax system to be just in all its dimensions.
2. The impact of negative emotions connected with a reduction of property and the need to bear tax collection costs is brought down to the minimum.
3. The taxpayer has been taught to behave in observance of law, and such behaviour is widespread in the social group with which they identify.

In his commentary, *On tax discipline*, posted on Sobieski Institute’s website, Ryszard Sowiński writes: “Government policy should aim for tax observance to be not only a legal provision but a public norm as well; for taxpayers to regard tax-paying as their obligation not only towards the state but also towards the society they belong to and identify with (the family, neighbours, fellow town people and countrymen); and also for tax evaders to be seen as breaking a universally observed social norm and acting to the detriment of other, disciplined taxpayers” [*O dyscyplinie… 2008,*].

Analyses of informal employment indicate that, contrary to a widespread belief about the weight of poverty and other forced circumstances, decisions to take up unregistered employment are taken by Poles, and especially by young Poles, consciously and voluntarily [Lentowicz, 2008].

The huge impact of public connivance to the spread of unofficial economic activity in Poland was confirmed by a 2007 research of CASE think-tank and SMG/KRC Poland agency, which found such activity to be accepted by close to 30% of the Poles, with one in five respondents declaring indifference [Błaszczak, 2010]. In addition to the obvious benefits of accessing less expensive informal services, this acceptance reflects a lack of faith in benefits from honest tax payment, and also “a peculiar sense of entrepreneurship, whereby he who passes up an opportunity to cheat on the authorities is a laughingstock” [Błaszczak, 2010].

Similar conclusions can be drawn from a Pentor institute survey, where a high proportion of the respondents (28%), mostly under-20-
-year-olds, said tax avoidance is a widespread practice [Kruszewski, 1992, p. 5]. As many as 10% of those questioned saw in tax avoidance a manifestation of courage and spirit of enterprise, while a mere 48% described it as fraud and crime. What better testimony than this to dismal levels of Poles’ tax morale?

The tax authorities realise the need for change in taxpayers’ mentality and attitudes. In 2012, the Ministry of Finance, teaming up with Business Centre Club, announced its 10th competition which, under the motto of the “business-friendly tax office,” promotes high standards of customer services at tax offices, and fosters friendliness and professionalism in relations between tax authorities and business [Ubyło urzędów…, 2011].

In another initiative, as part of a drive to inculcate the idea that paying taxes is the right thing to do, the Ministry of Finance has launched a “take the receipt” campaign, seeking to promote the desired habits of keeping sales records.

Such campaigns tend to reinforce the conviction that each taxpayer has real influence on the condition of public finances, thus increasing citizens’ commitment to a market competition based on just principles and to a greater pool of resources being earmarked for public goods and services.

Another instance of public education to increase tax-paying awareness is provided by the Basic Notions of Economics competition of the Science and Knowledge Foundation (FNiW), held in partnership with the National Bank of Poland to popularise knowledge about business and the economy among high school students and teachers. Participants complete a test after watching an animation which explains concepts such as market, inflation or the shadow economy [Miłosz, 2012].

3.5. Taxpayers’ trust in the state

Analyses of the shadow economy’s emergence and growth usually take up the subject of governance and its quality. In this context, the following terms are used in literature: governance, institutional quality, legitimacy, governance quality, government accountability [Torgler and Schneider, 2006; McEwen and Maiman, 1986, pp. 257–273; La Porta, Lopez de Silanes, Shleifer and Vishny, 1999, pp. 222–278;
Shadow economy and tax evasion

Kaufmann, Kraay and Mastruzzi, 2003]. Dominik H. Enste, discussing factors behind the informal sector’s rise in Eastern Europe, notes that the most important of them is the quality of public institutions. Observance of administrative procedures and compliance with tax obligations, he writes, can only win public acceptance when the state is capable of enforcing property rights, and providing adequate public-sector infrastructure and services [Enste, 2005, p. 134]. Consequently, he argues that institutional quality explains two-thirds of differences in the size of the shadow economy in 25 countries under his study. Citing other research findings, he adds that higher standards in state offices contribute to higher rates of official GDP growth [Busch and Matthes, 2004, pp. 15–21].

The latest report summarizing the CBOS agency’s survey of societal trust, including trust in public institutions, reads: “Trust is a value which helps keep the cohesion of groups and, in a broader dimension, of societies. Without trust, without the belief that one can take for granted another person’s word, diagnosis or promise, it is not possible to function well within a family, a business enterprise or a state” [CBOS, 2012]. The findings of the research leave no doubt that Poles are fairly distrustful in public life, even if in business relations the level of distrust is the lowest. In respect of most of the public institutions listed, respondents declared a high level of trust, even though some institutions clearly provoked a distrust.

The resistance to taxation is partly impacted by relations between taxpayers and representatives of tax authorities. There is a deeply felt perception that, even at the stage of fact-finding proceedings, taxpayers are often assigned the roles of suspects; and “those suspected of having oversize property must convincingly explain to tax authorities the undeclared income sources... and win over tax officials to those explanations” [Ogórek, 2012]. Usually, taxpayers in such situations have the impression that they have already been pronounced guilty.

Friedrich Schneider, too, notices the importance of strengthening incentives for the public to relate to manifestations of social and economic life. He places emphasis on the way public goods and services are redistributed. If the taxpayer finds the manner of this redistribution unfounded and unjust, as compared with their inputs, this may lead them to a belief that social inequality is the case and that the state is partial to some social groups at the expense of others [Schneider,
Enste, 2002, pp. 105, 178–179]. Also, if citizens perceive the state apparatus as being excessively inclined to regulate various walks of life, they may withdraw their earlier trust in government, resenting what they see as an unwarranted restriction of freedom, whether personal or economic. How far citizens identify with the system of state institutions provides an important indicator of their participation in democracy. A positive influence here could be exerted by a downsizing of public administration, its transparency and public servants’ willingness to co-operate.

4. Methods of shadow economy reduction as assessed by business people and tax officials – findings of empirical research

In March and April 2013, a questionnaire research was conducted among two hundred business people (sole traders and partners in unincorporated partnerships under Polish law: civil partnerships, general partnerships, professional partnerships) and sixty tax officials from tax offices in selected powiats (counties) in Mazowieckie Voivodship: Siedlce, Łosice, Mińsk Mazowiecki, Węgrów and Sokółw. The research questionnaire was made available at accounting agencies servicing the economic agents under review; also, links to the questionnaire, with requests for completion, were sent to businesses in the database of Polskie Książki Telefoniczne (Polish Telephone Directories). In respect of tax officials, the questionnaire was supplied in paper form to heads of tax offices, with a request to pass them on to the officials who deal directly with the shadow economy (i.e. those in inspection sections) and to those dealing with income tax.

The business people and the tax officials were asked the same questions, thus making it possible to conduct comparative procedure. The programme Statistica 10.0 (StatSoft Inc., USA) was used for statistical analysis. The findings were formatted as comparisons of percentages for a given answer in both groups. Furthermore, the Mann–Whitney U two-sample test was performed in order to check if the differences found are statistically significant. The test serves to verify the hypothesis that both samples under review come from different populations; it can be applied when the dependant variables are ordi-
nal. The null hypothesis (H0) here was this: the distributions of the two populations are identical; and the alternative hypothesis was: the distributions of both populations are not identical. The significance level was put as $\alpha = 0.05$. When the computed p-value (test probability) fell below that level ($p < 0.05$) the outcomes were found to be statistically significant (warranting rejection of H0 in favour of H1).

![Figure 1. What is your perception of tax evaders?](chart.png)

Source: Authors’ own research.

Most tax officials (60%) declared a very negative view of tax evaders, with a further 33% professing a rather negative view. The business people, even if also condemning the shadow economy, were less categorical, usually opting for a “rather negative” response (62%, against just 15% declaring “very negative” views, and 17.5% uncommitted). As can be seen, the assessments from both groups are fairly different, with the tax officials being more critical than the business people.

The outcome of the Mann–Whitney U rank-sum test allows us to reject H0 and accept H1, which means that the observable differences between the groups under review, in terms of assessment of tax evaders, are statistically significant: $U = 3108; p < 0.01$ (asymptotic significance, two-tailed). The business people are less rigorous in assessment of tax evaders ($M_{\text{rank1}} = 144.96$) than the tax officials are ($M_{\text{rank2}} = 82.30$).
Figures 2–7 present findings of the authors.

**Figure 2.**
Source: Authors’ own research.

**Figure 3.** Perception of fines as an instrument to curtail the shadow economy
Source: Authors’ own research.
Shadow economy and tax evasion

**Figure 4.** Assessment of income tax rate reduction as a method encouraging honest tax payment

Source: Authors’ own research.

**Figure 5.** Assessment of public economic education as a motivation to honest tax payment

Source: Authors’ own research.
Figure 6. Assessment of building good officials-business people relationships as a method of reducing the shadow economy (e.g. ranking lists of tax offices, the competition “Business-friendly tax office”)

Source: Authors’ own research.

Figure 7. Assessment of tax reforms towards streamlining the tax system

Source: Authors’ own research.
The respondents’ assessments of methods to promote honest tax payment (whether by compulsion or by encouragement) were analysed using the Mann–Whitney U rank-sum test. The test outcomes for individual methods are presented in Table 1, alongside the relevant conclusions.

**Table 1. Mann–Whitney U test of tax authorities’ methods to either force or encourage honest tax payments**

<table>
<thead>
<tr>
<th>Methods to curtail shadow economy</th>
<th>Mann–Whitney U test outcomes</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax inspections</td>
<td>Statistically significant difference. U = 2903.0; p &lt; 0.01 (asymptotic significance, two-tailed)</td>
<td>Perception of inspections as motivating to honest tax payment is weaker among business people (M_{rank1} = 115.02), than among tax officials (M_{rank2} = 182.12).</td>
</tr>
<tr>
<td>Fines</td>
<td>Statistically significant difference. U = 2632.0; p &lt; 0.01 (asymptotic significance, two-tailed)</td>
<td>Perception of fines as motivating to honest tax payment is weaker among business people (M_{rank1} = 113.66), than among tax officials (M_{rank2} = 186.63).</td>
</tr>
<tr>
<td>Reduction of income tax rates</td>
<td>Statistically significant difference. U = 2989.5; p &lt; 0.01 (asymptotic significance, two-tailed)</td>
<td>Perception of tax rate reduction as motivating to honest tax payment is stronger among business people (M_{rank1} = 145.55), than among tax officials (M_{rank2} = 80.33).</td>
</tr>
<tr>
<td>Education</td>
<td>Statistically significant difference. U = 2825.0; p &lt; 0.01 (asymptotic significance, two-tailed)</td>
<td>Perception of educational campaigns as motivating to honest tax payment is stronger among business people (M_{rank1} = 146.38), than among tax officials (M_{rank2} = 77.58).</td>
</tr>
<tr>
<td>Building good relationships between officials and business people</td>
<td>Statistically significant difference. U = 2616.0; p &lt; 0.01 (asymptotic significance, two-tailed)</td>
<td>Perception of good officials-business people relationships as motivating to honest tax payment is stronger among business people (M_{rank1} = 147.42), than among tax officials (M_{rank2} = 74.1).</td>
</tr>
</tbody>
</table>
How to curtail Poland’s shadow economy: the viewpoints of business...

| Tax reforms towards streamlining the tax system | Statistically significant difference. $U = 3763.5; p < 0.01$ (asymptotic significance, two-tailed) | Perception of reforms to streamline the tax system as motivating to honest tax payment is stronger among business people ($M_{\text{rank1}} = 141.68$), than among tax officials ($M_{\text{rank2}} = 93.23$). |

Source: Authors’ own research.

The business people and the tax officials differ in their assessment of methods to reduce the size of the shadow economy. Tax inspections are found by the officials as strongly motivating (23%) and rather motivating (62%) taxpayers to honestly pay taxes, whereas the business people find them as rather not motivating (51%) or not motivating at all (13%). It should be noted that none of the tax officials opined that inspections would not at all motivate taxpayers to honestly pay taxes. A very similar pattern can be seen with fines, as a means of cutting back the shadow economy. The officials see fines as (either rather or strongly) motivating, whereas the business people argue that scaring tactics (involving inspections and fines) are not motivating taxpayers.

The belief that income tax rate reduction may be instrumental in paring down the shadow economy was found much more frequently among the business people than the officials. Among the latter, 21% think that taxpayers are not motivated by cuts in taxes, while only 13% business people share this view.

Differences of opinion can also be seen in the assessment of public education and good taxpayer-tax office relations as methods of shadow economy curtailment. For the business people, those methods may – either fairly or strongly – influence honest income-reporting by taxpayers, but the officials are not prepared to admit a linkage between education or good relationships on the one hand and a retreat of the shadow economy on the other. The two groups agree only on one point, namely that the pursuit of this goal could be helped by reforms seeking to streamline the tax system.

A major difference emerges when it comes to assessments of flat tax. Among the officials, 56% are of the opinion that the introduction of flat tax had no connection with shadow economy reduction, and 22% believe that it rather contributed to scaling down the shadow economy. None of the tax officials sees the flat tax as having strongly
restricted the shadow economy. The picture is diametrically different among the business people, where 30% believe this (strong reduction) has indeed been the case, a half perceive the flat tax as rather having reduced the informal sector, and only 11% share the officials’ majority opinion, not noticing any connection between the launch of flat tax and shadow economy contraction. It should be noted that “no opinion” responses came from 21.7% of the officials and 6% of the business people.

5. Conclusions

The tax officials and the business people perceive their socio-economic environment differently, and have different views of why the shadow economy exists and how it can be cut down. A large portion of the
business people are of the opinion that tax rate reductions and the flat tax option helped reduce the shadow economy, in addition to streamlining the tax system. More cautious pronouncements about the flat tax option come from the tax officials although they too believe, just like the business people, that it helped simplify the income tax system.

Both the business people and the tax officials opine, quite frequently, that a simplification of tax procedures (by eliminating tax breaks and deductions) will improve the propensity to pay taxes. Both groups believe that a reduction of income tax rates will bring about an increase in budget revenues – and, also, that it will perceptibly contribute to reducing the size of the shadow economy.

On the other hand, there are wide differences in assessing the value of tax authorities’ methods as a motivation to honest tax payment. The tax officials assign much greater importance to administrative, repressive methods of combating the shadow economy, finding them to be more effective in a drive to restrict undeclared economic activity. But for the business people, the effectiveness of such methods is limited. In their opinion, better results can be produced by moves to reform and streamline the tax system, by public-education campaigns (to bring home to the public the necessity of paying taxes), and by the building of good, friendly relations between tax officials and business people/taxpayers.

The differences between tax officials’ and business people’s opinions about why the shadow economy exists and how it can be restricted point to the need for dialogue and better understanding between those two groups, for overcoming the existing barriers and building a climate of mutual trust.

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CHAPTER 3

Shadow banking versus the shadow economy in Poland

Jan K. Solarz*

Abstract

The difference in shadow behaviour between banking and the real economy have been at the center of professional debates in recent years. This paper presents a framework for understanding how shadow behaviour affects banking and the economy. The framework uses the concept of external cost and absorption of uncertainty. The framework is applied using data from the Polish sample.

I argue that the relationship between shadow banking and the shadow economy is far from a simple pattern; it is a complex mosaic. Shadows does not necessarily mean dark and sinister. On one hand shadow banking funds the real economy, on the other, shadow banking undermines trust in the economic institutions and relationships. Risk preferences and time preferences are important predictors of trust. The shadow economy fuels the development of shadow banking. Together they have a negative influence on quality of everyday life in Poland.

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Keywords: shadow economy, cash, merit goods, demerit goods, financialization, shadow banking

1. Introduction

Much of the economic activity around the world does not take place in the official legal system, but in the informal or shadow sector instead. One way to gain a better understanding of relations between shadow banking and the shadow economy is by making a comparative analysis of their role in the creation of the quality of everyday life. Real GDP growth is used frequently as a first order in the approximation of welfare gains. In Poland real GDP growth is coupled with a growing shadow economy and also of shadow banking. The symmetric nature of the link between shadow banking and the shadow economy requires a more detailed explanation.

The paper is organized into four sections:

– Section 1 sets out a basic concept of shadow banking in Poland. It notes the potential benefits from such financial intermediations in lowering the external cost of functioning in our shadow economy. An effective policy approach is needed to assess and control any systemic risk that it may pose.

– Section 2 examines the practicalities of addressing risks of the shadow economy in Poland; it considers the amount of cash used in our economy and examines whether an exclusive focus on cash is sensible.

– Section 3 offers a comparative analysis of shadow banking and the shadow economy. It includes a template that regulators could use to carry out this analysis.

– Section 4 summarizes the findings and thus illustrates how it would work in practice.

2. Shadow banking in Poland

The term shadow banking is often used to signify very different things, so it is helpful to start with the definition. There is no single commonly accepted definition of shadow banking. Shadow banking is
often seen as a form of regulatory arbitrage or near-banking. The Financial Stability Board defined the shadow banking system as the system of credit intermediation that involves entities and activities outside the regular banking system [Shadow, 2011]. This definition implies the shadow banking system is based on two intertwined pillars.

Firstly, here belong entities operating outside the regular banking system are engaged in one of the following activities:

- accepting funding with deposit-like characteristics,
- performing maturity and/or liquidity transformation,
- undergoing credit risk transfer,
- using direct or indirect financial leverage.

Good examples of this type of activities were found in Poland’s saving unions. Now they are regulated as Monetary Financial Institutions.

Secondly, you need to include activities that could act as important sources of funding of non-bank entities. These activities include securitization, collateral intermediation, securities lending and repurchase transactions. Securitization funds operating in the Polish market are an example of this concept of shadow banking. In this meaning shadow banking refers to the activity of issuing very short term IOUs and investing the proceeds in long-term financial assets. Shadow banking is from this perspective, a monetary phenomenon [Ricks, 2012, p. 731].

The banking system creates credit and private money. Private money is an investment perceived as highly safe, liquid and redeemable at par, which is a key factor behind its development. Essential to that process is maturity transformation. If the credit extended was repayable immediately, the matching money created could not be used effectively and maturity transformation is potentially welfare enhancing. This is because it enables the non-financial real economy to finance projects with long-term credit liabilities while holding short-term financial assets: it should therefore facilitate long-term investment. Essentially, therefore, the shadow banking system can create forms of private money held either by the non-financial real economy or by financial intermediaries, in a fashion analogous to the banking system’s own creation of money deposits. However, where there is maturity transformation and private money creations, there is a potential for runs, which is a potentially destabilizing factor.
Despite the multiplicity of views, there is a general agreement on shadow banking characteristics:

- raising short-term funds from financial markets to deploy elsewhere,
- funds raised are not guaranteed,
- no access to a central bank.

This shadow banking could exist, at least theoretically, as a standalone system parallel to, but quite separate from banking and the real economy. In practice it does not; rather the shadow banking system, which actually developed involves complex interconnections between the banking system and shadow banks.

The risks emanating from shadow banking could be primarily of four types viz., (i) liquidity risk, (ii) leverage risk, (iii) regulatory arbitrage and (iv) contagion risk.

Shadow banking entities have close inter-linkages with the banking sector from the asset as well as the liabilities side and also with other segments of the financial system, which can lead to a contagion risk in times of uncertainty and loss of confidence.

Part of the difficulty of assessing the impact of non-bank financial institutions on financial stability and economic growth is the fact of the wide range of institutions involved. Globally, shadow banking entities could be considered under the broad heads of (i) Money Market Funds, (ii) private equity firms, (iii) Hedge Funds, etc. (iv) pension funds and insurance undertakings, (v) central counterparts, and UCITS and exchange trade funds (vi) securitization vehicles.

Some non-banking financial institutions are highly inter-connected with the banks and other non-banking financial entities. According to the EU 27 data at the end of 2001, the assets of MFI’s were counted at 20.84 trillion EUR’s. Other Financial Institutions at 21.62 trillion EUR’s and pension funds and insurance undertakings at 10.98 trillion EUR’s.

In our analysis of Poland we will use the term “shadow banking” on a par with the term “other financial institutions.” The extent of such defined “shadow banking” in Poland in December 2010 was estimated at 58 bln EUR’s [Non-bank, 2012, p. 11]. The institutional structure of shadow banking in Poland indices, is shown in Table 1.
Table 1. Shadow banking in Poland in figures

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>POS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Credit Unions</td>
<td>1,954</td>
</tr>
<tr>
<td>2. Payment services</td>
<td>22,500</td>
</tr>
<tr>
<td>3. Shopping Centers</td>
<td>786</td>
</tr>
<tr>
<td>4. Debt traders</td>
<td>1,281</td>
</tr>
<tr>
<td>5. Fore</td>
<td>1,729</td>
</tr>
<tr>
<td>6. Leasing firms</td>
<td>119</td>
</tr>
<tr>
<td>7. Factoring firms</td>
<td>44</td>
</tr>
<tr>
<td>8. PE firms</td>
<td>52</td>
</tr>
<tr>
<td>9. Credit intermediation</td>
<td>400</td>
</tr>
<tr>
<td>9. Social lending</td>
<td>3</td>
</tr>
<tr>
<td>10. Money lenders firms</td>
<td>10</td>
</tr>
</tbody>
</table>

Sources: Own calculation. Data for 2012.

The strengthening of the current supervisory frameworks for banks and insurance corporations might provide incentives for regulated entities to again shift a part of their business into the shadow banking sector. This sector is thus likely to amplify pro-cyclicality and systemic risks generally via its maturity and/or liquidity transformation, relying often on short-term uninsured funds. The higher the growth rate of the financial sector value added relative to the non-financial sector, the greater its power in precipitating subsequent financial busts [Financial..., 2013].

Residency-based statistics on investment funds as collected under Regulation ECB/2008/30 provide a breakdown of investment funds by purpose, separating hedge funds from bond funds, equity funds and mixed funds. A second source of statistics providing a useful overview of other financial intermediaries heavily engaged in the repo market are the regular MFI balance sheet statistics as collected under Regulation RCB/2008/32. Within this framework, it is possible to monitor repos between banks and non-banking financial intermediaries, further broken down into central counterparties as well as other types of financial intermediaries.
One further sector of interest in the analysis of shadow banking is that of money market funds. A unique source of information for this sector is offered again by the MFI balance sheet statistics collected under Regulation EBC/2008/32.

Finally, securitization schemes are important activities of the shadow banking sector. Such schemes vary within and across debt securities markets. They can be grouped into three broad types. The first type of scheme, usually known as on-balance sheet securitization, involves the issue of debt securities backed by an income stream generated by the assets, which remain on the balance sheet of the debt securities issuer, typically as a separate portfolio. In the second type, called true-sale securitization, the original owner transfers assets from the balance sheet to a financial vehicle, which issues debt securities to finance the acquisition. Synthetic securitization, the third type of securitization, involves a partial or total transfer of credit risk related to a pool of assets without a transfer of the assets themselves. The original asset owner buys protection against possible default losses on the pool of assets using a portfolio of credit default swaps adjusted to the owner’s desired level of credit-risk protection.

Another path is the acquisition of portfolios of non-performing loans from the banks. There is no shortage of banks keen to sell such portfolios to get rid of risky assets, cut their losses, improve their balance sheets and use the proceeds to boost capital reserves.

Table 2. Non-performing loans in securitization founds in Poland from 2005–2009 in 1,000 złoty

<table>
<thead>
<tr>
<th>Type of issuers</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>82,162</td>
<td>182,363</td>
<td>249,431</td>
<td>400,648</td>
<td>326,595</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>237,422</td>
<td>142,846</td>
<td>80,613</td>
<td>44,578</td>
</tr>
<tr>
<td>Trade company</td>
<td>6,578</td>
<td>10,111</td>
<td>30,749</td>
<td>10,603</td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td>1,827</td>
<td>6,231</td>
<td>14,418</td>
<td>3,640</td>
<td></td>
</tr>
<tr>
<td>Insurers</td>
<td>593</td>
<td>419</td>
<td>1,085</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>82,162</td>
<td>428,783</td>
<td>409,038</td>
<td>527,513</td>
<td>385,416</td>
</tr>
</tbody>
</table>

3. Shadow economy in Poland

Known under a broad variety of different names as “grey and black,” “unrecorded,” “illegal” or “underground,” the hidden economy has as many facets and meanings as it does names. One commonly used working definition of the shadow economy is one of all currently unregistered economic activities that contribute to the observed Gross National Product [Schneider, 2010].

This shadow economy is spreading to almost everywhere in the world. For example, Poland’s shadow economy (25% of its GDP) is slightly higher than the European average part of the informal economy in the GDP (at around 19%). This development is worsened by the global economic crisis and in particular affects some vulnerable groups, such as women or the young. In the Polish economy, women are often engaged in low-wage jobs in Small and Medium Enterprises. For some, during this global crisis, the shadow markets are to their advantage adding jobs and improving the lives of millions of people. Engaging in the informal economy is not always an economical choice but rather a financial necessity. On the other hand, the current rise of the shadow economy in Poland is a crucial issue because it shows that our market does not function properly.

The shadow economy can be divided into two parts. Friedrich Schneider estimates that about two-thirds is undeclared work, where workers and businesses do not declare their wages to the government to avoid taxes or documentation. The other third comes from underreporting. Underreporting occurs most often in cash-based businesses [Schneider, 2009].

There seems to be two hypotheses underlying the observed occurrence of the, in-the-shadow employment. First, there is a market segmentation hypothesis, which suggests that for some workers, the access to the official labour market is limited, forcing them to accept the unofficial work relationship with their employers. Secondly, informal employment may indeed be preferred by the employees in accordance with the tax evasion hypothesis. In with this view, undeclared or under-declared work is motivated by the benefits of evading taxation and/or social security contributions. It seems, that in Poland, unregistered employees are active in the shadow economy not because it is an optimal solution in their individual strategy, but because they are
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forced to do so, due to the limited access to formal employment [Cichocki, 2010].

The size of the shadow economy is very strongly correlated with the amount of cash used in busses activity.

**Table 3.** Structure of payment instruments used by polish enterprises in Poland in 2012. In percent

<table>
<thead>
<tr>
<th>Item</th>
<th>Cash</th>
<th>Payment Carts</th>
<th>Distance Carts</th>
<th>Internet Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Car service</td>
<td>90</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Transportation</td>
<td>88</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Hotels, restaurants</td>
<td>88</td>
<td>7</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Professionals</td>
<td>75</td>
<td>4</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Medical care</td>
<td>87</td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Entertainment</td>
<td>84</td>
<td>6</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Service</td>
<td>90</td>
<td>2</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Firms with less than 9 employee’s</td>
<td>89</td>
<td>3</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Firms with 10 to 49 employee’s</td>
<td>74</td>
<td>8</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Firms with more than 50 employee’s</td>
<td>67</td>
<td>12</td>
<td>2</td>
<td>18</td>
</tr>
</tbody>
</table>


Recent development in the demand for cash can be relatively well explained by some economic and institutional factors as follows:

– the recent regime of very low interest rates has made cash an attractive instrument for saving (money hoarding),
– the banking crisis has caused a loss of confidence in financial institutions by the general public. It could be that bank accounts are no longer considered more secure than money balance (ma-dras money),
– some consumers do not have a free choice between using cash and credit cards. In the current bad times more consumers are forced to use cash as the only payment instrument,
– if cash usage is reduced then the related tax revenue from seigniorage is reduced as well.
According to Central Statistical Office the sectors most involved in the shadow economy in 2011 were as followed:

- building industry (38.2%),
- wholesale trade and retail trade, car and motorcycles repairs, basic consumer goods and household goods (23.9%),
- production (22.9%),
- agriculture, hunting, forestry (14.3%),
- households employing people (14.3%),
- hotels and restaurants (13.4%).

4. Discussion

There are two kinds of definitions of shadow banking and the shadow economy. Firstly, it is a descriptive definition of what it is. Secondly, it is a functional definition of what it may be. Using the functional definition of shadow banking and economy we compare their roles in our life.

Table 4. Comparative analysis of the role of shadow banking and the shadow economy in our life

<table>
<thead>
<tr>
<th>Item</th>
<th>Shadow banking</th>
<th>Shadow economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real economy</td>
<td>Uncertainty increasing</td>
<td>External cost absorption</td>
</tr>
<tr>
<td>Regulatory economy</td>
<td>External cost absorption</td>
<td>Uncertainty increasing</td>
</tr>
</tbody>
</table>

Source: Own.

Shadow banking and the economy may play two different roles. Firstly, it is one of increasing uncertainty in our everyday life. Secondly, it is about the absorption of the external cost of functioning of shadow banking or a shadow economy. Most of all, this is inherent to creating trust. Trust plays a special role in shadow banking and in the shadow economy. First of all, trust can be a substitute for official contracts. As transactions in shadow banking are by definition not monitored or declared, agents who carry out shadow transactions cannot rely upon the formal legal system to enforce agreements or settle disputes. In this context, trust may appear as a substitute for formal contracts. On the other hand, if generalized trust extends to the state, it
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may as well have the opposite effect of reducing the shadow economy. Since the shadow economy constitutes a form of tax evasion, then one should expect its size to be negatively impacted by growing trust.

There is robust evidence that trust is negatively correlated with the size of the shadow economy. In other words, more trusting countries exhibit a smaller shadow sector [D’Hernoncourt, 2008]. Growth of shadow activity in everyday life is fuelled by distrust to the market and to the state. There are many factors causing distrust in our relations with the others.

**Table 5. Factors of distrust in everyday life**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Outcome</th>
<th>Factors</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casino capitalism</td>
<td>Short time decision making</td>
<td>Financialization</td>
<td>Over-indebtedness</td>
</tr>
<tr>
<td>Dispersion of risk</td>
<td>Loss of social responsibility by DM</td>
<td>TBTF</td>
<td>Fiscalization</td>
</tr>
<tr>
<td>Offshore financial centers</td>
<td>Leveraged development</td>
<td>Populism</td>
<td>Financial democratisation</td>
</tr>
<tr>
<td>Complexity of financial system</td>
<td>Modeling risk</td>
<td>Biflation</td>
<td>Uncertainty in everyday activities</td>
</tr>
</tbody>
</table>

Source: Own [Solarz, 2012 A, B].

Shadow banking and the shadow economy play its own role in issuing “merit” or “demerit” goods. Negative and positive goods are moved from the real economy to the regulatory economy and vice versa. Traditional financial accounts and financial balance sheets have been presented in two-dimensional matrices; sectors in columns and categories of financial instruments in rows. Such presentations do not necessarily answer the question of who is financing whom in and what categories of financial instrument. In order to answer the question of what is the role of shadow banking and the shadow economy in our life we need financial accounts and financial balance sheets to be presented in three-dimensional from-whom-to-whom matrices, covering real and regulatory sectors of the economy as well financial instruments, institution and markets [Statistical, 2013].
As a result of the crisis, two dramatic changes have occurred, which have refocused the demand for data in support of financial stability analysis, as follows:

– the comprehensive (residency-based) statistics used for the two pillars of monetary policy assessment (i.e. economic and monetary analysis) have been scrutinized in much greater depth and detail. The timeliness of these statistics have also been of the utmost importance in serving policy needs at times when market rumors and anecdotal evidence may have led to imperfect information for decision-making;

– supervisory (country-based) data showing exposures and interconnectedness have increased in prominence for the assessment and mitigation of risks and contagion effects. Aggregated data collections supporting both micro-and macro-prudential assessments and potential recommendations are, however, not yet timely and comparable [Israel, 2013, p. 8].

Hence, many more micro studies are needed to obtain a more detailed knowledge about people’s motivation in using shadow or regulated banking and to work either in the shadow economy and/or in the official one [Schneider, 2012].

5. Recommendations

The depth of the banking sector and its efficiency matter equally in reducing the size of a shadow economy. Shadow banking is highly pro-cyclical, which may have adverse real-sector consequences. Pro-cyclicality is endemic to finance, but is especially high in shadow banking. There are various elements that lead to the pro-cyclicality of shadow banking, including mark-to-market rules, the evolution of margin requirements and lending standards relative to collateral value and the design of compensation packages. We must also note that during crises, shadow banking may require public support, leading to fiscal implications.

The informal sector is a powerful buffer, which expands at times of banking crises’ and absorbs a large portion of the fall in official output. About 60% of the official sector contraction is absorbed by the growth of the shadow sector [Colombo, 2013].
Properly understanding the role of shadow banking and the shadow economy in development quality of everyday life is essential for recommendation. It should encompass:

- dealing with regulatory arbitrage,
- addressing systemic risk in the shadow banking system, which includes developing a regulatory approach to dealer banks, money market funds, the tri-party repurchase market and dealing with innovation and complexity,
- considering demand-side pressures, including the merits of accommodating a shortage of safe and liquid assets with publicly guaranteed short-term debt,
- better measuring and monitoring of the shadow banking system; and
- studying the shadow economy macroeconomic effects and implications for life quality in everyday activities [Claessens, 2012].

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CHAPTER 4

Why VAT carousel crime schemes are almost impossible to prosecute in Poland?

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Abstract

This paper presents a conceptual model of VAT carousel crimes as exemplified by two schemes: called here English and Polish. Starting from a money transfer, goods flow data; and tax information, flows in the system of companies involved in a VAT scam can be modeled. Previously, we designed a minimal set of rules that is

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necessary to reveal an English carousel fraud scheme and the roles of companies implicated in this crime. In this work we extend the previous result for the Polish scheme. There are fundamental differences between these schemes that effect collecting evidence and prosecution ability. For the Polish scheme, hard (Boolean) rules can be applied to show the fictitiousness of transactions, however the number of firms to be investigated can be very large; for the English type scheme, the relevant question is whether a broker knew, or ought to have known that he was a part of the fraud. Nevertheless, due to the dysfunctional Polish legal system, fiscal administration, police and to highest degree, the prosecutor’s offices, Poland looses the battle of combating VAT fraud. We utilize the Jess rule engine for our reasoning. Visualization is performed using the Palantir Government tool. The model can be a good starting point for the deeper investigation of more complex VAT related scams.

Keywords: fraud, VAT carousel, rule-based system

1. Introduction

The European Union’s VAT system is failing [Terra, 2012]. There are several reasons for this:

1. The VAT gap is now at €100 billion, which is steadily rising due to fraud resulting from the fact that there is no taxation on EU cross-border purchases by businesses. In Poland the internal steel rod trade now accounts for 30% of the market; another 50% on paper comes from international trade, but is in a shadow economy (with corresponding criminal VAT avoidance).

2. The EU is not willing to take the necessary political steps, despite interim solutions,\(^1\) that help in preventing a VAT fraud. As a result, certain fraud schemes require an extra-ordinary effort to gather evidence [Mecsek-Gabona, 2012] – tax decisions could be challenged before the courts because of the lack of a legal

basis. In some schemes there could be hard evidence that the transaction was fictitious. Others require aggregation of softer arguments that are not easily accounted for by rules.

In 2009, Blue Sphere Global Limited won the appellation in England’s High Court against Her Majesty's Revenue and Customs (HMRC).\(^2\) The Court’s decision was that HMRC did not provide enough evidence that Blue Sphere managers knew, or ought to have known that they were a part of the fraud.

3. VAT related international cases require intensive co-operation at international level and an application of the level of analytics that is much more sophisticated than what is currently practiced by the police and fiscal services; particularly, new investigative techniques specifically designed to combat a VAT fraud are required.

The purpose of this work is to basically compare two schemes of VAT carousel crime and present analysis methods which provide evidence of fraud for each of them. This paper is organized as follows: Section 2 introduces a conceptual model of VAT carousel fraud processes and compares two prevalent schemes. In Section 3 the analysis of the English type VAT carousel based on recent High Court decisions is described. In Section 4 the analysis of the Polish type of VAT is presented based on the GARO case. Section 5 deals with the comparison of tackling tax avoidance in the UK and Poland. Section 6 provides conclusions and directions for future work.

2. Conceptual model of VAT carousel fraud

Carousel fraud, often called Missing trader fraud (or more specifically Missing Trader Intra-Community, MTIC) is a sophisticated economic criminal activity exploiting Value Added Tax (VAT) evasion.

The name carousel fraud derives from the typical circular chain of transactions set up by the criminals to maximize profits and often entails sham paperwork and temporary companies to engage in the trades. In order to hide the fraud, the circle sometimes involves compliant honest traders.

\(^2\) UK High Court judgment, case No. CH/2009/APP/0066.
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For a crime committed in a given European Union country, a member of the fraud ring acquires goods, tax-free from a trader in another country within the European Union, or a VAT country outside of Europe. Then, the goods are sold on through a series of VAT-registered companies of an assumed country (here we specialize on the UK, where, as of 2006, the scheme achieved monumental proportions). According to [Stone, 2008] “The participants in a fraudulent MTIC transaction will normally include the following:

- A ‘supplier’ of quantities of small volume high value goods, such as computer chips or mobile phones, who is located in another EU Member State.
- A ‘missing trader’ is a VAT registered business that is no longer at their principal place of business for VAT purposes and cannot be contacted.
- A ‘defaulting trader,’ the one who continues to trade, submitting their VAT declaration but not paying or making false export claims (known as Export Set Off or Cross Invoicing).
- An ‘intermediary’ or ‘buffer trader’ is a VAT registered business used by the ‘broker’ to distance themselves from the missing, defaulting or hijacked trader (the one whose identity – a VAT registration number (VRN) – is adopted, usually without that taxable person’s knowledge by the hijacker).
- A ‘broker’ (or shipper, exporter) is the entity which dispatches the goods back to another EU member state or a 3rd country and reclams the VAT charged to him by the buffer.
- A ‘conduit trader’ who may be located in another EU Member State or in a non EU country who buys and sells zero rated for VAT purposes and exports on, frequently the goods back to another EU Member States. It is generally regarded as being non-compliant.”

The similar definition of participants in a fraudulent MTIC transaction was adopted by Financial Action Task Force [2007]. All of the involved companies, except that of a missing trader, may claim a lack of knowledge of the scheme. The scheme works for the standard but not for the reverse VAT mechanism (in the same country a seller has to return output VAT to the Tax Office). The essence of the crime is to go through a chain of buffers in order to create a distance between the importing and the exporting companies; and in some cases re-exporting
the same goods to another EU member state. The loss to treasury follows because input VAT tax is reclaimed by the broker and output tax is not paid by the missing trader.

Initially, the country most affected was the United Kingdom, but then the scheme shown in Figure 1 diffused to other EU countries.

**Figure 1.** A simple fraudulent MTIC “carousel” transaction chain. Kingswood is an organizer (also a buffer) and MSL (MY SECRETS LIMITED) is a broker. The topology corresponds to the appellation case MSL and the Commissioners for HMRC. The Upper Tier Tax Tribunal ruled in favour of HMRC.

The most sophisticated scheme is the so-called “contra trade” scheme. Here, there exist 2 chains, one “dirty” – horizontal in Figure 2, and “clean” – the vertical one. One company (in the yellow background of Figure 2) appears in both chains. Its VAT tax obligation value is zero because the input VAT and the output VAT for the transactions are equal. The crucial feature of the scheme is distancing a defaulting trader from the point of a possible crime discovery (that is a company that demands a tax reclaim). In real cases structures of chains may be more complex.

The English type VAT carousel scheme has the following features:
- conduit traders appear at both ends of the chain. This means that tax duty obligation appears earlier than a tax reclaim request. This could be irrelevant in practice if all transactions happened in very short period of time,

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3 Upper Tribunal (UK Tax and Chancery Chamber) case no FTC/76/2011.
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- goods such as mobile terminals and computer chips – high value, low volume,
- transactions are of high value and occur in spurts (this could be easily stopped by inspecting Financial Intelligence Unit data),
- there is no doubt that goods crossed the border,
- usually, it was not clear what happened with goods after they left UK. They could start another carousel chain,
- goods could be country specific (mobile terminals specified to a given country).

Figure 2. A contra trade scheme corresponding to the appellation case GSL and the Commissioners for HMRC.\(^4\) The Upper Tier Tax Tribunal ruled in favour of HMRC. NEX is an organizer (also a buffer) and GSL (GREENER SOLUTIONS LTD) is a broker. The dirty chain exists, but its details are not necessary for our analysis

The Polish type VAT carousel scheme differs from the English one that the goods are unlabeled, are traded in a continuous manner and the paths of invoice and money flows are different from a transport flow. The chain of transactions may start in Poland as seen in Figure 3 or outside of Poland as shown in Figure 4. Moreover, there are many missing traders and end customers. Crucial for the scheme is the falsification of shipment documents. It is impossible to prosecute end customers and is difficult to investigate many missing traders. If prosecutors are not able to prove that transport routes were not possible and invoice and shipment documents are carefully drafted (without obvious errors) then criminals go

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\(^4\) Upper Tribunal (UK Tax and Chancery Chamber) caseno FTC/91/2010.
unpunished and obtain a VAT refund from the Treasury. It is rare that suspected persons break during testimonies and admit wrong doing.

A typical chain of transactions consists of the following steps:

– Company 1 from Poland issues an invoice and international shipping document, CMR, related to a sale (fictitious) of goods (there steel rods) to company 2 in the Czech Republic/Slovakia. The VAT tax rate is 0. The assumed price is 100.

– Company 2 then sells the goods to Poland and issues an invoice and international shipping document CMR related to a sale (fictitious) of goods (the same steel rods) to company 3 in Poland. The VAT tax rate is 0. The price is equivalent to 100 (after currency exchange).

– In reality the goods do not leave Poland. They are sold by company 1 to company 3 through a series of intermediaries $i$. In this work we do not analyse this aspect. The price of goods should be 123 (with the current base VAT rate of 23%); and the corresponding VAT input tax reclaim should be 23. However, since there is a collusion between the companies involved and their people, a final buyer pays around 115. As a side effect, the legal trade collapses.

Figure 3. Companies involved in the Polish type VAT carousel
The Polish type VAT carousel scheme has the following features:
- Conduit traders appear at the beginning of the chain.
- Goods are steel rods and metal scrap chips – high volume, low value. Hence, many transports.
- There are also systematic money flows (this is less suspicious; and banking Financial Intelligence Unit data need more sophisticated analysis to observe irregularities).
- Goods do not cross the border.
- Goods are sold to the end client at a discount.
- Goods are not country specific.
- One round of goods flow could be exploited in several fictitious invoice flows on paper in different Polish tax districts. In most cases, this is not discovered by the police and fiscal services due to the lack of central databases.

3. Analysis of the English type VAT carousel

In the English type VAT carousel basic evidence is collected and a fraud is established. The issue is whether a broker is liable to participation in the fraud. Legal conditions on liability in participating in a carousel fraud are complex and their relations, due to, facts cannot be based on the Boolean logic. Being a member in a fraudulent chain and obtaining benefit from carousel VAT crime is not enough. The ECJ introduced the so-called “knowledge test” in its judgment in the joined cases of C-439/04 and C-440/04 Kittel/Recolta.

The knowledge test has been expressed as follows: “If the tax administration can prove that the customer knew or should have known that he was participating in a transaction linked to VAT evasion, the tax administration can refuse the right to deduct to that taxable person. Taxable persons that take every precaution which could be reasonably required to ensure that their transactions are not connected with fraud would not be confronted with a loss of the right to deduct input VAT.”

The question is what is “every precaution,” which is also dependent on experience of a given person in a business transaction in specific areas.

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A scope of application of the decision of Kittel/Recolta had been debated [Ainsworth, 2012b]. The fraudster in both cases happened to be the immediate seller. It was not clear that Kittel/Recolta apply throughout the commercial chain, or was it confined to privity relationships of the next-person-in-line?

The recent decision of the ECJ on Mahagében/Dávid [Ainsworth, 2012a] declared that the scope of Kittel/Recolta is throughout the supply chain. In general, it means that the job of fiscal authorities and the police becomes more difficult. The ECJ gave its decision, after obtaining comments, from the Hungarian, English and Spanish jurisdictions.

Mahagébenkft is a small Hungarian wood mill and processing plant that contracted and purchased acacia logs from another domestic business, Rómahegy-Kertkft (RK). Formally proper invoices were issued and paid (along with VAT). Mahagében filed a timely return and deducted the VAT paid. In the Hungarian tax authority’s view, Mahagében was not allowed to deduct input VAT based on the invoices issued by RK. Namely, the tax authority, during an inspection of purchases and deliveries at RK, concluded that RK, as the issuer of the invoices in question, had not been able to produce any documents evidencing the corresponding transactions and did not have a sufficient quantity of acacia logs in inventory to meet the invoiced demand of Mahagében, nor did it have a lorry to make deliveries of the logs. Having regard to the result of the inspection carried out at RK’s premises, those invoices had not been regarded as valid. In the case of David, this Hungarian VAT registered company (general contractor) requested to deduct VAT on payments made to subcontractors for the services of labourers. The tax authority refused to allow the input VAT deduction, even though it was clear that the work was done and the VAT was paid. The reason for the denial was alleged improper acts by the subcontractors; acting as missing traders.

Argumentation of the ECJ in Mahagében included, in our view, is quite vague. None of the conditions and procedures of the Hungarian tax authority were appropriate in seeking the proofs that the person who drafted the invoice (the seller):

– was in possession of the goods,
– could have delivered the goods,
– could satisfy the obligations of the contract (actual performance capability not just the promise of performance),
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- placed the goods (the goods were acacia logs) he was selling into his inventory when he purchased them from his supplier,
- had a good invoice for the goods (acacia logs) he purchased from his supplier,
- declared the purchase from his supplier and for the subsequent sale to the taxpayer on his VAT returns,
- paid the VAT on the purchase from his supplier and reported the VAT on the subsequent sale to the taxpayer on his VAT returns.

Notice, that it is still crucial whether the goods had been delivered to Mahagében. It is, however, clear that Mahagében and David greatly diminish number of proofs that fiscal authorities could obtain. This will have consequences in decisions regarding a German courts judgment [Ainsworth, 2012b].

Unfortunately conditions of Mahagében/Dávid do not quite apply to cases of MSL and GS, because issues whether a broker knew or should have known that he is participating in a fraud are less material. There is no single fact, that by itself could resolve the issue. In general, one cannot prove that the broker knew about all of the transactions in a chain, even if he tried to establish this. The only discrepancies from business procedures in comparison with the legitimate world, in relation to broker-organizer and broker-conduit trader, in aggregate, could indicate fraud.

We specify 3 types of suspicious patterns. In the MSL case these are:

I. Orchestrated transaction:
   1. All of the parties to the deals in the supply chains had accounts in one bank, namely the FCIB in the Netherlands Antilles. (In fact, all 2500 carousel VAT parties in 2005 and 2006 had accounts in this bank. The FCIB’s banking license was revoked on October 9, 2006).
   2. Extensive free unsecured credit.
   3. A broker representing overseas customers contacted Kingswood unsolicited, requesting precisely the models of mobile phones which Kingswood was able to supply, so that the appellant was never exposed to holding unsold stock in its first participation in a wholly new market.
   4. Unsolicited approach from First Curacao International Bank to provide the requisite banking facilities.
5. Lack of commercial substance (Kingswood could have sold it itself).

II. Unusual features of the transaction:
   1. The broker and the conduit trader 2 did not know themselves personally, very strange when millions are involved.
   2. Readiness of the appellant to release valuable consignments of goods for export without obtaining any security for payment from overseas customers with whom the appellant had had no previous dealings of any kind.
   3. Inadequate specification of the products in the negotiating documents, in comparison with the specification later required in the written orders goods not suited for the alleged country of sale.
   4. In-compatibility between the order and the contract; a Belgian customer enquired about six different types of phones (by email timed at 15.12 on the 28th of June) and the export contract made that same day was only for two types of phones and then in amounts less than requested, rather than for the ones which conform to the UK specifications.
   5. Mobile phones of European specification were on the market for sale in the UK; chargers supplied with mobile phones’ European specification typically have a two-pin plug.
   6. A stock enquiry appeared to have occurred later than the substantial performance of the appellant’s part of an already concluded contract.

III. Wrong timings:
   1. Stock enquiry appears to have occurred later than the substantial performance of the appellant’s part of an already concluded (shipment)
   2. Whole of the payment flow in connection with the four dirty chains of which the June transactions formed part, apart from the appellant’s funding of the VAT element in which the missing trader at the head of the chain absconded, was handled, again in each case, on a single day.

The **Bold** font represents facts that the broker could have been aware of.

The GSL case was more complex, because the GSL was in a clean chain and GSL matters were handled by an agent, not an owner or
a general manager of GSL (therefore what the deal agent knew was not necessarily what GSL knew).

The number of incriminating facts are smaller.

Unusual features of the transaction were:

1. **No contract** – The absence of written terms and conditions of the given transaction. GSL had produced the invoice, which was identified as the only possible source of any terms and conditions. This is very incriminating for deals worth millions.

2. GSL did not make any inquiries of 1st Freight and as a result, did not inspect the phones. It was possible that the phones were never at the warehouse.

3. HMRC had visited GSL and warned its officers about the prevalence of MTIC fraud in the new mobile phone wholesale sector, in particular.

4. A reasonable trader in mobile phones at the time of the transaction would have known of the concerns surrounding FCIB and would have taken this into account in assessing whether the person with which he was proposing to deal was a legitimate trader or not. Many traders banked with FCIB conducted activities that were fraudulent. In that case a trader, in a position of GSL, should take special care when someone proposes to trade with a person/trader holding an account in that bank.

5. There was no person who met anyone from CEMSA, which was a Spanish company for delivery to a warehouse.

With these kinds of facts one cannot use Boolean logic. The proper formalism would require fuzzy rules (logic with uncertainty).

### 4. Analysis of the Polish type VAT carousel

To be specific, we present here a typical chain of transactions with prices corresponding to the value of 1 ton of steel rods. For simplicity, each step does not include margins:

- straw company X1”buys” steel for 500 EUR’s,
- straw company X1”sells” steel to Y for 500 EUR’s 115 EUR’s plus VAT – the total 615 EUR’s,
Y “exports” steel for 500 EUR’s to a Czech company F (fictitious),
on the ground of the transactions 2 and 3 Y applies for the 115 EUR’s VAT return from the Tax office. Contrary to what happens in UK, Y gets the refund in many, possibly most cases (there is no central database registering refunds based on suspicious grounds),
The same steel is sold by Y to a final client Z for the amount of 440 EUR’s (358 EUR plus 82 EUR’s VAT) in a seemingly legal fashion. Y may pretend it is running a legitimate business,
This transaction serves to justify an artificially low price of 440 EUR’s,
X2 is obliged to pay 82 EUR’s in VAT to the treasury – a district tax office, but is missing.
X1 is obliged to pay 115 EUR’s in VAT to the treasury, but is missing.
Actually the steel transport goes from Latvia to the final customer Z.

Figure 4. Detailed scheme of fictitious trade in the Polish type VAT carousel, TO – Tax Office, WSP – Wholesale steel provider, SC – Straw company
In 2012 Latvia reported shipments of 300,000 tons of steel rods to Poland, whereas the Polish registry shows imports of only 5,000 tons. There is the whole industry facilitating VAT avoidance. The steel mills and middlemen Y advertise the sale of steel rods for the price of 440 EUR’s (below the cost of production). The border Czech cities house hundreds of fictitious X1 companies. We are not aware of a single case in which prosecutors bothered to analyze how a part of proceeds gets back to steel mills.

For the typology presented in Figure 3, contrary to low volume, high value transactions, for the transaction to appear legal, a shipper has to make transports (material movement of goods from the warehouse in Poland to a warehouse in the Czech Republic/Slovakia). The willingness to save money and the lack of border control allows criminals skipping physical routes across the border. Instead their routes are completely within Poland directly to the end clients. The procedure is facilitated by the fact that both the fictitious and the real routes may partially coincide.

Analysis is conducted by data correlation between invoices and transnational shipment documents (Contrat de transport international de Marchandise par Route, CMR documents) and drivers phone records. By using a cell phone, drivers map positions of trucks along the routes they have taken (as recorded on radio towers, called BTS, Base Transceiver Stations). These phone records identify routes, that can be contrasted with these on CMR documents (complemented by invoices). Uncovering criminal behaviour relies on comparing data related to fictitious and real routes taken by shipping companies and drivers. Depending on the distance between the origin and destination of goods, data on dates of transportation and the frequency of phone calls, a significant percentage of routes can be labelled as fictitious. The method [Jędrzejek, Nowak, Bąk and Szwabe, 2012, pp. 61–69] proved its usefulness for the enormous steel rod affair GARO case (anonymized acronym).

The sequence of investigation steps and analysis steps go through the verification of the following stages:

a) CMR documents falsification,
b) invoice falsification,
c) VAT tax fraud, not paying the required VAT tax and claiming a VAT return based on fictitious transactions,
d) money laundering of proceeds.
Executing a) scheme requires many more activities, that facilitate these steps.
In this work we concentrate on step b).

The method has been applied to a real-life investigation concerning the fraudulent process of transactions between Polish and Czech companies.

We designed the VAT fraud ontology (suitable for carousel fraud), somewhat more specialized than [Kerremans and Zhao, 2005] and extended our previous approach to the analysis of the English type of VAT crime [Jędrzejek, Bąk, Falkowski, Cybulka and Nowak, 2011, pp. 130–134], following our experience with the description of other sorts of economic crimes [Bąk, Jędrzejek and Falkowski, 2010, pp. 210–224].

We used a dedicated tool in which one can model rules [Bak, Nowak and Jedrzejek, 2013]. The results are presented in Figure 5 [Jedrzejek, Nowak, Bąk and Szwabe, 2012, pp. 61–69]. The result is the first complete (up to the stage b)) analysis of a VAT carousel that invalidates the declared routes (expertise that would be a basis for indictment for this and twenty or so similar cases).

**Figure 5.** Results of the reasoning up to step b).

Paths which are claimed on the basis of fictitious documents are excluded progressively. The real goods transaction path is the one connecting the last Polish company and the end client (the last on fictitious invoices)
VAT offers distinctive opportunities for evasion and fraud, especially through the abuse of the credit and refund mechanism. The missing trader fraud originated on a large scale in the UK, where VAT revenue losses through evasion jumped sharply in 2005–2006, reaching £12.4 billion or 14.5% of potential VAT revenues.

Since then, due to many measures, the losses have been reduced to less than £1 billion a year, despite the legal difficulties mentioned earlier in the paper. One of the relative reasons for success was the analytic ability of the UK’s HMRC and the police, as well as the co-operation between the 2 services.

The UK is much more developed than Poland concerning e-government, particularly handling big data, digitalizing administration and using analytics. According to the latest e-government ranking, the UK is in 5th position (Poland has not been evaluated) [International…, 2013]. In a similar type of rankings (United Nations Global E-government Readiness Reports) Poland has never been higher than 40th place. The UK VAT tax collection follows GDP, VAT receipts peaked in 2011–2012 at 21% and remained at that level in 2012–2013 and in fact the UK tax gap decreases [HM Revenue…]. It is important to mention that the UK’s GDP remains 3.3% below its pre-recession peak due to the global crisis [UK Office…, 2013].

Poland experienced no recession in 2008–2013, instead its GDP increased by 18%, but a large contribution to this was due to export, which brings no VAT revenues. However, the level of the shadow economy [Raczkowski, 2013] increased to 24.4%, a recent update compared to [Schneider, 2013], rivaling only that of Romania and Bulgaria. We estimated [Więckowski and Jędrzejek, 2013] that the share of a criminal part of it increases sharply, by drafting false invoices, shipping documents by organized crime groups, corrupting and using proceeds for executing more severe crimes.

The evaluation of revenue for 2013 published in June 2013 by the Polish Ministry of Finance (MF) indicated that a decrease of the VAT collection will be in double digits [Polish, 2013]. The number of fictitious...
tious invoices increased by 260%. As a result of this, the budget deficit will increase by 24 bln PLN in 2013 (5.9 bln EUR’s, calculated at a rate of 1 EUR = 4.22 PLN), which could possibly exceed 30 bln PLN (7.1 bln EUR’s).

As the total inability of the Ministry of Finance command on data, the MF VAT gap estimates for 2012 were 6.6 bln PLN (1.6 bln EUR’s), whereas the recent PWC report [PWC, 2013] estimates it as at least 36.5 bln PLN (7.1 bln EUR’s). This is a manifestation of a policy used for long a time in Poland by the administration to hide the real scale of a VAT gap problem (in fact, the “VAT gap” wording is not defined and avoided).

Poland fails on every aspect of policy affecting combating VAT avoidance:

- tighter controls at all points in the “supply chain,”
- development of new regulatory and enforcement tools,
- new legislation (although reverse charge and joint liability of a seller and buyer will be enforced from October 1, 2013); in this aspect Poland intends quickly enact measures enabled by the European Council approval of two VAT directives on July 22, 2013,
- working with legitimate business in affected sectors,
- working with other EU states,
- sharply focused and targeted criminal investigations.

We ascribe this to the dysfunctional legal system, fiscal administration, police and to the highest degree, the prosecutor’s offices.

6. Conclusions and future work

VAT related crimes constitute tremendous danger to economic order, because they are relatively easy to commit. This paper presents a conceptual model which may be applied to the analysis of VAT carousel crimes and accompanying trade-based money laundering processes. We demonstrated a difference between the English and Polish types of VAT carousel schemes. Currently, both schemes operate between the UK and Poland for fictitious scrap metal transactions (reclaiming VAT in both countries, which is a novelty, but serving as proof as how audacious the criminal groups have become).
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The Polish scheme can be fully described by hard rules and therefore analysis could be highly effective. However, because of the necessity of investigating many straw companies and the inability to trace money to real beneficiaries of the criminal procedure, for a country with primitive analytics and a lack of crucial databases, the administration and police are helpless (if not worse). In the majority of cases, there are no indictments and no attempt to use evidence indicating VAT avoidance as shown in Figure 5. We have demonstrated that with novel tools, the time of investigations could be shortened several fold.

The English type of scheme is very much dependent on the legal interpretation for the full analysis of the case. For the analysis, fuzzy logic rules are necessary, which will be the goal of our next work. In particular, reactive elements have to be introduced for describing time dependence of flows and tax actions.

The Polish scheme relies on physical transport, so it could be analyzed and prosecuted. Unfortunately the low analytic, legal and organizational competences of the Polish Police, fiscal services and prosecutor’s offices are so low that practically criminals go un-punished.

Despite of some legal acts helping to prevent VAT avoidance we expect matters to get worse, endangering Poland’s stability. Maybe then the central institution structures will be shaken.

Our model is amenable to extensions and adding new actions (processes). It allows for building new VAT carousel crimes and combining them with money laundering schemes.

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CHAPTER 5

The latest changes in the French tax evasion policy and its influence on economic and financial security

Urszula Zawadzka-Pąk*

Abstract

For a long time the phenomenon of the tax evasion has constituted a serious problem in the French economy provoking the diminution of budgetary revenues and the increase of social injustice. However, the globalisation of commercial exchanges that enabled the expansion of the scope of evasion – on one hand – and the financial and economic crisis that obliged to seek the additional resources – on the other hand – forced the French government to search for more effective methods in combating tax evasion. In this aim, two approaches can be used: the punitive and the preventive one.

Keywords: tax evasion, tax havens, tax fraud, tax optimisation, combating

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1. Introduction

The phenomenon of tax evasion and on the existence of tax havens is a result of the globalisation and the internationalisation of the private enterprises. The development of the world’s economy heavily depends on international co-operation, including the taxes, while tax evasion significantly hampers the proper functioning of the global market economy and harm free-market competition. As noted by Michel Bouvier [2010, pp. 1–2], while trade has long since crossed the borders, the competencies of the tax administrations remains mainly the matter of particular countries. In such a case, the fiscal authorities are becoming more and more helpless in the face of the international tax evasion. Specially that a request of information addressed to another country still remains the main tool of fighting against this phenomenon. Thus, state authorities are trying to establish procedures of effective co-operation. However, at the same time the respect of the rights of taxpayers is needed, otherwise they would decide to move to other country with lower tax pressures. What is more, the phenomenon of tax evasion causes that there is no equality between taxpayers who have access to the international tax area and for those who cannot avoid the rigors of the state’s space. Due to the lack of tax harmonisation, that is extremely difficult to achieve, the penalisation of tax evasion requires an international strategy and a strong political will.

In France in 2001 “the New Financial Constitution,” i.e. an organic law on finance laws – in short LOLF – was passed (loi organique no 2001–692 du 1 août 2001 relative aux lois de finances). Its provisions came into force in stages until 2006. This act has introduced crucial changes concerning the expenditure side of the French states budget by replacing the traditional classification by the performance one. This change has enabled taking more effective and more efficient decisions regarding the allocation of budgetary resources. However the LOLF have not introduced any significant modifications concerning the revenue side of the budget, whereas to ensure the stability and security of the economy, not only efficient and effective public spending is necessary but also “the protection of tax revenues” (the expression – sécurisation des recettes fiscales – was used for the first time by the President of the French Court of Auditors in May 2000). These activities should focus mainly on the fight against tax evasion and the
effects of the existence of the so-called tax havens. Another effect that influences the protection of tax revenues is connected to “the fiscal expenditure,” i.e. the loss of tax revenue of the state and local governments budgets resulting from the various tax reliefs and reductions.

The problem of non-sufficient tax revenues is particularly important in the case of the French public finances, where the levels of public debt and the public deficit are definitely too high and too expensive. The detailed information is presented in Figure 1.

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<td>Public debt</td>
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<td>Public revenue</td>
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**Figure 1.** Key data of the French public finances (in relation to GDP)

Source: Institut National de la Statistique et des Études Économiques (INSEE).

It is difficult to measure the real scope of the problem of tax evasion, however it is estimated that the annual financial losses of the French budget resulted from the phenomenon of tax evasions reached a level of 60–80 mld EUR’s.¹

### 2. Tax fraud, tax evasion, tax optimisation

Beyond the central issue of ways of combating the illegal tax avoidance practices, primarily it is important to define the terms that are often confused, i.e. tax evasion, tax fraud and tax optimisation. The concept of “fiscal fraud” is usually applied to the most serious cases of the tax avoidance, for example to distinguish errors and omissions, intentional or not. Several meanings of the term “tax evasion” exist: for certain people, tax evasion is always illegal, for others it is a syno-

¹ Rapport du syndicat national Solidaires Finances Publiques Evasions et fraudes fiscales, contrôle fiscal, Janvier 2013, p. 20
nym for the optimisation and/or relocation. The notion of “the optimisation” is less ambiguous – it is connected to legal practices, however considered to be more or less “legitimate.” However, the optimisation may conceal a fraud when the legal means are used to hide tax fraud.²

For Pierre Beltrame, tax fraud is “an offense to the law in order to avoid taxation or reduce its amount” [Beltrame, 1987, p. 6]. So tax fraud in this strict sense involves three elements: the legal one (non-compliance with binding law), the material one (evaded tax) and the moral one (intentional or unintentional mistake). Moreover, the fraud (in the strict sense) is punished differently depending on its category (the offense, the deceit or the crime). The fraud in the broadest sense results in the lack of the amounts of money that the state and the local communities have not gathered because of non-compliance of the taxpayers with regards to the law.

The term tax evasion is rather vague and subjected to the different interpretations. Generally, it includes all elements related to tax fraud and the tax optimisation at the same time. Sometimes it is interpreted too strictly as the legal means of tax avoidance. However, it is preferable to understand the tax evasion as the tax fraud in its legal sense. In this sense the term “tax evasion” means the process aimed at the avoidance of tax when the binding law would normally lead to the payment of the tax. In that sense, the term “evasion” is widely used, including the latest declaration by the French government and the President of combating this phenomenon.

There is another term used to define legal actions took to pay less taxes – it is “optimisation.” In general, the optimisation is legal and consists of using the legal and/or illegal mechanisms for the only purpose of the avoidance of tax. Tax avoidance aims at reducing of tax burden– the taxpayer decides himself about taking actions which consist of the tax evasions (illegal behaviours) or the tax optimisation (behaviours legally permitted) [Raczkowski, p. 355]. However, the legal border between legal and illegal actions is at level of the abuse of law consisting of the use of the legal mechanisms only for the purpose of avoiding tax. When it is happening the tax administration is obliged to prove that the abuse of law takes place. However, the tax authorities are able to prove it in the minority of cases, so the proving

² Rapport du syndicat national Solidaires Finances Publiques Evasions et fraudes fiscales, contrôle fiscal, Janvier 2013, p. 20
by the tax administration of the existence of this aim cannot designate
the border between the optimisation and the evasion.

In summary, in contrast to the tax fraud, the tax evasion has not the
legal definition, both of them are illegal, while the tax optimisation is
legal.3

3. Reasons of intensification of combating tax fraud
and tax evasion in France

3.1. The role of the financial and economic crisis and the
co-operation of international organisations

The financial and economic crisis that began in 2007 has emphasized
the need for special care not only regarding the expenditure side of the
budget but also of the income one and led many countries, including
France, to the increased reflection on the possibility of the optimisation
of the tax revenue.

These actions seek to avoid the creation of new taxes or raising ex-
isting ones, which would be detrimental to the economic situation of
the country, but also unfair from the point of view of social justice,
because new (or higher) taxes would be paid (as the existing ones)
again by the majority of the taxpayers, who also previously regulated
their tax duties. What is more, it would be contrary to the art. 13 of the
French Declaration of the rights of Man and Citizen of 1789 that pro-
vides that a general tax is indispensable for the maintenance of the
public force and for the expenses of administration; it ought to be
equally apportioned among all citizens according to their means.
Therefore, it obliges the authorities to ensure the effectiveness of the
principle of equality under taxes of all citizens according to their con-
tributory capacities.

As the French Budget Minister, Éric Woerth, incited in May 2009
in the difficult economic situation: Do not look only for the solution to
the crisis. The crisis should force you into the reflection about the
effectiveness of the existing solutions.” Actually, France is the exam-

ple of the country where the crisis has not only contributed to the appearance of the problems that immediately should have been solved, but also revealed failures of the country, i.e. the growing phenomena of tax evasion and tax havens. It cannot be denied that the financial and economic crisis, apart from its severe financial consequences, also had a positive influence on the intensification of international cooperation against tax evasion and tax havens.

Due to the increased pressure of the G20, the OECD standards on transparency and exchange of information have become widely recognized international norms. Four OECD countries, which have so far opposed them (Austria, Belgium, Luxembourg and Switzerland) withdrew their opposition. Three tax havens (Andorra, Liechtenstein and Monaco) agreed to these standards in March 2009, four countries of the World Forum (Costa Rica, Malaysia, the Philippines and Uruguay) followed suit [Esclassan, 2010, p. 73].

Also at the level of the European Union, the works on the fight against the evasion of tax and tax havens were accelerated. It is estimated that scandalous EUR 1 trillion of potential tax revenues is lost to tax fraud, tax evasion, tax avoidance and aggressive tax planning every year in the EU, representing an approximate cost of EUR 2,000 for every European citizen each year.4 The European Parliament has prepared the motion for a European Parliament resolution on the Fight against Tax Fraud, Tax Evasion and Tax Havens. During the summit of 22nd May 2013 that took place in Brussels, the European Council composing of the chiefs of States and governments of 27 EU members took the decision about the acceleration of combating tax fraud and evasion and decided about a new agenda of actions.5

3.2. Impact of tensions between France and Switzerland

The tensions between France and Switzerland that started in 2009 and which have lasted until now were one of the direct reasons of the intensification in France in the fight against tax havens. In August 2009, the French Budget Minister, Éric Woerth, released a list of the 3000

5 Commission contribution to the European Council of 22nd May 2013. Combating tax fraud and evasion, pp. 1–9
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“tax evaders” – the millionaires – and asks them to report to the tax authorities. It was later learned that the list was created on the basis of the information stolen by Hervé Falciani, the former computer scientist of a Geneva branch of the HSBC bank. Hervé Falciani who has duel, Franco-Italian citizenship, during several years had copied the information about customers from the HSBC bank where he worked. After leaving Switzerland he wanted to sell the information about potential tax-evaders to the governments of different countries. The Swiss authorities has issued the international arrest warrant against him, however they made a serious mistake: they asked the French to search his home, seize his laptop and send to Switzerland all of his archives. The French authorities found on his laptop the information about 130,000 customers of potential tax evaders from different countries. Hevré Falciani decided to co-operate with governments against the phenomenon of tax havens. Now he lives under protection of the Spanish government who refuses his extradition to Switzerland.

The French President, Nicolas Sarkozy commented the publication of list of the 3,000 tax evaders that “in these times of crisis, fraud is not acceptable.” The case of the former employee of HSBC has sparked a diplomatic crisis between France and Switzerland. Berne accused Paris of illegal detention of the stolen data. The French government, in turn, threatened to put Switzerland on the OECD blacklist of tax havens. In January 2010, the new Franco-Swiss double taxation agreement entered into force that provided the exchange of tax information upon request. In March 2012, two main candidates in the French presidential election – Nicolas Sarkozy and François Hollande – suggested taxation of the rich French who had settled in Switzerland. This measure would require a revision of the Franco-Swiss agreement. In August 2012, the new agreement on succession was signed by the two states. The successors resident in France or Swiss residents are now taxed by the French tax authorities. This text aroused strong opposition in Switzerland. In December 2012, Paris removes the “tolerance” that allowed people to pay a lump sum in Switzerland to benefit from the privileges of the double taxation agreement.

At the end of 2012, the political and financial scandal involving Jérôme Cahuzac, the French Budget Minister, broke. Accused by the online news site Mediapart of possessing undeclared funds in an account in Switzerland, then in Singapore, Cahuzac repeatedly proclaimed
his innocence, including before the deputies to the National Assembly. The day of the opening of a judicial inquiry, on the 19th of March 2013, the president Francois Hollande announced the departure of its government minister. Jérôme Cahuzac before the judges plead guilty in April. He is accused of money laundering coming from tax evasion.

Finally in May 2013, the French Development Minister put Switzerland among other 16 countries on a blacklist of tax havens which means that these countries cannot distribute financial help from Agence Française de Développement (ADF). Even if this decision does not have important financial consequences to Switzerland, it reveals a very offensive climate in Paris against this country and shows that its tax co-operation is considered to be insufficient [Berchem, 2013].

4. Works in progress

4.1. Punitive approach

To realise the previous announcements of combating the tax evasion, the French government initiated the accelerated procedure of the adoption of the acts that will allow the intensification of the fight against tax evasion. On the 24th of April 2013 two projects of law were disposed: the bill on the fight against tax evasion and the great economic and financial delinquency (projet du 22 avril 2013 de la loi relatif à la lutte contre la fraude fiscale et la grande délinquance économique et financière JUSX1310649L) and the organic bill on the Financial Prosecutor of the Republic (projet du 22 avril 2013 de la loi organique relatif au procureur de la République financier, JUS X1310899L). It is planned that these provisions will come into force in the autumn of 2014.

The aim of the bill on the fight against tax evasion and the great economic and financial delinquency is:

− to allow the organisations fighting against corruption to become the civil party and to eliminate the monopoly of prosecution of public ministry for corruption involving a public official of a foreign state or an international organisation (art. 1),
− to extend the jurisdiction of the national brigade of the prevention of tax delinquency (Brigade nationale de la répression de
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la délinquance fiscale) to the complex tax evasion crimes, the punishment is also reinforced (art. 2 and 3),
– to make possible the sentencing for complementary general confiscation of assets of corporations convicted of money laundering (art. 4),
– to improve the effectiveness of provisions relating to the international assistance for the seizure of criminal assets (art. 9),
– to allow the tax administration to exploit the information that it receives, regardless of its origin (art. 10),
– to extend the competencies of specialized inter-regional courts (JIRS) in economic and financial matters and to remove specialized regional courts (JRS) (art. 12 and 13),
– to create the Financial Prosecutor of the Republic which shall have exclusive jurisdiction for the prosecution, investigation and trial of market abuse (art. 14 to 16 and art. 19). The provisions relating to the Financial Prosecutor of the Republic will be supplemented by the above-mentioned bill of the organic law.

Before all of these provisions will enter into force and enable a more effective fight against tax evasion, the French Budget Minister, Bernard Cazeneuve, has issued the 21st July 2013 the circular concerning the treatment of corrective tax declaration of taxpayers holding assets abroad (circulaire du 21 juin 2013 du Ministère délégué chargé du Budget sur le traitement des déclarations rectificatives des contribuables détenant des avoirs à l’étranger) that should encourage the taxpayers to reveal their revenues dissimulated in their foreign bank accounts. By this circular, the government calls the taxpayers holding abroad undeclared assets to make its situation legal as soon as possible in respect of common law, of the principles of transparency and fairness, which are the guarantors of the equality of citizens. The rate of penalty for wilful failure will be 30% for so-called “active” fraudsters, and 15% for the “passive” fraudsters (who, for e.g. inherited undeclared assets) instead of a rate of 40% normally applicable when the information of assets held abroad by the taxpayers are obtained by the administration itself. The circular has not introduced any kind of amnesty, so the taxpayers must pay the full amount of taxes evaded and the corresponding penalties and fines.
4.2. Preventive approach

It is worth noting that in addition to typically punitive approaches, it is possible (and desirable) to use complementarily a different solution based on the prevention. As Michel Bouvier [2010, pp. 1–2] explains for this purpose it is necessary to resign, at least partially, from unilateral determination of rules by public authorities and to establish rights and obligations of the tax administration and taxpayers together in the form of so-called preventive fiscal agreements. Such a solution has already been used in some countries, including the Anglo-Saxon ones. These agreements – which may take the form of the prior agreements on the transfer of prices – may be coherent with the concept of management of tax administrations but also with the strategic management of the enterprises. This concept can help to develop a new civic fiscal attitude. In consequence, a new form of fiscal governance is being created that consists of the accountability of both the taxpayers and the tax administration to establish the rights and obligations of both parties. This concept is also aimed at developing a new fiscal citizenship which consists of recognition and acceptance of the validity of the tax by the taxpayer in order that he voluntarily fulfils his tax obligations. The preventive fiscal agreements provide fiscal security for both sides – the taxpayer and the tax administration – because they fit in the preventive and not repressive concept of reduction of tax evasion.

This approach represents a new form of public governance on the enterprise management model which aims – on one hand – at a reduction of public expenditure and – on the other hand – an increase of public income. The preventive fiscal agreements fit in the process of legitimacy of taxes but also at the same time gain legitimacy themselves by providing the legal certitude for the taxpayer and the tax administration and cost reduction for both the tax administration and the taxpayer [Bouvier, 2010, pp. 1–2].

5. Conclusions

Even if the problem of tax evasion and fiscal paradises is not new, however the financial and economic crisis and serious problems of the majority of countries of all over the world related to the lack of sus-
tainability of public finances and excessive levels of public debt caused that the problem of tax evasion and the tax heavens had become the centre of attention. On one hand, the conviction that the tax administration, sooner or later, will get to know about all revenues of the taxpayer surely would efficiently discourage them from the evasion of tax. However, the effective combat with the fiscal evasion requires the international co-operation between all countries in order to create a transparent system of information necessary to tax what should be taxed. Obviously, countries that earn on the existence of being a tax heaven are not interested in the creation of such systems because they will lose the important part of the revenues coming from banks located in its territories. So the strong determination of international community is necessary to effectively combat the evasion of tax. On the other hand, the application of the preventive methods – next to strictly the punitive ones – would aid to decrease the scope of the phenomenon of the tax evasion and to develop the new intellectual attitude consisting of the recognition of the legitimacy of tax burdens. Regardless of the approach, there is no doubt that the phenomenon of tax evasion should be significantly reduced because of its detrimental influence on public finances, but also in the sense of the social justice.

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PART II

ECONOMY AND BUSINESS TRANSACTIONS
CHAPTER 6

The idea of homo oeconomicus
and the role of culture in the economy

Marian Noga

Abstract

This paper discusses the necessity of modifying the mainstream economy’s economic human paradigm since the current one prevents the science of economy from formulating predictive theses. The modification of the paradigm should address the fact that the idea of homo oeconomicus is a concept of a “hypothetical” or “fictitious” man. To build an economic model featuring predictive capabilities, we need to reduce the level of abstraction of the homo oeconomicus concept. It can be done only when we take account of the cultural context to economic management regardless of whether culture influences the economy directly or only indirectly.

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1. Introduction

The contemporary economy is dominated by a paradigm of the mainstream economy based on the idea of homo economicus or the economic human. The recent global economic crisis has shown that economy as a science has huge problems with predicting and building predictive models. There are many approaches among theoreticians of different sciences to the question whether it is necessary for science to formulate a predictive thesis. I am convinced that a science has to propose a predictive thesis as a result of its research to be called “science.” Otherwise, in my belief, we deal with a scientific reflection or scientific description of a phenomenon, object, matter, state of mind, human action or forces of nature, etc. This opinion of mine fully applies to the science of the economy as well. Naturally, it is easier to formulate a predictive thesis to a science that is able to discover and construe deterministic laws, as is the case with the natural sciences and it is harder to formulate a predictive thesis in these sciences construing to just stochastic laws, such as humanities including the economy.

For the contemporary economy to adopt the paradigm of the mainstream economy, the paradigm requires modification so that the economy would be able to formulate a predictive thesis. In my opinion, the following should be done to achieve this goal:

- Address the relationships between the human and the biosphere in evaluating the viability of economic management and thus, the aspects of environmental protection will become a determinant of sustainable economic growth.
- Take account of the results of research by the different non-mainstream schools of economic thought in the exploration of the economic realities and formulating a predictive thesis for the economy. What I mean is the results of research by the institutionalized economy, behavioural economy or behavioural finances. Social capital is becoming an important stimulator and determinant to economic growth.
- Historical, social and cultural contexts are very important parts of economic management. Both the working man (homo faber) and a man making a selection of means to fulfill his or her needs takes account of the historical, social and cultural con-
texts in his/her actions. So, we should ask whether the idea of the economic human addresses the cultural context or, in other words, whether the paradigm of the mainstream economy, based on the idea of the economic human, considers the effect of culture on economic management.

This paper attempts to find an answer to the question whether the paradigm of the mainstream economy takes account of the effect of culture on economic management in the context of adoption of the idea of the economic human as a theoretical basis.

2. The model of an economic human

Homo oeconomicus is an economy oriented and rationalized by man or woman. John Stuart Mill, considered the originator of the idea, for whom homo oeconomicus is just a theoretical model rather than a reference to a specific human population [Szacki, 2002, p. 263]. Accordingly, how could we interpret the concept of J.S. Mill's economic human?

- Homo oeconomicus attempts to maximize the useful value of things. However, producing the maximum useful value requires in each instance investing specific means (though the man will always try to minimize the investment even if just for this reason that the smaller input per the output unit of the useful value, the greater the savings for the production of extra useful value).
- J.S. Mill’s idea of homo oeconomicus does not specify what useful value the man works to maximize. This means the concept of an economic human does not identify a goal for human activity. Each man defines his or her goal for himself/herself and the environment, including the society, presents a barrier to overcome. According to this concept, the man is an utilitarian egoist who disregards the feelings of other people [Morawski, 2001, p. 26].
- The clear conclusion from my foregoing deliberations is that the economic human is just a hypothetical or fictitious man. Therefore, an attempt to postulate that the economic human takes account of the cultural context does not stand the test of criticism because the claim is wrong. If we assume under a given model
that, for instance, psychological factors (advertising, promotion, customs and habits, etc.) affect a consumer’s shopping behaviours, this will mean that this specific person considers the cultural context of its rational action. This means this person is not the model economic human.

– According to historical experience, an utilitarian egoist, according to Adam Smith, disregards the feelings of other people or, in fact, competitors. Therefore, in most cases, the decisions of an individual, which the economy would like to consider rational, are influenced by feelings and emotions that can hardly be regarded as rational motivators of a “cool-minded” reasonable choice.

– Considering the foregoing, we could say that a person that follows the economic human model will try to maximize his/her pleasures and minimize discomforts [Bylak, Sikora and Sztumskā, 2001, p. 32].

W. Załuski’s descriptive economic analysis of the law claims that the analysis has to be based on the economic human idea. What is a lawyer’s understanding of the concept of an economic human? He believes that the concept consists of the following:

– a formal component provided by instrumental rationality or a kind of rationality assuming that, while deciding what to do, a person will choose the action expected to provide him/her with the maximum gain at the smallest expense,

– a material component or egoism as the provider of individual tangible and/or intangible benefits [Załuski, 2013].

What could we say about the foregoing opinion? For me, it leads to a conclusion that the idea of an economic human, not only involves the pursuit of economic solutions to maximize their “value for money” (the maximum gain at the smallest expense) but also the indulgence to the person’s ego grown on the nurture, culture, relations within the environment, psychology and sociological factors. Contrary to the claim of the mainstream economy’s paradigm, the concept involves not just the individual but also a group rationality.

In my opinion, economists should not claim that the concept of an economic human “as is” takes account of the cultural context. Instead, they should try to bring the level of abstraction of the idea closer to earth to address all aspects of economic management, including the cultural one, which is what I want to do in this paper.
The idea of homo oeconomicus and the role of culture in the economy

3. Cultural Context to economic management

The influence of culture on economic management can be studied in many ways. It is obvious, and consistent with the national accounts methodology (System of National Accounts, SNA), that culture contributes to GDP as one of the national economy’s sectors and the share of culture in GDP grows with GDP [Noga, 2009, p. 268].

What is culture? As a sector of the economy it includes the cinema, theater, graphic arts, museums, sculptures, etc. In contrast, the scientific definition of the term needs to embrace the whole spectrum of human activities. The science dealing with the study of culture is sociology.

We can encounter many definitions of “culture” in the literature regarding this subject. Here I will present examples taken from the so-called “historical” school of defining the scientific category of “culture” and then I will share my own thinking on the subject.

Johann Gottfried Herder (1744–1803), a German philosopher and writer, claimed that each person is born twice: once as a product of nature and once as a creation of nurture. The man has the ability to create and transmit culture. Herder perceived the passing of culture as the source of humanity.¹ Further, Herder and Samuel von Puffendorf (1632–1694) maintained there were no cultured and uncultured peoples. Each nation, person or community can have its own culture that should not be criticized unless it is aimed against the good of other people.

Edward Burnett Tylor, a social anthropologist, defined culture as the following in 1871: “Culture, or civilization, taken in its broad, ethnographic sense, is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society” [Tylor, 1920, p. 1].

This is what Heinrich Rickert wrote about culture in 1929: “These (culture) sciences are not about what or how individuals experience (which is a subject of interest to psychology, which, besides, can be practiced as a natural science); it is about what is meaningful to them or remains in a tangible relationship with values that do not exist in any empirical, physical or psychological meaning of the word ‘exist’

but are nonetheless absolutely valid, providing landmarks for both historical people and a historian describing and trying to understand their behaviors” [Szacki, 2004, p. 429].

I believe culture can be defined as follows, drawing from the vast resources of definitions provided in the literature on the subject: the entirety of the material and spiritual heritage of humanity gathered, preserved and expanded augmented from one generation to another [Noga, 2009, p. 267].

Talcott Parsons claims that a social system meaning the whole “societal entity” is divided into subsystems or lower-ranking systems: (1) economy, (2) policy and (3) culture [Parsons, 1964].

The relationships between these subsystems have not been studied in depth yet. While the relationships between the economy and politics or politics and culture are the object of very inspiring research and the literature on the subject abounds in interesting results of these studies, the study of the economy-culture is just making its first steps. This has many causes, with the neglect of the cultural context as part of the economic human construct mentioned above being without doubt one of them.

While viewing the influence of culture on the economy, we cannot forget the subject of the effect of culture on man as the source of all economic activity. In my opinion, Sigmund Freud presented an interesting view on the interaction between man and culture. In his work, *The Uneasiness in Culture*, he referred to the relationships between the microcosmos of individual experience and the macrocosmos of the society. After studying these interactions, he concluded that “culture describes the sum of the achievements and institutions which differentiate our lives from those of our animal forebears” [Freud, 1998, p. 185]. Based on this view, Freud distinguished the following two aspects of culture:

1) on one hand, culture is repressive as it enforces specific behaviours on an individual,

2) on the other hand, culture is sublimational since the history of civilization is a tale of fulfillment of human wishes in a more sublime way [Freud, 1998, p. 185].

In both cases, culture subjects the man to restrictions, remains a source of “uneasiness” and has not offered humanity the happiness promised by the theoreticians of progress.
What is the aftermath of the Freud’s study to the science of the economy?

I believe that the father of psychoanalysis pointed out clearly that an economic entity has to pay attention to the cultural context of its actions, whether willingly or not, consciously or subconsciously. This, naturally, has further consequences. For instance, methodological individualism is not sufficient to study the economic realities and a complementary methodological “holism” should be applied in parallel. This means that also, in practice, the group rationality should be considered next to the individual one.

Now, if we look at the philosophical foundations of the culture of the East, such as Taoism or Confucianism, we will see that culture has an indirect effect on the ways how people do their business. Here, culture is the supreme determinant of man’s economic activity [Gesteland, 1999]. It has forged a unique approach to foreign nationals and a business culture of a network of contacts and relationships (guanxi). The economies of China, Japan and Far East countries including South Korea, Singapore, Taiwan, the Philippines and Malaysia are the manifest examples of the culture’s direct influence on the economy.

The social teachings of the Catholic Church are another interesting example of shaping the economy by means of influencing culture. The Pope Leo 13th’s encyclical, “Rights and Duties of Capital and Labour,” defined the foundations of these teachings. These were elaborated upon and updated by John Paul 2nd’s encyclical, “The Hundredth Year,” published on the 1st of May 1991, the 100th anniversary of the former publication [Centesimus…, 1991]. Naturally, the latter contained references to the economy and the influence of culture on economic management. I believe “The Hundredth Year’s” important points relevant to my discussion in this paper include the following:

- economy inefficiencies caused by the failure to address the cultural and national dimensions in economic management;
- the mainstream economy, founded on the economic human paradigm, completely fails to grasp the idea of group rationality because, according to the paradigm, all rationality should be derived from the rational actions of individuals. The social teachings of the Catholic Church postulate an idea of common good, collaboration and solidarity between people and thus, group rationality expressed in the form of working for the common
good, which is consistent with my belief that group rationality exists in parallel to the individual one;

– “The Hundredth Year” elaborates on the author’s points contained in the “On Human Work” encyclical (Sep. 14, 1981) and elevates work to a religious dimension. This means the Catholic teachings have taken account of the cultural context as part of their thinking about economic management.

To conclude my discussion on the relationships between culture and economy, I will refer to the two following approaches to the interaction:

– Approach 1: a given economic policy has to produce the same result in different countries regardless of their cultural differences. According to this approach, represented by liberals, politics can change culture. This is why it is policy and not culture, that drives social and economic growth.

– Approach 2: according to conservatives, it is culture, and not politics, that is crucial to social and economic growth since economic management is not always positioned in a defined cultural context and culture has a strong influence over the economy [Centesimus…, 1991].

The first approach has prevailed in the highly developed Western European countries and the USA, while the other is popular in many Asian countries. Some researchers relate this fact to the differences between Western and Asian cultures or systems of values. The values of Western culture, such as instrumental rationality, freedom, awareness of empowerment, legal procedures and individualism are relatively weak influences. In contrast, the Asian/Confucian values including the ritual, distributive justice, call of duty, shared spiritual life, family ties and community orientation gave a strong impact on the economy [Tu Wei-Ming, 2004].

4. Conclusion

The concept of an economic human as a theoretical foundation of the mainstream economy’s paradigm needs a deep-reaching modification in connection with the increasing complexity of economic management and changes in the roles of the determinants of economic growth
The idea of homo oeconomicus and the role of culture in the economy

with social capital and management gaining on importance as the drivers of economic performance.

The mainstream economy used to assume that the economic human does business in the following environment:

- full and free access to information,
- orderly set of preferences,
- economic accounts based on maximizing the pleasure and minimizing inconveniences,
- individual choice based on own interests.

I reiterated many times in the paper that the economic human is a “hypothetic” or “fictitious” being but if we want to construe predictive economic models we need to bring the abstraction of the economic human concept down to a more realistic level. This process of containing the level of abstraction consists of nothing more than including the cultural context to economic management. Culture is a part of the social capital with its strong influence on the global economy.

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CHAPTER 7

The implications of tax competition and “race to the bottom” for economic growth

Jolanta Szolno-Koguc*  
and Małgorzata Twarowska**

Abstract

This paper examines the relationship between economic growth and taxation. The purpose of this article is also to identify and analyze the pros and cons of tax competition and reduction in taxes. Against the background of increased globalization corporate tax rates have shown a clear downward trend over the last two decades. This suggests that corporate tax competition is of increasing importance. Besides many benefits of tax competition, it creates the risk of public finances stability due to the “race to the bottom.”

Keywords: tax competition, “race to the bottom,” budget revenue, EU, GDP

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1. Introduction

In a world with high mobility of goods, capital, labour, factor inputs, or other taxable activities and with ample opportunities for profit shifting, tax policy is likely to have strong fiscal externalities and to redistribute wealth and factor income internationally. This, in turn, has strategic implications for governments’ tax policy choices and implications for world welfare. It is not surprising that tax competition has received considerable attention both within politics and within researchers [Keen, Konrad, 2011].

Taxes have a significant effect on business activity and foreign investment. Moreover, they can affect the competitive position of economies and their attractiveness as an investment location. The low level of income tax harmonization in the European Union lead to more intense competition between Member States. A particularly important area of the competition is the corporate income taxation.

Tax competition is a reduction of tax rates or implementation of tax deductions and exemptions to stimulate economic activity and to increase the country’s attractiveness as a place for foreign capital investment. There have been long-standing concerns that, as nations compete for mobile investment, this has resulted in a “race to the bottom” in taxes, resulting in the under provision of public goods as well as potential distortions in firms decisions [Davies, Voget, 2008].

This paper studies how income tax rates relate to economic growth. Adherents of tax cuts claim that a reduction in the tax rate will lead to increased economic growth and prosperity. Opponents claim that if we reduce taxes, almost all of the benefits will go to the rich, as those are the ones who pay the most taxes. What does economic theory and experience suggest about the relationship between economic growth and taxation?

2. The relationship between corporate taxation and economic growth

Many studies and analyzes show that the level of taxation has a significant impact on economic growth. S. Cnossen has examined the impact of a reduction in taxes on the economic growth in the EU Mem-
ber States, which joined the organization in 2004. The results have shown that these countries are not able to accelerate economic growth only by tax cuts, because there are other important factors stimulating economic growth, such as the legal system, the level of infrastructure development, the investment incentives and the financial market. However, taxes are one of the key factors.

Table 1 shows corporate income tax rates (hereinafter: CIT rates) and GDP changes in the European Union. Based on the data from the table, it cannot be clearly indicated that a lower tax rate always involves higher economic growth.

Table 1. Corporate income tax rates and economic growth in the EU

<table>
<thead>
<tr>
<th>Country</th>
<th>CIT rate [%]</th>
<th>GDP change [%]</th>
<th>Average CIT rate [%]</th>
<th>Average GDP change [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
<td>3.86</td>
</tr>
<tr>
<td>Bulgaria</td>
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<td>10.00</td>
<td>10.00</td>
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</tr>
<tr>
<td>Ireland</td>
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<td>12.50</td>
<td>12.50</td>
<td>5.34</td>
</tr>
<tr>
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<td>15.00</td>
<td>15.00</td>
<td>10.60</td>
</tr>
<tr>
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<td>15.00</td>
<td>15.00</td>
<td>7.79</td>
</tr>
<tr>
<td>Romania</td>
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<td>16.00</td>
<td>16.00</td>
<td>4.15</td>
</tr>
<tr>
<td>Hungary</td>
<td>16.00</td>
<td>19.00</td>
<td>19.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Poland</td>
<td>19.00</td>
<td>19.00</td>
<td>19.00</td>
<td>3.62</td>
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<tr>
<td>Slovak Republic</td>
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<td>19.00</td>
<td>19.00</td>
<td>6.66</td>
</tr>
<tr>
<td>Slovenia</td>
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<td>20.00</td>
<td>18.00</td>
<td>4.01</td>
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<tr>
<td>Czech Republic</td>
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<td>19.00</td>
<td>19.00</td>
<td>6.75</td>
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<tr>
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<td>21.00</td>
<td>8.85</td>
</tr>
<tr>
<td>Austria</td>
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<td>25.00</td>
<td>25.00</td>
<td>2.40</td>
</tr>
<tr>
<td>Greece</td>
<td>32.00</td>
<td>24.00</td>
<td>20.00</td>
<td>2.28</td>
</tr>
<tr>
<td>Finland</td>
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<td>26.00</td>
<td>24.50</td>
<td>2.92</td>
</tr>
<tr>
<td>Portugal</td>
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<td>25.00</td>
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</tr>
<tr>
<td>Denmark</td>
<td>28.00</td>
<td>25.00</td>
<td>25.00</td>
<td>2.45</td>
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</tbody>
</table>
The implications of tax competition and “race to the bottom” for economic growth

<table>
<thead>
<tr>
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<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>28.00</td>
<td>26.30</td>
<td>26.30</td>
<td>3.15</td>
<td>0.85</td>
<td>26.87</td>
<td>3.28</td>
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<tr>
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<td>25.50</td>
<td>25.00</td>
<td>2.05</td>
<td>1.63</td>
<td>-0.50</td>
<td>27.33</td>
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<tr>
<td>United Kingdom</td>
<td>30.00</td>
<td>28.00</td>
<td>24.00</td>
<td>2.09</td>
<td>2.09</td>
<td>0.82</td>
<td>27.33</td>
<td>1.67</td>
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<tr>
<td>Luxemburg</td>
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<td>28.59</td>
<td>28.80</td>
<td>5.43</td>
<td>2.68</td>
<td>-0.23</td>
<td>29.26</td>
<td>2.63</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
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<td>30.00</td>
<td>30.00</td>
<td>3.59</td>
<td>-0.07</td>
<td>-1.83</td>
<td>31.67</td>
<td>0.56</td>
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</tr>
<tr>
<td>Germany</td>
<td>38.31</td>
<td>29.41</td>
<td>29.48</td>
<td>0.83</td>
<td>3.56</td>
<td>0.62</td>
<td>32.40</td>
<td>1.67</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>37.25</td>
<td>31.40</td>
<td>31.40</td>
<td>0.93</td>
<td>1.80</td>
<td>-1.91</td>
<td>33.35</td>
<td>0.28</td>
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</tr>
<tr>
<td>France</td>
<td>33.83</td>
<td>33.33</td>
<td>33.33</td>
<td>1.87</td>
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<tr>
<td>Belgium</td>
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<td>33.99</td>
<td>33.99</td>
<td>1.73</td>
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</tr>
<tr>
<td>Malta</td>
<td>35.00</td>
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<td>35.00</td>
<td>3.67</td>
<td>-2.71</td>
<td>1.24</td>
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<tr>
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<td>25.34</td>
<td>23.04</td>
<td>22.60</td>
<td>4.00</td>
<td>-2.23</td>
<td>0.20</td>
<td>23.66</td>
<td>0.66</td>
<td></td>
</tr>
</tbody>
</table>


As Figure 1 shows, the lower tax rates do not always involve higher economic growth. There are many other non-fiscal factors that have a significant impact on economic growth.

There are also analysis of correlation indicators between the GDP growth and corporate income tax rates. The correlation between the corporate income tax rate and the change of GDP in 2005 was −0.61, which is a strong negative correlation. In 2012 the correlation ratio was −0.17, which also means an inverse correlation, but slightly weaker compared to 2005. The observed relationship indicates that GDP rates and CIT rates influence each other and interact in the opposite direction, which means that when the tax increases, the GDP rate decreases. When the level of taxation is reduced, the economic growth increases.

Taxes are also one of the factors that influence the international capital flow and international trade. However, the size and the direction of the foreign direct investment (hereinafter: FDI) depends on many factors. The decision about location of the investment is the result of all factors evaluation. Analyzing the taxation factor, the investor should consider nominal and effective tax rates and taxation techniques. The nominal tax rates do not provide a realistic tax burden. The authoritative assessment needs to also take into account the tax base calculating method. If there are, in the country opportunities
to reduce the tax base, the effective tax burden is lower. A similar situation occurs when tax liability calculated using the nominal tax rate might be reduced by tax reliefs. It is also important to use by the taxpayer the opportunity to postpone the obligation to pay the tax. There are many differences between the countries in the tax reliefs and exemptions, because of the social and economic priorities. For these reasons the better and more comprehensive international comparison we obtain using the effective rates [Nicodeme, 2001].

Figure 1. Average GDP change and average corporate income tax rates (in %) between 2005–2012

3. Tax competition – pros and cons

3.1. The disadvantages of a reduction in taxes and “race to the bottom” – the arguments against tax competition

The immediate effects of a reduction in taxes are a decrease in the real government income and an increase in the real taxpayers income. In the longer term, however, the loss of government income might be mitigated, depending on the response of tax-payers. Furthermore, the long-term macroeconomic effects of a reduction in taxes are not predicatable in general, because they depend on how the taxpayers use their additional income and how the government adjusts to its reduced income [Fox, 2007].

Commonly formulated thesis state that an uncontrolled reduction in taxes could lead to negative budget effects, the so-called “race to the bottom.” This process could cause a significant decrease in the governments income, as well as the reduction in some governments spending and public functions, especially the reduction in social spending. Decline in the redistributive role of the government budget could lead to a situation where the citizens themselves will have to make a choice between a lower level of public services and higher taxes. This situation could be unfavourable, especially when it comes to the European Union Member States. There are two reasons for this [Hybka, 2002, p. 7]:

1) the budgets of EU countries are based largely on income taxes,
2) the share of tax revenue in GDP is significantly different in EU countries.

Another negative aspect of tax competition is a tendency to increase the tax burden of labour comparing to other factors. The high level of labour taxation increases production costs and slows down economic growth. Moreover, analyses carried out by the European Commission indicates that the increase of the labour taxation burden is one of the reasons for unemployment [Commission…., 1997, p. 3].

The tax competition connected with a decrease in taxes and the so-called “race to the bottom” contributes to disadvantageous effects. “Race to the bottom” is a tax competition between governments. Each government may benefit from higher tax revenues by having high tax rates on corporate profits, but governments can benefit individually
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with lower corporate income tax rates relative to other jurisdictions in order to attract businesses to their own jurisdictions. In order to maintain equilibrium, each of the other governments would have to lower their corporate income tax rates to match that of the government that first lowered the tax rate. The end result is that each government adopts a lower corporate tax rate and therefore, collects less revenue overall. Assuming the foundational premise is correct, the optimal option for all governments would be an agreement to maintain tax harmonization \cite{Harmful...}.\footnote{1998}

The main predictions of the theoretical tax competition literature is to evaluate how the observed patterns relate to them. The standard tax competition models of Zodrow and Mieszowski (1986) and Wilson (1986), predict a race to the bottom for small open economies, which despite a clear downward trend cannot yet be observed. Allowing for the countries to be large enough to influence each other’s tax policies, Hoyt (1991) finds that tax competition leads to inefficiently low tax rates, which is consistent with recent tax rate cuts. The more aggressive rate reductions in smaller countries are in line with Bucovetskys (1991) and Wilsons (1991) models of tax competition between asymmetrical jurisdictions predicting a sharper drop for smaller countries \cite{Loretz, 2008}.

The most commonly used arguments against tax competition are \cite{Krajewska, 2010, p. 140}:

1) the reduction of public revenue, as a result of lower taxes, could lead to the reduction of government expenditure and the supply of public goods as well as to reduce the redistributive function of public finance,

2) the government’s budget reduction decreases the competitiveness of the economy because of the lower investment in infrastructure, science and education, research and development, which may lead to increase public discontent and affect the economy mainly by the deterioration of investment,

3) the government may try to compensate the reduction of public revenue by increasing the tax burden on labour, which leads to an increase in unemployment; another government action is a consumption tax hike, which leads to a reduction in consumer demand,
4) the tax competition between countries encourages entrepreneurs to make a capital transfer to a country, where the taxes are lower, which resulting in loss of potential budget revenue and “free riding” of taxpayers, who benefit from public goods in their own country, but they avoid paying taxes,

5) the tax competition involving the reduction in taxes is not the only one way to improve the investment attractiveness of the country, because it is also important to improve the infrastructure, improving public education, increase investment in research and development, improvement of the law system and public administration.

In order to determine whether it is harmful to tax competition, the Committee on Fiscal Affairs OECD has defined the criteria to assess whether the tax incentives are harmful. In addition to this, the Committee has developed a dealing procedure in case of harmful practices. Indicated by the Committee’s criteria are [Oręziak, pp. 93–94]:

– low income taxes or relinquishment of corporate income taxes in the country,
– separation of the tax system from the domestic economy,
– lack of transparency in the system,
– lack of effective exchange of information between the tax authorities of different countries.

The idea of tax competition prevention is supported in the countries with relatively high taxes. Instead countries that score high in the international competitiveness ranking have a rather negative approach to all activities, including those undertaken at the OECD [Mitchell, 2000].

As the world economy becomes more integrated and technology improves, it is becoming much easier to avoid excessive taxation. The taxpayer mobility means that countries with high tax rates are likely to lose revenue, making it harder for their policymakers to fund expensive government programs. Supporters of the OECD initiative tend to see the effort as an attempt by governments “to regain the capacity to finance redistribution through tax revenue.” As Michel Vanden Abeele, the Director General of the European Commission’s Taxation and Customs Union put it, “protection of adequate tax revenues is of particular concern in order to guarantee the survival of the fair and caring society” [Mitchell, 2000].
Strong discontent among supporters of limiting tax competition results in the so-called tax haven or offshore haven. Tax havens can be defined as a separate territory (country or part of the country), where the tax burden is very low or the government does not collect the taxes from all or some of the economic activities carried out by non-residents [Oreziak, pp. 93–94]. Tax havens such as Cyprus, Lichtenstein, Monaco and Gibraltar provide taxpayers with an opportunity to avoid taxation by transferring the business or capital to a tax haven. Both, the OECD and European Commission have recognized the risk to fair competition in the existence of tax havens and take actions to curb the capital outflow to the tax haven [Hybka, 2002, p. 7].

3.2. The advantages and opportunities of tax competition and reduction in taxes

The reduction in taxes may provide corporations with an incentive to make investments which stimulate economic activity. This could generate additional taxable income which could generate more public revenue than was collected at the higher rate. The reduction in taxes has the effect of increasing GDP via the fiscal multiplier. The tax cuts give a greater stimulus to the economy than that of increases in a government spending [Fox, 2007].

Proponents of the tax competition indicate the most important benefits of a reduction in taxes are [Baldwin, Krugman, 2001]:

1) the low tax burden (reduced tax rates and a limited range of taxes) increases a company’s disposable income that contributes to the development of the entrepreneurship and stimulates economic growth,

2) the process of reducing taxes as the primary element of tax competition by reducing the government revenues encourages countries to rationalize public spending and to reduce the scope of budget redistribution,

3) the tax competition and tax cuts reduce the politicians and decision-makers influence on the economy. If the tax competition did not exist, there would not be pressure to reduce taxes and thus politicians would have more flexibility to raise taxes without fear of the consequences of their decisions,
4) the reduction in taxes in some cases may be necessary, because the level of taxation may compensate the low attractiveness of the country due to a poor infrastructure, inconvenient or peripheral location of the country and low-skilled labour,

5) the tax competition leading to lower taxes encourages the foreign capital inflow, which accelerates the economic development and reduces the gap between better and less developed countries. The confirmation of this argument, among others, are the results of research carried out by R.E. Baldwin and P. Krugman, which show a decrease in the most developed EU countries advantages compared to peripheral countries, including Greece, Portugal, Spain and Ireland.

Moreover, A. Bénnasy-Quéré, N. Gobairaja and A. Trannoy have suggested that the international tax competition is an important factor that forces public sector efficiency. The tax competition is seen as a positive incentive for the many reasons, primary because of the need for public debt reduction. Significant benefits of tax competition is that the governors are under pressure to keep tax rates at a reasonable level, so that taxpayers will not be forced to move their business to countries with lower taxes. Thus, tax competition leads to greater governing accountability in policy to attract and retain foreign investors [Oręziak, pp. 93–94].

4. Conclusion

The goal of this paper has been to examine the relationship between economic growth and taxation. The reduction in taxes could lead to increased economic growth and prosperity, but an uncontrolled reduction in taxes could lead to negative budget effects, such as the so-called “race to the bottom.”

An important factor for the harmonization of corporate taxation in the European Union is to prevent the situation, when the tax competition between member states, that usually leads to a “race to the bottom,” results in the erosion of tax revenues in the government’s budget. The loss of revenue resulting in risk to the public services and other government expenditure. The countries, where government expenditures and services financed from public funds are expanded,
have serious problem with government budget balancing. In order to stimulate economic activity, attract foreign investors and local entrepreneurs, countries undertake activities aimed at reducing the burden of corporate taxation. Opportunities of such activities are limited, because of high budget deficits and the need to comply with the Stability and Growth Pact. Another barrier in reducing the corporate income tax is public defiance of budget expenditure cuts.

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Loretz, S. (2008), Corporate taxation in the OECD in a wider context, Oxford University Centre for Business Taxation, WP 08/21.
The implications of tax competition and “race to the bottom” for economic growth


http://www.imf.org/.
CHAPTER 8

Correct planning of budget revenue as an essential condition for secure business transactions

Eugeniusz Ruśkowski*

Abstract

For some time now, Poland has seen a significant discrepancy between planned budget revenue and its implementation. In the middle of 2013, this situation led to a major necessary change to the budget in connection with overestimation of the planned expenditure by 24 bln PLN. The article analyzes the causes of this situation as well as its negative results and suggests possible future changes. One may regard the planning of revenue in Poland as being approximate instead of directive in its character and as having a secondary status in relation to budgetary expenditure, relying on an over-optimistic budget plan implemented in a passive and mechanical way. This poses a threat to the economic security of Poland as it imposes definite negative consequences for public finances. However, the planning of budget revenue must be active

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Correct planning of budget revenue as an essential condition for secure business...

and realistic, connected with the system of its implementation and it must take into account the extent of tax evasion and the black economy. This requires serious legal and organizational changes. One of these would be the establishment of a Fiscal Council and as we speak the Parliament is already working on this subject.

Keywords: taxes, budget revenue planning, tax administration, deficit, public debt

1. Introduction

The considerations of this article are based on Poland as its model. However, to some extent, they may be universally applicable within the entire European Union and in general syntheses.

In recent years, considerations concerning changes in public finance have, for the most part, focused on public expenditure. This applies to both the primary method of steering out of a financial crisis that principally comes down to limiting the expenditure and also to the instruments of the New Public Management (NPM) in the field of public finance, which are activity-based budgeting, management control, and long-term financial planning. These instruments, whose names indicate that they are relating to public finance in its entirety, have focused on public spending. However in the instance of activity-based budgeting it has also been limited by it. There are examples of European Union countries which, while correctly implementing these plans, have lurched into recession and deep public finance crisis which can be measured by an increase in deficit and government debt and staggering unemployment rates [Niedziński, 2013, p. A6]. Against this backdrop, Poland’s situation looks relatively good. However, for some time now, Poland has seen limited feasibility in the planning of budget revenue, which in 2013 led to a budgetary crisis and the need for a major revision of the state’s budget. The present article makes an attempt at portraying this limited feasibility of budget revenue planning as well as some of its causes and effects, while at the same time indicating some basic suggestions on how to avoid these problems in the future. Moreover, the planning of budget revenue should be treated as a very important element of the country’s revenue policy, which is often reduced to tax policy.
2. Limited feasibility of planning (programming) of budget revenue in Poland

For some time now, the annual implementations of budget revenue in Poland have differed from the provisions of the respective budget acts. On the basis of specially prepared tables including data since the year 2000, S. Owsiak states that, “...the mean prediction error for the budget revenue equalled 1.4% of the implementation in total, whereas the mean absolute prediction error was 3.2%” and also that “...most often it is tax revenues, overestimated (overvalued) in the budget act, that are ‘responsible’ for the discrepancy between revenue recorded in the budget act and the actual revenues of the state budget” [Owsiak, 2013, pp. 53–54]. This difference is all the more evident in medium-term planning. The difference between the projected revenue within the subsequent Multiannual State Financial Plans (MSFPs) from 2012 and the implementation of the budget act for that year was: 1.1% in 2010, 1.8% in 2011, and 2.1% in 2012. It is therefore interesting that this difference increased instead of decreasing in the subsequent multiannual plans. Similar data may be derived from a comparison of projected revenue in the subsequent MSFPs as of 2013 with the amount planned in the budget act for that year before the change. Revenue planned in 2010 was higher by 1.6%, in 2011 by 3.4%, in 2012 by 2%, and in 2013 by 1.6% than the revenue placed in the budget act before the change in 2013.

At the end of June 2013, the Council of Ministers announced it was necessary to amend the budget act for 2013 due to the lower-than-expected receipts of budget revenue by about 24 bln PLN. One reason for this was a lower rate of economic growth. Growth was expected to reach 2.2%, but in reality it will be about 1%. Also, there was a lower-than-projected increase in the prices of consumer goods and services as the budget act projected inflation at 2.7%. This resulted in the need to increase the budget deficit from the previously planned level of 35.6 bln PLN to about 51 bln PLN. Performing this operation required introducing a prior amendment to the public finance act suspending the so-called first prudential threshold in 2013.¹ The lack of feasibility of budget revenue planning in recent years in Poland has been widely

¹ The Act of the 26th of July 2013 amending the Act on Public Finances (in Polish).
discussed by many specialists in the country itself [Budzyński, 2012, p. 7]. It has also been noticed by the European Commission which has stated that either the Ministry of Finance is using the wrong model of planning tax revenue, or it is doing so deliberately for reasons that are difficult to understand [Gadomski, 2013].

3. Primary causes of limited feasibility of budget revenue planning

There are numerous causes of the situation presented above and they are of varied character. Below I have dealt with only a handful of these, focusing on the causes that are general in their character:

1. In the light of the applicable legal regulations, budgetary income and revenue are in essence projections, which also affects the non-directive nature of the budget in this regard. The income and revenue projected in a budget cannot therefore be a legal basis for their implementation but rather such a basis must result from separate regulations. In contrast, budgetary expenditures and outlays representing absolute limits, are treated as an authorization to incur them and are directive in their character [Ruśkowski, Salachna et al., 2013, pp. 244–245].

2. Applying in the EU and Poland’s budgetary policies, a principle stating that significant effects in repairing public finances may be achieved through the rationalization of public expenditure. This secondary nature of revenue in relation to expenditure also results from New Public Management (NPM). Therefore, it comes as no surprise that some scientists and politicians share this view and put it into practice.

3. Starting from the assumption that the planning of budget revenues is non-directive and thus approximate in nature, it plays a secondary role in relation to expenditure. It is too easy to base a calculation of revenue on optimistic macroeconomic assumptions and indicators. By way of illustration of how unrealistic they are, one should consider the fact that the actual budget revenues from the tax on goods and services in 2012 was about 10 bln PLN less than the amount planned. Whereas, it is anticipated that the deficit of the planned budget revenue in 2013 will
reach nearly 24 bln PLN. This is why the budget deficit is increased by that amount. At the core of these kinds of errors is a conviction about Poland being “a green island” in terms of economic development and about the supposedly excellent condition of Poland’s public finances in comparison with other EU countries.

4. The planning of revenue in Poland practically boils down to mechanical activities, which consist of an adjustment in the previous tax revenue with the use of particular indicators. It is therefore a completely passive approach to the planning of budget revenues. An active approach to the planning of budget revenues should instead, involve finding and analyzing the risks associated with certain barriers in this respect, looking for provisions and signalling the need for the removal of barriers or the establishment of provisions. It is also necessary to link the process of revenue planning with the analysis of its implementation in the previous period. Revenue planning must also take into account the capability of its implementation by the tax collection system and it must influence its development. At present in Poland, these seem to be two completely independent areas of activity; this must be the only possible explanation of the year-in, year-out tendency to include revenue from traffic fines in the plans, with past experiences consistently shows a small-percentage collection level.

In light of the foregoing arguments, one may regard the planning of revenue in Poland as being approximate instead of directive in its character and as having a secondary status in relation to budgetary expenditure, relying on an over-optimistic budget plan implemented in a passive and mechanical way. It is a simplified description indicating, however, the root causes of flawed planning of budget revenues in Poland.

4. Selected effects of errors in the planning of budget revenues in Poland

The effects of incorrect planning of budget revenues in Poland are diverse; some are directly perceptible in the functioning of public
Correct planning of budget revenue as an essential condition for secure business...

finances while others are indirect. Below I have focused on three of these.

1. Over-optimistic budget revenue planning hinders the reduction of public finance deficit and the management of public debt. The mentioned financial categories are crucial for the national public finances and for Poland’s commitments towards the EU. According to the updated MSFP for the years between 2011–2014 and the Convergence Programme updated in 2011, the public finance sector deficit was expected to reach 2.9% of GDP in 2012, with public debt at 51.9% of GDP. As a result of the overestimation of budget revenue, its implementation was 2.1% lower compared with the amounts provided for in the budgets act. The actual public finance sector deficit for 2012 amounted to 3.9% of GDP. This has prevented the EU institutions from repealing the excessive deficit procedure imposed on Poland by recommendations of the Council of the European Union on the 7th of July 2009. Poland, as well as Spain, France and Slovenia, were granted an additional 2 years in which to decrease the budget deficit to a level below 3% of GDP. This fact and an increase in the budget deficit during 2013, may cause the EU institutions to begin looking at the Polish public finances with particular attention.

2. A result of revenue planned in an over-optimistic way and insufficient action to improve its implementation is an inability to perform certain activities which is connected with the reduction of some expenses. This assumes special importance when using modern management instruments, which include activity-based budgeting and multiannual financial planning. If the difference between the planned and implemented budget revenue is significant, as is the case for the example given in 2013, then the previous activity planning becomes insignificant both in activity-based budgeting and in activity-based planning of expenditure in its capacity in the MSFP.

3. The lack of an active role in the planning of budget revenue contributes to an unsatisfactory increase of revenue from the tax on goods and services to the state budget, despite raising rates of this tax. According to analyses prepared by the Supreme Audit Office on the implementation of the states budget for indi-
vidual years, the receipts from the tax on goods and services accounted for 41.9% of the total state budget revenues in 2006, 40.8% in 2007, 43.1% in 2010, and 43.5% in 2011. The formal framework of the act on this tax allows or camouflages tax fraud that is becoming more and more widespread, hidden under the general formula of "tax optimization". Recently, new regulations and opportunities in this regard have been introduced, especially in connection with: establishing a new place of provision (Articles 28b and 28e); introducing the so-called reverse charge principle (Article 17 Paragraph 1 Items 5 and 7); the right to adjust tax payable (Article 89a). W. Modzelewski states that negative fiscal consequences of the new solutions, especially those implemented in 2009–2012, introduced to the provisions of the aforementioned act on the tax on goods and services, amount to 117 bln PLN [Modzelewski, 2013, p. 137]. More and more often it is also indicated that it is necessary to consider the so-called shadow economy in budget revenue planning and implementation. This includes both the capability of its taxation and tax collection and the impact of the tax system on its scale. As calculated by F. Schneider, who was present at a scientific conference held on the 22nd of March 2013 in Warsaw, entitled “Long-term fiscal strategy in VAT,” one may assume that in the current year Poland’s shadow economy will generate 23.8% of GDP, while the figure for Greece will be 23.6%. This is very interesting information, which also means that the states budget will not receive dozens of billions of zlotys in indirect tax revenues [Kowalski, 2013].

5. Proposed changes

Changes in the planning of budget revenue in Poland can be very diverse in nature due to its subject and depth. Presented briefly below are possible future changes. They cover both the rationale of looking at the problem under discussion, as well as organizational and legislative aspects of its solution:

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1. The legislatively prognostic nature of budget revenue planning and giving priority to rationalization of expenditure in the reform of public finances cannot be treated mechanically. Planning of budget revenue must therefore be realistic and active, rather than passive and over-optimistic. From the point of view of public finance management, revenue planning is as important as the rationalization of expenditure and the correct way in which revenue is planned conditions the logic and success of this rationalization. Increasing the importance of budget revenue planning in financial policy is therefore a **sine qua non** condition of its success.

2. Legislative conditions must be created for active and realistic planning of budget revenue. Taxes constitute the bulk of this revenue. The aim of this change would therefore be to repair the broadly-defined tax law, which is not an original postulate, since almost all specialists agree with it. It is also a problem that is very difficult to solve, especially for social and political reasons. L. Balcerowicz experienced this when his reform of the tax system and tax law introduced in 1997–2000 ended unsuccessfully. An additional proposal would be original, however, namely the proposal of analyzing the evolution of the system of taxation from the point of view of limiting its performance for the states budget and attempting to create legal ways to remove the main barriers in this regard. Because when analyzing the tax system instituted in Poland, it is obvious that taxes have become part of a social and political game at the expense of their primary fiscal function, which is providing the budget with revenue.

3. Improvement of budget revenue planning requires organizational and conceptual changes in the Ministry of Finance and tax authorities. This, in particular involves the strengthening of analytical work and conceptual and strategic actions. Accurate assessment in this respect and postulates of changes have been frequently presented in the publications by C. Kosikowski [2010, pp. 30–32, 334]. They include, but are not limited to: assuming the principle stating that legal solutions concerning tax burdens are the result of sound economic and social analysis as well as financial ones and take into account the financial situation of the society, especially of households and entrepreneurs.
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and their significant differentiation; requiring the Ministry of Finance to develop a financial policy program, carrying out permanent and professional analysis and evaluation of public finances and an increased involvement in the shaping of the financial legislation and changes in its interpretation and application; supporting the activities of the Minister of Finance on scientific advice, coming from his own scientific background and so-called independent experts. It is also a task of the Ministry of Finance and of scientists to develop the concept of minimizing the tax losses connected with the existence of a shadow economy, both in terms of limiting its scope and of indicating the origin of income from undisclosed sources. This latter aspect is particularly important in light of the Constitutional Tribunal judgment on the 18th of July 2013 (Ref. No. SK 18/09), which is critical of the existing rules for determining the amount of this revenue.

4. An increasing number of European Union countries have introduced an independent body, responsible for financial policy, including fiscal policy, often referred to as the Fiscal Council. In some countries it is of a constitutional nature as seen in Hungary. Such a body might also have a positive impact in Poland, in terms of improving the correctness of budget revenue planning. It is all the more relevant because it is doubtful that the previous comments submitted to the Ministry of Finance will ever see the implementation stage. In many studies it has been found that this institution shows exceptional resistance to proposed changes, or to even hold a discussion about them [Etel, Kosikowski et al., 2000; Ruśkowski and Zawadzka-Pąk, 2010]. Therefore, certain tasks expected from the Minister and the Ministry of Finance must be performed by an independent external body. It is all well and good that Poland has made a legislative attempt to establish such a body. On the 19th of July 2013, a group of Polish MPs submitted a draft law on the Fiscal Council to the Sejm. It is supposed to be a completely new institution of an advisory and consultative nature whose tasks would include giving opinions about the government’s fiscal policy and its supervision and the prevention of debt accumulation, providing reliable macroeconomic forecasts and analyzing
the economic efficiency of public spending and taxes. This initiative should – regardless of its future in terms of legislation – at least trigger a scientific and public debate.

**Summary**

The policy on planning and implementation of public revenue, which is passive and at the same time unrealistic due to over-optimism, is a natural threat to the financial and economic security of the country. It indeed complicates the efforts to reduce the budget deficit and inhibits public debt control, at the same time rendering the rationality of activity-based planning and the implementation of expenditure questionable, both on an annual basis and within MSFPs. Making this policy active and real is therefore supposed to help optimize the budget revenue optimization and its planning on a realistic level. It must be necessarily linked to the feasibility of implementation of this revenue and also dependent on it. Only then, will it be possible to realistically perform activity-based planning of budgetary expenditure and maintain a proper, comprehensive fiscal policy of the country. It may also turn out that the condition for its success in Poland is the establishment of a Fiscal Council.

**References**


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The Act of the 26th of July 2013 amending the Act on Public Finances (in Polish).
CHAPTER 8

The effect of public transfers on an economic system

Marta Postuła *

Abstract

The body of processes used by a state to influence its economy makes the economic policy pursued on a given territory. The economic policy constitutes a very extensive area for action by many entities (the government, central bank, supra-national institutions, employers and employees, etc.), the subject of which is a policy for growth, structural policy and regional development. The structured and thoughtful application of the specific means by the state’s government in order to achieve a defined social or economic goal outlined with respect to the policy being pursued, translates directly on the governance of the system.

Keywords: public spending, economy growth, consumption

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1. Introduction

The body of processes used by a state to influence its economy makes the economic policy pursued on a given territory. The structured and thoughtful application of a specific means by the state’s government in order to achieve a defined social or economic goal, outlined with respect to the policy being pursued translates directly on the governance of the system. The purpose of this paper is to present a section of an extensive subject referring to the effects of public spending on the economic policy, narrowed for the purposes of this paper to a review of consequences of public transfers for the economic policies goals, pursued by the government and dedicated international structures.

The purpose is to demonstrate, using available analytical tools, how and to what extent public transfers, effected in the form of the expenditures by the governmental and self-governmental sector institutions, influence the achievement of the economic policy goals and how they affect the components of governance in an economic system.

An ongoing analysis of the role of public transfers in the economic policy of the state can cover with its scope, detailed issues of specific directions of the state’s interventions financed from the state’s budget and through the budgets of other public institutions. The paper is limited to an overall assessment of how public transfers influence the efficiency of governance in the economic system based on the example of European Union countries (UE-27). Does the influencing of the economy by public authorities by means of transfers, enable the achievement of the overall goal of the economic policy, i.e. steady and sustainable socio-economic development?

The economic policy constitutes a very extensive area for action by many entities (the government, central bank, supra-national institutions, employer and employees, etc.), the subject of which is a policy for growth, structural policy and regional development. An instrumental division enables the distinction of the following policy: monetary, fiscal (budgetary), investing, employment, pricing-income and research and innovation [Winiarski, 1994, p. 61]. The involvement of public authorities in the pursuit of the individual types of the policy depends, obviously, on the level of development including the level of the state’s interventionism into the economy. Public transfers made on purpose, on time and in an optimal amount ensure harmonious socio-
economic growth, enable building welfare of the country’s population, predictable conditions for the operation of the economy, stabilized employment and low unemployment.

All of the basic functions of the state in the area of economic policy (allocative, redistributive and stabilizing) are reflected in the sphere of regulation (not a subject of a detailed review in this paper) and in real life. The performance of all the three indicated functions of the state requires appropriate public transfers constituting specific expenditure titles.

The means redistributed by the state in the form of the public spending are finally earmarked for investments and consumption, both public and private. The proportions of this split depend on the structure of public spending, which relates to existing legislative solutions, decisions on the allocation of the means based on strategies and programs and ultimately, budgets of the state and other public sector entities. Decisions on the allocation of expenses have an indirect effect on the economic growth. However, more importantly, the structure of the expenses affects, also qualitative items decisive for economic growth that is not always reflected directly by the measures of economic growth. These items take account of the operation of qualitative factors primarily related to social capital (technology, politics, management, institutions, culture and the environment).

2. Public transfers vs. economic growth

2.1. Theoretical approach to the subject

The deliberations contained in this part of the paper should start from a statement that economic growth in an intensive economy, ensues from the growth of productivity of capital and a growth of work performance. The growth in both productivity and performance is related to quantitative and qualitative changes in the whole sphere of production and distribution and in terms of demand, investments and also consumption. The level of consumption reflects the state of achievement of the goal of economic management, translating directly into the level of welfare in a given country.
The notion of public transfers is used here in its general meaning concerning the redistribution of income within the market system through the public finance system. Public transfers concern the nature of the public finance, understood as processes for accumulating and distributing public means. The transfers are related to the performance of the redistributive, allocative and stabilizing functions as part of the public finance system [Musgrave and Musgrave, 1984, pp. 3–19]. The redistributive function affects, firstly, the change in the structure of income and then, indirectly, production. The effect of the allocative function primarily concerns the structure of production. Public transfers forged within the frameworks of the fiscal policy concern these changes in the structure of distribution and generation of the domestic product. In this article I will focus on the expenditure consequences of public transfers.

The evaluation of the effect of public expenditures on economic growth is not obvious, it has changed with the evolution of the economic thought. The direction and consequences of the redistribution of income and, ultimately, public spending depend on the growth theory adopted for the analysis. The consequences of an increase in the public spending, whether beneficial, neutral or adverse for economic growth, make the difference between the different economic schools (neo-classical, neo-Keynesian, or the theory of the real business cycle).

Public governance methods were intensively researched into and developed at the turn of the 1890’s of the 20th century and in the 21st century. The quality of the public spending was the highlight. Then, a new idea of the effect of public spending on economic growth was developed [European…., 2002, pp. 102–103]. The basic statement has not yet resolved the core dilemma of the effect of the spending on growth: programs implemented using public funds can stimulate economic growth in many ways. Thanks to public expenditures, firstly, public goods are supplied and secondly, these constitute a source of products and services aiming to correct the imperfections of the market and improving performance. Also some social spending can contribute to the improvement of economic performance, provided, however, that the size of the expenditure remains at a reasonable level. The classification of public spending, put into four categories, is essential for concluding the consequences of the expenditures for growth. The effect of each of the four categories of expenditure on performance and in consequence, economic growth is shown in Figure 1.
The effect of public transfers on an economic system

Figure 1. Performance of public spending broken into the four categories


Category 1 (the red line, AF) represents payments on the account of interest: the cost of servicing the debt. This spending always has an adverse effect on growth and employment, the use of resources for other ends should be, usually, more productive. Category 2 (the green line, AE) consists of old age and disability pensions, the spending on public consumption and salaries for public sector employees. This category of spending has a beneficial effect on the growth up to a certain, relatively high, level but if the spending is excessive, e.g., as a result of too fast growth of salaries in the public sphere, this can have the opposite effect. A high level of spending can displace other performance-improving expenditure. Also, a very high level of spending on retirement benefits can have an adverse effect on savings and the accumulation of capital. Furthermore, both high and early retirement benefits can have an adverse effect on employment. High costs of labour in the public sector can have an adverse effect on inflation and a measureable effect on the operation of the labour market (the effect of follow-up in the negotiation of salaries, etc.). Category 3 (the blue line, CD) includes welfare spending on the disabled, preventing social exclusion, housing, transfers to the unemployed and family...
allowances. The public expenditure on this account can have a beneficial effect on performance, provided that they are kept within reasonable limits. A very high level of spending can have an adverse effect on growth because of the likelihood of permanent addiction of the beneficiaries to public aid and related moral dilemmas. A reduction of the public spending in this category to less than a minimal level of spending is also detrimental to the economy. Reducing this spending to less than the minimum level limits opportunities for participation in the labour market, leads to extension of the area of extreme poverty and hinders re-integration of the excluded. A very low level of transfers for the prevention of unemployment can reduce the performance of the economy by restricting job-seeking activity and can translate into a less than optimal division of labour. Category 4 (the black line, AB) includes the spending on education, health care, active forms of unemployment control, research and development and public investments. This group of expenses fully promotes the positive dynamics of the economy. Only the exceeding of an exceptionally high level of spending can create a threat of adverse consequences, though empirical validation of the effect is difficult because it concerns a level of spending that has never been seen in European countries.

The idea illustrated in Figure 1 uses the detailed structure of public spending for analyzing the effect of spending on economic growth. The basic theories of growth focused on analyzing the global size of the public spend. Differentiating the types of spending leads to new conclusions that are different than the ones drawn within the frameworks of the basic theories of growth.

2.2. Effects of spending on growth within a given time interval

The sources of economic growth researched with the criterion of the time of operation of the sources and the lasting of their effects can be divided into long and short-term ones. The long-term sources are the ones related to the supply side and variations in the performance of production factors, whereas the short-term sources of growth are related to changes in the internal and external demand. Some types of public spending (as discussed above) can have a beneficial effect on growth (subject to the fulfillment of certain conditions). Allocative
decisions concerning public spending feature a strongly diversified time horizon. Typically, the spending related to capital expenditures require long-term implementation and provide measurable results only when the whole investing process has been finalized. The remaining spending translates into direct consumption relatively quickly. Note, however, that also in this case this type of expenditure can have the form of relatively rigid flows recurring on a yearly or monthly basis. Notwithstanding the final division into investments or consumption, the public spending features low flexibility. Allocative decisions by public authorities are related mainly to the fulfillment of expenditure titles, defined in the existing legislation (eliding the budgetary laws in this discussion) even in terms of their amounts, pursuing the selected directions of public intervention (in this case defined for goods in budgetary law) that affect the ultimate levels of consumption and investments, resulting from the application of public resources.

In reference to long-term factors affecting economic growth, note that the European Union countries have been trying to pursue economic strategies supposed to support their ability to continue their steady and sustainable development and improve their competitive positions in the globalized economy since the beginning of the 21st century. These postulates were the features of both the Lisbon Strategy1 and the Europe 2020 Strategy.2 The Europe 2020 document presents integrated guidelines (as a basis for the development of National Reform Programs by the governments of the Member States): assurance of quality and stability of the public finance:

- resolve the problem of macroeconomic imbalance,
- mitigate the disequilibrium in the Euro area,
- optimize assistance for R&D and innovation; strengthen the knowledge triangle and liberate the potential of the e-economy,
- use resources more effectively and reduce the emission of greenhouse gases,


- improve the business and consumer environments and modernize the industrial base to provide for the full scope of operation in the internal market,
- increase the participation of men and women in the labour market, reduce structural unemployment and promote quality of employment,
- develop resources of skilled labour corresponding to the requirements of the labour market and promote life-long learning,
- improve the quality and performance of education and training systems at all levels and increase the number of entrants to university-level education,
- promote social inclusion and poverty control.

Also long-term directions of public intervention remain relatively inflexible (in terms of the structure of public spending and its share of GDP) in spite of significant variability of the environment (social, technological and cultural). As highlighted in the introduction, the time of affecting the sphere of the economy by public transfers is directly correlated to the functions of the state for the performance of which the public transfers are earmarked.

### 2.3. Specific categories vs. economic policy goals

In reference to the discussion presented in subsection 1.1, it seems important to analyze in greater depth how each category of public spending by the COFOG\(^3\) functions affects, in many ways, the levels of consumption and investments. Changes in the levels of specific groups of expenditure affect in different ways the dynamics of the constituents of demand.

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3 Classification of the Functions of Government (COFOG) developed jointly by UN, OECD and EC-Eurostat, http://eur-lex.europa.eu (4/07/2013). The Classification of the functions of government, abbreviated as COFOG, was developed by the Organization for Economic Co-operation and Development and published by the United Nations Statistical Division as a standard classifying the purposes of government activities. The classification has three levels of detail: divisions, groups, classes. Divisions describe the broad objectives of government, while groups and classes both define the means by which these broad objectives are achieved. http://epp.eurostat.ec.europa.eu (4/07/2013).
The spending related to the general functioning of the state are relatively neutral to the economy. One exception to this group relates to public debt transactions constituting an actual and inflexible spending priority. Undisrupted payment of these expenses and maintaining them at an optimum level (which relates to public debt control) is a prerequisite to achieving an adequate fiscal balance. Excessive debt service expenditure included in this category, particularly financed from the deficit (where the public finance cannot earn the primary surplus) can lead to displacing the credit for the economy and limiting the economic growth rate.

The second group of spending under the COFOG classification includes the spending on national defence. For some countries (specifically those with huge economies), such transfers used to constitute a factor strengthening demand on both the capex and consumption sides in a steady and long-term manner. The consequences of excessive spending in this group (particularly for small and medium-sized countries) related to the engagement in internal and international conflicts are not favourable, producing frequent shortages in the payment balance and excessive indebtedness. Also, a country’s engagement in conflicts gives rise to other adverse phenomena, such as loss of life, health or property, which additionally beats the purpose of the spending in this area. The spending on security and public order maintained at an optimum level, ensuring the correct operation of relevant state services, including the judiciary, enabling sustainable economic growth. Changes in the level of spending as part of this category should be neutral to growth in the short and medium terms.

The next three groups of spending identified within the frameworks of the COFOG classification – economic matters, environmental protection, housing and municipal management – have a strong influence on investments and to somewhat lesser degree, consumption. Concentrated in this group of spending are both large infrastructural projects related to road, railroad and air transport but also the environment, water management, waste and municipal and the housing infrastructure.

The four last groups of spending identified in the COFOG affect the level of consumption to the largest extent. The first of them represents public transfers to the health care, which includes the spending related to medicines and medical devices and first of all, services:
those provided by the public health care, hospitals and ambulatories. We have seen a very dynamic growth of the medical service market in recent decades, which, considering the population aging processes correlated to this trend, forces the building up of both public and private spending as part of this category and in the aftermath, investments and consumption. The second group of public spending discussed in this paragraph, the smallest of the categories, is organization of leisure, culture and religion. It has a limited effect on consumption because of its size but is important for the quality of lives and public welfare. Another category is the spending on education that covers all-inclusively the public spending on upbringing and educating the children and youth starting from kindergartens, through elementary schools, high schools and higher levels of education and education services. The spending on education constitutes an important factor of long-term competitiveness of the economy related to the growth of social capital. The last and broadest expenditure category, social protection, accumulates most of the spending of the social security subsector in the form of old age and disability pensions, family and child allowances, unemployment benefits or performances related to illness or disability. The public spending on social protection has the strongest leverage on consumption. It is also a highlight for the fiscal policy because of the population aging processes and their long-term consequences for the stability of public finance and sustainable economic growth.

3. The structure of spending in European Union countries between 2002–2012

Though the European Union as a whole has adopted common recommendations on the directions of economic policies, both the sizes and structures of the spending broken into the foregoing groups remain within full autonomous competences of the individual states. Therefore, specific groups of the spending are diversified in terms of their

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dynamics and naturally, to some extent, in weight. In spite of that, viewed from the perspective of the whole group, the structure of the spending remains relatively stable, which can be seen in Figure 2.

![Figure 2. The structure of spending in the UE-27 states by the COFOG functions (%)](image)

Source: Own study based on Eurostat’s data (the data was published with a one year delay, so the data for 2012 could not be presented at this point).

The spending on social protection has the largest share of the public expenditure: 39.9% of the total spending in 2011, a growth 0.9% from 2002. The share of GDP changed during the deliberated period from 18.2% to 19.6%. The aggregate growth of the nominal spending during that period was 37.3%. The spending of France (22.8%), Italy (13.9%), Spain (12.6%), Germany (8.2%) and the UK (7.5%) had the greatest shares of this growth. However, the figures for these countries varied significantly in terms of their nominal dynamics: 47.6% for France, 40.9% for Italy, 89.7% for Spain, 19.2% for the UK and just 12.2% for Germany. This affected the dynamics aggregated for the UE-27 because of the huge contribution of Germany whereas most
countries saw expenditure growth dynamics significantly exceeding the mean ratio.

The spending on the health care sector was the second largest category of the spend: 14.9% of the spending in 2011, a growth of 1.1%, or from 6.4% to 7.3% of GDP, from 2002. The aggregate growth of the spending on health care was 45.3%. For the spending on health care, the changes in individual countries followed the foregoing change in the share of GDP. Only Germany did not sign up to this trend (just 0.1% growth of the share of GDP, compared to 1.8% for the UK and 3% for Spain).

The third spending category in terms of size was the overall functioning of the state. Its share in the total public spending decreased by 0.7% to 13.5%. Its share of PKP in the UE27 changed slightly: 6.6% in both 2002 and 2011. The situation of individual countries varied significantly. The highest share of this spending in GDP was noted in Greece (12.8%, +2.5% from 2002), Cyprus (11.1%, +1.5%), Hungary (8.7%, −1.2%) and Italy (8.6%, −0.8%). Ireland saw a growth of 2.1% but to the lower than average level of 5.5%. Note that this function includes the costs of servicing the public debt in addition to the spending on the broadly defined public administration. The change of the share of this function in public spending followed the changes in the debt servicing costs in most cases.

The fourth largest category was the spending of education with the 10.9% share in 2011, which meant a drop of 0.3%. Relative to GDP, this spending amounted to 5.3%, 0.1% more than 10 years earlier. The level of this spending remains relatively fixed throughout the EU.

The fifth spending category, economic matters, represented 4.0% of the GDP in both 2002 and 2011 for the UE-27. This category had an 8.2% share of the total public spending for 2011. The transient growth of the spending on the economic matters function between 2008–2010 requires a separate explanation. The spending on economic matters grew slightly slower than the overall spending until 2007. The effect of the individual countries on the significant 13.7% (65.6 billion EUR or approx. 0.5% of GDP) growth of the spending on economic matters noted in 2008 was, obviously, varied and depended (though not wholly) on the national economies size. The following states had the largest shares of this growth (year-to-year): the UK 45.6%, Germany 13.6%, Spain 5.9%, Poland 5.4%, Greece 5.3%, Ireland 4.1%
and the Netherlands 3.9%. The growth of these outlays relative to GDP illustrates the actual burden from the costs of the public intervention related to the bailout of the banking sector. The largest growth rates were noted in the UK (2.1% of GDP), Ireland (1.7%) and Greece (1.4%). The growth of spending on economic matters relative to GDP in Germany, Spain, Poland and the Netherlands ranged from 0.2% to 0.3%. Note, further than the additional funds for this area were allocated by Poland, which was attributable mostly to the co-financing of the structural investments supported with European funding. The spending on economic matters stabilized in 2009 and grew by a further 6.9% (37.8 billion PLN or 0.2% of GDP) in 2010, provided that the sources of growth concentrated in two countries. These outlays amounted to the unprecedented 25% of GDP in Ireland (a change by as much as 17.8% or 27.5 billion EUR, year-to-year) and increased by 0.9% of GDP in Germany. Other countries saw both increases and drops in the outlays of this function.

Figure 3. Growth of the UE-27’s public spending by function between 2002–2012 (EUR M)

Source: Own study based on Eurostat’s data.
The remaining five groups of the expenditures represented just about 1/8 (12.6%) of the total spending in 2011. Their shares remained relatively stable (as shown in Figure 3). The spending on public safety and order represented 3.9%, national defence 3.0%, organization of leisure, culture and religion 2.2%, environmental protection 1.7% and housing and municipal management 1.7%. The demotion in priority during the period under review, concerned the national defence and housing and municipal management (a drop of 0.4% each).

The changes noted for each category of public spending are clearly a consequence of two trends (limited rate of growth of GDP and fiscal consolidation) observed during the two last years of the deliberated period. The share of the spending on social protection, health care and environmental protection was larger than the share of these categories on the aggregate spend. For the public safety and order and health care the proportions were similar to each other. For the remaining categories of the spend, the share in the growth of the expenditure was lower than the share in the aggregate spend, which means a decline in priority. Forcing the spending on social protection and health care strengthened consumer demand while additional investing demand was related to the spending on economic matters and environmental protection.

Using the available data on public spending broken into the COFOG functions, does not allow for grouping the functions according to the four categories (set out in points 1–4 below) of varying effectiveness and the effect on economic growth. However, we can attempt to draw certain conclusions for the whole UE-27. The costs of servicing the public debt (category 1) increased throughout the examined period, inhibited as part of the “overall functioning of the state” spending category with the reduction of spending on other purposes, unfortunately, at the cost of the growth potential. However, the expenditure from categories 2 and 3 did not exceed a threshold share of GDP that would indicate the adverse effect of the spending on the performance. The expenditure of category 4, featuring relative proportional effects on the performance was, regrettfully, the one most trimmed as part of consolidation processes. The picture varied depending on the country (e.g., Greece or Portugal). Specifically, we could find adverse consequences of forcing excessive growth in the spending of category 2 (public sector salaries, early retirement benefits, public consumption funds) in the initial year of the period concerned and a dramatic growth of the spending from category 1 (debt service costs) during the crisis.
4. UE-27’s spending vs. GDP growth and investments between 2002–2012

In the context of the foregoing review of public transfers it is important to compare the results with the data referring to the economic life indices to find out whether and to what extent these factors are correlated. This is why this subsection will review the available statistics of GDP, consumption, investments and the public spending in the European Union (UE-27) between 2002–2012. The pre-2000 consolidation processes led to a rapid reduction of the share of public spending in GDP and reaching the bottom level of 44.8% in 2000. The ratio saw a slight growth between 2001–2003, then started to decline as of 2004 and reached another low level in 2007 (45.6%). The growth of the public spending and stabilization of the nominal GDP (with a significant drop of 4.3% in real terms in 2009) in the following years contributed to a major growth of the share of the public spending in GDP (51.1% in 2009 and 49.4% in 2012). The volume of consumption representing approx. 80% of the aggregate GDP for UE-27 (varying between 77.3% and 80.7% between 2002–2012) had much to say about the dynamics of the aggregate GDP, as shown in Figure 4.

![Graph](image)

**Figure 4.** The actual rates of growth of GDP, consumption and public spending (left axis) vs. Public spending to GDP ratio (right axis)

Source: Own study based on Eurostat’s data.
After 2007, most of the EU countries took advantage of the demand impulse to sustain the growth which, among other factors, contributed (in some cases) to the aggravation of the state of public finance without enabling to achieve the expected result, i.e., economic upturn. The growth of the scale of redistribution of income and the imposition of new, or a major extension of the existing, expenditure titles produced, after the year of the breakdown (2009), a short-term growth stimulus (2010). In the environment of practically fixed GDP levels in the UE-27 after 2007, the growth of the public spending volume produced excessive deficits in the public sector.

The data on average annual nominal change (see Figure 5) reflects quite clearly the mid-term trends for the whole of the 2003–2012 period and the effect of the post-2007 breakdown on the development of the main macroeconomic aggregates. The growth of GDP by 2.6% was followed by the growth in consumption and the public spending by 2.8% and 3.2%, respectively. The average annual real growth for this period was 1.2% for GDP and 1.1% for consumption. The mean real growth of the public spending measured using the GDP deflator method was 1.8%.

![Figure 5. Accumulated consumption dynamics in UE-27 in nominal terms (2002 = 100)](image)

Source: Own study based on Eurostat’s data.
The cumulated growth of consumption for the public and private sectors between 2002–2012 amounted to 37.9% and 29.7%, respectively, as a result of which the share of the governmental and self-governmental institution sector in the total consumption increased from 35.0% to 37.1%. In nominal terms, the aggregate consumption during that period grew by 2,249.2 billion EUR, given the public spending growth by 1,577.0 billion EUR while the major growth within this spending by 1,120.1 EUR occurred in three groups (social protection, health care, and education).

During the period concerned the public investments grew by approx. 48% between 2002 and 2009, the rate declined to approx. 30% in 2012. The private investments increased to the maximum extent by approx. 35% in 2007, in 2012 they were approx. 17% higher than in 2002. The share of the public investments in the aggregate investments ranged from 13.3% in 2002, through to 16.9% in 2009, to 14.7% in 2012.

Both the consumption and investing demand of the public sector between 2002 and 2012 showed higher dynamics than the one of the private sector. To some extent, this was an effect of the cycle-suppressing fiscal policy pursued in a much imperfect way because of excessive deficits during the years of economic upturn preceding the post-2007
breakdown. In addition, the consolidation efforts of 2012–2013 again froze the growth processes throughout the European Union. The political dispute associated with the consolidation did not tip the balance to the side of the followers of greater interventionism and consequently, higher spending. Besides this, for the countries most affected by the crisis, there are no thinkable sources of financing higher spending. Some believe the central banks (including the EBC) played an important (detrimental) role during the financial crisis of 2007–2009. Given the clear asymmetry with respect to the goals and responsibilities between the central banks and governments, the extraordinary (regarding the size) consequences of the financial crisis placed excessive loads on the public spending in a few countries (Ireland, Greece and Cyprus). However, we are seeing a very slow evolution in the anti-crisis efforts of the EBC.

5. Conclusion

The fiscal stimulus applied during the crisis sustained consumption of more than the aggregate GDP. This has been particularly clear since 2010. The share of the public spending in GDP increased after 2008, mostly as a result of GDP variability but also in connection with the increasing volume of this spend. The 2012 downturn was partly related to the forced process of fiscal consolidation. The privileged role of the spending on social protection, health care and education should be confirmed. Containing administrative expenses is reasonable. We can expect long-term beneficial effects of the foregoing spending preferences on the growth of social capital and then, the economy as a whole.

The limited flexibility of public spending (in terms of both the aggregate volume and the internal structure) results from many causes: legislative and political, but also social. We should also note that the important factors affecting changes in the structure of the spend: demographic, cycle-suppressing fiscal policy or consolidation processes. However, the influence of such instruments often produces surprisingly varied results (short and long term).

The growing share of public consumption indicates that given the collapse of the growth trend, public consumption was sustained by steadily growing public spending. Although the structure of public spending by the COFOG functions throughout the UE-27 varied little
throughout the deliberated period because of the most important share of the spending on social protection and the largest share of this spending in the growth of expenditures (next to health care and education), we can note the importance of this spending for the up keeping of the demand.

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Classification of the Functions of Government (COFOG) developed jointly by UN, OECD and EC-Eurostat, http://eur-lex.europa.eu (4/07/2013). The Classification of the functions of government, abbreviated as COFOG, was developed by the Organization for Economic Co-operation and Development and published by the United Nations Statistical Division as a standard classifying the purposes of government activities. The classification has three levels of detail: divisions, groups, classes. Divisions describe the broad objectives of government, while groups and classes both define the means by which these broad objectives are achieved. http://epp.eurostat.ec.europa.eu (4/07/2013).


CHAPTER 10

The role of marketing information in the assessment of a contractor’s credibility in business negotiations

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and Magdalena Kalińska-Kula**

Abstract

Every market player needs information that forms the basis of economic decisions. Viewing negotiations as a specific decision-making process it can be assumed that it also concerns the decisions taken in this area. Undertaking economic actions by an enterprise imposes necessity of establishing business contacts, negotiating, concluding contracts and conducting business transactions. Such relations are often burdened with a considerable risk and in this context the question of the multi-faceted verification of a potential contractor – negotiating partner’s credibility seems extremely rele-

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vant. This paper presents an attempt to examine how enterprises verify a negotiating partners credibility, satisfying the demand for information in this area and how they assess the usefulness of the information obtained.

**Keywords:** negotiations in business, usefulness of information, sources of information, contractor’s credibility

1. The role of information in business

One of the basic managerial skills is the efficient functioning in economic realities as well as perceiving and harnessing continuous changes observed in the market. What seems indispensable here is a systematic collection, selection and verification of information about a market and its players. Knowledge resources are the source of creating values and achieving a competitive advantage. The knowledge that becomes one of the main resources of an organization, allows it to make economic decisions with a lower risk. The lack of relevant information, on the other hand, implies the risk of making a wrong and often disastrous decision. Regardless of the sector the enterprise operates in, the prerequisite of effective decision-making is the possession of precise information and the proper use of it [Hague, 2006, p. 14].

Information in organizations perform a lot of functions and the most rudimentary include [Bolesta-Kukułka, 2003, p. 75]:
- cognitive function,
- motivating function,
- co-ordinating function,
- managing-controlling function.

A specific function is performed by information in the decision-making processes that takes place in an organization. The information that is topical, precise, accurate and reliable helps to optimize decision-making and thus enhances the improvement of achieved commercial performance and results. It can be assumed that information is indispensable at every stage of a decision-making process, starting from the identification of a problem, through the determination of its character and working out alternative solutions, their assessment from the perspective of expected results of undertaken actions, up to the
moment of implementing decisions and assessment of their results. Diversification of problems for the needs of which information is obtained influences the way it is used. Marketing problems include planning problems, problems connected with making current marketing decisions as well as problems related to controlling decision-making functions [Churchill, 2002, p. 24]. Also taking into consideration a cognitive dimension of information [Kędzior and Karcz, 2007, p. 20] we can distinguish a separate category of „problems” that need obtaining information i.e. the enhancement of marketing knowledge (help in comprehension).

Proportionally to marketing problems, while talking about a way of using information by managers, the instrumental or conceptual use of information can be mentioned [Bartosik-Purgat, Mruk and Schroeder, 2012, pp. 14–15, 32–45]. In the case of decision problems, information is used instrumentally, which means it is used directly to solve a current marketing problem. Then information can help to make short-term and long-term decisions in relation to the elements of the marketing mix, such as, when the products design is to be implemented, what price it should have, where and by whom products are to be sold or what combination of the media should be used in its promotion campaign.

Similarly, the instrumental use of information takes place while solving problems connected with controlling functions e.g. in the assessment of customer satisfaction, identification of an organizations image in target market or a total market share or the assessment of the influence of adaptations introduced in the past in the set of marketing means. It also applies to the use of information in the context of planning e.g. determination of actual market opportunities, trends in the markets of products, forecasting of changes in a markets infrastructure or product planning.

Information does not have to be used exclusively to solve current marketing problems, but it can be collected to obtain a better picture of conditions for running business activity and can be used later in the future. The example of such direct use of collected information in order to get an overall picture or enhancement of managerial knowledge can be the assessment of competition in the market, identification of needs and requirements of customers or the assessment of macroeconomic factors conditioning the conduct of business activity i.e.
legal and political conditions, economic trends or social values. In the context of enhancement of marketing knowledge we can mention a conceptual way of using the information.

Regardless of the type of marketing problems observed in an enterprise and the ways of using information, what proves to be indispensable is a constant collection and the processing of economic information in order to support the decision-making processes that takes place in an enterprise. While assuming that negotiations are a specific decision-making process, it can be stated that it also applies to decisions taken in the area of trade negotiations.

2. Strategic importance of information in business negotiations

Negotiations (according to a definition) are a communication-decision-making process that aims to bring two parties together who are in conflict to find a resolution in a way that the outcome is acceptable for both partners [Brdulak and Brdulak, 2000, p. 13]. Decisions taken by a negotiator during the course of a negotiating process can concern a lot of areas, e.g. determining the purpose of the negotiations and the best alternative to a negotiated agreement, adopting a specific strategy and the choice of negotiating style, methods, techniques or tactics that will be used [Biesaga-Słomczewska, 2009, pp. 82–84]. It can then be assumed that negotiations are a specific decision-making process, and thereby it can be stated that a skill of obtaining information should also refer to preparing and conducting negotiations.

The prerequisite for achieving satisfactory results in negotiations is an appropriate preparation. In order to conduct effective negotiations a negotiator first of all needs the background knowledge of a negotiated issue. Economic negotiations differ from negotiations conducted in other areas of social life. The way of running economic negotiations not only requires the ability of using negotiating rules and techniques, but also applying economic categories and cost-benefit analysis [Jastrzębska-Smolaga, 2007, pp. 10, 66, 68–75]. Obtained stores of knowledge should then be a basis for a thorough analysis of a negotiating situation for both parties, the assessment of negotiating objectives and alternative solutions, strengths and weaknesses of business
partners as well as opportunities and threats. Thus, it is necessary to get reliable and valuable information that when used appropriately will significantly facilitate business talks.

The types of information needed for negotiating purposes are diverse and obtaining them generally requires the exploration of a number of sources. An efficient negotiator should have stores of knowledge covering, among others, information related to a subject of negotiations, practices specific for a given market, information about a company-negotiating partner as well as about a person representing this organization at the negotiating table [Peeling, 2010, pp. 25–29].

Information related to the market includes among others, the size of supply and demand for products and services that are the subject of negotiations, prices and their relations, conditions offered by competition, practices specific for a given market or the general functioning of a sector. A wide range of information about a negotiating partner concerns the characteristics of their enterprise. It includes for example the size and organizational structure of the company; innovativeness and development dynamics; the range of products and services and their quality as well as a company’s image and reputation in a sector; stability of employment and its corporate culture.

The abovementioned economic information will allow a business to avoid mistakes, point out good practices in solving specific problems, provide knowledge about market and economic trends, which enables them to gain a competitive advantage [Jastrzębska-Smolaga, 2007, pp. 10, 66, 68–75]. The significance of this information can also be examined in the context of identifying the credibility of business partners.

3. Credibility of a contracting party in business negotiations

Collecting complex and reliable information at the stage of preparing negotiations enables managers to focus on credible contracting parties with whom it will be possible to build long-term trade relationships based on the knowledge of a business partner and mutual trust. Undertaking economic actions by an enterprise, often abroad, imposes the necessity of establishing new business contacts, concluding contracts
and making transactions with new contracting parties. Such relationships are often burdened with a risk connected with unreliability or dishonest practices of entrepreneurs. What seems very important is a problem of verification of a multifaceted credibility of a potential negotiating partner.

In order to draw adequate conclusions it is indispensable to get information related to a contractor’s reputation in a sector and also their history and image. What proves really useful is information about the efficiency of order realization, meeting obligations, reliability of deliveries, timeliness as well as the quality of products. Information needed to verify the economic credibility of a contracting party should also include a company’s profitability, financial credibility, current turnover and its financial results. The analysis can be complemented with information about development dynamics, a company’s innovativeness, conducted research and development activities as well as patents and certificates. The stability of a company can also be judged on the basis of its absolute market share and market share in a target segment. Additional useful information is the size of a company (measured by the number of employees), its assets, technical base and machinery park.

To gather the abovementioned information, negotiators can use secondary sources (it is usually processed data obtained as a result of previous surveys conducted for specific purposes, by certain people or organizations [Kaczmarczyk, 2007, p. 298]), such as: archives and public registries, papers and information services, the internet, professional literature and periodical press, information bulletins, prospectuses, state institutions and embassies, trade and marketing associations, market research agencies, credit information agencies, Economic Information Bureaus, domestic and international databases, European Information Centers, the Polish Information and Foreign Investment Agency and the Polish-foreign Chambers of Commerce, etc. [Jastrzębska-Smolaga, 2007, pp. 10, 66, 68–75; Bartosik-Purgat, Mruk and Schroeder, 2012, pp. 14–15, 32–45]. Negotiators can also obtain necessary information from primary sources i.e. from former business partners, contractor’s clients and the contractor himself, consultants and specialists from a given sector.

In the context of gathering the information needed to verify a negotiating partner’s credibility, the sources that are considered most useful are Economic Information Bureaus, i.e. the National Debt Register or
the Info-monitor. The purpose of these organizations is to gather and share information about companies and individuals who do not settle their financial liabilities. The list of debtors that they offer are a useful tool while preparing for negotiations, both when deciding about the co-operation with new partners and constant monitoring of current partners’ credibility are concerned.

Information bulletins that are issued due to a public offer or application for admission for trading of securities in a regulated capital market are also a very useful source of information. Prospectuses in particular provide potential negotiators with the data to assess economic, financial, property situation as well as prospects for a contractor’s development. They enable them to obtain knowledge about current investments, basic company activity or ongoing legal proceedings, which have influence over a contractor’s financial situation.

In highly developed European countries, the source that is used most frequently are the credit information agencies whose aim is to support an enterprise in decision-making in the area of establishing and concluding trade contracts. These specialized institutions deal with the professional and lawful collection of information about economic entities, its gathering and processing. They also offer commercial reports containing the description of legal-organizational and financial situations of a contractor’s company as well the assessment of their credibility.

In the light of these discussions an attempt to check how companies verify a negotiating partners’ credibility has been made and it included satisfying information needs and checking how companies assess the usefulness of the information which it had obtained. Conclusions were drawn on the basis of the results of the empirical research conducted in December 2012 and January 2013 by the Department of Marketing of the University of Łódź. The project aimed to assess a degree of using marketing research in the context of supporting negotiations as a specific decision-making process and was a complementation of a research project concerning the usefulness of marketing research in companies practice which started in October 2011.

The research was conducted on the sample of medium-sized and big enterprises (entities employing 50 to 249 workers or entities employing 250 workers or more) located in Łódź and the Łódzkie region. They were examined by means of non-probability sampling – through purposive sampling using the address base made available by the
Voivodeship Statistical Office. Research procedures were purposefully focused on bigger enterprises assuming that they more frequently than the small ones conducted negotiations and more often gathered information, using marketing research. The research was conducted by means of personal interviews carried out with high management level representatives or individuals responsible for conducting business negotiations (president, vice-president, director, marketing manager or sales manager). The research tool was an interview questionnaire.

The research comprised 285 enterprises, among which 267 (i.e. nearly 94%) were conducting business negotiations in the last three years and the research procedures focused on them (Tab. 1).

**Table 1.** Characterization of enterprises which conducted business negotiations (by selected features)

<table>
<thead>
<tr>
<th>Enterprise features</th>
<th>Number of examined enterprises</th>
<th>Share in sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From 50 to 249</td>
<td>199</td>
<td>74.5</td>
</tr>
<tr>
<td>More than 250</td>
<td>68</td>
<td>25.5</td>
</tr>
<tr>
<td>Type of business operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>108</td>
<td>40.4</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>28</td>
<td>10.5</td>
</tr>
<tr>
<td>Retail trade</td>
<td>31</td>
<td>11.6</td>
</tr>
<tr>
<td>Services</td>
<td>100</td>
<td>37.5</td>
</tr>
<tr>
<td>Sector of operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2B</td>
<td>175</td>
<td>65.5</td>
</tr>
<tr>
<td>B2C</td>
<td>92</td>
<td>34.5</td>
</tr>
<tr>
<td>Origin of enterprise capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polish only</td>
<td>186</td>
<td>69.7</td>
</tr>
<tr>
<td>Mixed</td>
<td>44</td>
<td>16.5</td>
</tr>
<tr>
<td>Foreign only</td>
<td>37</td>
<td>13.9</td>
</tr>
<tr>
<td>Range of served market</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional market</td>
<td>38</td>
<td>14.2</td>
</tr>
<tr>
<td>Domestic market</td>
<td>96</td>
<td>36.0</td>
</tr>
<tr>
<td>International market</td>
<td>133</td>
<td>49.8</td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Own study.
4. **Assessment of a negotiating partners credibility in the light of the research results**

Among enterprises which conducted negotiations there were only three that admitted that they did not obtain any information and claimed that their workers possessed long-standing experience and a wide knowledge of the sector which were sufficient enough to conduct talks. The other respondents i.e. 264 enterprises gathered information in order to support a process of negotiation and this was mainly the information needed to verify a negotiating partners credibility (Fig. 1).

![Figure 1](image_url). The range and frequency of obtaining information in the context of the assessment of a negotiating partner’s credibility.

Source: Own study.
The measurement of frequency of obtaining information was performed by the means of a 5-point grading scale where, value 1 means that information in an indicated range was never collected, value 2 – information was rarely collected, 3 – from time to time, 4 – often, whereas value 5 – information was always collected in order to support a process of negotiations. The results of measurement were presented by means of the arithmetic mean on an examined sample.

In light of respondents answers, the information that was collected most often was a contractor’s financial credibility. Only 1% of respondents did not obtain any information in this range, whereas, as much as 90% always or often needed this information. Similar results were obtained in the case of reliability and timelines of orders, as this information was gathered often or always by 87.5% of respondents, whereas the proportion of “never” answered, only amounted to 0.8%. Likewise, high means from answers were obtained in the case of information concerning the quality of services, the size of a contractor’s company and its technical base as well as the reputation it had in the sector. The last item of information was collected always or often by 70.9% of respondents, whereas only 2.7% indicated that they were never interested in this particular issue.

In the light of the research results the information that was gathered less often, concerned sales and the financial results achieved by a contracting party as well as their profitability. This information was not collected by 5–6% of respondents, however, on the other hand, nearly a half of all respondents needed it always or often.

Information about achievements (patents, certificates or granted awards), a contractor’s innovativeness, dynamics of development and business ethics is collected by one third of respondents but only from time to time. What seems really surprising is the little interest shown in a company’s history because this information was collected “often” only by one third of respondents, whereas a similar percentage do not collect this information at all or very rarely. Similarly, one quarter of respondents seldom or never gather information about contractor’s or their regular customers’ share in a market.

While analyzing the range of presented information in terms of enterprise features certain regularities can be observed. For example, big enterprises more frequently gathered information about a contractor’s sales and their financial results – 92% of big entities always, often or
from time to time collected this data, whereas in the group of medium enterprises only four in five were interested in this information. Likewise, information in this range was collected by nearly 98% of all entities with mixed capital, whereas in the case of companies with solely Polish capital, the proportion was lower and amounted to 77%.

Information about a contractor’s profitability was collected by nearly 88% of the big enterprises, but by a smaller number of medium-sized enterprises – amounting to three quarters. Data in this range was gathered by nine in ten entities with foreign or mixed capital and 78% of enterprises with Polish capital. Similar results were obtained in the case of differences in frequency of obtaining data concerning the market share of a negotiating partner.

Data concerning a company’s history was collected more frequently by retailers and companies with foreign capital (nearly 84%) than wholesalers or enterprises with Polish capital (two thirds of the examined entities).

A significant difference can be observed in the case of a negotiating partner’s regular customers as this information was collected by nine out of ten big companies and only two thirds of medium-sized entities. More often than not, the data was collected by enterprises operating in the wholesale sector of the market (three quarters of respondents) compared to retailers (58%) and companies with solely foreign capital (92%).

Information about a contractor’s dynamics of development was more collected more often by manufacturers (87%) compared to companies operating in the service sector as in this case the proportion was 71%. Such data was collected by 93% of entities with mixed capital and three quarters of enterprises with Polish capital.

The issue of reliability was more important for wholesalers (service providers as well), and the proportion of companies operating in this sector which gathered information about timeliness and payment history amounted to nearly 100%. Enterprises operating in wholesale sector of the market more often than retailers collected information about technical base and contracting party’s manufacturing capacities. This information was also gathered by nearly 100% companies with foreign capital.

In the light of the presented results it can be noted that there are certain types of information that is collected by a significant majority
of respondents with a comparable intensity, regardless of a type of enterprise (e.g. contractor’s financial credibility, the quality of provided services, reputation and company size). It can be observed that some kinds of information were collected more seldom than others and in this case it was easier to spot certain differences in the frequency of gathering data, resulting (as it seems) from the features of enterprise and the character of business activity.

In order to collect presented information resources respondents used a number of sources. Among the most frequently used were:

- Internet, previous respondent’s contractors and a negotiating partner – on average 98% of all respondents used this source of information and three quarters assessed it as very useful.
- Negotiating partner’s customers – they were a source of information in the opinion of 96% of respondents and two third assessed collected information as very useful.
- Trade exhibitions, conferences and fairs, as well as professional literature, trade and professional papers as well as newspapers and information services – were used by 90% of respondents, but only every third or every fourth of them assessed this source of information as very useful.
- Consultants and specialists from a given sector, information bulletins and prospectuses were a source of information for 86% of respondents, however, only one quarter of them assessed them as very useful.
- Institutions such as the Polish Chamber of Commerce, the Statistical Office and other archives and public registers were a source of information for 80% of enterprises and a fifth of them assessed the Polish Chamber of Commerce as a very useful source whereas the other institutions received such a high grade only from 12–15% of respondents.

On average three out of four enterprises used information sources such as: national and international databases, credit information agencies, organization rankings, Economic Information Bureaus and Institute of Market or Consumption and Business Cycle Research. Databases and organization rankings were evaluated as very useful by one fifth of respondents who used these information sources, whereas in the remaining cases a proportion of such positive evaluations was definitely lower (11–17%).
In light of received opinions certain sources were definitely used less frequently (by half of respondents) and they included: the Polish Information and Foreign Investment Agency, European Information Centers, trade units of foreign embassies in Poland and the commercial counselor’s office of Polish embassies in other countries as well as the Polish-foreign Chambers of Commerce. However, it must be observed that these sources are devoted to gather information for negotiations with foreign partners. In the research sample, the enterprises which confirmed that they conduct international negotiations (i.e. established business contacts with partners abroad, was connected with an international range of their market) or operate in a domestic market but have foreign contractors (providers) – amounted to 67%.

**Figure 2.** Fulfillment of the information needs and the verification of a contractor’s credibility

Source: Own study.

It must be noted that the respondents who gathered information for assessing a contracting party’s credibility definitely valued more the primary sources rather than the secondary ones and used them more often. The proportion of respondents who confirmed to obtaining primary information ranged between 86% and 98% and this information was collected during the market research by one third of the entities
surveyed. The most frequent method was the observational method (three quarters of respondents conducted research by means of this technique) and personal interview (70% of responses). What might be considered surprising is that only one out of five enterprises that conducted market research in order to explore primary sources of information used the questionnaire method – it is generally considered the most popular among survey measurement methods.

While assessing the usefulness of the collected information, the majority of respondents (four out of five enterprises) admitted that it was useful in the context of verification of a contractor’s credibility. However, not all of the respondents were equally satisfied with the data range. Three quarters described the obtained information as „satisfactory,” whereas only one fifth assessed it as „fully sufficient” (Fig. 2).

5. Conclusion

In light of the presented discussion it can be observed that the enterprises involved in this study definitely value the role of information in business, realizing that business decisions require reliable support. It can be proved by the responses of those who in a significant proportion, obtained a wide spectrum of information to support the negotiation processes and very often, it was the information that might help to verify the credibility of negotiating partners. While building resources of knowledge the companies used numerous sources of information, both secondary and primary ones. Although entrepreneurs are not fully satisfied with the information they gathered, especially when assessing its usefulness in the context of the verification of a business partners’ credibility, it must be emphasized that this information definitely enriches the decision-making resources of negotiators.

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CHAPTER 11

Implementation of the business counterintelligence branch in enterprise structure

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Abstract

This paper is a summary of business counterintelligence consulting work, with the theoretical and practical background presentation, regarding modern strategic management knowledge and the author’s own advisor experiences. The article presents a sample solution for the implementation process of business counterintelligence branch. Moreover, some other problems have been raised as: cooperation between external consultancy and company execution representatives at organization of counterintelligence cell, counter-

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intelligence branch activities using information warfare, threats to
effective co-operation between business counterintelligence and
governmental special services in counterespionage cases. Also, the
paper deals with a strategic perspective on development of busi-
ness counterintelligence in the near future.

Keywords: business counterintelligence, counterespionage, eco-
nomics espionage, competitive intelligence, information security,
personnel loyalty

1. Introduction

Functioning of a counterintelligence branch inside a company is the
area of management knowledge relatively poorly explored in the na-
tional and world scientific literature. In Poland, the most cited book is
the work of French authors Bruno Martinet and Yves-Michel Marti on
the business intelligence subject. However, it only partly showing
counterintelligence and counterespionage problems [Martinet, Marti,
1999]. Polish author Mirosław Kwieciński also indicates some unre-
solved problems connected with nowadays threats to the company
information security systems [Kwieciński, 1999]. While there is not
a detailed look at the process of practical counterintelligence branch
implementation, which branch has to function in the complex deci-
sion-making and information cycle within the company structure. The
role of the counterintelligence cell has been presented, at the strategic
and operational levels, in the Figure 1.

Today’s economic and industrial espionage threats [Porteous,
1993] cause, that the creation of a specialized unit dealing with the
business counterintelligence matter can be an example of innovation
in enterprise with its market competition requirements [Rozwadowski,
2010, pp. 273–285]. Usually, this demands not only engaging external
advisors in combating employee’s disloyalty [Kaliski, Kierkowska,
Tomaszewski, 2010, pp. 33–52], but run a whole, time consuming
implementation process of a new counterintelligence branch.
2. The sample solution for an implementation process of the business counterintelligence branch

The implementation plan of new counterintelligence and counterespionage branch in enterprise may be divided into several stages. Some of them may be omitted depending on past and present company organisational experiences. However, from the practice of counterintelligence consulting, it appears that there may be a strong demand from the executive authorities to lead several implementation processes at the same time for example: internal security analysis, counterintelligence workshops and training, personnel recruitment, company current threats analysis, and an investigation of secret information leakage or lack of personnel loyalty. Time implementation schedule of the business counterintelligence branch consists of the sequence of organizational works, tasks and information flows, as it was shown in Fig. 2.

- Analysis of the state of internal and external information security with existing counterintelligence resources in the form of security rapport.
The scope of work of the security report can be very wide. However, it can be roughly divided into two zones: the circulation of information and documentation inside and outside the company, and the area of human factor and its impact on the organization.

In the first approach, the key is the verification of circulation of electronic documents and in paper form, for information security threats statement and to determine the potential strategic and operational information leakage places.

The second phase involves carrying out reconnaissance on potential sources of disloyalty of employees.

The third step is to determine the locations and areas of organization activities, which may be followed by the penetration of a competitive intelligence or by foreign governmental intelligence agencies. Particularly intelligence services can be interested in secret information about planned market activities and changes in provision of services, or details of sensitive dual-use technologies.

The report should end with an elaboration of practical applications for counterintelligence and counterespionage security approaches for already carried out business projects and planned ventures.

**Proposition for organizational, management and financing** of the internal business counterintelligence at the company structure, prepared in the form of a feasibility study.

The work begins with the determination of the inner form of the counterintelligence organization and its position in the company structure. The primary issue is to establish the scope of the counterintelligence branch duties and its staff’s accountability. At the same time, organizational efforts should be made to create decision linking and reporting procedures binding between the counterintelligence branch and company execution board. In the next step it is necessary to accept the main principles of the future intelligence employee’s selection, training methods and possible career paths.

At the very beginning of the counterintelligence organization's work, it is important to adopt methods of co-operation with other departments, in particular with marketing, controlling, procurement, accounting, human resources and IT. It has a direct relationship with the accepted principles of access to strategic, operational and financial documents for the counterintelligence staff and their future security responsibilities.
Turning to financial issues, the executive board should accept the counterintelligence structure and its cost estimate, broken down by major periods: preparatory work, selection of employees, training, initial period of implementation, continuous counterintelligence and counterespionage activities and periodic verification of the counterintelligence branch’s development.

Efficiency measurement requires that objective evaluation parameters are set to measure the counterintelligence cell, including the methods of financial analysis adequate to the specifics of the company’s business strategy. The analysis should be extended to the adoption of methods of economic analysis, defining the effectiveness of the company counterintelligence security in the context of enterprise market position.

To organize new company structure, it is also a need to establish acceptable working counterintelligence methods due to culture organizations and civil and criminal law standards. In advance, it should also be decided what kind of solutions will be available for the information security verification of counterintelligence branch by itself.

Hence, it needs to be determined the appropriate forms of contacts between counterintelligence staff with outside business and public environment i.e., especially with defence and security industry, competitive and corporative market segments, and public authorities sphere, including governmental special services, prosecutor's office, ministries, courts and the self-governing administration: voivodeship, provincial and local commune authorities.

Business counterintelligence cell also requires the adoption of some degree of secrecy, because of various challenges of its activities within the company structure, while maintaining the superior rule of law, which provides that it is prohibited to create private covert organizations.

The executive board should also approve a key document which is the feasibility study and to allocate adequate financial and personnel resources for the counterintelligence schedule deployment in the company, in the certain time.

- Recruitment process of new personnel for the counterintelligence branch, department or cell, with specific capabilities to conduct information security tasks, counterintelligence and counterespionage operations, and support for the future competitive intelligence company activity.
The basic principle in the recruitment process of the counterintelligence cell creation is to prepare a candidate personal profile, which the company is looking for and the precise assumptions of the expected competence range for the counterintelligence member team.

The process should begin from a review of currently employed staff to seek out valuable candidates for transfer to the counterintelligence branch. The key copy is also to prepare an outstanding job offer, particularly suited to discrete search for specific candidates. Public employment offers need to be also understandable by specialists from the business security management, with regard to the relevant counterintelligence and counterespionage intentions of an employer.

On the side of external consultants, it is an obligation to propose sufficient selection process for the cell counterintelligence recruitment. The selection begins with the verification of the candidates personal data by a crosschecking reliability of information provided by these documents. It should also carry out the social and electronic candidates screening. This is a significant tool to assist the process of complementary personal data, collected during multilevel interviews and screening.

Many kind of tests, checking the predisposition to analytical and operational work in counterintelligence, are also a very useful recruitment tool. However, they cannot be considered as more significant than results of individual interviews with candidates. In fact the tests give only a seemingly objective measure of personal suitability for business intelligence and counterintelligence duties. They have never been able to replace personal interactions and bring in the reality of the situation related to planning and execution of difficult tasks, especially in conditions of high levels of stress and danger.

In the final stage of recruitment should be presented detailed counterintelligence position requirements to the selected candidates, financial contract conditions whilst paying attention to the further possibilities of career opportunities in the company, or in related subsidiaries, or a career path throughout international corporation structure.

Finally, the executive board approves selected candidates and employment conditions, proposed by outside consultant agency, together with recommendations how to match people responsibilities to the counterintelligence tasks in newly created team.

- **Comprehensive training program for newly established counterintelligence department** and specific topics of corporative intelli-
Enforcement, counterintelligence and counterespionage theories, practical methods for owners, top execution boards and management staff.

Employees training for the future counterintelligence branch is a lengthy process. It includes not only lectures and simulation exercises, but above all, individual and group intensive consultations. In some ways this is similar to the coaching methods, but it also has own specific approach due to often hidden nature of the business counterintelligence work.

The background of the multi-month training system should adopt the organizational principles for counterintelligence, counterespionage and business intelligence duties and responsibilities, as a permanent quality of the internal structure, which has to be implemented in an innovative enterprise. It is vital to know accurate knowledge and understanding of the legal conditions for the business counterintelligence and intelligence activities at the democratic countries and in the other political systems, related to the markets in which the company operates.

For effective counterintelligence work the most important thing is the acquisition and verification of personal and technical information sources. Behind this is a common understanding among company’s staff for advisability of co-operation with the counterintelligence cell. Intelligence employees should be particularly carefully trained for a smooth operation in surrounded areas as: public administration, customers, individuals, subcontractors, suppliers, members of investment groups and competitors. Only from this starting point, analytical methods and reporting of counterintelligence efforts can be proposed and established.

In the framework of continuous training, consultants should help the company with development of the counterintelligence internal tasks scheduling, establish rules of its accounting and what is mainly relevant that matter, to suggest finance measurement methods of the counterintelligence work efficiency. Subsequently, it follows breakdown to counterintelligence activities and work in task forces (operational groups).

Particular care should be paid to the problems associated with the management of information presenting company economic secret and legal requirements and technical safety conditions of storage, use and processing of classified information [Classified..., 2010]. From above regulations, company supposed to set the internal restrictions for the scope of business counterintelligence responsibilities, connected with
protection of entity classified and economic information [Database…, 2001].

The main task of the business counterintelligence is recognition of the situation related to the company's industrial espionage threats, as technological, financial and political (domestic or foreign), but also corruption investigation or employees disloyalty cases and illegal influence of competition and administration surrounding same. Day by day collaboration between executive and others management staff with counterintelligence branch should protect company against leakage and interception of secret information and sensitive personal data. The key point here is an acquisition by counterintelligence staff practical skills connected with the information systems, for example, a frequent use of the company accounting and financial management systems. However, it should be taken into account administrative and related mental limitations for a direct cooperation with different departments of the company.

Despite the tremendous growth of information technology and electronic observation\(^1\) in XX and XXI century, still in business intelligence and counterintelligence environment, as in the work of the special services, the most important is ability to search, enrol, collaboration and effective use of personal information sources\(^2\). However, the basic canon of counterintelligence duty is to protect informants from disconspiracy, both inside and outside the company.

Among the specific methods, with which the future counterintelligence staff might be familiarized is, inter alia, carrying out specific implicit activities: intelligence games, inspiration, disinformation and covert operations. This has an additional and hidden objective on detection of places and people illegally transmitting important data and classified information to competitors or to the public administration. It should be noted that above methods must have a high degree of secrecy, because in the most cases there is a need to an implicit control of entire company personnel, including also members of the top management staff and executive board.

Among others counterintelligence tasks, but essential as fixing disloyalty of personnel, subcontractors and customers, it is detection of phone, Internet and intranet system bugs, electronic surveillance,

\(^1\) SIGINT – Signals Intelligence.
\(^2\) HUMINT – Human Intelligence.
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fighting against industrial and informatics sabotage, terrorism prevention, permanent control of the entity information system, safety and integrity of the data storage systems, with a special consideration for updating access policy.

In summary, comprehensive counterintelligence and counterespionage training always in the first place should identify possible routes of implicit and explicit data and information transfer paths inside the company and in directions to business partners, subcontractors, clients, suppliers and to competitors.

- **Pre-implementation of the counterintelligence branch for operational duties**, with outside expert support for planning, execution, measurement and reporting of counterintelligence branch development.

Nearly all of the annual initial implementation of the counterintelligence structure typically requires operational and tactical advices to the counterintelligence team and strategic advice to the executive board of directors. This is a critical period for success of the entire project location of counterintelligence and counterespionage protection in the company.

Assistance of external experts is particularly important when planning and carrying out covert counterintelligence operations. Consultants should also assist in the preparation of monthly reports on the enterprise information security for the Board of Directors or for the entire capital group.

A special issue is a role of security advisors in verifying employees and subcontractors, suspected of working to the detriment of the company’s position, as a separate form of sensitive and confidential tasks.

The process of pre-implementation should end up submitting correction solutions for counterintelligence branch activity and may present a proposal for improvements in the entity information security. This brings about the verification of counterintelligence progress and determination of present organizational needs for adapting the counterintelligence branch to changes in operational and strategic management and the specific project requirements.

The annual report should evaluate the process of change in the company information security after implementation of the business counterintelligence branch, particularly with regard to the control of the flow of sensitive and classified information.
Figure 2. Implementation plan of the business counterintelligence branch with outsourcing consultancy support and an average time of each step development

Source: Author’s diagram.
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- **Strategic consultancy and evaluation reports** of the counterintelligence branch development after the pre-implementation period. External counterintelligence experts should be able to determine new gaps in enterprise information security, which have not been identified so far by the counterespionage department. They advisory role is to focus attention of the executive officials and counterintelligence branch managers on the future project risks and espionage threats at new markets. Security consultants can also provide solutions designed to enhance the counterintelligence branch with an integrated and specialized business intelligence cell. But usually external consultants take periodic orders for screening loyalty of company counterintelligence personnel (“intelligence in counterintelligence” or “double checking”).

- **Foresight analyses of company the future threats and the others security cases** e.g.: espionage studies, losses caused by an illegal competitive intelligence penetration, inspiration and disinformation games and personnel defector\(^3\) incidents.

3 Co-operation between external consultancy and company execution representatives at the organization process of counterintelligence department, practical problems and guideline solutions

The gradual implementation of the business counterintelligence structure, presented in details in the previous section, assumes a very close co-operation between executive board and external consultants. The complexity of the implementation process requires from the consultation company a lot of experience in counterintelligence tasks and combating espionage. First of all consultants should adapt their actions to organizational culture and entity business activity.

Co-operation with executive board and top management officers is a complicated, tedious and time consuming process. Figure 3 presented the basic diagram of such joint action between executive board, external consultant agency and new innovation structure of corpora-

\(^3\) Person who betrays company.
tive security branch. Hence, consultants should pay attention to some of the aspects mentioned below, from the scope of counterintelligence branch organization and management and obligation rules of the integrated information security system.

![Diagram](image)

**Figure 3.** Basic diagram of the co-operation between executive management, counterintelligence branch and external consultancy agency

Source: Author’s diagram.

- Identification of intentions of the executive board, main tasks:
  - Separating manager fantasies from actual information problems.
  - To verify situation, that it is not a case of external experts entanglement in some internal competition within the company e.g.:
    - with the hidden aim to get rid of certain employees,
    - promote specific individuals within the company,
    - cover top executive own treason or incompetence and steer an attention to other employees, with a final dumping responsibility allowance, or criminal investigation,
    - maintain own leadership and dispose of competing individuals or groups of interest.
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- Determine what information specifically has been leaked,\(^4\) when, which way, what are the amount of losses (short-term or long-term), if a leak continues to place, are there still active “moles” and what are the proofs?
- Other specific questions, as in the following examples:
  - whether leaking of the information is from one company sector or from many places?
  - where management learns of the implicit information leakage or employees disloyalty and their effects for entity present position as:
    - strengthen market position of competitors,
    - drop in sales in an absence of seasonality in the market conditions,
    - worsen of own products or services quality,
    - leaving key personnel,
    - unusual increased interest of competitors or clients in personal contact with basic business and engineering staff;
  - whether phone or internet bugging was detected or other electronic surveillance attacks have been taken places?
  - emergence of the secret corporate data in media release.
- Diagnosis of counterintelligence or information security problems, its basic reasons from the past and still existing sources:
  - Individuals inside and outside company,
  - Groups of employees and groups of interest,
  - Ways of external impacts from clients, suppliers, customers, investors, governmental authorities and competitive enterprises,
  - Methods of enterprise restructuring process with the participation of other entities,
  - Level of the company secret information leak,
  - Lack of implicit data security and company’s information system integrity.
- Possibility of using detected leaks for information warfare to counteract market competitors, using specific methods as:
  - Inspiration,

\(^4\) In the language of the special services it is called “the list of questions” or “the question marks.”
Disinformation, intelligence games (operational games), camouflage, covert operations, competitor stimulations, true and deceptive marketing strategy, hidden recruitment process.

- Closure methods of counterintelligence, counterespionage or information security issues, using approaches such as:
  - "Silent closing case,"
  - Official disciplinary proceedings,
  - Notice of the commission of crime to the public prosecutor's office,
  - Deter competitors from interference within the enterprise integrity,
  - Disciplining employees, suppliers, subcontractors and business partners by:
    - intelligence and espionage case study and company information counteract,
    - pressure on development of the future observation counterintelligence methods and security clearance obligation procedures,
    - strengthening organization by releasing of disloyal employees,
    - exclusion of employees or degradation of individuals in the organization structure, that knew about a leak of information or about some people disloyalty and have done nothing to prevent those situations ("better to know nothing" case).
- Implementation of continuous time complex counterintelligence system with periodic evaluation procedure (internal or external controlling).
- Valuation of company counterintelligence development prepared by an external consultancy entity, in terms of:
  - Complexity and comprehensive structure of business tasks,
  - Company information security screening,
  - Counterintelligence branch implementation steps,
  - Separately of each case investigation problem and its solution,
  - Market competitors surveillance,
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- Workshops and group or individual counterintelligence espionage training,
- Business counterespionage cases consultancy.
- Recruitment and special selection of staff for the future company counterintelligence branch.
- Efficiency measurement of the counterintelligence cell in a long term perspective:
  - From the point of view of market competitors,
  - Internal executive board operational demands,
  - Realisation of the company strategies,
  - Case study suggested by business intelligence practice,
  - Protection against business, economics, technological and political espionage.

**Figure 4.** Business counterintelligence impact channels on the enterprise management structure

Source: Author’s diagram.
Information flows between counterintelligence branch and strategic, operational and tactical management can be segregated according to the type of sufficient knowledge, which categorization is describing by popular sentences in the secret services terminology: “nice to know,” “need to know” and “right to know” (Fig. 4).

4. Counterintelligence branch activities using information warfare

Business counterintelligence branch, as a company intelligence cell, is never able to gain a complete set of information about particular subject. However, counterintelligence staff tries to refill this imperfection by using information warfare and feedback methods as: inspiration, penetration, psychological operation and information counterattack [Żebrowski, 2010, pp. 15–31]. That has a final effect of making wrong decisions by competitors.

The obvious competence of the counterintelligence structure is execution of counterintelligence and counterespionage permanent and special tasks, but also to provide information security duties in several aspects of the company implicit and explicit electronic systems. While a specific hidden goal is to work on improvement or create innovative methods for organizing own business intelligence cell, using as a basis experiences gained from fighting against illegal actions of competition and public administrations. Ultimately, what counts the most strategic goal is to obtain a permanent competitive superiority (Fig. 5).

Counterintelligence department fills in a lot of other interpenetrating roles:

– counterbalance for an information asymmetry in business,
– reduce information gaps, giving limitation of potential financial losses,
– get new positive cash flows (probably),
– balanced company management to an economic reality,
– view of the outside world through internal problems of the company and its shortcomings,
– building internal sustainable background for an organizational company culture,
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![Diagram of information warfare and business counterintelligence](image)

**Figure 5.** Relation between information warfare and business counterintelligence at the framework of company operation and strategic aims

Source: Author’s diagram.

- acquiring and analysis of the critical information to survival and development of an enterprise,
- control of competitors perception and interfering with theirs decision-making processes, which caused increasing an information gap of economic and public enemies, leading on to commit by competitors or public controllers errors and miss-decisions,
– tool to verify sources of data, information and knowledge, which is used by own intelligence cell and other company departments, when information has been collected from outside the company,
– recognition of inspiration, disinformation, psychological operations and camouflage methods used by competitors,
– identification of targeted information interferences produced by competitors, leading to the categorization of information on reliable, unlikely, dubious, and misinformation [Żebrowski, 2010, pp. 15–31].

Business counterintelligence can be a very efficient tool to conduct an information warfare, which is used to reduce the efficiency of competitive organizations and the excessive impact of public institutions\(^6\). Therefore, company counter-intelligence branch is not only a simple instrument to defence against hostile competitive operations.

5. Threats to effective co-operation between business counterintelligence branch and governmental special services in counterespionage cases

The main threat to co-operation between economic counterintelligence branch and special services is leaving a businesses entity with unresolved problems related to counterespionage cases. It may happen as a result of political classified decisions to withdraw support from national counterintelligence agencies or when the special services reach their own ad hoc purposes, outliers from the strategic interests of the company.

In practice, that problem is strengthened by an exiguous preparation of a counterintelligence cell and company management structure, to stand up to the economic and industrial espionage, in comparison to knowledge and working methods of secret counterintelligence service. Usually, this is the reason of lack of appropriate tactical and operational co-operation between the company and special services and total initiative dedication to the public counterintelligence agency, no matter what kind of the long-term effects, they can give for the company.

\(^6\) We assume, that a company is not involved in any criminal and espionage offensive activities.
A very frequent threat occurs in using an enterprise structure for international intelligence games, in which the business entity operator will only serve as an element for inspiration or disinformation of foreign special services. In the financial aspect, it may be possible, that company will be charged by increased expenses of action against industrial espionage, which shall be borne by the state counterintelligence agency or others public security services.

Sensitive issue, in terms of public relations, is ability to hold a company as a cover for espionage residency or an intelligence tool for national political and information warfare, both at a homeland and an abroad. One of the major reasons is the potential exercise of influence on executive board, bringing to an aspiration of governmental special officers to direct management of the company’s intelligence, counterintelligence and information security cells. That is, without informing and obtaining permission from the executive board on current counterespionage activities, which in public opinion may violate the good name of the company.

Asymmetry in counterespionage collaboration occurs especially in the applicable provisions of law, where no doubt the state counterintelligence service has disproportionately wider legal possibilities comparing to any business counterintelligence braches.

It is particularly important problem of using by the counterintelligence agency operational techniques and reconnaissance technologies, which are forbidden for utilization by companies in competitive rivalry. The differences in the information and operational technologies make, those business counterespionage employees do not have direct access to the most of state counterintelligence tools. Hence, the results of joint operations to combat spying may be known to the executive board only in processed form, without being able to identify the sources and methods, which have been used. However, this does not preclude a full legal liability for the board of taken but failed counterespionage actions against competitors.

Another important threat to the company’s information integrity is a recruitment of employees as informants or agents by the governmental security services. The same applies to suppliers, customers, subcontractors, etc. As a consequence, it may be accompanied by an illegal acquisition of the confidential and sensitive personal data about employees and business associates. This can be a basis for subsequent informant’s recruitment attempts.
In the broader context, one of counterespionage results can be also illegal interception of strategic and sensitive business data by the special services authorities, which information are the core of company secret assets in market rivalry. Then they can be used by special services or by individual officers for their own political and economic objectives.

6. Strategic perspective on development of business counterintelligence

The company counterintelligence strategy, treated as a continuous process, should take into account the need for constant improvement. This assumption requires involvement of entire staff. Hence, the directions of improvement will be aimed at:

– close correlation actions between counterintelligence tasks and determined business intelligence, carried out by the same company,

– constant updating the directory information risks, mainly strategic, with an indication of the present risks scale and their specific sources, divided by internal and external threats,

– implementation of the procedure for constant monitoring of information security,

– determination of the current and perspective critical points, dictated by the analysis and probability estimation of the organization system development and its susceptibility to the future threats activation,

– skills development to create probable attack scenarios on the part of competition, with the assumption that innovation and innovative asymmetry advancing processes have not boundaries,

– precise assignment of personal responsibility for follow of the information safety rules in the company,

– constant attention to the development of information culture and comply with the information security regulations.

The key object of implementation of the counterintelligence strategy is people – managers and employees of an enterprise. Due to use of a variety of important information, they must be subject to a special consideration in terms of protection from a secret information disclo-
sure. This will require at least the two-way action. Firstly, sustainable development of a loyalty in relation to the acquisition of an employee’s knowledge, trust and honesty in personal relations. Secondly, a standing support of the company’s control systems, including e-control, and monitoring of employee behaviours.

7. Conclusion remarks

There is no doubt, that implementation of the business counterintelligence concept requires from organizational managers a huge maturity and practical knowledge. In fact, they have to carry out above mentioned complicated concept, which can be called the art of skillful management.

The concept of the business counterintelligence uses not only mastered knowledge, but at the same time goes far beyond the experience gained. Often requires an expertise exploration somewhere has not been carried out yet. This forces a tremendous multidisciplinary preparation for full implementation of the concept and it requires an approach in terms of ongoing process continuously, searching new synergy. In summary, the business counterintelligence concept may be widely considered as a quintessence of nowadays management art.

But, at first and foremost, the successfully business counterintelligence concept is determined by the ability of identification obstacles and their reasons. It is also necessary to demonstrate innovation solutions how to overcome these barriers. This is an important feature assigned to management staff, which tests their creativity, holistic perspective and strategic actions. It makes also a huge humility to identified facts, which are characterized by sharp business variation.

References


CHAPTER 12

Systematization of risk in internal and international markets

Katarzyna Żukrowska *

Abstract

The paper consists of an introduction, three chapters and conclusions. It is aimed at presenting the internal and external sources of economic risks in the current conditions of the economy and stage of international economic relations. The paper argues that the threat of a certain type of risk has changed in comparison with the last decade to that of the XX century. Some risks traditionally considered as threats have lost their weight while others have gained considerably. What was accompanied by the appearance of new risks. One of them is the use of old instruments and outdated knowledge in evaluating risks and preparing on that background, prescriptions for the policies. Moreover it is shown in the paper that some occurrences, which result from new economic conditions

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can have similar social, economic or political effects as the old ones. This fact strengthens the belief that the diagnoses concerning the possible risk and its effects was correct. Such a situation seems to be one of the biggest current risks. This can be exemplified by social effects of applied policies which were aimed at keeping jobs in branches which were losing competitiveness, which was accompanied with high costs and relatively small effectiveness of such a policy. A better solution in this area would be to either look for policies increasing real competitiveness by i.e. supporting the increase of quality of human capital or letting such branches which lose competitiveness to fail in favour of those who kept or even gained competitiveness. The other one is linked with an inability to foresee all possible dangers coming from outside of the economy, especially when they are closely linked with completely new areas. This can be exemplified by i.e. multifold effects of the social and political turbulences in Egypt in August 2013. The paper presents a table, which is summarizing the analysis and presents internal and external sources of risks with division into areas and problems that can occur.

**Keywords:** economic risks, systematization, sources of risk, internal risks, external risks

International divisions of labour and the transfer of manufacturing abroad, followed by off shoring and outsourcing of different types of economic activities, all increase the number of currencies which are included in such international transactions. Those currencies change their value somewhat in conditions of transactions concluded for a medium and longer time and increase uncertainty in the field of finances. The number of currencies is not the only source of risk in such relations. This article focuses on the risks linked with transactions which are concluded in the internal and external markets. The aim of this article is to make a systematic schedule of risks which are real and imagined by business. There will be also an explanation as to why some risks are considered to be imagined, while the others are considered as real. The article will consist of four parts. The first part will concentrate on presenting the different types of risks which can be encountered in the globalized and liberalized world. The second part
will present the risks in the internal market with division into national and international internal markets. The third part will dwell with external markets and their risks. Finally the last part will sum up the findings from the previous parts resulting in the systematization of risks.

The article undertakes the challenge to answer the question, ‘are risks currently increasing in the global environment or are they in decrease’? In which areas risks tend to be higher and in which they tend to be lower? Who decides about the risk nowadays? Can we have an answer to the question, ‘what a business has to take into account while an attempt is made to evaluate risk’? Can something be done to lower risks and is it actually done?

1. Types of risks encountered in the globalized and liberalized world economy

Risks are plentiful and enumerating all does not make bigger sense. What seems to be reasonable is to show what are their sources. Generally we can divide the sources of current economic risks into a number of categories.

The first group of risks is linked with the application of policies and tools which were correct to apply in other conditions. Before listing some examples illustrating such policies or tools it is advisable to explain why the previously used policies lost their power and create a burden or obstacle towards recovery. It is relatively clear that the economy has changed with processes such as regional integration, liberalization, internationalization and globalization etc. All of the mentioned processes are perceived by economists and politicians but this fact is rarely transmitted into a change of applied economic or financial policies, which creates additional costs of different types (economic, financial or social). Most of the policies continue with the assumption that they are applied solely in a national economy, which is untrue as the economic borders were lowered or completely eliminated [Balassa, 1961, pp. 191–273]. This fact eliminates the effectiveness of previously applied policies.

The second group of risks are linked with changes in the economy due to the advancement in development, opening of the economy,
movement of production factors, increasing effectiveness of their use and innovations. Such changes, which can be considered as progressive and desirable, all in all make the definition of the national market blurred as compared with the external environment. This mainly concerns developed economies, which are the most liberal in their economic external policies. Nevertheless this is what happens in developed economies and has a specific impact on the rate of growth in other groups of countries, namely the so called emerging economies, catching up economies as well as the developing economies. This also has a strong influence on applied economic policies conducted in the areas of finance, trade of goods, services, transfer of intellectual properties and migration [Beenstock, 1983, p. 213].

The third group of risks derives from the fact that economies are interdependent which makes them more vulnerable to positive and negative impulses from abroad [Keohane and Nye, 2001, p. 272–275].

The fourth group of risks comes from misinterpretations of the source of diseases which in turn is followed by wrong prescriptions to cure them [Buckley, 2011, p. 19; Żukrowska, 2012, p. 653].

The fifth source is closely linked with growing tensions between states and within their structures which are relatively easy to overcome in the conditions when the economy grows but is difficult when the rate of growth is low or negative. Nevertheless, such tensions are not serious enough to lead the countries to withdraw from the groupings but at the same time it is relatively difficult to reach a consensus on deepening and continuation of the formerly chosen road of integration.

The sixth source can be ascribed to the fact that the majority considers all of the faults in the economy (relatively low rate of growth, high unemployment, high budget deficits or even twin deficits of the budget and current account) as a result of mistaken policies applied within the frames of the monetarist vision of the economy. This puts the so called interventionist approach vis-à-vis to the monetarist one. Those who do so are wrong as both broad views presented by J.M. Keynes and M. Friedman have a number of elements which are common [Keynes, 2000, p. 177–204].

The seventh source is linked with the digitalization of the economy, mainly communication, banking, payments and services etc. This speeds up the transfer of data, information, money and people. Nevertheless it is not limited only to acceleration of the dynamics but
it also enables the continuation of transactions on stock markets around the clock, for 24 hours as when one stock market closes – others still work or will start to work. Transactions can be conducted from a distance which enables the continuation of them without the need to break for the night hours as it was in the past [Scott and Gelpern, 2012; Ross, Westerfield and Jaffe, 2012].

In all cases the sources are closely linked with what is labeled as an economic policy, which embraces engagement of the state in the economy (model, scale or scope), financial activity (interest, value of exchange rates, the structure of the state budget with tax policy and expenditures, size of the deficit and the size of the public debt), regulations concerning starting business, laws and institutional solutions concerning the labour market, educational systems, and the competition policy etc. It is important to have all of the mentioned features of the market matching one with the another, all in all.

The developed economies, or to be more precise, the OECD members, are considered as economies in a postindustrial stage of development. There are some exceptions there, first of all, Mexico can be seen as a catching up economy or emerging market, similar to the majority of the Central Eastern European economies. Nevertheless, even in the case of those exceptional states the share of services in GDP as well as in creating jobs it is overwhelming in all of them. This shows that the concept of re-industrialization which is based on the simplification of economic models, when economists point at problems of the US economy, which faces trouble and the Japanese and German economies which can enjoy much more favourable macro-economic indicators. Both of the mentioned economies: the Japanese and the German, are also in a post-industrial stage but both export sound results in the manufacturing industry, mainly the production technologies and machining tools. The reduction in unemployment and the creation of jobs in the European economy is closely dependent and tied with institutional changes in the market (making the labour market more flexible) rather than with re-industrialization. Re-industrialization will come with increased wages in catching-up economies but the list of economies who want to grow and catch-up is longer and not limited to BRIC (BRICK/BRICKS). The African continent is included as well as the Latin American and remaining Asian states. Development of the remaining continents is a strategic goal of the UN, which
is worth mentioning here in the context of future strategic plans for the OECD and their economic policies. Not expanding the problem of re-industrialization in developed economies it is worth mentioning that at such a stage of development it will be connected with the wide scale use of automatic machining tools and robots. This means that the production lines currently in use will have to be replaced by new ones. The stage now seems to be an intermediary as the current production lines are still in use and can do their job in other geographic destinations and their replacement will be possible after the completion of the first move. The installation of the lines moved from OECD to Asia, Latin America or to Central Eastern Europe seems to be useful in several ways. It creates new conditions for the replacement of the old lines to the new ones in postindustrial economies, it helps the emerging and catching up markets to build jobs and self-finance some of the living costs, reducing the pressure for aid, it also creates a demand for infrastructure development in the emerging markets, which further creates jobs and increases self-financing potential. Finally it helps catching up economies to establish institutional and economic ties with the world’s economy and stimulates changes towards a higher phase of development which includes the effectiveness of use of the production factors, better use of the international trade multiplier, as well as profiting from production with a higher value added share.

What we have witnessed in the last few years shows that the only single group of states which have enjoyed the growth of FDI inflows are the developing economies [World…, 2013, p. 67]. Moreover, for the first time in 2012 the world share of FDI inflows to developing economies (52%) exceeded the share of developed economies (48%). The number of economies with favourable tax systems is also in increase. What also characterizes the current stage of production are the so called global value chains (GVC), which means that goods (final as well as components) and services are all traded in fragmented and internationally dispersed processes which shape the new division of labour on a global scale. The global value chains are managed by the TNC’s. This includes cross-border trade of inputs and outputs which are located within their affiliates with which they create networks of companies who supply components and final goods. The share of trade conducted within the TNC’s is expanding, reaching 80% of the global trade value. A big share of that trade is counted several times in different states and their economies.
This new trend shows that there is a clear interest in investing in economies which represent lower level of development. This seems to be good news. The main benefit has twin roots, the first root is linked with limited interest in investing in developed markets with a number of problems, which can be solved, only with deep reforms, requiring international co-ordination. The second root comes from the fact that often, interest in developing economies is connected with the creation of institutions, laws and infrastructure from scrap. Investments streamlined into such markets help to create the web of newly designed solutions, which often, in result are copied in advanced economies or enforce desired changes which allow more competition, openness and result in more effectiveness. Such general views seem to be groundless when they are not supported by practical illustrations. They can be read as idealistic illusions, which do not have any relationship with reality and seem to be a model worked out in scientific institutions by decision makers and takers.

Nevertheless such feedback policies within the firms belonging to one TNC or anticipation models which were applied in Central Eastern European economies, which today are part of the “developed world,” proved by membership in NATO as well as in the EU or OECD. The sources of such stimulators to change in the past were more clear than they are today, which does not mean that they are not applied or are impossible to apply. The new element of the current stage of changes is that the feedback relationship is not so clear. How it can be clear when changes enforce more competition in the capital market by the creation of competitive services which are either offered to a certain group of clients or are offered to all clients on a certain market, giving lower prices for offered services. It is clear that in both cases such new services overtake the number of transactions which otherwise would have been serviced by traditional suppliers of such services. This can be seen very clearly by the development of banks (daughter affiliates) of companies which follow the wave of migration. This is done within the EU by banks coming from Central Eastern Europe, which is a clear consequence of the organization of the internal market, which embraces the movement of goods, capital, services and people. This is also resulted by waves of migration from outside of the EU, followed by attempts to overcome the income differences between states who have signed trade agreements with the EU, have institutionalized rela-
tions with the EU of other types or are simply a source of emigration (states of North Africa) or trade (China).

In both cases new solutions are applied, which, on the one hand offer new advantages and gains, while on the other hand they also bring some new risks.

2. Risks in the internal market

In both markets, the national or international, created institutionally by the introduction of most commonly, laws, solutions and the co-ordination (direct or indirect) of policies there is a risk that when they need reforms they are postponed as they undermine the interests of local capital owners. In such circumstances it is wise as interests are often presented to the society as an earthquake which requires specific solutions without which the economy will lose its impetus, causing a fall in the rates of growth, an increase in the unemployment rate and general economic disturbance. Such a picture is often followed by some remedies which point out which can prevent such a sequenced down-turn in the economy. The remedy is seen in increased taxes which are supposed to help by covering the growing gap between revenues and expenditures of the national budget’s which result in increasing budget deficits. This could help and it often did in the past but mainly in a short term perspective. Increased taxes were helpful in number of the EU economies when they were preparing to meet the convergence criteria while preparing for EMU in the second part of 1990’s. If one looks back to that period, one can find that increased taxes were not the only method that countries applied. On top on that (increased taxes) countries have restructured or de-structured and reduced expenditure from the national budgets, while others have applied a combination of measures addressed to changes in revenue as well as on the expenditure side of the budget. Still, some other economies, mainly outside the EU, like f.i. the US, were increasing expenditures in a rate which was always lower than the rate of an increase in revenues.

If one wants to evaluate which methods seem to be the most effective in long run: it turns out that increasing taxes is a method which brings about spectacular results in the short term but in the longer
period it results in an increased budget deficit which automatically blows up the public debt. This in turn puts pressure on the capital market, where the state has to borrow money. The potential of the state to borrow is bigger in comparison with most of the individual clients in the money market, which means that the state has a big impact on the level of interest rates. Costs of capital influence investments, lending and crediting policies, housing activities as well as consumption. High interest rates have an impact on savings but those can be done in a traditional form or via the capital market. On the capital market states need of money (interest linked with treasury bonds) compete with capital market interest. Treasury bonds (with high interests) help to finance the budget deficit in the short run but at the same time they create an obligation to pay the high interests when the bonds will mature which leads to two effects: (1) increased expenditures from the budget; (2) limited investments in the capital market. Such a solution creates a type of vicious circle and the effects of that can be seen outside Europe like in Japan, while in Europe the illustration of this phenomenon can be found: in Greece, Spain, Portugal or Ireland. It is very clear that high revenues offered by states which issue treasury bonds attract the capital which otherwise would have been invested in the capital market either on the stock-exchange or better still in new investments. The institutional investors stimulate development of the capital market but at the same time they compete with private shareholders. This means that the problems which were previously limited to the national market – recently, can be blown-up to global size and have global consequences [Gonnard, Jung Kim and Ynesta, 2008, p. 4].

Having said that, we can say that some regulations here would help all of the three markets function better. Markets generally should not be over-regulated as regulations create a corset which ties up natural movements of production factors. What can be done here in order not to spoil the functioning of the market mechanism? It is relatively simple, regulations should concern the size of state activity in the capital market as well as on the stock exchange (institutional investors vis-à-vis individual). Moreover, it is difficult to:

– Indicate the level of engagement of institutional investors in specific markets, as on one hand they stimulate development of the capital market of catching up economies, financing and also
the development of the infrastructure [Buffie, Berg, Parthillo, Portillo and Zanna, 2012], while on the other hand, they postpone changes in fiscal policies as they provide a source which enables financing ineffective state policies, evidenced by an awkward structure of state expenditures. The share of institutional investors in individual OECD states is strongly differentiated, falling between 5–10% of the GDP in less developed economies of OECD (Mexico or Turkey) and about 200% of the GDP in most advanced economies (Netherlands, France, Iceland, Denmark, UK, USA). In new EU member states, it varies between 22% for the Czech Republic, through to 30% in Poland and up to 33% in Hungary). The trend in growth of the financial assets of the institutional investors tend to increase rapidly. Between 1995–2007 they have increased statistically by 50% for the OECD but the real dynamics is much higher, as the first statistics were increased by the US and the UK. Low statistics in Mexico are a starting point and recently the experienced much higher dynamics, increasing 10 times in the studied period. In Poland the dynamics showed an increase of 4.7 times, in the Czech Republic – 74%, while in Hungary – 10 times. Looking closer at the value of the financial assets of institutional investors in the OECD economies – one can see the real differences as the former indicator was referring to the GDP share and the OECD members vary in this area strongly. The biggest assets are noted in such economies as: the US (24,220 bln US$), France (2,581 bln US$), Germany (2,422 bln US$), Canada (1,272 bln US$), Italy (1,026 bln US$). The lowest assets are accumulated in Slovakia (4 bln US$), The Czech Republic (13 bln US$), Turkey (16 bln US$), Hungary (17 bln US$), Greece (27 bln US$) and Poland (64 bln US$) [Gonnard, 2008, p. 5].

– Creating legislation which would be convenient for all countries in different stages of development. Nevertheless, taking into account the role of the institutional investors in the development of the capital market in all type of economies – one has to see a positive role of the internationalization of public debt and its financing. At the same time it is worth stressing that such flows of capital being efficient in creating capital markets create jobs
in widely defined services (banking, security, stock exchange, analysis and telecommunication etc.). This means that such investments have an indirect impact on creating jobs in production, which seems to be a secondary effect of such capital flows.

The risk linked with such a new phenomenon is multifold. First of all, most of the indicators expect an increase in jobs in production, which results also in applied policies which support activities enabling re-industrialization. Such an approach seems to be only partially correct. It can bring about positive changes when re-industrialization will be funded on [Economic…, 2012, p. 6–7]:

- nacro-stabilization,
- sectors, which have competitive labour costs (high productivity),
- sectors which have gone through sharp restructuring also in the area of employment and the organization of production, which means the replacement of the physical labour force, engaged directly in production by robots and machinery tools,
- sector concentration.

The results of the changes in the American economy are not so spectacular but still visible. According to the quoted report in 2001 the share of industrial production in US GDP was 11.7%, which resulted in 43.2% of the total growth of the American economy. In 2010, after the 2008 financial crisis, the respected indicators were as follows: 12.4% and 44.6%. In 2011 – 12.8% and 37.2% [Economic…, 2012, p. 13]. The positive signs in the American economy was achieved in TNC by the reduction of debt, the movement of investments towards less risky areas and the deep restructuring of employment. A wider perspective of global branches is given in another study launched by the same Institute in July 2013 [Reconciling…, 2013, p. 3–8]. It is clear that there are differences among specific national economies. In the study one can find details concerning the American economy, French, Austrian-German-Swiss (taken together) and Mediterranean also dropped into one group [Economic…, 2012, p. 6–7]. All in all, the presented analysis indicates that positive fundamentals can be found in such branches:

- food, beverages,
- pharmaceuticals,
- automobiles,
- chemicals [Reconciling…, 2013, p. 3–8].
Economy and business transactions

Signs of prolonging problems and weaknesses are seen in:
- consumer electronics,
- automotive components,
- rail, maritime, aeronautics equipment,
- machinery,
- paper and pulp production,
- manufacturing of IT and telecoms equipment,
- steel production,
- semi-conductors and components,
- distribution,
- information and telecommunication technologies [Reconciling..., 2013, p. 3–8].

The analysis of detailed problems and differences with the ability to solve them in the group of the OECD states, shows that those economies have natural conditions to deepen co-operation and participate on a wider scale in the international division of labour. Nevertheless, the effectiveness of the applied policies are conditioned. The required conditions embrace:
- a sound macro-stabilization policy, guided by the long-term vision of sustainability,
- deep reforms in applied policies, namely oriented and guided by the European Strategy of 2020 as well as by the so called expanded Washington Consensus, which is given by D. Rodrik. Both do not contradict but enforce one another,
- closer international co-operation within internal markets, enabling completion of the internal market, namely in the area of the liberalization of services,
- inclusion of external economies into the process of closer co-operation, guiding their changes and controlling how they fulfill their own declarations on what is desired and planned and what is done.

The risks here embrace all areas where states are not able to introduce the reforms or changes needed by guiding their populist policies or policies which were applied in the closed economy. Both have a number of common elements.

Often it is not easy to enforce certain economic decisions, especially in area of structural changes of the expenditures from the state budget. Nevertheless, it is advisable to use multilevel management in
enforcing such policies, which is easier in such regional grouping as the EU, with financial obligations and benefits from the budget in general.

3. Risks in external markets

Risks in external markets have an increasing impact on national markets and economies. The influence is bigger in case of a higher share of turnover with a certain area. Also, at the same time, positive impulses from the outside have better channels to give positive impulses when the economy is in up-turn. As a turnover, we traditionally take trade turnover or less often capital transfers and abilities to transfer back returns or interests. The political turbulences in North Africa show that the risks are not limited to trade, but also embrace tourist services. The middle of August 2013 has shown that the Marshall Law imposed in Egypt had an effect on gradual reactions in the EU ministries of foreign affairs. Some states did not recommend travel for summer holidays to Egypt, while others were saying that the sea resorts were guarded and safe. The situation in Egypt shows that events far away from our own state and its economy have an impact on what happens in our own economy. This is the case which does not concern only the number of people who have paid for their vacations and travelled to the endangered region. The whole consequence of the turmoil or even home war in a country has much wider economic implications than one can see at the first sight. A number of tourist operators (TUI-Germany, Neckermann, British Thomas Cook, Thompson to name a few), have cancelled their trips to Egypt. Such decisions were a reaction to information coming from Foreign ministries of the states. They mean a financial consequence for the operators as well as for the tour-

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1 Ministry of Foreign Affairs in the UK and Germany openly discouraged travel to Egypt and such resorts as Hurghada or Shar-am-Sheik. To those who already went to Egypt advice was given not to leave the hotel. Such an approach is linked with unforeseeable developments in the region which can be resulted by actions against the groups of interest running the hotels and remaining tourist attractions. In Poland, bigger operators offered change in tour offers, informing travelers that all destinations in Egypt were safe as the Martial Law and accompanying struggles are concentrated far from the sea resorts and places where tourists stay.
ists. This also has an impact on the expenses in the insurance sector, as big tour operators traditionally secure all of their trips and risks linked with their work. Egypt and the domestic war there is an example of such a risk. The decision to halt tourists at home from travelling there and offering them other destinations, if of course still available, does not bring an end to the consequences of the “battle of Egypt.” A number of people from each of the EU states are there. Fire and death on the outskirts of Hurghada meant that a number of tourists declared their desire to return back home before the end of their formerly planned stay. Most of the tour operators use charter flights as a means of transporting their clients. However planes in the summer are overbooked. To cut a long story short, this means that there are limited possibilities to fly the tourists back home in short space of time. Trying to do so, brings additional costs. In summary, the battle of Egypt will have its economic consequences for a number of European, and not only, companies which operate in the tourism market place. This concerns tour operators, insurance firms and transport companies.

This is one of the illustrations of the scale of international interdependence when something goes wrong. The list of areas in which consequences of events in one market can have a much wider influence are numerous, which shows that further internationalization of the economy, followed by liberalization and globalization requires close international cooperation, coordination of the applied policies and an active co-operation and engagement between those who have the potential to help to introduce changes for the better, i.e. overcoming the development gap between the North and South.

Giving only this single example, with a little imagination, we can think about the consequences, which were caused by the tourism brake-down in Egypt, but on top of that we can also imagine what would have happened when the regional turbulences would grow in scale, affecting oil transfers, which is delivered all over the world (with the US, the EU and China as main destinations). This information shows that despite interdependence which is considered to be one of the best security guarantees in the turn of the XX/XXI century [Keohane and Nye, 2001, p. 228–263], they also can be considered as a source of instability.

Generally, interdependence and internationalization of a risk or problem bring states together to co-operate in solving the problem.
Solutions – according to international law – can’t be enforced with the use of power or against the will of people in a country.

This has been proven in current history during several military interventions in different regions (Asian, Latin America or North Africa). This has also been proven in international economics, enough to mention the calling into life of G-20 during the 2008/9 financial crisis. Co-operation of international organizations and a number of wealthy or mighty states helped to co-ordinate their policies and moved to drag the world economy out of the crisis. Nevertheless with the escalation of the political events in North Africa OECD and the wider world economy can return to negative statistics in growth. The first symptoms of growth in the US and in the EU are more optimistic than the last forecasts, but the rate of growth is still small and is not sufficient enough to increase the employment statistics or to reduce the social tensions in Europe (Spain, Portugal, Greece and Ireland). Small turbulences from outside can endanger the feeble growth. In such circumstances the risk of a crisis return is growing and this is so despite positive macro-indicators showing that inflation is under control and credits are cheap.

Serious international political dialogue is badly needed here. It cannot be organized while the EU criticizes Egypt and the policy of this state. The dialogue should be started quickly despite several issues which are unclear:

- With whom the representatives of Europe should talk? What impact on future EU-Egypt relationships will have a choice of the political partner of the EU, made today?
- What can Europe offer to the Egyptian Partner? (and other states from the region)
- Can this offer be effective and suitable?
- Can it be applicable? If so on what condition and how quickly?

This chapter concentrates on one problem, the source of instability, showing how real such a danger is and also providing a solution while being applicable at the same time does not guarantee that it is effective or rather can be effective in certain circumstances. What is clear today? A Prolonged slump in the world’s economic rate of growth shows that a low rate of growth in developed economies has a strong impact on the slow-down in emerging markets. Emerging markets tried to overcome this problem by lowering exchange rates of their
currencies, lowering the costs of production and finally by expanding
domestic markets but their rates of growth continued to fall. This is
caused by a strong asymmetry in mutual turnover between the emerg-
ing markets and the OECD economies. At this point the rate of growth
also accelerated in the US, British, French and German economies,
which was followed by Belgium, Italy and the Netherlands. Neverthe-
less, the level of rate of growth is low and the market can easily slide
into recession. Such recessions can have even worse global statistics
as a fall in rates of growth in emerging markets will have an impact on
such statistics. It is worth remembering that in 2009 the emerging
markets were considered to be the engines of global growth. Never-
theless, their abilities in this area are limited and at this point cannot
last long.

Quick solutions are needed within the G-20 and BRIC\(^2\) (BRICKS),
otherwise the world’s economy can fall back into recession and this
time it could be deeper and last for longer. Without a wider co-
ordination of policies the risk of a recession returning grows.

Taking into account the fact that the Japanese economy after a long
recession in the turn of centuries from XX to XXI (relatively unique at
that time among the OECD economies) as well as the European econ-
omy after the introduction of euro in 2002 and its enlargement in 2004
 – in all mentioned cases the locomotive of growth has moved from
such markets as the Japanese, American or German (Europe) and has
moved to the peripheries. The recovery was not so quick as stimulated
by traditional locomotives, nevertheless it worked. In the case of Ja-
pan it was an indirect effect of a traditionally applied policy of low
costs of capital. Such a policy resulted in drawing credits as they had
relatively low costs (the lowest among the PECD states and their
economies). Credits obtained in the Japanese market (with the lowest
interest rates) were not invested there as interest returns were rela-
tively low. They were transferred to markets were the interest rates
were high, indicating the scarcity of the capital. A similar situation
was seen throughout Europe. Although relatively big credits were

\(^3\) BRIC – Brazil, Russia, India and China. BRICKS – additionally includes South
Korea and the Republic of South Africa. The first meeting of the Group was held in
2006, in 2010 South Africa officially joined. All Bricks are members of G-20. This
builds up their political position internationally.
drawn in the German, French or British economy – they were invested abroad – stimulating the growth of the markets of European peripheries. In 2002 it was Greece, Ireland, Portugal and Spain, while after 2004 it was Poland, Estonia or Slovenia. All of the fore-mentioned economies were stimulated by internal demand but this was a small kick for their growth in comparison with possibilities to export to the EU markets, namely the German one, which had the highest share in external trade of these economies. During the financial crisis in 2008/9 the rate of growth of the world economy was positive as a number of emerging markets (like China, India, South Korea, Poland and Australia) had experienced positive rates of growth. Experience shows that peripheries can also stimulate growth globally and regionally. This means that stimulation – if applied – should be used in a non-traditional manner. This takes into account the indirect effect of such policies and the stimulation processes. An attempt to use traditional financial instruments to stimulate national economies are, in most cases faulty and can bring the opposite effect to the expected. They create a burden for the budget but at the same time the money is transferred. This can be illustrated by the instrument which was used in Germany, while the country tried to stimulate sales of cars by giving additional bonuses to those who desired to buy relatively good quality, new cars with relatively. This measure stimulated among others, sales of cars in Poland. The Germans were buying new cars in the Polish market. Mainly their purchases were addressed to Opel-Poland, where the drivers were buying new cars which originated from Warsaw but over a longer period from Krakow. This meant that the traditional instruments matter although we needed to wait a bit longer for the effects. The effects until now were visible but not so spectacular as it was in the case of the acceleration of the rate of growth of the US economy or the EU – one.

Co-operation within the G-20, which was called into life during the 2008/9 crisis has proved to be effective. Also, a number of solutions introduced in regional groupings, mainly in the EU (but some were also followed in remaining regional integration organizations) – show that international co-operation can solve as a platform which creates new opportunities for managing political decisions. Such decisions are more effective when they are supported by capital transfers or wealth distribution. The last information indicates, not being the only argument in favour of such solutions, that economies representing different
levels of development while integrating – are a source of stimulating changing impulses. This finding goes against theories of integration which were favouring the same level of development in such endeavors (M. Allais). Such an approach was well funded at the starting point of integration, while now with the advancement of regional groupings and the expansion of the EU with close institutional and economic ties all over the world – it is high time to stimulate integration among unequally developed economies. In reality such integration took place from the beginning of the European integration project. Except the enlargement by Britain and the 3 EFTA-ns, all remaining enlargement was conducted with economies representing lower levels of development.

Preparation for closer co-operation with specific regions imposes the need to change laws by converging them to the core solutions, it also embraces policies which are well established on macro-stabilization sustainability. Closer international co-operation of the EU with other regions means a number of changes in the perception of security.

Firstly, it can be considered as a source of political security in co-operating partners, where it is needed. This can be the case as mentioned earlier in Egypt, or the Ukraine and other states. Nevertheless, it can be also a source of new types of tensions within the European Community itself.

Secondly, talks on the creation of TAFTA⁴ are advancing. Before TAFTA the US-EU relations were framed institutionally by TPP.⁵ The first round of current talks started on the 8th of July 2013. They can lead to an increase of the number of wealthy economies which form a FTA but at the same time the divide between America from Mars and Europe from Venus will become blurred in comparison with the current situation. At this point a number of states see a real partner in Europe but at the same time they are scared of the US. TAFTA can change a lot in such perceptions. Nevertheless it can also help economically closer integration with other regions, making it politically more difficult to accept.

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Thirdly, closer co-operation between the US and the EU makes it more difficult to accept and explain to local citizens when aid will come from abroad. Such solutions were much easier when f.i. NATO troops were withdrawn and replaced by the European economists and politicians. This was despite the fact that most of the EU members are also NATO members but usually the EU did not support the American policies, while individual EU members were doing so and this enabled them to support the US militarily in NATO actions. NATO’s political role in the security area is totally different than that of the peace keeping UN troops. This is despite the fact that both are international and the military services and in both cases consist of people from the same states, nevertheless the decision of participating in such action is taken in a different way and moreover the goal of such action is different.

Fourthly, Europe is not a state and does not have a common army, while the US has. With the deepening integration of Europe since the Lisbon Treaty it has a Foreign High Representative. The situation in areas of security and defence in Europe is changing but the speed of such changes are relatively low.

Fifthly, there are big changes in the remaining regions, which are often institutionally integrated and face problems with establishing balanced relations with emerging local leaders (not using the notion of power). This is so in the case of the emerging powers of Brazil, China and India, established under new conditions of Russian power. This is also the case with the Republic of South Africa. Moreover, the Asian-Pacific rim witnessed the emergence of two wealthy nations (built upon immigration from all over the world but recently dominated by migration from Asia). Here I have in mind the new role of Australia and New Zealand.

The sixth and final point is the world has experienced a deep financial crisis, the deepest since the 1930’s depression. This has happened within a new constellation of world finances, dominated by two currencies, which also overwhelm the state currency reserves of each state and the international organization. These are the US$ and the European euro. The first of the two currencies can be considered as fully international as it is kept in currency reserves by all states and their Central Banks. The decisions concerning the interest rate which decides upon its value are made by a group of experts headed by the chief of the Federal Reserve (most recently Ben Bernanke). In the case
of the European currency the euro it is an international currency as it is used in 17 eurozone states, while 11 EU members are not euro-users. The decision on interest is taken by an international body consisting of representatives from the European Central Banks, where part have a voice and decision making power (EMU members) while others are passive members of the body. This gives us a lot of knowledge about the internationalization of a currency and its role in channeling economic changes and the effectiveness of the production sectors. Despite all of the dangers, it also increases security within the financial area, strongly reducing the risk of exchange rate changes between the countries which replaced their national currencies to the common euro. This information should be supported by the fact that the US$ share in the world currency reserves in 2013 are 62.2%, while the euro share is 23.6%.

The list shows which direction the world economy moves and how that effects the risks. It is important to understand that the old sources of risks are being eliminated or reduced, while new one’s arise. This means that the map of risks is in flux what should keep us busy in evaluating what are the new sources of risk and what should be done to eliminate them. At the same time we can encounter a number of opponents to changes who would say that we need to keep the world as it is now as we know the risks and we know the instruments and remedies to overcome them when they occur. Despite such opinions, which we still need to take into account as people have different knowledge and different approaches stemming from their different specialist areas, we need to look into the possibilities of applying suitable solutions which will reduce the known risks and help us to eliminate the new ones, making this more visible and easier to detect the first signals.

4. Systematization of risks

The systematization of current risks in the economic area is a difficult task which has resulted from the fact that the world economy changes and some old risks are being eliminated while others emerge. In some

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cases we can see that risks are labeled in the same way but their sources have changed. This implies that the policies which cause those risks have to be adjusted, otherwise one can face a new risk or bad diagnosis and improper treatment. Such a mistake brings about costs and can lead to an escalation of the occurrences which were supposed to be eliminated. Often, in such a situation, we face the reaction: in our specific condition the cure does not work.

How can the risks which we have mentioned above be systematized? Why we should systematized them? and why not limit the approach to listing the risks? Systematization means arrangement or classification [Frankfort-Nachmias and Nachmias, 1996]. This means that one has to amass a systematize knowledge in a specific area, attempting to organize information about the studied occurrence methodologically and properly, with the use of different criterion concerning the depth of the occurrence, the length it has lasted, the area in which it came out, the sources both externality or internality and the root of the cause. Trying to do so we can see a number of obstacles which result from the specialization in sciences. This is what was shown in the above analysis of risks and indicates that the approach to evaluate them should be interdisciplinary [Raczkowski, Żukrowska and Żuber, 2013].

Systemized approaches help to frame the knowledge in a certain area, defining the general observations, main actors, relations between them as well as consequences and methods which can be applied to increase the impact of positive elements and to eliminate negative ones. It also helps to show where and when one can face some errors in the evaluation of the scientific problem which he has chosen to analyze [Frankfort-Nachmias and Nachmias, 1996, p. 414].

Using the criteria, which can divide risks in the economy, one can look at risks evaluating the sources which can either be internal or external. They can come from the field of finances, the economy (macro-economy or micro-economy), foreign trade, capital flows (in and out-flows), length of engagement (short-term, medium-term and

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7 Short term engagement is labeled as speculative flow, which results in critics towards such transfers. Nevertheless a number of things has changed with the introduction of float exchange rates. Short term inflows were much more in danger than with fixed rates, which in a period of changes were creating ideal conditions for speculation. Recently the wise policy tries to address the problem attracting the short term flows to stay longer in the economy, profiting and supplying the market with capital.
long-term), political risks, social risks, asymmetric risks, the effects of terroristic attacks and their impact on the economy, even when they happen in a remote spot and market, telecommunication problems, infrastructure problems and energy supply problems still occur (like the blackouts in the Northeast part of the US in 2003).

Globalizing and liberalized economy, resulting in inter-nationalization and intensification of competition which in turn should increase the effectiveness in some economies works for the benefit of the average citizen, while in other economies only brings profits to business. The first example can be seen in the OECD states, the second in case of CIS\textsuperscript{8} economies or in the majority of the Asian and Latin American economies, which apply protective trade policies. The opening of the economy is introduced gradually into regions, in specific consequence, which slows down the wider spread of effects resulting from better use of comparative advantages and large scale specialization.

Social problems in each economy, although resulting in an increased unemployment rate, low incomes and limited wealth, have historically different sources. In the past mainly resulted in underdevelopment and a specific division of advantages coming from the economies which were concentrated on capital owners. Nowadays the division into capital owners and land owners is enriched by a new group of intellectual property owners and diploma possessors. Democracy creates chances to a wider social group of people in countries where the system functions well. Nevertheless, even in advanced democracies one can encounter different economic and financial risks which can undermine the stability of life in large numbers of people. This was proved by the 2008/2009 crisis in most of the OECD economies. The problems and the associated risks are numerous. One of them comes from the fact that destabilization in a remote place can have an impact on what happens in the national economy of another state. Economies of states are closely linked together, they are opened or are in the process of opening, they are internationalized or are in the process of internationalization and the main problem linked with this is such, that seeing all of this and being aware of the new stage of the world economy. What we do is try to evaluate new occurrences, new relations using old and

\textsuperscript{8} CIS – Commonwealth of Independent States, Regional organization who’s participants are the former republics of the Soviet Union after it’s breakout in December 1991.
outdated indicators. We try to act using old and inefficient remedies, we try to interfere looking at the surface of the occurrence but not at the roots, using medicine which is adequately pointed at most visible things but not trying to eliminate the real sources of the problem. Such things often happen in times of revolutionary changes when new tries to find its way against the old [Mises von, 1964]. This process creates a new source of risks. It can destabilize the country politically, it can result in wrong decisions and actions, it can bring deeper crisis despite the fact that the aim was to eliminate its negative results and even sources.

Undertaking an attempt to sum up what has been said here, one can present the outcome of the research on risk and its systematization in a table.

**Table 1. Systematization of economic risks in the first two decades of the XXI century**

<table>
<thead>
<tr>
<th>Internal Area</th>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finances</td>
<td>Fiscal policy, monetary policy, exchange rate, interest rate, stage of development of the banking system, effectiveness of the capital market, share of institutional investors vis-à-vis private ones, value of accumulated capital by the state</td>
</tr>
<tr>
<td>Economy</td>
<td>Macroeconomic effectiveness, microeconomic effectiveness, share of value added in production, branch structure of the economy, competitiveness, sources of competitiveness, scale of liberalization of the economy, number of days needed to start a business,</td>
</tr>
<tr>
<td>Policy</td>
<td>Stable political structures, realistic programs, climate for nationalism, climate for populist policies. Engagement of political solutions in solving internal problems. Ability and potential to solve the occurring problems.</td>
</tr>
<tr>
<td>Labor market</td>
<td>Elasticity of the labour market, effectiveness of labour, productivity, cost, structure of employment, quality of labour</td>
</tr>
<tr>
<td>Social issues</td>
<td>Stability and sustainability of the social solutions (employment, level of earnings, pension system, rate of growth)</td>
</tr>
<tr>
<td>Health</td>
<td>Stage of development of the health services and applied solutions. Access to services and their quality.</td>
</tr>
</tbody>
</table>
### Economy and business transactions

<table>
<thead>
<tr>
<th>Education</th>
<th>Effectiveness of education (teaching to think in an abstract way or teaching to memorize). Active or passive methods of teaching.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>Stage of adequacy of the infrastructure and its quality in comparison with the needs</td>
</tr>
<tr>
<td>Institutions</td>
<td>Efficiency of the institutions</td>
</tr>
</tbody>
</table>

#### External – international

<table>
<thead>
<tr>
<th>Finances</th>
<th>Vulnerability/immune to events outside. Intensiveness of financial ties with the external world. Channels connecting the national economy with the global economy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>Prospects of symmetric or asymmetric attacks and expected fields. Membership in regional organizations (EU, NATO), sub-regional (OECD, EEA⁹) or global (UN, IMF, WB, WTO).</td>
</tr>
</tbody>
</table>

Source: Own arrangement.

It can be seen that the vulnerability of an economy in different occurrences depends mainly on the ties which the economy has established with its partners. Nevertheless, a lack of such ties does not automatically result in increased immunities. Poland is a relatively open economy, it is a member of NATO and the EU. It has a share of the trade within the EU which exceeds 60% of the Polish external trade and nevertheless, the crisis of 2008/9 did not drag Poland into negative rates of growth. Poland was the only economy in the region, or wider one of the 2 OECD economies (along with Australia) that enjoyed low but still positive rates of growth. This can be used to draw a conclusion that internal policies also matter. More or less the

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⁹ EEA – European Economic Area – combines the EU and EFTA expanding four transfer liberties, which were introduced into the European internal market by a Single Act in 1997. EEA was established in 1994 (EFTA with the exception of Switzerland who has signed an agreement on four liberties with the EU on bilateral terms).
policies applied in the region are similar but they have differed in the stage of systemic transformation, that is between 1989–2004. This can be considered as the background of current immunities (at least to a certain extent) to external and internal turbulences.

It is a risk to make attempts to preserve the old structure of the economy, keeping the old companies which lose their competitive advantage. As the quoted example from the American economy shows one can try to reindustrialize investing in such branches which are characterized by higher than average productivity and are competitive. Moreover such investments are not sufficient to make an economy immune to external turbulences like the one we witness recently in Egypt which can have a wide scale impact on the Polish economy by the lack of a quick reaction in cutting down the trips to Egypt, when the events in that country would ultimately become out of control. Such events have to be taken into account, especially when one looks at the numbers of the Polish tourists in Egypt, possible costs of bringing them back by other means of transport than those formerly planned and finally when security companies would have to pay for all of the disturbances. This calculation shows us the scale of vulnerability to external shocks, especially when we take into account that Egypt is one of the lowest costs tourist destinations and each year 220,000 Poles travel there. Currently there are 12,000 Poles in Egypt.

The case of Egypt may have some possible negative effects in some economies, however this does show that not all economic risks are easy to predict, which embrace an occurrence, the scale of its impact on an economy as well as the direct and indirect consequences. Nevertheless, trying to systematize the source one can be clear cut through the whole economy with its external ties – showing what can happen and what should be taken into account.

5. Conclusions

The study was aimed at presenting a systematic approach to economic risks which can occur in a national economy of a country which is participating in international division of labour and is in the group of developed economies. The study has shown a number of dangers which accompany attempting to evaluate the risks as well as the list of
risks and their changing sources. The study is divided into specific parts. The first part shows the source of the risks and enumerates them. The second part concentrates on characterizing the internal risks, while the third shows the external risks. The fourth part corresponds with the title and shows the systematization of risks, listing areas and fields in which they can occur. The risks are divided according to the two previously presented criterion of internal and external ones. It is shown that an important role is played by national policies, which, when well designed, can help to minimize the possible risks and their scale of negative impact.

Returning to the questions which were formulated at the beginning of the paper one can say that generally the risks are changing, what is resulted by a lower weight of some and the emergence of new ones. Trying to answer the question concerning the scale of risk today in comparison with the past: is it greater or smaller? I argue that generally the risk is smaller which is achieved by the application of the same regulations (most of the economies use convergence criteria as their guide-lines in evaluating macroeconomic situations in the market), the number of currencies is limited and fixed exchange rates were replaced by floating ones. All this makes the worlds finances easier to manage. At the same time the number of economies engaged in the world division of labour and capital flows is rising. Moreover, most risk evaluations concentrate on production or banking while also some other services gain importance (transport, tourism, communication and sales of intellectual property etc.). The scale of increasing risk for the economy in the new branches is unexpectedly vast, but also there is the problem of underestimating the turbulences which they can cause. In other words the message here seems to be generally optimistic but there are also some warnings, which have to be taken more seriously in the future.

What can be done to lower the risks? The most simplest way to deal with this issue is to bring countries closer together, talk about the risks, their sources and create a framework and climate for a closer co-ordination of their policies. This is, on one hand a continuation of what was done in the past, but on the other hand the achievement of a certain level of co-ordination of policies on an international level by the G-20 (followed by others) which enforces further goals of enhancing such co-operation.
References

Economy and business transactions

CHAPTER 13

The role of the supreme audit office in tackling corruption and other types of organisational pathologies

Zbysław Dobrowolski*

Abstract

Supreme Audit Institutions (SAI’s) play an important role in ensuring sound public management. An important mission of SAI’s is to reduce the level of threat of corruption and fraud in public life and to promote the concept of good governance. The realization of the mission of SAI’s and the limitation in the fight against corruption are presented and discussed in this article. The author proposes a new definition of corruption – the abuse of stakeholder’s trust for private gain.

Keywords: supreme audit office, corruption, organisational pathologies

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1. Introduction

In all developed countries, they have increased public sector spending in relation to gross domestic product. In some countries, public expenditure growth in recent years has even tripled [Dobrowolski, 2008, pp. 7, 11, 44–191]. In today’s world, the public sector performs a series of tasks, which are necessary for the citizens. Protecting the natural environment, food security, water supply, financing the construction of roads, bridges and sewers, are just some of tasks of the state. Of course a lot of tasks are performed by private entities. Regardless, however, who realizes the tasks, the state is obliged to fulfill the expectations of its citizens.

The evaluation of specific programs created by parliament and implemented by the government must not only consider the specific nature of the socio-economic program put in place, but also how it was implemented or how the citizens are actually treated by the state (macrostructure) and its public officials.

Public life is accompanied by the phenomenon of corruption. Where decisions are made by decision-makers who do not take responsibility for the consequences of a decision, or where there is little accountability or transparency, corruption is growing particularly fast. This organisational pathology generates four categories of costs: (1) costs caused by the loss of revenues from taxes, customs duties, privatization and costs generated by corruption in public procurement; (2) reduced productivity of investment and economic growth, including, through the abuse of regulatory powers; (3) a burden for the society, including, through, excessive taxation and a low quality of services; (4) a loss of trust in public institutions, which may undermine the respect for public order and security and even the idea of the State [Dobrowolski, 2005, pp. 13, 22; Korupcja..., 1999]. Recent events in African countries, the Middle East and Brazil provide empirically verifiable evidence for this assertion.

Effective efforts to combat the illegal phenomena of corruption are essential for sustainable development of societies and regions. Substantial experience with efforts aimed at combating corruption have demonstrated that, approaches focused solely on techniques to detect corruption can be ineffective in achieving a reduction in corruption. In other words, there may be little relationship between an increase in the
level of corruption detected and an actual reduction in the amount of corruption. In order to successfully combat corruption, actions beyond those aimed solely at its detection are needed. Success in combating corruption can only be achieved through co-ordinated actions taken by the public authorities specified by a Montesquieu separation of powers, as well as other institutions such as NGO’s and media organizations. Such a co-ordinated approach refers to the concept of public governance that incorporates the involvement of stakeholders in public affairs [Dobrowolski, 2012, p. 1–11; Dobrowolski, 2013, p. 1–10].

Although governments have a major responsibility for creating an environment that does not favour or enable corruption and other types of wrongdoing, governance issues vary from country to country and solutions to govern the problems must be tailored individually, as the supreme audit institutions (SAI’s) have a key role to play as an advocate of good governance and interagency co-operation in the fight against different types of wrongdoing, including corruption [Dobrowolski, 2012, p. 1–11].

Based on the results of the authors own research work and research work of other scientists, as well as literature studies, the author focuses on the role of SAI’s in tackling corruption and other types of organisational pathologies as well as trying to identify all limitations SAI’s have in the fight against corruption. The purpose of this article is to determine the overall SAI's approach to corruption and fraud prevention. The intermediate goal is also the arrangement of terms associated with corruption. Finally, the aim of the research is to determine the cognitive gaps about the role of the SAI in the fight against corruption.

The author of this article does not discuss the improvement of legislation, as well as improving the law enforcement agencies or the judiciary. The author does not focus on the causes of corruption and its effects. These issues have been analyzed and presented among others by the author in separate publications. The author uses the concept of the supreme audit office, as a public organization, which has the highest range of audit authority, subordinate to the legislative branch, but is not a part of it. This term has been known for years and is used in the scientific literature.

The choice of the research topic is resulted from the assessment of the social, political, and economic effects caused by the negligence of
the public organisations in the fight against corruption. There is lack of sufficient research on the role of the SAI in tackling organizational pathology, from the perspective point of management science.

2. The role of the supreme audit office in tackling corruption and fraud

Before discussing the role of SAI’s in tackling corruption, some terms, including “corruption” need defining. Attempts to develop a precise definition of terms in this area invariably encounter legal, criminological and political problems in many countries [United..., 2004, pp. 23–26]. According to the United Nations, there is no single, universally accepted definition of corruption. For example, the United Nations Convention Against Corruption does not contain a single definition of corruption, but lists several specific types or acts of corruption.1 There are however several so-called “working definitions” of corruption. For example the definition presented by Transparency of International, which is the misuse of public power for private benefits.2 In terms of etymology, the meaning of corruption is significantly different from its Latin origin. The Latin word corruptio means mar- ring, seducing or perverting [Dobrowolski, 2005, pp. 13, 22].

The Civil Law Convention on Corruption, held in Strasbourg on the 4th of November 1999, defines corruption (see Article 2) as requesting, offering, giving or accepting, directly or indirectly, a bribe or any other undue advantage or prospect thereof, which distorts the proper performance of any duty or behaviour required of the recipient of the bribe and the undue advantage or the prospect thereof.3

Taking into consideration that corruption can have a major negative impact on a country’s economic performance corruption can be defined as the abuse of a stakeholder’s trust for private gain. Trust is the necessary lubricant for public organization efficiency. It creates

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3 Cywilnoprawna konwencja o korupcji sporządzona w Strasburgu dnia 4 listopada 1999 r. (DzU z 2004 r. nr 244, poz. 2443).

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social capital, which is as Francis Fukuyama cited, an instantiated informal norm that promotes co-operation between individuals and organizations. In the economic sphere it reduces a transactions cost. The assumption formulated by Francis Fukuyama was proved by Stephen Knack and Philip Keefer [Fukuyama, 1995; Knack and Keefer, 1997, p. 1251–1288].

Corruption is associated with activities such as nepotism or favouritism, clientelism, cronyism, patronage, graft, bribery, extortion, embezzlement, theft and fraud. All of these phenomena are harmful. In the case of favouritism, which means giving favours based on informal relations [Dobrowolski, 2002, p. 16–17; The New Penguin..., 2001], this phenomenon should be considered not only from the negative point of view of criminal law, but also from the perspective of human resource management. Analysis of the responses of the members of staff working in various offices and companies (150 respondents between 2008–2012), conducted by the author of this article, showed that favouritism often occurs (60% of all answers). It destroys employee’s initiative, undermines the sense of obtaining higher qualifications (100% in all answers). Especially dangerous is the belief of respondents that the fight against corruption is not successful (70% of all answers). They did not believe others. Unclear procedures for the promotion of employees, or their employment can catalyze other adverse events. For example, fraud. The above observation allows the formulation for theoretical generalizations, that favouritism and its variants destroy trust both within and outside of the organization.

Based on literature studies, it appears that the relevant definitions of the concepts of cronyism, patronage, are: cronyism which means the practice of favouring one’s close friends especially in political appointments [The New Penguin..., 2001]. Patronage which means the control of, or power to make appointments to government jobs or the power to grant other political favours. It also means the distribution of jobs and favours on a political basis, as to those who have supported one's party or political campaign [Ibidem]. Nepotism can be considered as a narrower form of favouritism. Originating from the Italian word for nephew, it covers favouritism shown to a relative [Ibidem].

The term clientelism refers to a complex chain of personal bonds between political patrons or bosses and their individual clients or followers. These bonds are founded on mutual material advantage: the
patron furnishes excludable resources (money or jobs) to dependents and accomplices in return for their support and co-operation (votes and the attendance of rallies). The patron has disproportionate power and thus enjoys wide latitude about how to distribute the assets under his control. In modern politics, most patrons are not independent actors, but are links within a larger grid of contacts, usually serving as middlemen who arrange exchanges between local level and the national center [Brinkerhoff and Goldsmith, 2002, p. 2]. The meaning of graft is the following. To take illicit or unfair advantage of an office or a position of trust for personal gain.\footnote{http://www.businessdictionary.com/definition/graft.html (28/06/2013).} Extortion, also called blackmail or exaction means, the offense of illegally obtaining money or other benefits or compelling some action through coercion or menace, especially by a public officer acting in his or her official capacity.\footnote{http://www.businessdictionary.com/definition/extortion.html (28/06/2013).} Theft and embezzlement occurs when an individual steals or retains something stolen from another party, for example the government.

There are a number of definitions of fraud used throughout the world. Fraud is commonly referred to as a deliberate act, usually involving the use of deception, to obtain some form of financial benefit or advantage from a position of authority or trust, which often results in some form of loss to the organization defrauded. Fraud involves the use of deception such as the manipulation, falsification or alteration of accounting records or documentation. In addition to this, it also involves the misrepresentation or intentional omissions of events, transactions or other significant information or intentional misapplication of accounting principles relating to the amount, classification and manner of representation or disclosure. In summary, fraud is a type of illegal act involving the obtaining of something of value through willful misrepresentation [Dobrowolski, 2002, p. 16–17; A Handbook..., 1999, p. 1–35; Compliance..., 1996, pp. 1–27].

Bribery is the act of conferring a benefit in order improperly to influence an action or decision. It can be initiated by an official who asks for a bribe, or by a person who offers to pay someone. Bribery is probably the most common form of corruption. Definitions or descriptions appear in several international instruments, in the domestic laws of most countries as well as in academic publications. Typically, it is used to describe a payment extracted by a public official from an un-
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willing member of the public before the citizen can receive the service to which he or she is entitled. Strictly speaking, such a transaction is not one of a “bribe” being given by an accomplice in corruption, but a “payment being extorted” from an unwilling victim [United..., 2004, pp. 23–26]. The “benefit” conferred by a “bribe” can take a variety of forms, for example: cash, company shares, inside information, sexual or other favours, or, indeed, the mere promise of a benefit in the future (such as a retirement job). The benefit can pass directly to the person bribed, or indirectly, to a third party such as a friend, relative, associate, a favourite charity, private business, political party or election campaign. The conduct for which the bribe is paid can involve a positive act on the part of the official (the making of a particular decision), or it can be passive (with the official declining to do something that he or she is obliged to do). It can be a bribe paid “according to the rule” (to obtain something the official is withholding but is under a public duty to provide); or it can be “against the rule” (a payment to encourage an official to ignore the rules in favour of the person offering the bribe). Bribes can be paid individually, on a case-by-case basis, or as part of a continuing relationship in which officials receive regular benefits in exchange for regular favours. Once bribery has occurred, it can lead to other forms of corruption. By accepting a bribe, an official becomes susceptible to being blackmailed and coerced into further, and more serious, derelictions of public duties [United..., 2004, pp. 23–26].

The Criminal Law Convention on Corruption, held in Strasbourg on the 27th of January 19996 defined bribery associated with the phenomenon of corruption, namely:

- **Active bribery** of domestic public officials is an intentionally committed offence of promising, offering or giving by any person, directly or indirectly, any undue advantage to any of its public officials, for himself or herself or for anyone else, for him or her to act or refrain from acting in the exercise of his or her functions (Article 2 of the Convention).

- **Passive bribery** of domestic public officials is an intentionally committed offence, consisting in the request or receipt by any of the public officials, directly or indirectly, of any undue ad-

6 Prawnikarna konwencja o korupcji sporządzona w Strasburgu dnia 27 stycznia 1999 r. (DzU z 2005 r. nr 29, poz. 249).
vantage, for himself or herself or for anyone else, or the acceptance of an offer or a promise of such an advantage, to act or to refrain from acting in the exercise of his or her functions (Article 3 of the Convention).

- **Active bribery in the private sector** is an act, committed intentionally in the course of business activity, consisting in the promising, offering or giving, directly or indirectly, of any undue advantage to any persons who direct or work for, in any capacity, private sector entities, for themselves or for anyone else, for them to act, or refrain from acting, in breach of their duties (Article 7 of the Convention).

- **Passive bribery in the private sector** is an act, committed intentionally, in the course of business activity, consisting in the request or receipt, directly or indirectly, by any persons who direct or work for, in any capacity, private sector entities, for any undue advantage or the promise for themselves or for anyone else, or the acceptance of an offer or a promise of such an advantage, to act or refrain from acting in breach of their duties (Article 8 of the Convention).

Before discussing the role of SAI’s in tackling corruption, it is worth discussing the causes of corruption. Flaws of human nature are mentioned among the causes of corruption. The urge to enrich oneself quickly by dishonest means (in contravention of the established ethical standards or the law) makes this phenomenon persistent in any society, regardless of its political system [Dobrowolski, 2005, pp. 13, 22; Myint, 2000, p. 50]. Corruption thrives in cases of organizations with problems of ethical collapse. The examination of public organizations (carried out by the author) indentified several factors that can contribute to an ethical collapse. These factors are for example: fear and silence, lack of an ethical climate in human resource management, weak internal controls and a culture of conflicts. It is interesting that similar situations like what happened in Poland, also occurred in the USA [Dobrowolski, 2009, pp. 104–105]. It can therefore formulate a theoretical generalization that the determinants of ethical collapse are based on human nature and results from the improper management of public organizations.

The tolerance for corrupt behaviour may not only have cultural, but also a historical background. For instance, the absence of one’s own
national state may generate disregard for legal norms, perceived as rules imposed by the occupying power. This, in turn, can translate into a generalized disregard for legal norms, and – more broadly – for ethical standards. In addition, some mistakes of state economic policies may catalyze corruption. For instance, in the circumstances of a shortage in the economy, with mismatched supply and demand, a desire to get some consumer goods, may generate corrupt behaviour (a bribe in exchange for the possibility to buy a fridge without waiting. Such a situation occurred in the 80’s of last century in some eastern countries in the so-called “socialist economy.”

In a market economy, corruption is facilitated by the existing legal and organizational regime that can limit the freedom of business, by imposing restrictions on business transactions. These restrictions can give rise to various informal groups, which can affect the existing societal system. Such agreements can occur in various societies with different cultures. It is worth noting at this point that an act considered to be a corrupt practice in some communities may not necessarily fit into such a classification adopted in another community. A gratuity offered to an official after he or she has completed a task may – for some – be a sign of corruption (establishing a “climate” for successful completion of other affairs in the future), and for others – only an expression of gratitude acceptable in their culture [Dobrowolski, 2005, pp. 13, 22; Myint, 2000, p. 50].

From the organizational perspective and in light of what has been discussed so far, corruption develops when the freedom to do business is restricted, there is excessive discretion in decision-making, little or no accountability of decision-makers, an inefficient control system and a lack of transparency in the activities of institutions using public funds or property.

In discussing the issues of corruption and fraud, it is impossible to ignore the problems related to the administration of government organizations. Government organizations complement the constitutional authorities by performing subsidiary functions, providing services and performing some of their executive and regulatory functions. They tend to the collective and individual needs of citizens arising from those living in communities and transform general legal regulations into specific decisions on individual matters.
Public administration, which is characterized by hierarchical structures and specific decision-making procedures, forms an integral part of the political system and is subject to that system’s influence, but it also plays an active part in creating state policies [Peters, 1999, pp. 15–63]. Even the right decision taken by the Parliament or the upper level of a bureaucratic hierarchy, but poorly implemented by lower-ranking officials, is going to result in citizens having a bad opinion of the legislature and of the government.

Public administration is funded from the State budget and is sustained by the governments procurement of goods and services, which – in addition to government transfers and repayment of public debt – constitute state expenditures. A government’s procurement of goods and services applies not only to the expenditures on administration, but also national defence, the protection of public order, health care, culture and science/research. The State invests in infrastructure development. Some investments may be related to manufacturing the activity of the State – for instance, the arms industry. Public administration is therefore a very important collective purchaser of goods and services and may determine the conditions of development of its private partners, for which the sale of goods and services to the government is a significant or the sole source of income [Peters, 1999, pp. 15–63].

In addition to the foregoing there are many other aspects of public administration that must be considered. First, contrary to M. Weber’s assertions, public servants, in performing their public functions, may actually fail to tend exclusively to the government’s interest and public good, but, on the contrary, may aim to maximize their private interest which could be inconsistent with the employer’s interest, or aim to pursue the interest of their employer, which results in the maximized budget of the institution in which they are employed. Secondly, the information of actions taken by those administrating government organizations may be incomplete and the real cost of the services provided may be different from that which is declared and may lead to situations where the budget exceeds the cost of production of a public service. Thirdly, there are a great number of public institutions performing a wide array of functions and services.

Taking all of these aspects of public administration into consideration, it can be concluded that the actual capacity of the decision-makers to verify the information prepared by the intermediates – i.e.
administration, is not only costly, but most of all, strongly limited by the dispersion and the number of the institutions comprising public administration. In addition to this, it should be taken into account that the information exchange between the political executive and the administrative executive takes the form of a mutual monopoly. An entity located within the governments organization provides information to the decision-maker who as a result receives a specific range of information only from the entity that deals with specific matters. The parties involved in the transactions in such a defined “market” are the supervising authorities and the administrative bodies of the organizations subject to such supervision. The supervisory authority establishes the budget of the organization body based on the information provided by the administrator of that organization. This results in asymmetric information, whereby the real cost of the public service provided is only known by the administrator of the organization. On the other hand, the allocator of budget funds may lack such information. The information asymmetry may therefore lead to inflated costs of performance of public functions [Peters, 1999, pp. 15–63; Wilkin, 2005, p. 145–147]. The information asymmetry, which has been so deeply presented by William A. Niskanen, may also support corruption and fraud.

As discussed previously, corruption generates costs. It negatively affects productivity. This fact has been repeatedly presented in various publications, including the World Bank. It is estimated that an increase in corruption in the Corruption Perception Index (CPI) at one point lowered productivity by 4% of GDP. Corruption deters investments. One of the reasons for this is because of the effects of corruption are comparable to a tax on investments. A firm wishing to make an investment has to take into account the costs of bribery for setting up a business and keeping it running. It is estimated that an increase in the CPI of around 1% has the same effect as a 7.5% increase in the rate of tax [Myint, 2000, p. 50].

As already stated, corruption and fraud can create a bias towards the allocation of public expenditures, increase the costs of doing business and reduce foreign investments. As a result of this, fraud and corruption have a negative impact on the effectiveness and efficiency of government operations. If the fight against corruption and fraud is to be successful, it is essential to establish an environment that does
not favour or enable these practices. Although governments have a major responsibility for creating an environment that does not favour or enable corruption and other types of wrong doing, governance issues vary from country to country and solutions to govern the problems must be tailored individually, the supreme audit institutions (SAI’s) have a key role to play as an advocate of good governance and interagency co-operation in the fight against different types of wrong doing, including corruption. The important role the SAI’s play in promoting good governance typically results from their special position in relation to the government. SAI’s from EU countries are non-partisan organizations whose employee’s subscribe to the fundamental values of service to their countries and fellow citizens. These organizations are subordinate only to their Parliaments and they are independent of their governments executive and judiciary branches. Having broad audit authorities, SAI’s evaluate the functioning of the whole government system of combating wrong doing. From such a broad perspective they advise how to strengthen public institutions [Dobrowolski, 2012, p. 1–11].

Supreme Audit Institutions from European Union countries have existed in some form for several centuries, but the structure and powers of SAI’s have evolved over time. Current SAI’s have a main purpose in common – to examine, evaluate and report on accounts relating to the use of public funds. However, it should be noted that the concept of auditing by the SAI of public funds in some countries is narrowed to government spending. In others, such as in Poland, the SAI can audit government spending and local government, municipality spending, but while assessing the local government sphere, the SAI does not evaluate the purpose of spending money by local governments.

Most of the SAI’s also carry out performance audits, which mean they examine the economies efficiency and effectiveness with which public funds have been used. This way they create trust to governments and try to prevent inappropriate usage of public funds. Audits performed by SAI’s typically focus on the execution of their states’ budgets as well as on public finance spending and management of public property by their states and in some countries, also by local governmental bodies and economic entities. The nature of audits performed by the SAI’s vary, based on the complexity of the public pro-
grams or the entities being audited. SAI’s operate under different mandates and models. However, SAI’s are required to issue audit reports that contain the audits findings, including comments and recommendations on how to address any irregularities that are identified.

The examined SAI’s have an institutional role that is not directly aimed at fighting corruption. However, it is attributed with competences that allow the SAI to proceed to the immediate detection of financial irregularities and other examples of improper realization of a public task. In addition to this the German SAI plays an additional important role as an advisor to the German government. In Poland, the SAI’s emphasis is on fraud and corruption and is incorporated in its overall mission statement that is realized in establishing its audit priorities and periodic work plans. Also, the Polish SAI has developed a formal strategy aimed at combating corruption and other types of wrong doing [Dobrowolski, 2012, p. 1–11].

Although each SAI defines problems in the functioning of public organizations, its tasks are neither to solve these imperfections or to punish them. An SAI does not participate in the management of public organizations in this way, that SAI ascertains problems and makes decisions on how to solve them. An SAI proposes some solutions through formulating recommendations. However, these recommendations are not obligatory for auditees with the exception of the SAI from Lithuania.

One of the most important elements of the SAI’s programs of combating corruption and fraud is the work they do in strengthening public institutions that are the elements of the national integrity system. Each public institution, within its statutory powers, supports this national integrity system like pillars that support the roof of a building. In this Transparency International idea, sound governance in the national integrity system is based on integrity, transparency and accountability.

Taking into consideration that it is much better to prevent rather than detect corruption and fraud, it is critical that the approaches that the SAI’s use in their efforts to fight corruption and fraud will be multifaceted. Figure 1 shows some elements that should be included in approaches aimed at combating corruption. Most of the SAI’s from EU countries realizes the approach mentioned below, even if the need
of the identification of the phenomena of corruption and corruption risk areas are not explicitly defined in the audit programs, as is the case with the Polish SAI.

If SAI’s want to effectively fight corruption, the SAI’s should perform a corruption and fraud assessment (assess its occurrence, causes, areas and mechanisms) during each audit and should routinely be on the lookout for ways to reduce arbitrariness in the application of rules and regulations, simplify administrative procedures and to eliminate unequal access to information. Such an assumption is appropriate and understandable. Through the SAI’s daily analysis of irregularities identified during audits and analysis of legislation SAI’s may attempt to identify the mechanisms that can contribute to corruption and/or fraud. Through its work, the SAI tries to influence the laws and regulations so that they themselves would not encourage corruption and/or fraud. If the SAI’s make a determination that a law or a regulation creates situations that permit or encourage corruption and/or fraud, it makes proposals for change. It is worth noting that when irregularities are identified in an audit, the SAI’s should recommend corrective measures, although SAI’s have no executive powers.

SAI’s analyze the law, suggest solutions for government programs that are unclear or not consistent. The Polish SAI draws conclusions, _de lege ferenda_, although their implementation by policy makers is small. For example, in 2012, according to a report on the activities of the Polish SAI, the SAI had formulated 65 conclusions, _de lege ferenda_. As estimated on the 8th of February 2013, eight of these conclusions had been implemented in full. It has not implemented the other 56 conclusions (one conclusion was implemented in part). Equally poor implementation of conclusions, _de lege ferenda_ took place in previous years. For example, in 2009, the SAI formulated 65 conclusions, _de lege ferenda_, of which 61 were not realized [NIK, 2009; NIK, 2012, pp. 158, 159–160]. Identifying the reasons for poor implementation of applications, _de lege ferenda_ requires further in-depth research. It must be stated more broadly, in general, the impact of the proposed changes in the law, government programs in the level of corruption requires research. There is no data available, in an extent, that the SAI’s activity helps to limit the level of corruption.
By carrying out a comprehensive strategy aimed at combating corruption and other types of wrong doing, SAI’s help to strengthen the financial management systems of public institutions by instilling the knowledge among the institutions that there will be ongoing accountability that in turn will create a preventive environment that does not favour corruption and other types of wrong doing. It is worth mentioning that a strong financial management system should incorporate the following elements: 1) accurate, complete and timely financial reporting that includes financial statements audited by the SAI and reports on internal controls and the compliance with laws and regulations; 2) a reliable system of internal controls; 3) effective cost accounting capabilities.

These elements will help to ensure that a public institutions’ financial management system can contribute to and provide a basis for effective performance measurement. The above mentioned task to strengthen the accounting system of the state and its organization is valuable. It can certainly lead to greater transparency and accountability in public life, thus indirectly contributing to the reduction of corruption. However, the author of the article does not know the results of the studies that indicate clearly, the relationship between the activities of SAI’s in order to strengthen the financial system and the scale of corruption reduction. This issue requires further in-depth research. It should be noted that corruption is accompanied by a conspiracy be-
tween perpetrators. None of the participants in corruption will transfer bribes to the accounting system. So strengthening the accounting system in public organizations, although valuable, will not directly limit the phenomenon of bribery. Equally difficult to identify is the phenomena of nepotism and favouritism. Documents from the competition for positions in public organizations or in public procurement are usually well prepared and there it is difficult to discover corruption without observation or techniques such as mystery shopping. It is also difficult to detect other phenomena’s associated with corruption. The pessimistic tone of the article is not intentional, but is resulted from the research conducted by the author. The question now is how the SAI can help in reducing corruption risks? Indirectly we have already answered this question. An SAI may also help to reduce corruption by strengthening the internal control system as well as social control, which is efficient in terms of civil society.

Strengthening the system of internal control is the responsibility of all analyzed SAI’s. This approach is fully justified. Internal controls typically deal with factors such as approval and authorization processes, access restrictions and transaction controls, account reconciliations and physical security. Historically, control weaknesses have been identified as a major contributing cause in many significant cases of fraud and corruption. In conjunction with its audit and oversight responsibilities, the SAI’s comment on the effectiveness of internal controls and make recommendations for its improvement. The recommendations made by the SAI’s to strengthen controls can result in, or contribute to improvements in the effectiveness and efficiency of government programs. The SAI’s follow up on recommendations to determine if they have been implemented and to evaluate their results.

In addition to the SAI from Greece and from several other countries, the SAI’s attach great importance to their informational role and highlight public awareness of corruption and other wrong doing through timely and public disclosures of its audits findings. Increased public awareness of corruption and fraud helps to foster accountability. SAI informational activities should also be seen through the prism of the implementation of educational and preventive functions of a states audit. In addition to this, information about the activity of the state and on how public organisations are implementing social programs, favours the creation of social control. The analysis of responses (al-
though performed on a small sample of the research – 150 seater) confirms this assumption. This research should be continued.

It is worth noting however, that while the SAI’s have certain information gathering tools for combating wrong doings and can report on corruption or fraud in the public sector, they have no Police nor Prosecutorial authority. In the case of a well-founded suspicion of a crime or any offense, the SAI notifies the organization responsible for investigating crimes and offenses (in instances required by Criminal Law). In some countries, like in Poland for example, auditors may play an important role during criminal prosecutions by being witnesses for the prosecution [Dobrowolski, 2008, pp. 7, 11, 44–191].

The level of corruption is evolving and the perpetrators of illegal activities seek improved ways of obtaining an undue advantage. The trust is created not only by the SAI participates in the fight against corruption, but also that this fight is effective. Therefore the SAI should constantly work in a systematic manner to improve the methodologies it uses to identify and combat any wrong doing. It means that the SAI should also increasingly turn its focus to the training of its staff, knowing that the success of the fight against wrong doing depends not only on its audit procedures and tools, but also on it having staff with appropriate skills, knowledge and abilities to identify and assess the potential irregularities. There is no available data about such training. Therefore, it is difficult to determine to what extent the training carried out by the SAI’s, are improving the detection of corruption.

It is important that SAI’s create a commitment to personal integrity. This commitment to personal integrity should not only be limited to the staff of the SAI but should extend to individuals outside of the organization. Therefore SAI’s try to be institutions to whom whistleblowers from other institutions and individual citizens can provide information about suspected or actual wrong doing. Again, it should be noted that it is difficult to determine the impact of the whistleblowers on corruption detection performance. There is no data available in this area. We move, therefore, in the declaration sphere, not empirically verified assumptions.

SAI’s declared, that all information gathered from such individuals by an SAI’s complaint system should be transmitted over a secure connection and the SAI’s should safeguard all information provided
by whistleblowers or others against unauthorized disclosure. Telephone hotlines and Internet technology are examples of commonly used whistleblowing mechanisms. However the efficiency of the whistleblowing system depends not only on the availability of such a solution for citizens, but also depends on how the system ensures the anonymity of whistleblowers and the belief of citizens that the information on irregularities in public life, provided by individuals to the authorities of the state are properly used by the authorities. The results of public opinion polls showing the scope of citizens' trust in the SAI’s, from the point of view of ensuring SAI’s anonymity of whistleblowers are not available. This area of an SAI’s activity from the perspective of building trust requires further in-depth research.

Proper consideration of complaints by the SAI about improper activity of public organizations will increase the number of complaints to the SAI’s. Of course, the increase in the number of complaints is also an indicator of malfunction of public institutions. The questions of, to what extent the increase in the number of complaints to the SAI’s is the result of increasing trust to the SAI? and to what extent is the result of the increase in the scale of irregularities in public life, requires more painstaking research?. The results of such research are not available yet. In the case of the Polish SAI, each year the number of complaints has increased. Complaints obtained by the Polish SAI are a valuable source of information on the socio-economic situation of the country. In 2007 the Polish SAI received 3,961 complaints and requests to carry out an audit. In the following year: in 2008 3,978 complaints and requests, in 2009 – 4,479, in 2010 – 5,049 and in 2011 – 6,387 complaints and requests [Dobrowolski, 2012, p. 1–11; NIK, 2008; NIK, 2012, p. 159–160].

Regardless of the fact that there are no studies analyzing the relationship between the way complaints are analyzed and used by the SAI’s and the level of trust to the SAI, the theoretical generalization may be formulated that the proper activity of SAI generates a spiral of public trust to the SAI. The activity of the Polish SAI was well assessed by the survey respondents. The number of positive reviews was greater than the number of negative opinions. But it should be noted that compared to the results of the survey conducted in September 2007 (44%), surveys conducted in September 2012 showed a decrease
in positive reviews for the Polish SAI by 5%. The good reputation of the Polish SAI scored 39% of the total respondents [Oceny…, 2012].

The effectiveness of the SAI’s fight against corruption and other types of wrongdoing depends on the activities of other elements of the national integrity system. SAI’s should closely co-ordinate and co-operate with other state institutions in an effort to combat corruption and fraud. Regarding this co-operation, it was already mentioned when discussing the co-operation with law enforcement institutions. There is no data on the scope of such a co-operation, including joint training. In the case of Poland, the SAI has organized training for employee’s of the Central Anticorruption Agency, the aim of which was to improve the audit process [Dobrowolski, 2012, p. 1–11].

Studies have shown that the fight against corruption by the SAI’s are mainly based, not on identifying cases of bribes, but on identifying the abnormal functioning of the state and public organizations. In other words, SAI’s focus on mostly prevention and there are only several examples, where SAI’s have successfully detected corruption. Some of the SAI’s have additional rights which may be helpful in the fight against wrong doing. For example the Hungarian SAI has an opportunity to formulate its recommendations to the top management of the auditee to start a disciplinary procedure against the employee responsible for the formation of irregularities found during the audit carried out by the SAI. In addition, to prevent the occurrence of a loss the SAI may, with the exception of wages, freeze material and financial assets during the period of the audit, if it establishes wasteful utilization or the audited body causes damage, by seriously violating the rules related to the management of financial resources. Based on the request of the President of the Hungarian SAI, the Minister for Finance or the head of the auditee shall take steps for the execution of freezing. In respect of investment projects financed from budgetary resources, the Hungarian SAI may, with the exception of the amounts required for the payment of wages, suspend the use of financial resources until further measures are taken to eliminate irregularities. However, it is worth noting that, since Hungary returned in 1989 to a group of democratic states, the Hungarian SAI initiated freezing assets and suspending the usage of funds in only a handful of cases.

It should be noted that in the former Soviet republics, special efforts were taken to reduce the risk of corruption. For example, Esto-
Economy and business transactions

Estonian legislation, like in other developed countries, has specific legal provisions to combat corruption and tools, like: 1) the declaration of economic interests of officials and persons listed in appropriate acts and the disclosure of declarations of economic interests in the cases prescribed by law; 2) the restriction in additional employment and activities of employee’s of public services. The Estonian SAI monitors the implementation of the above mentioned act. The SAI also collected annual declarations of economic interests from chairmen of rural municipalities and city councils, rural municipality mayors and city mayors, the rural municipality district and city district elders some years ago. Now they submit their declarations to the Minister of Internal Affairs.

Like other SAI’s, the Austrian SAI contributes to tackling corruption. With regards to corruption prevention, one competence of the President of the Austrian SAI, should be emphasized. The members of the Federal government, the state secretaries, members of the land governments, the mayor of Vienna and the members of the Viennese city senate have to disclose their financial circumstances every two years to the President of the Austrian SAI. The disclosure has to contain all real and capital assets, shares of companies and debts. The President of the Austrian SAI has to report every extraordinary growth of property of the person mentioned above to the President of the National Council or to the President of the Diet.

Corruption does not provide the most considerable challenge in the Finnish and Danish society or in the performance of supreme audit institutions. As an explanation for this can be referred to the Finnish or Danish legal culture and the long tradition to the effect that all administration shall be based on the rule of law. In addition, important general legislative contributions to the fight against corruption and the abuse of power in both countries, are the implementation of an access to public administration files. The principles of transparency and accountability are not only established by law but also put into practice of public life for many years. However, the simple explanation that the small risk of corruption in public life is the result of legal culture is too vague. A thorough examination of the problem requires among others, sociological analysis.

It should be noted that although corruption is not perceived by the population of the Nordic countries as a key threat to the stability of
their countries, it does not mean that some other wrong doing does not occur in the activity of public organizations. Regardless of high citizen trust, both Danish and Finnish SAI’s monitor wrong doing during the ordinary audits and such efforts are conducted by the ordinary staff in the various public organizations. Among the Nordic SAI’s attention should be paid to the Swedish SAI. This National Audit Office in 2003 began a study about fraudulent behaviour in the public sector, especially in the state-owned enterprise. The SAI focused its efforts on providing reasonable assurances regarding the achievement of objectives in three categories: effective and efficient operations, reliable financial reporting and compliance with applicable laws and regulations. The Swedish SAI has a specialist unit, that carries out special audits in cases of suspected irregularities. Those can consist of suspected fraud, embezzlement, breach of faith committed by an agent in respect to his principal, bribery or material non-compliance with legislation. The main task of this unit is to clarify whether or not there is reason to suspect that such irregularity has taken place and then to deliver relevant information to the judicial system for possible action [Dobrowolski, 2008, pp. 7, 11, 44–191; Bager, 2005; Tupp, 2005; Stelzer and Lehner, 2005; Spiga, 2005; Protection..., 2006, p. 8].

Summary

In the modern world, the role of the state in social and economic life is significant. A comparative analysis of the activities of SAI’s from EU member states allowed the realization of two goals. The first is to determine what action is taken by SAI’s in fighting corruption. The second, is to determine whether or not these activities are declared or bring measurable benefits. Third of all, is to determine the scientific knowledge about the activities of SAI’s, including the identification of cognitive gaps.

Institutional balance is necessary in combating corruption. This includes the need to ensure the internal consistency of the law, matching

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and the interaction of individual institutions, organizational effectiveness and the efficient realization of public tasks. Taking part in ensuring the institutional balance, SAI’s are participating in reducing corruption. SAI’s inform public opinion about the realization of public tasks by public organizations. Presenting examples of illegal, inaccurate or un-economical realization of government programs, inefficient spending of taxpayers money, but simultaneously the best practices in the public sector, SAI’s promote wise spending of public money. They support the improvement of the internal control system. However, there is no data available about the results of any SAI's corruption detection in all of the EU’s countries. The Polish SAI, in few cases informed public prosecutors about the results of an audit, where the occurrence of corruption was probable. There are no studies available, to which extent the SAI’s activities reduced the level of patronage or any other types of wrong doing. No data is available about the extent to which the activity of SAI’s preventing the occurrence of corruption. At present, therefore, we move into the realm of hypothesis rather than evidence. It is therefore necessary to research how effectively a supreme audit offices help is in limiting corruption. One of the organizational pathology.

As previously stated, the efficiency of a whistleblowing system depends not only on the availability of such a solution for citizens, but also depends on how the system ensures the anonymity of whistleblowers and the belief of citizens that the information on irregularities in public life, provided by individuals to the authorities of the state are properly dealt with. SAI’s use the whistleblowing system. However, the results of public opinion polls showing the scope of citizens' trust in the SAI’s from the point of view of ensuring the SAI’s anonymity of whistleblowers is not available. This area of an SAI’s activity from the perspective of building citizen’s trust requires further in-depth research.

In light of the audit authority and location of the SAI in a macro-structure, it seems reasonable to say that the SAI’s must focus their attention on providing not only the legality of government operations, but also transparency and accountability. Corruption can be seen as the abuse of stakeholder’s trust for private gain. SAI’s should support the construction of the civil society, where stakeholders are engaged in various tasks. The construction itself in such a society does not auto-
matically reduce the level of corruption. It is necessary to promote integrity in the public sector. SAI’s should create public belief that corruption is harmful, because it reduces the possibility of joint development. The preventive, educational and advisory function of a state audit will developed in the future. An SAI does not have the tools to detect corruption. This activity will be realized occasionally. Taking into account the results of research work, the generalization can be made that the SAI’s combat corruption through prevention rather than through detection.

These considerations are not an attempt to formulate a paradigm. The author presents the role of an SAI in tackling corruption and to formulate propositions for future SAI activity in this field, taking into account the public needs.

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CHAPTER 14

Analysis of state bank guarantees offered to enterprises by national bank holdings and system solutions in selected countries

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Abstract

This paper presents the nature and importance of bank guarantees for business development as well as an analysis of the market of state guarantees provided under government programs to companies by BGK. Shown system solutions in selected countries.

Keywords: bank guarantees, the Bank of the National Economy

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1. Introduction

Running a business is exposed to high risk. Whether or not it is the formation of a company and then to remain in the market depends on many factors. One of them is the financial factor. In the course of business, it is a company's ability to pay current obligations and the implementation of further investment. In practice, companies have difficulty raising funds to start and continue operating. There are many sources of funding, such as loans, leasing, factoring, forfeiting, franchising and structural funds, etc. The loan is the most popular instrument for raising funds, but without proper credit it is sometimes difficult to obtain. This situation makes it difficult in a crisis, when banks tighten the conditions for their acquisition. The solution guarantees can be granted to enterprises by banks and especially by the Bank of the National Economy under the Government. The aim of this paper is to present the subject of bank guarantees and their importance to the economy as well as the analysis of the BGK offer guarantees granted to undertakings.

2. The nature and types of bank guarantees

Bank guarantees are hedging traders against various risks. Guarantees can be used by the company at various stages of its development. Both in the process (for example, a loan guarantee and warranty concession) and further development (e.g. guarantee of lease payments, guaranteed payment of the deposit, performance bonds and payment guarantees) It is particularly relevant of the instruments they use during an economic downturn, when a company records a decline in financial performance as a result of declining markets. Companies have difficulties in paying its obligations to contractors and financial institutions and with the implementation of new orders due to the shortage of funds. The use of warranty provides, inter alia, an adequate level of reliability and maintenance of liquidity.

The agreement guarantees are exist in three entities. The first is the guarantor, the guarantor institution (bank or insurance company), the second is beneficiary of the guarantee (the entity requiring the guaran-
te as a form of collateral), the contractor guarantees and commits to the principal guarantee. The guarantor, the bank in the contract agrees to pay the sum insured of a contractor's warranty if the principal guarantee for the guarantee was issued or has not complied with the obligation. The fee for taking on the role of guarantor depends on several factors such as: type of guarantee, warranty duration, the amount of the guaranteed amount, the type of covered claims, the economic and financial principal and the form of security guarantees. The warranty is void if:

- It has expired,
- principally honoured the commitment, which was the subject of a guarantee,
- beneficiary releases the principal or guarantor of the obligations before the date of expiry of the warranty,
- the provision of guarantees made by the guarantor reaches a sum insured.

Principal bank guarantee may be many actors, such as:

- individual,
- domestic and foreign legal entity engaged in economic activity (including banks operating for the client),
- entity without a legal personality,
- entity that has the capacity to act,
- entity conducting business by their own account.

It's fair to say that all entities of the national economy can benefit from the guarantee, which in practice is divided into contractual guarantees, payment, customs and tax concessions.

Market guarantees are due in larger part to the banking sector, because approximately 70% (2012) occupied the rest of the insurance market [Wedziuk, 2012]. Banks have the advantage of insurance mainly due to a more extensive distribution network and due to the fact that customers come to the bank themselves whereas potential customers and insurance companies usually arrive using insurance agents. Banks, in co-operation with insurance companies, due to its position in the market are very desirable and efficient distribution channels for common products [Garbiec, 2003] such as investment policies. The market guarantees a banks assurance word has lost its meaning and even that “Banking and insurance are increasingly linked to form a capital and functional organizational system” [Fryszer, Krawczyk and Maśniak, 2003] – That said, this type of instrument is
sold separately and banks and insurance companies mainly sell products reserved for themselves, even though they may use other distribution channels for other products [Kufel-Siemińska, 2004].

Bank guarantees are more expensive than insurance\textsuperscript{1} [Wedziuk, 2012], but for some reason the principal guarantee (the debtor) are better than bank and insurance guarantees, as [Tomaszewska, 2011]:

\begin{itemize}
\item bank guarantees will reduce its credit (Article 71 of the Banking Law),
\item security guarantees for insurance can only be a blank promissory note and/or if banks are more stringent with their security,
\item where the guarantee is no longer needed, in the case of a bank guarantee it is not possible to recover the rest of the amount for the unused period as may be the case of an insurance guarantee\textsuperscript{2} [Wedziuk, 2012],
\item banks are much better for claims against the debtor, as a greater opportunity to enforce the amounts paid and the insurance market lacks statutory instruments.
\end{itemize}

Procedures for an insurance guarantee is much faster and can take only a few hours (granted renewable annual limits here), whereas usually the time to wait for a decision takes a few days. A very important aspect in the process of security guarantees are the legal recourse. Customer Warranty must provide a security guarantor recourse. It is one of the main conditions of the warranty. The two institutions, both the bank and insurance company will honour the two main types of collateral and they are: personal security and property. Personal security can include: civil guarantees, guarantee bills of exchange or promissory notes. The collaterals include, among others: the pledge (plain, registered), mortgage or assignment by way of a security deposit [Holly, 2003].

Key features and characteristics of bank guarantees include [\textit{Gwarancje Bankowe…}, 2013]:

\begin{itemize}
\item safe and convenient protection of various mutual obligations and liabilities of partners, both domestic and foreign,
\end{itemize}

\textsuperscript{1} An increasing number of customers guarantees in the insurance market led to an increased interest on the part of DU in the provision of guarantees, which causes a gradual decrease in the price of the service.

\textsuperscript{2} However, as a guarantee of insurance premium is charged immediately for the duration of the guarantee and the guarantee of a bank - the premium monthly or quarterly.
the guarantor's undertaking is independent of the validity and legal effect of the contract concluded between the originator and the beneficiary of the banks guarantee,

- increases the credibility of the bank guarantee in the evaluation of its principal trading partner, thanks to the reputation of the bank providing the bank guarantee,

- clients can avoid blocking their cash resources which could be retained as a deposit or margin,

- the beneficiary obtains an efficient tool to enforce their claims.

In the Polish financial market, warranties virtually all come from commercial banks, but unfortunately only companies with a good financial condition are able to obtain them. Much of the business, so it cannot take advantage of this kind of solution. It should also be noted that the banking sector is dominated by foreign entities [Ostrowska, 2011], which makes the situation worse, because the owners of foreign capital do not want to pay when there is too much risk. Luke is trying to fill the domestic capital – stated by BGK. But of state guarantees on the market, is there a high demand for this type of product?

3. BGK – an outline of activities

BGK is a state-owned bank and was founded in 1924 by the initiative of Władysław Grabski (Prime Minister and the Chancellor of the Exchequer). The Bank was established by a decree issued by the President of the Republic. He then mainly dealt with bank’s lending to long-term local governments and state-owned enterprises. Bank emit securities guaranteed by the Treasury (bonds, municipal bonds, railroad and banking). In 1948, work was suspended by the BGK however in 1989 there was a resumption in its operations. Works in the public finances. Within the Bank, it implemented a number of government programs for socio-economic development. BGK caters to local governments, businesses and individuals. In addition to the tasks of government it conducts commercial activity in the corporate and retail market [Historia…, 2013].

The Bank's activities focus on four areas: government programs, support for public sector entities, through programs of their own and reducing inefficiencies in the functioning of the financial sector, as
presented in Table 1 guarantees are located in the first region that is found in government programs.

**Table 1. Areas of activity in BGK**

| Government Programs | 1. Payments from the EU funds from the accounts of MF in the EU Financial Perspectives: Support of Regional Operational Programmes, making payments and accounting returns of European funds, accounts MF, MF, reporting, MRD, the administrators of the budget. |
| | 2. Development and modernization of the infrastructure: the National Road Fund, the Railway Fund, Inland Waterways Fund, Subsidy Fund, the Fund Thermo-modernization and other funds. |
| | 3. Banking services assets and liabilities of the Treasury: debt service, accounting, statistics and additional actions. |
| | 4. Supporting the implementation of EU programs: current co-operation with managing operational programs, service programs, JEREMIE and JESSICA products tailored to the perspective of 2014–2020, information activities – promotion. |
| | 5. Government export assistance programs: providing funding instruments exporters, buyers for their products and the settlement and support export transactions, co-operation with the Export Credit Insurance Corporation SA, educational and promotional activities. |
| | 6. Guarantee programs and guarantees: guarantees, including the guarantee facility *de minimus* (PLD). |
| | 7. Support other government programs: programs currently being carried out (including the consolidation of public finances) and potential new programs/funds under the economic policies of the State. |
| Services for the public sector | 1. The leading role in the consolidation of public resources (in stages). |
| | 2. Banking Services for the public sector: BGK Treasury as an entity operating in the settlement (building an effective competence center), to create a modern technology platform for further steps to consolidate public finances, participation in the construction of the base to implement the government's strategy for the development of non-cash transactions. |
| | 3. The possible extension of the state budget account maintenance: optimizing the relationship between stakeholders. |
### Activities under own programs

1. Organization of financing infrastructure investment projects, taking into account the priorities of the government (Polish Investment Program) in the form of loans, guarantees and debt securities Public-Private Partnership.

2. Local government, utility companies, health care facilities: financing and transaction banking, complete offer tailored to the needs of local governments and utility companies.

3. Strategic sectors (such as energy and defense): current and comprehensive service sector entities, analysis and development forecasts.

### Reducing inefficiencies in the functioning of the financial sector

1. Proactive response to financial policy, economic and social state.


3. Complementarity of actions (and implemented instruments) with those of other domestic and foreign institutions.

4. The selectivity of action, taking into account your financial situation and the economic and social needs.


### 4. System solutions in selected countries

In virtually every country there operates a government bank. These banks are very important institutions in the financial market. The main goal of all government banks is to support activities contributing to economic growth and development, supporting important sectors of the economy and social policies of the government. At the same time the structure supports areas which are different in every country [Strategia..., 2012]. „The scope and scale of the features varies between countries e.g. housing is strongly supported in France and Germany, less in Spain, and hardly in Italy” [Ibidem]. There are the following types of government banks [Ibidem]:

- development banks with a profile similar to the BGK,
- the export agency, export development banks,
- credit institutions and guarantee in support of SMEs.

Each country has its own, developed specifically for their needs and is a system of state aid. Analyzing this system, only in 10 new EU
member countries (excluding Croatia) it has been observed that in every country, this system consists of state guarantees, which are presented in Table 2. These figures are from 2003 and in the case of the Polish system in 10 years many changes have occurred in this area.

**Table 2. Availability of warranties in 10 "new countries" of the European Union**

<table>
<thead>
<tr>
<th>Country</th>
<th>Warranty system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Cyprus</td>
<td>State guarantees granted to government organizations and national institutions</td>
</tr>
<tr>
<td>2 Estonia</td>
<td>State guarantees (student loans, guarantees, export credit contracts)</td>
</tr>
<tr>
<td>3 Lithuania</td>
<td>Guaranteed loans and loan guarantees for SMEs</td>
</tr>
<tr>
<td>4 Latvia</td>
<td>State guarantees</td>
</tr>
<tr>
<td>5 Malta</td>
<td>State guarantees mainly for the public sector</td>
</tr>
<tr>
<td>6 Poland</td>
<td>State guarantees mainly for state-owned enterprises</td>
</tr>
<tr>
<td>7 Czech Republic</td>
<td>State guarantees and CKA commitments (Czech Consolidation Agency) – classified as debt contracting government and state guarantees not included in government debt</td>
</tr>
<tr>
<td>8 Slovakia</td>
<td>State guarantees</td>
</tr>
<tr>
<td>9 Slovenia</td>
<td>State guarantees – especially for operators in the sector of public financing of infrastructure and export guarantees</td>
</tr>
<tr>
<td>10 Hungary</td>
<td>State guarantees – excluding guarantees for the Hungarian State Railways</td>
</tr>
</tbody>
</table>


Mrs. Kamilla Marchewka-Bartkowiak came to some interesting conclusions in her paper. It turns out that: “In 15 Member States, the dominant form of public assistance in the period between 2001–2003 were subsidies, which accounted for an average of almost 70%. State guarantees were used in the penultimate place with a score of just 2.2%. Definitely we have a different situation in the case of Member States that joined the EU last year after the period of this analysis. For these countries, guarantees were the main instrument in state public
assistance for the manufacturing sector, representing – on average – more than 40%. This was followed only by tax subsidies and grants” [Marchewka-Bartkowiak, 2006].

In addition to this, of the current European Union countries in 2004, most of the aids were sent to companies in the manufacturing sector (59%), 23% to the companies in the agricultural sector, the coal mining sector received 9% of the aid available, 3% was distributed to other services, financial services and transport (except rail) received 2% and fishing and other non-production sectors received only 1% [Marchewka-Bartkowiak, 2006].

5. Analysis of the guarantees offered by the National Economy Bank for businesses

The BGK in the provision of a guarantee, is governed by the Law of the 8th of May 1997. The guarantees granted by the Treasury and some legal persons (Journal of Laws of 2012, Pos. 657, as amended). The BGK is trying to adapt its offer on a regular basis to the changing economic situation. The analysis began with the guarantee of the latest product, which has been operating since March 2013. The product, a guarantee of *de minimis* – is the support of micro, small and medium-sized businesses. Businesses can apply for guarantees to cover a loan intended to finance current operations. In this case, the State assumes the entire risk. The guarantees can apply through commercial banks such as: PKO Bank Polski S.A., BRE Bank S.A., ING Bank Śląski S.A., Bank BPS S.A., SGB-Bank S.A., Bank Ochrony Środowiska S.A., Raiffeisen Bank Polska S.A., Getin Noble Bank S.A., Idea Bank S.A., Toyota Bank Polska S.A. and Bank Zachodni WBK S.A. [Gwarancje de minimis…, 2013].

A state without the consent of the European Commission may grant a warranty (for one entrepreneur) amounting to 200,000 EUR or 100,000 EUR for the road transport sector in the tax year in which he applies for aid and also for the previous two tax years [Informacje…, 2013]. Conditions of the guarantee [Ibidem]:

- is granted for a maximum period of 27 months,
- not to exceed 3.5 million Polish zloty (PLN) and 60% of the working capital loan,
does not include interest and other costs associated with the loan rotary,
is secured by a blank promissory note in businesses,
when granted in 2013, the first year is costless, for the second year a trader must pay a commission of 0.5% of the guaranteed amount.

Due to the fact that it is a relatively young product, the first contracts concluded with banks in February and March 2013, they granted 243 guarantees, amounting to 62 million 76 thousand and 480 PLN (62,076,480 PLN).

Another type of guarantee is a guarantee of the repayment of the loan granted in co-operation with the lending banks under the government program “Promoting entrepreneurship through BGK guarantees.” The entrepreneur may seek to obtain a bank guarantee or revolving loan fund. Proceeds from the loan must be used to finance projects co-financed from EU funds, the infrastructure projects and for the development of the SME sector, including to make them public. Guarantees may be granted up to 80% of the loan in the amount of 100,000 to 10,000,000 PLN. It does not include interest or other expenses related to the loan. The commission fee rate is fixed, but this depends on the class of credit risk. The higher the grade, the higher the rate (from 2.0% to 3.4%). Banks that act as guaranteed are: Alior Bank S.A., Bank BPH S.A., Bank of Food S.A., Bank Handlowy S.A., Bank Millennium S.A., Environmental Protection Bank S.A., Bank Pekao S.A., PKO BP S.A., Postal Bank S.A., Polish Bank BPS S.A. Cooperative Bank in Hawk of the Spring, DZ Bank Poland S.A., Getin Noble Bank, HSBC Bank Poland S.A., ING Bank Slaski S.A., Krakow Cooperative Bank, SGB-Bank S.A. (Commercial Bank Wielkopolski SA and Mazowiecki Bank Regional) [Poręczenia…, 2013a]. Here at the end of 2013 granted only one guarantee for 165 thousand PLN. As part of this program they granted a guarantee.

Another product offered by BGK is a guarantee of the repayment of loans in the portfolio of the Guarantee (PLG) as part of the government program “Promoting entrepreneurship through BGK guarantees.” This product is intended for customers – residents of the SME sector. The guarantee may cover loans in Polish zloty (PLN), which have not yet been launched and will be used to finance the current market. The amount of the guarantee is one of 100,000 PLN to 3.5
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million, up to 60% of the loan amount. Warranty does not include interest or other costs. A borrower can get a guarantee for an amount of up to 3.5 million PLN. With this product the BGK demands business’ insurance in the form of a blank promissory note declaration and the declaration of submission to enforcement [Gwarancje spłaty…, 2013]. The first agreement was concluded with the bank in December of 2012, in February and March they granted 12 guarantees to the amount of 5,242,000 PLN. In addition to the guarantees given is the guarantee for repayment of loans under the line of the credit guarantee portfolio.

Promise guarantees the repayment of the loan under the government program “Promoting entrepreneurship through BGK guarantees” and is another kind of guarantee. A company may apply for an SBA loan guarantee capital and investment. A promise may be issued for up to three months and this applies to the loan guarantees of up to 80% of the loaned amount. The minimum loan amount is 100,000 PLN to 10,000,000 EUR’s. Co-operative banks operating in this area are: Alior Bank S.A., Bank BPH S.A., Bank Gospodarki Żywnościowej S.A., Bank Handlowy w Warszawie S.A., Bank Millennium S.A., Bank Ochrony Środowiska S.A., Bank Pekao S.A., Bank PKO BP S.A., Bank Pocztowy S.A., Bank Polskiej Spółdzielczości S.A., Bank Spółdzielczy w Jastrzębiu Zdroju, DZ Bank Polska S.A., Getin Noble Bank S.A., HSBC Bank Polska S.A., ING Bank Śląski S.A., Krakowski Bank Spółdzielczy, SGB-Bank S.A. [Promesa…, 2013]. By the end of 2012, there was no issued promises. Here, too, in addition to the guarantee, no promise guarantees shall be given.

A very important type of a guarantee is the guarantees performance within the contract under the government’s program “Promoting entrepreneurship through BGK guarantees.” Guarantees issued by the establishments of the BGK. “High performance of the contract is awarded by the BGK in its own name and for its own account in the government’s socio-economic programs and programs for local government and regional development, as referred to in art. Paragraph 34a. 1 of the Act of the 8th of May 1997 on guarantees granted by the Treasury and certain legal persons (Journal of Laws of 2003, No. 174, item. 1689, as amended. D.), Including projects with the use of EU funds or funds of member states of the European Economic Area (Norway, Switzerland and Liechtenstein)” [Gwarancja należytego…, 2013]. This warranty does not exceed a level of 10 million EUR’s, up
to 80% of its contract value. The basic security which requires BGK, is a blank promissory note signed clause “protest.” The warranty period is agreed individually. By the end of 2012 they granted 27 guarantees, to the amount of 13,380,380 PLN.

The final product concerned is a loan guarantee under the program “Support for privatization by providing guarantees to companies with the participation of workers and local government units (companies active citizenship).” This kind of guarantee may apply the company’s employees and the company's active citizenship. The basic security is a promissory note, with the clause “without protest” and may require additional collateral. As part of this program by the end of 2012, there has been no guarantees issued.

Guarantees can secure loans to finance [Poręczenia…, 2013b]:
1) employee leasing a company – the employee to repay the loan to cover its payment obligations to the Treasury, which is the equivalent of the lease payments for the use of the company,
2) other forms of privatization – such as the company active citizenship, to pay off a loan to pay for the shares/shares of the privatized company or a firm,
3) acquisition of the trustee of the bankrupt enterprise or its organized part, put up for sale as part of bankruptcy proceedings – a civic company involving employees of the entity in bankruptcy,
4) strengthening the capital of companies active citizenship – civic companies to repay the loan for the acquisition of the shares of this company in order to offer them to employees in accordance with Act. 362 § 1 point 2 of the Code of Commercial Companies.

6. Conclusions

1. In total, by the end of 2012, the Bank of National Economy under these programs (except for the de minimus guarantee – the support for micro, small and medium enterprises) provided 40 guarantees amounting to 18,787,380 PLN.
2. With the guarantee of de minimus – the support for micro, small and medium enterprises only in March, has been granted 243 guarantees worth 62,076,480 PLN.
3. With the guaranteed repayment of the loan granted in cooperation with the lending banks under the government’s program “Promoting entrepreneurship through BGK guarantees” it granted one guarantee to the amount of 165,000 PLN which accounted for only 0.88% of the value of guarantees issued by the end of 2012.

4. With the guarantee of the repayment of loans in the portfolio, the Guarantee (PLG) as part of the government’s program “Promoting entrepreneurship through BGK guarantees” granted 12 warranties totaling 5,242,000 PLN, which represented 27.9% of the value of guarantees issued by the end of 2012.

5. Due to a promise to repay the loan guarantee under the government program “Promoting entrepreneurship through BGK guarantees” not given any warranty.

6. With the guarantee, the performance of the contract under the government program “Promoting entrepreneurship through BGK guarantees” granted 27 guarantees to the amount of 13,380,380 PLN, which accounted for 71.22% of the value of guarantees issued by the end of 2012.

7. The loan guarantee, under the program of the “Support for privatization by providing guarantees to companies with the participation of workers and local government units (companies active citizenship)” there have been no guarantees issued.

8. Until now, the BGK, in this regard, safeguards were not a leading product. A much more important product because of the number and value were sureties. Perhaps this was due to the difference in the price of both products for the benefit of guarantees. However, this trend may reverse spectacularly in guarantees of de minimus.

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CHAPTER 15

Common banking supervision within the financial safety net

Beata Domańska-Szaruga*

Abstract

This paper presents the idea and the concept of a common European banking supervision, which is an essential component of the financial safety net. This issue takes on particular significance during the period of currently on-going discussions regarding the target shape of European banking supervision and the project of banking union against the background of considerations on financial stability in the European System of Financial Supervision and the concept of a homogeneous supervisory mechanism as a pillar of the banking union were characterized. An important element of the discussion is to signal some of the problems and doubts related to the shape of the banking union and its practical implementation.

Keywords: financial safety, financial stability, European banking supervision, banking union

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1. **Introduction**

In view of the progressing globalization and the gradual emergence of an increasingly integrated financial services market in Europe, the issue of financial stability and the rules of co-operation among individual entities under the financial sector security network becomes particularly important. The existing financial safety net structure is inadequate when many financial institutions are the supranational institutions, operating in many countries. In addition to this, the financial crisis experiences, prove that the mitigation of the crisis phenomena effects, indicates a need to make changes in the existing structure of the security network. This issue refers especially to the banking sector that plays a significant role in the financial intermediation system and is particularly exposed to systemic risk. This risk means the possibility for occurrence of a serious disturbance in the financial intermediation system as a result of mutual interactions between various components of the financial market. For that reason, this paper will focus in particular on the security and stability of the banking system as an important link of the financial system and the European Union member states. Its main goal is first of all to explain the idea and the concept of the common European supervision over the activities of financial institutions. The financial safety net and the current structure of the European banking supervision have been characterized here. These considerations will be concluded with a presentation of the idea and concept of the banking union as the target model of the common supervision over the European banks.

2. **Financial stability and the financial safety net**

The financial stability is essential to achieve long term economic growth. It means a situation when the financial system is able to handle with shocks and cope with market instabilities, thereby reducing the likelihood of any disruptions to the financial intermediation process [Financial..., 2005, p. 6].

It is worth noting that a definition of the systems stability is defined by negation, i.e. by identification of a situation when financial...
instability is non-existent and not in the form of a directly defined situation that characterizes financial stability [Zygiere\-wicz, 2007, p. 12]. In this perspective, financial stability is often defined as the absence of a threat in the occurrence of a financial crisis, understood as the emergence of strong interference in the financial intermediation system, thus causing problems in the real economy. Financial crisis may be a consequence of a collapse in confidence of the stability of the entire economic financial system or its individual components. One may speak about a threat to the stability of the financial system when the size of losses, which financial institutions in a given country, may suffer as a result of an unexpected worsening in their financial management, begins to be relatively large compared to the capital that they hold and which is associated with the risk of insolvency [Bancerek\-wicz, 2005, p. 26; Report on stability…, 2004, p. 7].

The financial crisis is the most serious and the most severe economic consequence of financial instability, but on the other hand, financial instability creates an environment that is conducive to the crisis [Alle and Gale, 2001, p. 51]. So, what we are facing here is bilateral impact. It should be noted that the unstable financial system does not always have to lead to a crisis, however undoubtedly that a financial systems instability significantly increases the risk of the crisis, exacerbates its negative effects in the financial sector and the real economy, and raises the cost to get out of the crisis [Kiedrowska and Marsza\-lek, 2002, p. 20].

The banking systems security has a direct impact on the security of the economy and its financial stability. This has been proved by the experiences of the recent global financial crisis that shook the global banking system and significantly affected the perception of the bank as a safe institution [Kole\-'n\-k, 2011, p. 10, 109, 112]. Therefore a need has occurred to reconstruct the financial safety network and establish new international standards for banking supervision.

The financial safety net stands for the functionally and institutionally interrelated solutions whose mutual relations cause an increase in safety and effectiveness, while maintaining competitiveness among banks both domestically and internationally [Kole\-'n\-k, 2011, p. 10, 109, 112]. These solutions are designed to guard the system against destabilization and disasters caused inter alia by a financial crises and systemic risk [Jurkowska-Zejdler, 2008, p. 14], to build confidence in
the financial system and protect the customers of financial institutions from the consequences of insolvency of the latter. Protection against the effects of the financial crisis and reduction of its impact is of key significance to the single European market, particularly susceptible to disruptions in financial markets due to the numerous links and financial relationships of large European capital groups and the eurozone operation.

Ensuring financial stability is a multidimensional task, forcing many institutions from individual segments of the financial market to get involved. In narrow terms the safety net is limited, however, to the safety of the banking system [Capiga, Gradoń and Szustak, 2010, p. 20]. With such an approach, in most countries the financial safety net of the banking market consists of: the central bank, financial supervisory institution, and the deposits guarantee system. The safety net also includes the government as a regulator and trustee of public funds [Stelmach, 2013, pp. 25–26]. At European Union level, the financial safety net currently consists of primarily the European Central Bank, the Basel Committee on Banking Supervision, national deposits guarantee systems and the financial supervisory system at national level and that of the European Union.

In the context of this paper, special attention shall be paid to the financial supervisory system as an important part of the financial safety net. This topic takes on additional significance while discussing the final shape of European banking supervision in the form of the banking union project.

3. The current shape of European banking supervision

Already in the middle of the first decade of the twenty-first century, the idea occurred that mere co-operation between individual national safety net bodies is insufficient. It was noticed in particular that there was no institution that would monitor the systemic risk of the European and global banking sector and whose task would be to warn of the increasing systemic risk [Koleśnik, 2011, p. 10, 109, 112; Schuller, 2007, pp. 214–215]. Such an institution should be able to obtain information from various national regulators supervising the banking market.
The emergence of the European financial supervisory system which commenced in 2001 at the time when the European Council introduced the so-called Lamfalussy Procedure. This procedure was originally intended to increase the flexibility of EU legislation in the field of securities markets in the context of technological changes and innovation occurring in the financial markets. According to the procedure, the legislative process in the EU was based on four levels under which relevant technical and advisory committees were acting being in charge of supervisory issues [Kasprzak, 2013, p. 131]. In 2003, the procedure was extended to the banking services market by issuing a decision on the appointment of the Committee of the European Banking Supervisors (CEBS). The main task of the CEBS was acting as an advisory body to the European Commission in particular with regards to the uniform application of the community directives and convergence of supervisory activities in the European Union member states. This Committee has never had the permission to exercise a direct supervisory function on its own.

The global financial crisis, which started in 2007, however highlighted the weaknesses of the then existing supervisory architecture, including the CEBS formula. First of all, some problems with the coordination of supervisory activities occurred in relation to banks operating across borders. It turned out that there was insufficient cooperation and information flow between national supervisory authorities and that the regulatory and supervisory requirements at national level vary across individual EU member states.

The CEBS activities ended in early 2011. At that time, six legal acts establishing the new European System of Financial Supervision (ESFS) across the EU came into force and which is composed of two supervisory pillars: macro-prudential and micro-prudential. The European Systemic Risk Board (ESRB) was established as part of the macro-prudential supervision and the micro-prudential supervision is managed by the European Supervisory Authorities (ESA). The ESA consist of the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA), and the European Insurance and Occupational Pensions Authority (EIOPA). The European System of Financial Supervision also includes the Joint Committee of European Supervisory Authorities (Joint Committee) and the competent supervisory authorities of the Member States (see Figure 1).
The purpose of this system is to ensure the proper implementation of the provisions relating to the financial sector, so as to preserve financial stability and ensure confidence in the financial system as a whole and provide sufficient protection for consumers of financial services.

Figure 1. The European System of Financial Supervision


3.1. The European Systemic Risk Board (ESRB)

The main task of the European Systemic Risk Board (ESRB), which operates from the European Central Bank, is the effective monitoring of systemic risks. The ESRB tasks are also to contribute to the smooth operation of the internal market and thereby ensure a sustainable contribution of the financial sector to the economic growth. The European Systemic Risk Board consists of: the General Board, the Steering Committee, the Secretariat, the Scientific Advisory Committee and the Technical Advisory Committee. One of the main tasks of the ESRB is to issue warnings about the identified systemic risks and recommendations regarding actions to be taken by the Member States competent
Common banking supervision within the financial safety net

authorities to which the ESRB recommendations are addressed to. The ESRB should issue warnings – and if necessary – the recommendations of a general or specific character which, in principle should be addressed to the entire Union. However, their recipient should be at least one Member State, at least one European Supervisory Authority, or at least one national supervisory authority.

3.2. The European Supervisory Authorities (ESA)

The establishment of three European Supervisory Authorities (ESA), in place of the European supervisors committees operating previously, was one of the key components of the financial supervision reforms in the EU. Each of the European Supervisory Authorities consists of: the Board of Supervisors, Management Board, the Chairperson, Executive Director and Board of Appeal – joint for all three ESAs. The most important decisions within each ESA are taken by the Board of Supervisors whose members are mainly representatives of all relevant national supervisory authorities, each with voting rights.

The main task of the Committees operating before the end of 2010 was the convergence of the supervisory practices by issuing non-binding guidelines and recommendations and to advise the European Commission on the development of its legal acts. The European Supervisory Authorities, established to replace the Committees, have a much wider range of powers and competencies than the previously functioning Committees. The tasks of the ESAs include [The European..., 2013]:

- to contribute to the establishment of common standards as well as regulatory and supervisory practices of high quality, in particular by providing opinions to the EU institutions and by developing guidelines, recommendations, and regulatory and executive drafts of regulatory and implementing technical standards,
- to contribute to a consistent application of legally binding EU acts, in particular by building a common supervisory culture, by ensuring consistent, effective and efficient application of the relevant EU legislation, by preventing regulatory arbitrage, mediating and settling disputes between competent authorities, by ensuring effective and coherent supervision over the financial
institutions, by ensuring coherent activities performed by the appeals committees of the supervisory bodies and by taking actions e.g. in emergency situations,
– to support and facilitate the secondment of tasks and responsibilities between competent authorities,
– to closely co-operate with the ESRB, in particular by providing all of the information necessary to perform its tasks and by ensuring that proper follow-up activities are taken in response to its warnings and recommendations,
– to organize and conduct peer review analyses of competent authorities, including to issue guidelines and recommendations as well as to identify best practices to improve consistency in supervisory results,
– to monitor and evaluate fluctuations in the markets which are under the competencies of the authorities,
– to conduct economic analyses of markets to inform about the discharge of the authority,
– to strengthen the protection of depositors and investors (in case of EBA), the insured entities, members of occupational pension schemes and beneficiaries (in case of EIOPA), investors (in case of ESMA),
– to contribute to the consistent and coherent operation of the appeals committees of the supervisory bodies, monitoring, evaluation and measurement of systemic risk, development and co-ordination of recovery and resolution plans, ensuring a high level of protection to the above-mentioned persons across the EU and – in case of EBA and ESMA – to develop methods to conduct the restructuring proceeding of the failing financial institutions/financial market participants, as well as to assess the demand for appropriate financing instruments, in accordance with Act. 21–26 of the Regulations.

The ESA does not exercise direct supervision over financial institutions, but in certain situations they have the ability to issue decisions binding for national supervisory authorities. They are entitled to produce and develop binding drafts of the regulatory and implementing technical standards that are approved by the European Commission. The structure of the European System of Financial Supervision contains only certain transnational components. No European state has so
far transferred all of its supervisory powers over the financial institutions onto the European supervisory authorities. Legislative changes in the unified supervision over financial institutions are still in progress, as the increasing problems of the euro zone led to greater interest in the control of the banking market in Europe. These changes lead towards the establishment of the so-called banking union.

4. Banking Union Concept

The concept to establish an integrated financial framework (the so-called banking union) was presented by the European Commission’s Chairperson José Manuel Barroso at the informal meeting of the European Council on the 23rd of May 2012. The European Council summit meeting held on the 28th–29th of June 2012, Herman Van Rompuy, in collaboration with the Commission, the Euro-group and the President of the European Central Bank, presented the report entitled “Towards A Genuine Economic and Monetary Union” [Towards…, 2012] that defined four pillars of the future of Economic and Monetary Union (EMU): an integrated financial framework, an integrated budgetary framework, an integrated economic policy framework, and ensuring the necessary democratic legitimacy and accountability. The notion of the integrated financial framework actually means the banking union.

On September the 12th 2012, the European Commission presented an action plan for the banking union and two draft regulations. They referred to a single supervisory mechanism for banks in the euro zone with key powers of the European Central Bank. The Commission called on the Council and the European Parliament to adopt them by the end of 2012, together with the previously proposed drafts on pru-

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dential banking standards, deposit guarantees and the restructuring and orderly liquidation of banks. In November 2012, the Commission presented in its statement the “Blueprint for a deep and genuine economic and monetary union. Launching a European Debate” that includes short-, medium- and long-term action planning aiming at “inter alia” the establishment of the banking union. At the European Council’s meeting held in March 2013 and in June 2013, a summary was made of the works to deepen economic and monetary union and it was found that the priority was to complete the legislative process targeting a single supervisory mechanism. A decision was made to finalize the completion of the banking union, as that was essential to ensure financial stability (it was agreed at the summit meeting in Brussels held in December 2012 that the new supervision will commence from March the 1st 2014).

The concept of a banking union is about creating a new dimension to the financial safety net and the uniform principles of restructuring, liquidation and resolution of banks in a pan-European dimension. The banking union is to cover all of the EU Member States and to consist of the following pillars [Waliszewski, 2013, p. 34]:

- Single Supervision Mechanism (SSM),
- Deposit Guarantee Scheme (DGS),
- Banking Recovery and Resolution Plan (BRRP, resolution).

Also the CRD IV Directive and CRR Regulation, which are to implement the Basel III [Basel III..., 2010] recommendations into the European legal order over the period of 2013–2019, are part of the efforts taken to increase financial security.

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The concept of a European banking supervision, called the Single Supervisory Mechanism (SSM), is complex and at the same time the most advanced project from the point of view of its life enforcement. This means a transfer of supervision from national to European level and the strengthening of banking supervision over the European credit institutions. The supervisory authorizations however, will not be linked with the responsibility for actions being taken as this responsibility will still rest with the national safety net [Zaleska, 2013, pp. 17–27].

The following will be involved in the single supervisory mechanism:

– the ECB as the supervisory authority, subject to the separation of the ECB’s monetary and supervisory functions,
– Member States of the euro zone,
– other Member States, if they join the SSM on the basis of a “close co-operation” mechanism.

The co-operation between the supervisory authorities of the Member States which have joined the SSM and those remaining outside the SSM, will be co-ordinated by the EBA.

The European supervision will be exercised over the relevant credit institutions in the euro zone, i.e. such that [Zaleska, 2013, pp. 17–27]:

– have assets in excess of 30 billion EUR, or
– have assets in excess of 20% of the GDP of the home country and they are higher than 5 billion EUR, or
– shall be deemed relevant by the European Central Bank at the request of the national supervisory authority and
– credit institutions that have received assistance funding from the European Financial Stability Facility (EFSF) or the European Stability Mechanism (ESM).

The idea of a banking union raises hope for solving many problems, as well as objections and comments. In general, it seems logical and coherent. The main argument in favour of the banking union project is the multiplicity of cross-border links between financial institutions in the EU. With a high-level of confidence, one may say that the scale of these bonds will not decline in the coming years. By harmonizing regulatory and supervisory standards and by establishing the single European banking supervision, the integrated management of banks in a crisis situation would be enabled and conditions would be created to ensure that the cost of rescuing big banks could be paid by
the entire euro zone, while protecting the interests of depositors through making a common system for protection of deposits. It would also provide the possibility for restructuring and an orderly liquidation of banks. The proposed concept of the union would also allow the Member States being outside the euro zone to enter the banking union if they wished to do so and if they were ready to adapt to the proposed requirements, thus enabling the financial sector to increase the range of its stability.

There are also a lot of doubts, questions and critical comments related to the banking union. Here are some of them [Zaleska, 2013, pp. 17–27; Szpringer, 2013]:

1. The analysis of the European banking supervision organizational diagram shows that its structure will be quite extensive. Besides, the establishment of European banking supervision under the ECB does not however mean liquidation of the macro-prudential and micro-prudential supervision structures established in 2011. Therefore, a supervised institution may be subject to (directly or indirectly) supervision of a number of institutions, including the supervision of the home and host country. Therefore, the establishment of the next decision-making center raises a need to define terms of reference and mutual dependencies and relationships of the new supervisory bodies not only with the existing authorities but also with the European Commission, national supervisory authorities, and national governments.

2. The operating costs of the single supervisory mechanism are to be paid by the supervised entities, depending on the importance of a given entity and the profile of risk undertaken. The rules for calculating those fees have for the time being been specified in general, however, it seems that they will not be marginal. There are some arising concerns that some of the fees will be shifted onto the customers of the supervised institutions.

3. The banking union project refers only to the European banking market, while other segments of the financial market are not being reformed to a similar extent. So, one may risk in saying that the banking union will not save the financial world from the next crisis, despite the fact that it aims to increase safety. It may, however, to a higher extent, reduce the risk of crisis, the source
of which lies in the risky operations of banks and it can mitigate the impact of the financial market fluctuations in the European banking sector.

The banking union project also creates some questions about moral hazards, regulatory chaos, the consequences for the commercial banking sector of the countries outside the euro zone, the marginalization of national supervision and many more. Due to the many questions raised and not so obvious answers, today it is impossible to determine precisely the impact of the banking union on European banking and in particular on the banking sectors of individual countries. However, it does give hope for building the architecture of new financial governance and for increasing financial safety.

5. Conclusion

In summary of the deliberations about the common European banking supervision, it should be emphasized that organizing an effective safety net system is not a simple task. The shape of the safety net constantly evolves. This is mostly due to conditions constantly changing in the financial market, as well as because of the emerging risks of crisis and the need to prevent destabilization of the systems. The idea of the banking union is to increase the safety of the European banking system, but is it capable of dismissing a threat of future crises in Europe in the form it is currently proposed? Besides, the banking union in its final shape should not only create financial stability but also provide foundations for the dynamic and competitive activities of the banking sector, while ensuring an equally competitive edge and conditions for growing confidence in the banking sector.

The appointment of these supervisory structures alone means a transfer of supervisory competencies to EU level, while leaving the responsibility at the national supervision level. This raises another question about the effectiveness of the supervisory regulations: will the regulations issued by the regulator at European level be effective as that of the local level and how will the same set of rules perform in the banking systems of different countries?

There are so many questions related to the shape of the banking union and its practical enforcement that today it is difficult to assess how
it will affect the stability and safety of the European financial sector. A view should also be shared that legal regulations do not automatically guarantee the stability and safety of banks [Flejterski, 2013, p. 169], as effective bank management, the responsibility for money entrusted by clients and simple honesty is of great importance.

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Abstract

This article reflects the current situation we have in the economy today namely the financial crisis. The main effort of the analysis undertaken by the author is to answer the question if there is a real possibility to establish mechanisms to manage this particular crisis in the global economy. Based on the facts and analyzed data the author gives his indications and rules to get on the right track and to come out of the crawling collapse of fiat paper money currencies around the world of the Economic Armageddon. The problem is very complex because the roots of the crisis are not in economics but in politics. The policies of the governments and central banks especially the FED and the ECB were not effective and caused the majority of wealth of the world being cornered in the hands of 50 transnational financial organizations (50% of them are US origi-
nated) which influenced global economic development. Super Economies and Great Powers arose trying, at the beginning to cooperate with each other like Chimerica which now have conflicts of interests. As a result public debt to GDP ratio, poverty and unemployment increased significantly. Different approaches are presented from Keynesian to the Fisherian school of economics. Austerity policies of the governments and debt to GDP measures are a focus. A lack of structural reforms makes an austerity plan working in the opposite direction leading to frustration and massive protests from the citizens side as well. If there is no trust in the government, no mechanism can be established to manage the crisis. In conclusion, we need to have economic Armageddon to understand the meaning of the rules and indications which help us to get out of the crisis. Following the case in Iceland, it is probably too late now for the EU and US in the opinion of the author. The fact that the US and EU did not follow that way may imply other agendas or the solutions are on the way.

**Keywords:** crisis, austerity, economics, globalization, management, government’s policy

### 1. Introduction

“When written in Chinese the word *crisis* is composed of two characters – one represents danger and the other represents opportunity.”

John F. Kennedy, address, 12th of April 1959

John. F. Kennedy, the former President of the USA spotted an interesting dualism in the crisis, which can be seen as a danger and opportunity at the same time. Nowadays during crisis time some of countries like China tried to take advantage of the economic stagnation of the EU economy by purchasing assets such as land, T-bonds, countries debts even though some economist like Mr. Tyler Cowen looked at the future development of China with concern, arguing that China may misdirect its investment leading to underinvestment in public goods needed to secure future growth [Cowen, 2013]. At the same time,
China fights with growing internal consumption which leads to increase of import, growing inflation, distortion in financial systems and demographic problems related to the “family of one-kid” policy. That is a danger to China as the first part of dualism in an attempt to manage its economy. The managing mechanism of the economy does not create itself and is not perpetual. It is designed, run and stimulated by the government or relevant decision makers. The situations which we are experiencing today such as tax on personal savings in the banks of Cyprus, increasing VAT on a coffee latte in Poland, rising public debt by 16 billion PLN are the examples of restricted fiscal and expanding monetary policies of the governments. The IMF exhibited in one of its working papers (WP/10/245) Public Debt as a percentage of GDP in the period of 1885–2010. There is one fact which can be observed while analyzing that paper. This ratio has increased significantly since 1885 exceeding 100% of GDP. The accumulation of public debt was started when the Bretton-Woods system of exchange rates ended in the mid 1970s and it was aligned with oil shocks [Ali Abbas, Belhocine, ElGanainy et al., p. 11].

Fiscal and monetary policies are used by the governments to heat up or cool down the economy. Each mechanism can fail so does the economy if it is overheated or cooled for too long. As each country may have its own mechanism and we live in a world of more than 200 of them, there is the question of the possibility to establish such a mechanism for the global economy to manage and control crisis.

2. Theories of global economy

We all live in a global world facing similar challenges regarding communication, unemployment, social system and education etc, but it still does not keep the global economy in place. To make it simple, the global economy can be treated as the one organism where the dysfunction of the economy in one country can influence the entire world’s economy. Some economies like in the US can have a significant impact but it cannot disrupt the whole world. From that perspective the global economy is a concept or the goal to which the world is heading up. In economics, several theories regarding economy cycles exist. A lot of economists today try to explain the source of the global
crisis and how to overcome this big problem which affects several billion people worldwide. Dr. Ravi Batra tried to explain in more depth, all irregular cycles in the period of 1920–1986 but he came up with the conclusion that neither a Jugular cycle or Kuzents-type intermediate cycle explained enough of the source of a global economic crisis [Batra, Ravi, 1987, p. 13–20]. As of now it is possible to indicate three main theories which try to explain the aspects of the downturns in the global economy. The first one is the Keynesian theory which explains normal disturbances in the global economy by the insufficiency of aggregated demand or total spending. The next one comes from Milton Friedman who also agrees with former but this economic slump can be cured by increased money stock (quantitative easing). The third theory comes from Irving Fisher who explained the main contractions in the economy by a bad debt excessive build-up and its relation to GDP growth. While studying the reports of Econintersect\(^1\) The Bureau of Economic Analysis of FED in the USA, it can be found that public debt was 140% of GDP while it exceeded 360% in 2010. According to Irving Fisher the main symptoms of excessive indebtedness are: weaknesses in aggregate demand, increasing unemployment rates, slow money growth, decrease of confidence in financial institutions such as banks (vide Cyprus case in March 2013) or even a decrease in birth rates (Poland currently has this situation now).

It seems that the Fisherian theory is closer to reality as we are experiencing this in the economy today. That is a reason why some of the contemporary economists try to re-think the Fisherian theory not only to explain crisis but also find a way for recovery. We have rather political alliances, unions or treaties such as the European Union and BRICS etc. Which may have different goals and it can be contradicted to each other. Paul Krugman in one of his interviews said that he was afraid of the euro zone the most as Europe was on the edge with its policy of printing money and fighting with the bankruptcy of Greece, Portugal and other European countries in the queue.\(^2\) Less fear is on the US side in comparison with the euro zone as the US government’s saving is offset by the private sectors saving. It can be seen in reports of FRED (Economic Research of Federal Reserve Bank of St. Louis research.stlouisfed.org) that Gross Government savings approached

\(^{1}\) www.econintersect.com.
a Bill of $ (−800). The surplus in the private sector saving is due to the collapse of the housing bubble and the surge of public debt which is caused mainly by the automatic stabilizers in the economy. According to the theory of economics, the *crowding-out effect* leads to increased interest rates, but actually in the US economy the rates were decreased by the FED. It seems that fiscal and monetary policies have failed as governments’ financial transactions are not the guaranteed way to the prosperity especially if politics is involved (to be realistic: there is no way today to avoid politics from the economy). Three most popular and fundamental macroeconomics theories were mentioned but the question regarding the management system in the global economy is still open.

Today economists talk about *austerity* which means the reduction of public debt by a government policies (reduction of public spending and/or tax increase) to demonstrate a government’s ability to pay all of the payables and dues and to bring fiscal income close to expenditures [Traynor and Katie, 2010]. This is important to get a better position in ratings conducted by the credit agencies. In practice it means cuts in social transfers, especially pensions and forcing people to retire later. The Polish government prolonged the retirement age to 67 which in fact it means that the majority of people may not reach this age due to health problems and the health care system which requires a deep reform. In fact, recently the Polish ZUS (National Social Fund) announced that financial deficit may exceed 80 billion PLN in four years if GDP growth will not reach 4% p.a. (less probably to reach that level). It will not reach even the projected 2.4% growth as the Polish Prime Minister Donald Tusk has announced that the Polish public debt was bigger by 24 billion PLN in which, 8 billion PLN is to be reduced by savings and cuts in the public sector and 16 billion PLN will enlarge the Polish public debt. Increasing public debt and at the same time cutting budgets of local governments in Poland are a contradiction to economic growth. The local governments in Poland have problems today with allocating and using EU funds as they do not have the required financial means. It is not only one barrier in Poland for economic growth. The insurance premium paid by companies in Poland to ZUS is one of the biggest barriers to develop the business and the

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3 www.wykop.pl.
root of unemployment rate increases. The austerity results in other countries in Europe also have negative effects and were the causes of massive protests and riots in France, Belgium, Germany, Greece, Portugal and other countries. There are several viewpoints from economic theory on austerity itself. John Keynes pointed out that when the economy is at the boom stage, this is the time for austerity, otherwise we may have a consequence of a \emph{paradox of thrift} [Nash and Gramm, 1969, pp. 395–400]. Contemporary Keynesians disagree with that while other economists like Kenneth S. Rogoff and Carmen M. Reinhart believe that austerity does not work without structural reforms [Reinhart and Rogoff, 2010, pp. 573–578]. That is true in Poland’s case where deep structural reforms regarding social and health care systems (ZUS and NFZ) have not been made since the 1990s.

\section{Global crisis who stands behind it?}

Referring to the economic cycle theory each period of economic development is different and it has its “ups and downs.” The fact is that innovation and rapid technology development has changed the concept of the “Economic Man” who is defined as a rational decision maker who tries to achieve as much as possible with little effort to Information Society Member who can gain a new dimension of life by implementing and using information technology in his or her daily life [Isachsen, Hamilton \emph{et al.}, 1992, pp. 39–41]. Technology is a very powerful tool in the global economy which allows governments or companies not only to generate reports at any time and send them to anyone anywhere but also influence the trends in the economy. Nowadays there are two main Great Powers in the economy which use technology as the powerful tool to sustain a dominant position: the USA and China.

The relationship between them is known as a neologism called Chimerica which was invented by Nial Ferguson and Moritz Schularick [Ferguson, 2010]. The main idea was to place the whole US production in China and then give China the right to sell produced goods in the US market. According to Ferguson and Schularick overspending by Americans and saving by the Chinese led the world to the financial crisis of 2008–2009. Chimerica generated huge currency
reserves on the China side which were used to buy US and EU treasury bonds. From the other side regarding Great Powers there are the EU, Russia, India and Japan which also plays an important role in the global economy. Professor Witold Orłowski classified them as regional power (Russia, Japan, India), Super Great Power (USA), Great Power (China), World Power (EU 27) [Orłowski, 2009, p. 525]. EU power is rather political rather than economy driven and the idea of the European Monetary Union (EMU) called the euro zone makes more problems to the citizens than it brings advantages (e.g. Slovenia, Slovakia). There is also an economic slowdown in Russia which builds its economy on fossils. According to Renaissance Capital’s report, Russia is heading into crisis in 2013 as its GDP growth slows down to 3.4% p.a.\(^4\)

All these Great Power countries have their financial institutions which manage the fiscal and monetary mechanism and influence the global economy. In the USA is the FED and in the EU are the ECB and the Bank of England. According to the recent report of the Policy Department Economic and Scientific Policies European Parliament activities of the FED and ECB were not effective at all in fighting with the crisis in the period of the first stage of 2007–2009 and the second stage of the crisis of 2010–2012. The ECB didn’t even want to take a risk so as a consequence of its long term refinancing operations (LTRO) with the aim to sustain broken interbank market balance sheet of the ECB had doubled [Gros, Alcidi et al., 2012, pp. 7–18]. The ratio of total assets to liabilities of the FED, ECB and BoE for the period of 2009-2012 is shown by authors Cinzia Alcidi and Daniel Gros in one of the reports of the European Parliament with the title of ”Central Banks in times of crisis. The FED versus the ECB. They concluded that this ratio for BoE exceeded 350,000 mln GBP, while the FED and ECB were around 300,000 mln GBP in 2012.

During the crisis the FED, BoE and ECB invented new mechanisms to control the crisis. The ECB cut the interest rate close to zero and introduced unconventional policy measures, the BoE swapped high-quality illiquid assets from banks in return for Treasuries. The Federal Reserve (FED) broadened the set of counterparts for liquidity operations but also opened a series of swap facilities to allow other

central banks to provide banks locally with dollars as the USD is widely used in inter-bank transactions outside the US. These mechanisms did not help the economy. In 2008 Lehman Brother collapsed and it made people afraid of further banking sector instability. In the second stage of the crisis in Europe (2010–2012) the ECB has invented another mechanism called the Securities Markets Program (SMP) to calm down the difficult situation with Greece’ insolvency. The SMP idea was to buy out the securities from the ECB from the governments of these countries which had financial problems leading to insolvency or bankruptcy. Even with this mechanism called ‘credit easing’ used by the ECB it was not efficient comparing to similar activities (quantitative easing) of the BoE and FED. Cinzia Alcidi and Daniel Gros also showed that the FED had the highest ratio of purchasing securities as of % of GDP in 2012. In the case of the FED it was over 20% while the BoE was 16% and the ECB was less than 5%. This mechanism introduced by the ECB made it less transparent with comparison to other central banks in the world and did not solve the problems of mass market customers facing inflation and unemployment rising in their countries. The ECB lent a huge amount of money to weak banks with no access to market funding while the FED has lent little to banks trying to cut interest rates to almost zero. Two different mechanisms were introduced but none of them seemed to work well enough. The biggest difference was the central bank propensity to risk (much higher in the FED’s case than in the ECB).

Former economists of the International Monetary Fund Simon Johnson and James Kwak in their bestseller *13 Bankers* agreed that the main source of today's crisis in the USA and the EU is based on political decisions related to the accumulation of bad mortgages and speculation on capital markets especially using derivatives as main instruments called *synthetic papers* [Johnson and Kwak, 2011]. The report prepared by JPMorgan Chase gives relevant figures related to the value of the derivative market which yearly pumps into the US market make up approx. 20% of GDP and brought massive losses due to the high risk. The biggest financial institutions in the US such as JPMorgan, Citigroup, the Bank of America and Goldman and Sachs had almost 223 bln USD in derivatives in 2012 [Levin and McCain, 2013]. According to many economists there is no global economy but rather a decentralized competitive market which can’t be ruled. The
world’s economy in theory may be global of course, if all economies such as US-EU-BRIC-Japan will create one market empire (less probable to happen). The recent report by Swiss experts on complex network analysis, with the use of the bow-tie statistical model and the Lorentz-like curve showed that an economy’s wheel is in the hands of the rather small number (50 companies) of transnational financial institutions which have 40% of the total wealth in their hands through direct and indirect control of other companies [Vitali, Glattfelder, et al., 2011]. It is proved that when a financial network is very densely connected it is exposed to systematic risk as well [Battiston, Delli Gatti, Gallegati et al., 2009]. We have also situations where government representatives are connected to big companies and business and politics mix ups. The list of 50 transnational companies is presented in the report where 50% of them originate from the USA.

All of that shows that the main root of the crisis is political decisions made up by global decision makers. They are navigated with their own agenda and want more of everything like power, authority and money. History always shows the guilty parties and judges them so there is no need now to point out the biggest sinners. More importantly is to implement a mechanism to control and overcome the financial crisis which we are in now. There are big names in politics, business and religion which may influence and stimulate the global economy in the right direction. The main issue is that the right direction doesn’t have to be in line with the interests of global decision makers who govern transnational financial institutions.

4. Financial crisis outcome – searching for the right direction

Here comes the question of how can we get out of the crisis? Jens Weidmann The Chief of the Germany Central Bank said that the crisis would continue for the next 10 years. The main issue is to solve a public debt problem where in the EU it is 90% of GDP. In Poland it depends on how you calculate it, as when it is 55% it reaches 60% it means that Poland, the “green island” will be under the water (much

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more probable to happen in 2014 due to the current 24 bln PLN budget gap). The governments try to increase taxes to cover the debt but it slowdowns the economy and makes consumers refrain from spending and moving to other countries where taxes are lower (a famous case is of the actor Gerard Depardieu who protested at having to pay 75% income tax in France and was offered tax residency in Russia from President Vladimir Putin). Why do governments raise taxes when the effect of the Laffer curve is well known in economics? Tax is quite a powerful tool for the government in economic management but it seems that the basic and fundamental rules of the fiscal policy in economics are not really treated seriously by the politicians and decision makers. One of the fundamentals: when a government spends more than it collects and consumption decreases and GDP also decreases \((C + I + G + (Ex - Im)) = GDP(Y)\) then point E will move to the left (Fig. 1). When we have a sluggish economy or crisis the fiscal policy should stimulate spending and taxes should be lowered.\(^6\)

Another idea is to cut interest rates to force consumers to spend more but there are no jobs created by the government at the same time (the unemployment rate has exceeded 14% in Poland, the EU has an average of 10%). The Consumers propensity to spend is lower as they are more afraid of the unstable situation so they chose to save than to spend and as a consequence businesses don’t invest and further layoffs of workers and tax inflow to the government’s budget in that way decreases further. Also multiplier will boost the effect of the increase or decrease of taxes. As of now it seems that the financial crisis is a “vicious circle” where all negative effects are built-up. It needs to be noted that the size of the national debt or budget deficit itself doesn’t imply that the economy is in bad shape. These need to be analyzed together with GDP growth, unemployment rates, productivity and industrial development. All of these items are issues of policy and politics rather than pure economics. If so, does it mean that the global economy is pending much on politics or something else?

The answer to that question seems obvious that today’s economy is politics driven not an economy driven and more and more wealth is concentrated in a small number of transnational companies’ hands. Considering that it can be difficult to establish a mechanism of global

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economic control because it will contradict the current status. There are many speculations regarding the New World Order, secret Bilderberg Club meetings influence the global economy which are out of the analysis in this article because it was never proved to be true. A good example of how the crisis was overcome is Iceland’s case, is where the Swedish Model was applied immediately. According to Economic Minister Mr. Sigfusson, the first important thing was the security of the society. Then the lower and middle income classes must be protected from austerity measures. Their purchasing power must be maintained so that their consumption can contribute to the revitalization of the economy. Internationally that case is often overlooked. The fact that the US and the EU did not follow suit may imply a different agenda, in the opinion of the Author.

![Figure 1. Economy Equilibrium level (E) and Fiscal Policy Prescriptions](http://www.infoplease.com/cig/economics/government-unique-situation.html)

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From the economics and rationality perspective there are some rules and indications which could be implemented to get out of this deadly trap. There has to be trust between the government and society otherwise nothing will work (security of the society should be a priority)

7 [http://tyillc.blogspot.com](http://tyillc.blogspot.com).
Economy and business transactions

...for any government as in Iceland’s case). The first rule should be applied to spending “Spend only what you have in your hand.” That means no credit cards, cash advances or loans from the International Monetary Fund etc. It may sound like getting back to the 17th century but it is like a medicine pill, you need to take it to get well. Another rule applies to business: “No politics in business and do not do the business of politics.” That sounds like separating melted ice from whiskey today, very difficult. The third rule is for any government is “Do not harm society by your decisions, build trust and security.” That requires from the heads of governments to act pro-socially and to avoid greediness. It is like “Stop playing the lottery on derivatives.” Another rule applies to the society “Trust and respect your government.” Is it possible to create a global mechanism which could be based on these rules? We do not live in a perfect world and it will be kind of utopia to believe that it will happen. In fact we need to have an Economic Armageddon to understand that nothing will work without trust and security.

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CHAPTER 17

Business Process Management
as a way to achieve national economic security

Piotr Senkus*

Abstract

National economic security is a very complex concept generally related to some equilibrium in endogenous and exogenous forces that impact the national economy. The equilibrium in the conditions of globalisation and information revolution is very difficult to achieve and retain. National economic security could be considered as the most important objective of any nation, like survival and development are the most important objectives for any company. Recently some successful concepts to achieve that objectives has been developed in the scale of a company. All these concepts are based on processes and process orientation. The following paper presents the concept of application Business Process Management in a macro scale to achieve national economic security.

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1. Introduction

The global financial crisis that begun in 2007 sharpened debate on the nature of global economic security [Dellios, 2008, p. 4] and economic security of individual countries. Since then it is very difficult to choose the right method to build and maintain the state of economic security either in a national or global perspective. The idea to solve the problem was proposed by M. Porter, that when some successful management solutions from micro scale are used in enterprises, this could be applied to the level of country or in certain circumstances to international organizations.

The paper presents the idea of applying the Business Process Management as the solution to create the state of economic security. The first part of the paper presents the roots of national economic security that could be basically considered as a certain goal from the management perspective. The second part of the paper is the proposal to use the business process management concept to obtain the goal. To simplify the application process orientation to the level of the macro scale, the Value-added IT supported Integrated System (VITIS) is presented at end of article.

2. From national security to national economic security

The first interests in the issue of national security could be found in the 1790s in the debates of undergraduates from Yale University and there were more related to economic security than military security. The Yale students considered whether national security depends on fostering Domestic Industries [Qin and Hu, 2011, p. 252]. The similar economic framework of national security” was drawn up in 1850 by Thomas Jefferson and John C. Calhoun, in there debates about protecting domestic manufactures in national security terms [Clark, 1916, p. 58]. The military context of national security has begun since early 1951 in response to information received that citizens were preparing to send a military expedition to invade Cuba, the President of the United States issued a proclamation, warning that the decision to invade would undermine U.S. National Security [Invasion…, 1854]. National security was also present in the Inaugural Address of Presi-
dent Franklin Pierce in the context of the compromise in 1850 [US Committee On Inaugural Ceremonies (1989), p. 7]. Laura K. Donohue suggests that during the era of the French Revolution, articles appearing in the newspapers tied the concept of national security to national fraternity [Donohue, 2011, pp. 12–118].

The historical presented above shows that national security is neither a creature of the twentieth century nor of a military origin. Some authors relate national security to only one industry, for example the rubber industry [Finlay, 2009].

The military meaning of national security in the XX century has evolved since W. Lippman defined the term in the context of war saying that “a nation has security when it does not have to sacrifice its legitimate interests to avoid war and is able, if challenged, to maintain them by war.” A very interesting fact is that the National Security Act of 1947 did not define national security, which was conceivably advantageous, as its ambiguity made it a powerful phrase to invoke whenever issues threatened by other interests of the state, such as domestic concerns, came up for discussion and decision [Romm, 1993, p. 7]. The later definitions of national security are also strongly related to military issues and national power but slowly, the other elements of national security were added:

- Arnold Wolfers defined the term in 1960 as “an ambiguous symbol meaning different things to different people. National security objectively means the absence of threats to acquired values and subjectively, the absence of fear that such values will be attacked” [Paleri, 2008, p. 66]. That is a very general and capacious understanding of national security;

- Harold Brown, U.S. Secretary of Defence from 1977 to 1981 included in the definition of national security certain elements such as economic and environmental security: “National security then is the ability to preserve the nation's physical integrity and territory; to maintain its economic relations with the rest of the world on reasonable terms; to preserve its nature, institution and governance from disruption from outside; and to control its borders” [Watson, 2008 p. 28];

- in 1980, the Japanese government developed the concept of comprehensive national security. The concept’s distinctive dimension was the prioritisation of non-military over traditional military threats. It was defined as a merger of three concepts: self-defence, non-military diplomacy and natural disaster response;
Charles Maier defined this through the lens of national power: “National security… is best described as a capacity to control those domestic and foreign conditions that the public opinion of a given community believes necessary to enjoy its own self-determination or autonomy, prosperity and wellbeing” [Romm, 1993, p. 7; Paleri, 2008, p. 66];

The National Defence College of India defines the term through the elements of national power: “National security is an appropriate and aggressive blend of political resilience and maturity, human resources, economic structure and capacity, technological competence, industrial base and the availability of natural resources and finally, military might” [Paleri, 2008, p. 66]. The elements named here are very similar to resources of any organization considered in management science;

Prabhakaran Paleri also has pointed out the multidimensional character of the national Security: “The measurable state of the capability of a nation to overcome the multi-dimensional threats to the apparent well-being of its people and its survival as a nation-state at any given time, by balancing all instruments of state policy through governance, that can be indexed by computation, empirically or otherwise and is extendable to global security by variables external to it” [Paleri, 2008, p. 66].

The most common dimensions of the national security often so-called elements of national power are:

- military security – means the capability of a nation to defend itself, or deter military aggression. Alternatively, military security implies the capability of a nation to enforce its policy choices by use of military force – that often refers to outland military actions. Sometimes military security is considered synonymous with “security” [Dictionary…, 2013];

- political security – Barry Buzan, Ole Weaver and Jaap de Wilde proposed that political security is an important component of national security, that is closely allied to military security. According to the authors, political security is about the stability of the social order. The characteristics of political security are as follows: system referent objects are defined (such as nation-states, nations, transnational groups of political importance including tribes, minorities and some religious organisations, etc.).
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diplomacy is present and negotiation and other interactions form the means of interaction between the objects could be noticed [Buzan, Wæver and De Wilde, 1998, p. 25];
– economic security is, as important a part of national security as military security. That issue would be discussed furthermore in the next section;
– environmental security – that deals with environmental issues which threaten the national security of a nation in any manner [Romm, 1993, p. 7]. Joseph J. Romm classifies these as:
  o transnational environmental problems that threaten a nation's security, in its broad defined sense – for example global environmental problems such as climate change etc.;
  o environmental or resource problems that threaten a nation's security, traditionally defined;
  o environmentally threatening outcomes of warfare [Romm, 1993, p. 7].
Katarzyna Żukrowska names more dimensions of the national security like: social security, education and science, research and development, food security, health policy, water supply, telecommunications [Żukrowska, 2011, p. 66].

In the opinion of the author, the problem of information security that certainly affects national security and its other components is not well examined and should be the key issue of another paper.

As the economic security becomes a more and more important aspect and point of interest either for scientists or politicians and even entrepreneurs that issues would be presented more closely in the following section.

3. National economic security

Literature Review

Despite the fact that national economic security has recently become very popular topic several comprehension to it could be found but there is no an authorized definition so far.

The most common definitions of national economic security are:
– Robert Gilpin and Jean M. Gilpin – “national economic security as economic competitiveness and relevant international political
standing and capability brought from economic competitiveness” [1987];

- Richard C. Neu and Charles Wolf claim that “economic security can protect economic interests when a nation faces the events which could threaten economic interest or hinder the economic running, and economic security, endows a nation with the capability of national economic environment which is in accordance with itself interests” [1994];

- Konrad Raczkowski – “relatively balanced endogenous and exogenous state of functioning of the national economy, in which the risk of occurring imbalances is kept in the foreseen and acceptable frames that came from organizational and legal standards and principles of social coexistence” [2012];

- Zenon Stachowiak – “the state of development of the national economic system, which ensures high efficiency of its operation – through the proper use of internal development factors and the ability to effectively resist external pressure, which may lead to developmental disorders” [1994, p. 189];

- Krzysztof Księgopolski – “the undisrupted functioning of the national economy, that means the maintenance of the basic development indicators of a certain level [that is expected, or planned] and maintain a comparative balance with the economies of other countries” [2011, p. 32];

- Katarzyna Żukrowska – “the conditions of harmonious development that allows to build sustainable prosperity for the nationals. (...) In macroeconomic terms the economic security means job stability, low unemployment, prospects of predictable growth of the economy, characterized by liquidity. In microeconomic terms of the solvency of the home or business. In both cases, it is the ability to balance the obligations in relation to the needs in the medium term” [2013, p. 32].

Every “Big Crisis” like “The Great Recession of the 30’s,” “DOT.com Bubble” (Fig. 1) or “subprime crisis” convince researchers and politicians to rethink the issue of national economic security. The most interesting works that consider the problem to guarantee national economic security are by:

- Michael Porter – the researcher proposes the term competitive advantage of nations and claims that the ability to obtain eco-
nomic competitive advantage in the international competition is the fundamental element to determinate prosperity or recession for a nation [Porter, 2011, p. 52];

– Joseph Stiglitz and Carl E. Walsh – the authors review the development process of economic growth and propose the concept of absolute advantage and with regards to technology innovation as a nation’s competitive advantage [Stiglitz and Walsh, 2003, p. 45];

– Fidel Ezeala-Harrison names the elements of international competitiveness of a nation and proposes the TFP-Competitive Advantage Model to measure the level of a states competitiveness [Ezeala-Harrison, 2005, pp. 80–87];

Figure 1. The main economic crises from 1930 to 2013 based on the Dow Jones

Source: Own work 2013.
Yuichiro Uchida and Paul Cook have researched the changes of the competitive advantage in East Asian in the relation to the technology and trade specialization [Uchida and Cook, 2005, pp. 701–728];

Isabel Grilo and Gert Koopman are formulating the strategies to strengthen the European Union’s competitiveness from the aspects in productivity and microeconomic reforms, and claim that living standards as the most important index to measure competitiveness [Grilo and Koopman, 2006, pp. 67–84];

Howard Stone and Ashok Ranchhod constructed the Quantitative Model of Competitiveness Advantage of a Nation Determination that is based on Porter’s Diamond Model and apply the model to the UK, USA and BRIC [Stone and Ranchhod, 2006, pp. 283–284];

Siyi Qin and Genhua Hu proposed a very interesting National Economic Competitive Advantage (NECA) model based also on Porter’s Diamond Model that is discussed in the next section of the paper. The model could the measurable element of economic security research from the process perspective [Qin and Hu, 2011, pp. 250–257].

Although the static approach to define economic security could be noticed in the most of examined definitions one should consider the dynamic approach to the economic security problem. That means the assumption that economic security is not the state but rather the ideal model, that could be considered as objective that is quite impossible to obtain in the dynamic turbulent environment (world economy). Therefore the economic security creation process” should be rather defined, concerned and researched.

Peter Drucker wrote: “What gets measured gets managed,”\(^1\) so if one wants to manage the economic security for example as the step to achieve the goal, has to apply certain simple or advanced measures to it.

### 4. Measures of national economic security

Following Michael Porter’s thesis that countries, like companies, compete in international markets for their fair share of the world mar-

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[Grant, 1991, pp. 535–548] some measures typically used to enterprises could be used by countries. One of the examples of the measures like this are for example, international market share, trade competitiveness and market penetration rates.

The more advanced measure related to national economic security is the National Economic Competitive Advantage (NECA) [Qin and Hu, 2011, pp. 250–257]. That index takes under consideration some factors that influence national economic competitive advantages in these factors are as follows: growth rate of GDP (X1), inflation rate (X2), unemployment rate (X3), growth rate of M1 (X4), ratio of dependence on foreign trade (X5), ratio of external debt (X6), rate of financial deficit (X7), growth rate of fixed assets (X8), balance of foreign exchange reserves (X9), growth rate of energy input per GDP (X10), high-tech-product-GDP ratio (X11), and national-defence-expenditure-GDP ratio (X12).

Siyi Qin and Genhua Hu in the model of National Economic Competitive Advantage (NECA) based on national economic security in the framework of Porter’s Diamond model. They have presented six main factor groups that construct the Diamond model of National Economic Competitive Advantage.

The factor groups that could be identified are as follows:

- **F1** – external risk factor – is mainly determined by the five indices of X3, X5, X6, X9, X11,
- **F2** – economic performance factor – includes X1, X2, and X7,
- **F3** – motivation for growth factor – includes X4 and X8,
- **F4** – low-carbon factor – includes X10 only,
- **F5** – political security,
- **F6** – military security.

The above model includes double meanings: on one hand, the level of national economic competitive advantage is determined by not only the absolute level of four main factors and degree of political security and military security, but also reciprocity among six factors in the diamond model; on the other hand, there exist six paths (solid lines with double arrows) formed between national economic competitive advantage and the other six factors respectively, i.e. NECA – external risk factor, NECA – economic performance factor, NECA – motivation for growth factor and NECA – low-carbon factor. All the paths are bidirectional, indicating that the level of NECA could be upgraded by the reciprocity among six factors while the level of six factors could also be improved by NECA. Therefore, national economic security could be guaranteed by the circulatory effects [Qin and Hu, 2011, pp. 250–257].

Based on above analysis, the researchers build the econometric model of national economic competitive advantage based on national economic security. The expression is:

\[ \text{NECA}_{i,t} = \alpha \times Z_{i,1t} + \beta \times Z_{i,2t} + \gamma \times Z_{i,3t} + \varepsilon_{i,t} \]

where:

- \( \text{NECA}_{i,t} \) represents national economic competitive advantage;
- \( Z_{i,1t}, Z_{i,2t}, Z_{i,3t} \) are comprehensive evaluations of main factors, political security and military security, respectively;
- \( \varepsilon_{i,t} \) is distracter. Besides, \( i \) and \( t \) represent the nation and time respectively [Qin and Hu, 2011, pp. 250–257].

Of the certain goals of economic security creation process to set-up the appropriate measures and measuring methods are assigned there is only a question of having to choose the right tool that supports the achievement process of the goal such as process orientation.

In 1776 Adam Smith in his book entitled “Wealth of Nations” presented the term division of work into single parts that in the nomenclature of the process could be called functions or actions. To illustrate the problem he used a pin production factory. He convinced that the actions that are set-up in the proper order could lead to the superior effect of increased productivity and performance.

More or less, the idea of a proper set-up, the actions in order to achieve the success did not change over years. Frederick Winslow Taylor and the other pioneers of scientific management considered the source of process improvement in the scientific approach to human labour, standardization of processes, systematic training, proper hierarchical organization structures that impose all relationships between employees and management.

Edward Deming and other representatives of the flow of quality management, both Japanese and in the U.S. insisted on meeting customer expectations, which guaranteed the survival of and development of their organizations. Other internal processes had to be subordinated in the quality philosophy [Watson, 2008 p. 28; Obora, 2011, pp. 121–129; Wysokińska-Senkus, 2013].

In the beginning of the 90’s, mainly because of competition from Japanese companies, U.S companies began to try to find the right way to optimize their operations. That is the time when reengineering began. Reengineering is a business management strategy, originally pioneered in the early 1990s, focusing on the analysis and design of workflows and processes within an organization. BPR aimed to help organizations fundamentally rethink how they do their work in order to dramatically improve customer service, cut operational costs and become world-class competitors. BPR help companies radically restructure their organizations by focusing on the ground-up design of their business processes.2 At the same time the contemporary definitions of the process itself have begun to appear. According to Tom Davenport, a business process is a set of logically related tasks performed to achieve a defined business outcome [Malhotra, 1998, pp. 27–31]. Reengineering highlighted the holistic focus on business goals of the organization.

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and how processes related to them, encouraging complete recreation of processes rather than iterative optimization of sub-processes. Although the Business Process Reengineering allows Rank-Xerox and a couple of other big companies to survive and successfully build their competitive advantage it caused too many social costs. Basically to start the reengineering process means to fire all employee and to start a completely new company where nothing remains in the same place where it was before. That is why the reengineering is often called a revolution. Because of the reasons mentioned before the BPR in their pure concept did not last long, even the fundamental payoffs could be noticed in some cases.

**Figure 3.** Popularity of the different concepts of management improvement concepts according to KPMG


The aspects like the rise in frequency of goods ordered, the need for fast information transfer, quick decision making, the need to adapt to change in demand, more international competitors; and demands for shorter cycle times [Ko, Lee and Lee, 2009, pp. 744–791] have encouraged researchers as well as company executives to develop the concept that would guarantee positive outcomes like in BPR (Increasing customer satisfaction, reducing the cost of conducting business and establishing new products and services at a low cost [Weske, 2012, p. 3]), but also it would not cause high social costs at the same
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time. The solution was found in the beginning of the 21st century with the Business Process Management or BPM.

![Business Process Management Diagram]

**Figure 4.** An overview of approaches to business process change


Except the main “process flow” that was discussed above in Business Management, Information technology and Business Process Management Systems have allowed BPM to appear (see Figure). The BPM concept that integrates the best known so far concepts from the Work Simplification/Quality Control Tradition, the Management Tradition and the Information Technology Tradition like: Michael Porter’s value chain, Balances Scorecard, Expert Systems, Business Process Reengineering, Computer Aided Software Engineering (CASE), Performance Framework is the holistic approach that allows any organization to rise their efficiency in an evolutionary way that would not cause such as high social costs as the BPR. Through business process management, an organization can create high-performance processes, which operate with much lower costs, faster speeds, greater accuracy, reduced assets, and enhanced flexibility. BPM also offers a variety of strategic benefits. For one, process management enables companies to respond better to periods of rapid change (such as ours). Conventional organizations often do not even recognize that change is happening until it is reflected in financial performance, by which time it is too late; even should they recognize that change has occurred, they have no mechanism for responding to it in a disciplined fashion. Under
a process management regime, by contrast, change is reflected in the decline of operational performance metrics, which are noted by the process management system; the design of the process is when the tool through which the organization can respond to this change [Hammer, 2010, pp. 3–17].

Figure 5. Cross-sector operation of processes

Source: Own work 2013.

If the country or nation could be treated as the organization? … that is the question that faces more and more politicians. … The management experts have the answer ready. In today’s circumstances the operational scale of global enterprises measured either by operation area or income, is bigger than some countries or nations [Senkus, 2005], so if it is possible to run a global enterprise that has often very complex structure with the support of BPM it must be possible to run the country using the same concept. That was not mentioned before, according to Peter Drucker practical work in the area of non-profits and administrations the country is literally some sort of organization with is leaders – politicians; employees – the employees of the public sector and shareholders that are the customers at the same time – citizens.

The orientation process and business process management allows to implement effective management of national economic security, understood, “as the art of seeking to proactively identify threats to the
functioning of the national economy, the efficient implementation of actions to prevent the state of economic imbalance, the strategic ability to achieve the intended objectives and the ability to organize the chaos of the economic crisis” [Raczkowski, 2012].

As processes are not bounded by any organizational structure their application to many organizations, sectors even countries is possible (see Fig. 5). So as the possibility to apply the Process Orientation to country level exists there is only the problem to provide the methodology or frame that puts in order the objectives and actions. The author has proposed the universal approach – Value–Added IT Supported Integrated.

System (VITIS) as the frame and guideline to implement and maintain the process orientation in any organization [Senkus, 2013].

6. VITIS – the process model to sustain national economic security

Before the Value – Added IT Supported Integrated System (VITIS) is introduced here the process of specific definition has to be discussed. In the VITIS concept “the process can be understood as a set of related activities to achieve a predetermined goal. This is done by converting the input in a pre-defined customer value in the output” [Senkus, 2013]. The processes are characterized by the following features:

– they provide added value to stakeholders of organization and the organization itself, ensuring its survival and development;
– the output of processes are the products following the objectives that could be structured in the hierarchical tree:

- C01 Survival and development of the organization – that objective could be identified with national economic security in the context of paper,
- C02 Mutually beneficial relationships with decision makers – in the context that, paper the decision makers are for example government, parliament, or even the whole nation, when it comes to elections,
- C03a Balanced market value – in the operation of for example state owned enterprises, that intend to provide profit, also C05b Sustainable material value of the organization,
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- C03b Balanced overall efficiency – for all of the other operations that have a non-profit character, also C05a Sustainable budget management,
- C04 Sustainable intangible assets,
- sustainability goals: C6 High economic efficiency, C7 High social efficiency, C8 High environmental efficiency),
- C9 High organizational effectiveness,
- C10 Mutually beneficial relationships with beneficiaries/clients,
- C11 Mutually beneficial relationships with staff (employees or officers),
- C12 mutually beneficial relationships with management/leadership,
- C13 Mutually beneficial relationships with suppliers,
- C14 Mutually beneficial relationships with legislators,
- C15 Mutually beneficial relationships with the public,
- C16 Minimize the impact on the environment,
- C17 Meeting standards and optional codes,
- C18 Mutually beneficial relationships with other stakeholders [3];

- inputs to the process are: expectations and needs of the identified stakeholders such as policymakers, providers, clients/beneficiaries, employees, legislators, community and other stakeholders; knowledge – as one of the most critical resources; other resources; environment (environmental requirements); standards and code options;
- processes can only be run inside the organization and cross the “borders” of organization, inside the sectors, or cross the border of sectors etc. (see Fig. 5);
- the processes are for example: P1 Analysing Needs And Requirements; P2 Mission, Vision, Strategy And Goals Formulation; P3 Process And Governance Design; P4 Implementation Support; P5 Implementation; P6 Measurement and Analysis;
- processes can be decomposed.

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Figure 6. The simplified VITIS perspective

The novelty of this approach is that in the opinion of the author, each process must be useful, that means it has to provide the specific value to the customer internal or external, the process should contribute to the wide range of purposes, and may extend beyond the boundaries of a single organization and even beyond the boundaries of one sector.

![Figure 7. The general scheme of the VITIS model](image)


The full overview of the VITIS model consists of three phases:
- **Phase 1** – Identify needs and specific circumstances in the organization, its stakeholders requirements and needs and
to the ability to satisfy them in the context of current conditions. Determination of stakeholder requirements is intended not only to write down what they now expect, but to determine the forces that shape these expectations. If organizations do not define either the stakeholder requirements or the forces that shape them, the organization could not be innovative, competitive and could soon disappear. The best example is Eastman Kodak, which until 2012 based its business model on the production of photographic paper and film for cameras even the company first introduced digital photography.

- **Phase 2 – Preparation of implementation, and improvement of process orientation** – this phase consists of the sequence of actions aiming at the implementation of process orientation in the organization.

- **Phase 3 – Implementation, monitoring and improvement** – it is a set of basic processes shown as a reference model. The processes were mentioned above. It was considered that it should be included here, only the elementary processes that should be implemented in any organization regardless of sector and size. Where necessary, the process can be, specifies the various lower levels. An attempt was also made to determine how the various processes should be implemented.

**Summary**

National Economic Security is a very complex concept generally related to an equilibrium in endogenous and exogenous forces that impact the national economy. The equilibrium in the conditions of globalisation and information revolution is very difficult to achieve and retain.

As the National Economic Security could be considered as the most important objective of any nation like survival and development are the most important objectives for any company there is the need to find the right way to compete the goals.

Recently some successful concepts to achieve these objectives have been developed in the scale of a company that are basically concepts that are based on processes and process orientation. In the paper, a certain approach that could be applied to the National Economic security is mentioned.
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Management and economic security


CHAPTER 18

Collaborative networks as a basis for internal economic security in sustainable local governance. The case of Poland

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Abstract

The applicable organizational and legal solutions make it possible for local governments to make decisions with regards to tasks performed in an autonomous and unfettered manner. Therefore, primary importance in shaping economic security is today ascribed to local and regional levels. However, in the current circumstances local governments are capable of accomplishing principles assuring economic security through collaboration with other entities. On the whole, these determinants prompted to carry out an analysis of issues and benefits produced by the application of collaborative networks in achieving economic security within a local and re-

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Keywords: economic security, internal security, local governance, sustainable local governance, collaboration, collaborative networks

1. Introduction

A global economic crisis triggered numerous threats to the entire national economy and its specific components. The consequences in the aftermath of the economic downturn included: loss of flow on money markets, budget deficits, the threat of bankruptcy, loss of trust between organizations, diminished performance, increased unemployment, etc. Therefore, it is of immense significance to attain and maintain economic security. Such security is principally defined as the state of functioning of an economy and it embraces both an international as well as a national level in macro, mezzo and micro terms [Żukrowska, 2013, p. 32].

Economic security is a capacity of the economic system of the state (group of states) to tap into internal expansion forces and international economic interdependence so that they guarantee its secure growth [Kołodziejak, 1986, p. 20]. It determines the states capability of social and economic protection for the society, regulation of the market and internal and external co-operation. It relies on the national development strategy and regional policy whose effectiveness is measured by the use of territorial development potentials [National..., 2010, pp. 73–80, 89]. It specifies the requirements for sustainable development fostering prosperity of the state and its citizens. Security stands for the sum of activities undertaken at specific levels of the state’s organization under inter-organizational, cross-sectoral and international co-operation, at all levels of the state’s organization. Local and regional levels were assumed as the basic ones.

The thematic scope of this paper covers the operations of local government units. It results from the applicable organizational and legal solutions which provided local governments with the autonomy and freedom to make their own decisions with regards to activities launched. Whereas the analysis of statutory tasks of local governments
indicates that they may have direct or indirect effects on the level of economic security in the local environment or region and overall on the state as a whole. In addition to this, local government units comprise social, economic and institutional organizations collaborating with each other [Roiseland, 2011, pp. 879–893; Kożuch, 2012, pp. 4–9, 15–17]. Thus, today a level of local growth and economic security are driven by a total of activities taken as part of a collaborative network. Bearing this in mind, the objective of the paper is to examine and validate that collaborative network within a sustainable local governance that fosters achievement of economic security. The objective of the paper delivered, was based on the Polish and foreign body of reference literature. Considerations presented in this article are part of a preliminary study carried out under the project funded by the National Science Centre awarded by decision numberDEC2012/07/D/-HS4/0053.

2. Current understanding of economic security

Economic security is one of the fundamental subsystems in the states security. It is defined as “functioning of the state economy, relatively balanced in endogenic and exogenic terms, where occurring risks of disturbed balance are maintained within specified and approved organizational and legal standards and principles of community life” [Raczkowski, 2012, p. 81]. According to the White Paper on National Security of the Republic of Poland, the security encompasses the following areas: finance, energy, transport, critical infrastructure and natural environment [White..., 2013, p. 19]. The economic security is usually approached at national or international levels. Its major types are classified as: external and internal security. Though, it is overlooked that the security in terms of the entire country involves the security in territorial arrangements, which then hinges on the nationwide security system. To put it another way, there is a correlation between the economy at macro as well as mezzo and micro levels.

Distinctive attributes inherent to the economic security differentiating them from other types of the state security include [Jakubczak and Flis, 2006, pp. 387–388; Stachowiak, 2012, pp. 32–35]:
1. Adaptability, vulnerability to changes and declined production remove ineffective elements, create a capability for the development of economic security. It results from the core aspects of management, competition and cyclical fluctuations processes.

2. No possibilities to formulate an adequacy requirement in relation to economic security. This security affects a civilization level and potentials of satisfying a society’s aspirations and these values are subject to continued development.

3. Strong relationships and links with selected foreign partners may lead to dependence and vulnerability to dysfunctions in functioning of the economy. International transfers determining access to foreign markets requires rational and well-conceived approaches.

4. The role of the state in shaping its economic security is limited. It follows from curtailed powers for regulating business processes as well as a restrained area of economic autonomy. An overly strong role of the state brings about a fall in management efficiency.

5. Despite economic relationships with foreign countries, central to the economic security are internal aspects of management. It stems from the fact that the economy creates a material foundation for the states security in its various dimensions.

In the current circumstances, economic growth of the state is made possible when it is built upon increasingly bolstered innovativeness and competitiveness of regions, investments and the achievement of adequate economic, social and environmental conditions [Strategy…, 2013, p. 13]. This development is, to a larger extent, fueled by a diffusion principle across local government units [Poland…, 2009, pp. 265–267]. Furthermore, it is subject to social needs and requirements for environmental protection. Financial autonomy and independence of local governments make it possible for sustainable local governance to ensure economic security.

3. Foundations of sustainable development within a local and regional government

The consequences of industrial expansion, growing volumes of municipal and industrial waste as well as globalization and urbanization
were identified in the research carried out by the Club of Rome, the Brundtland Commission and the World Commission for the Environment and Development. In the wake of the conferences and summits (among others, Rio de Janeiro in 1992, in Copenhagen and Johannesburg in 2002) international obligations were signed and they were devoted to both resource protection as well as the improvement of social and economic conditions of living in compliance with sustainable development. This development has manifested in fulfilling the needs of the present while integrating technological, social and environmental limitations so to not put future generations in jeopardy.\(^1\) Basically, it is an attempt to formulate a scheme to incorporate the myriad of levels of human activities (ethical, ecological, social, economic, technical, legal and political) – previously being often only examined separately – premised on moral reflection, referring to man’s responsibility for nature [Kożuch, 1996, p. 21; Pawłowski, 2009, pp. 76]. Implementation of the idea of sustainable development relies on the pursuit of such solutions for business operations that are socially responsible, ecologically friendly and economically valuable at the same time [Hausner, 2008, p. 11–14].

Currently forces behind regional development have primary significance for sustainable development [Kozłowski and Haładyj, 2006, p. 160]. Essentially, it arises from the fact that applicable legislative regulations conferred autonomy and leeway for local governments in making decisions on the actions to be launched. Thus, they have immediate possibilities for shaping sustainable development on the territory administered.

Local government is one of the most important institutions of a democratic state that regards decentralizing the performance of its public duties as a foundation for its approach to social and economic matters [Niewiadomski, 2001, p. 18]. The responsibilities of the Polish local government bodies are governed by their legal environment including the Constitution of the Republic of Poland, the European Charter of Local Government and ordinary statutes, including constitutional statutes as well as various ordinances and resolutions. Territorial local government administers over a given region, handle all elements of the economy regardless of the nature and proprietary rights

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of institutional solutions and it is in charge of creating social and economic values [Kożuch, 2002, p. 31].

Specified determinants show that management within a local government proves to be a process where an essential research focus is on the efficiency of the networks of public units interrelated with the powers wielded by local authorities or also being supervised by these units. Its specifics derive from the fact that it is executed by relevant authorities while dropping individual well-being in favour of collective well-being for stakeholders of the specific local government unit [Kożuch, 2012, pp. 4–9, 15–17]. Guaranteeing local development rests on harmonized and systematic social activities launched by the community, public authorities and remaining entities operating within a specific local government unit. Specifically, these efforts seek to create new and bolster the existing functioning qualities of the local government unit, to generate conditions favourable for its economy and to ensure spatial and ecological order [Parysek, 1996, p. 35; Obrębalski, 1998, pp. 11–14]. One of the principles inherent to the management of the local government unit – alongside coherence, competitiveness, co-ordination, resilience and others – is the principle of suspensiveness that is incorporated in the urgency of environmental protection in the efforts run within the triad of objectives: economic, social and environmental [Markowski and Marszał, 2005, pp. 11–15]. Similar views are held by Tadeusz Borys when writing that planning and management of sustainable development (social, economic, spatial and environmental) tend to be fundamental obligations faced by local government authorities which should be characterized by cohesion and the integration of orders encompassing: core orders (environmental, economic and social) and integrated orders (core, spatial and institutional) [Borys, 2011, pp. 75–81]. The modelling of orders is effected on the basis of the following documents pertaining to the sustainable development in local governments: development strategy, land use plan, zoning study of land use conditions and trends, local land use plans, environmental protection scheme, waste management plan. Besides, the environmental sustainability project or Local Agenda 21, local development plan, and so forth may be also designed.

Management for sustainable development requires the exploitation of appropriate legal, organizational and management instruments as well as the dexterous employment of economic tools intended for
environmental protection such as, among others: fees, penalties or tax policies. Also, ecological education as well as promotion of pro-environmental behaviours prove to be prominent. However, above all, effective management of public institutions responsible for shaping integrated ones is of tremendous significance. This management requires the application of cutting-edge tools and concepts which includes: process management, project management, competence management, strategic management, information management, knowledge management, change management and so forth. At the core of this is the concept of collaboration, embracing a variety of correlations (co-operation, rivalry and combat) occurring between specific entities which strive towards a common goal [Sienkiewicz-Małyjurek, 2008, p. 95–97; Kożuch, 2011, pp. 109–117]. Central to local management is a mutually beneficial collaboration.

Accordingly, for the purposes of further deliberations it was assumed that at the heart of the local and regional economic security in sustainable development are organizational and legal as well as management measures enabling the rational management of resources dedicated to social and economic advances while respecting environmental protection. However, local governments are capable of pursuing the principles of sustainable development through collaboration with other public and private entities as well as local communities within the collaborative networks which comprise voluntary relationships established with the goal of joint execution of activities. For this reason, collaborative networks are the essence of sustainable development within a local and regional government.

4. Collaborative networks in achieving economic security

Local government units constitute of entirety marked and are distinctly specified by their own objectives, subject to the chief goal concerned with the long term satisfaction of the needs of local communities. The realization of the objectives set by local government units are geared towards effective, fair and lasting social and economic growth of the region while considering the rational management of resources and respecting environmental protection. Their activities are run with
the use of specific relationships with stakeholders, covering, in particular, social participation, collaboration with other organizations, rivalry, and creating co-operative advantages [Kożuch, 2004, pp. 234–237]. Essentially, these relationships constitute a specific attribute of the local government unit whilst entrenching them strongly in legal regulations. Local government units are thus specific organizations functioning as open-ended systems mostly free from entry and exit barriers. Fundamentally, they constitute peculiar organizations of collaborating institutions which requires co-ordination, co-operation and shared government towards delivering targets [Kożuch, 2012, pp. 4–9, 15–17]. Collaboration with multifarious types of social and economic as well as institutional partners tend to be one of the core developmental tasks within the organization as a self-governing subsector [Roiseland, 2011, pp. 879–893]. In accordance with assumptions of the network paradigm, the management of the local government unit is a flexible process aligning the current needs and potentials. It may be effected through harnessing the premises underlying the concept of the “growth machine” which refers to the establishment of the collaborative coalition to drive advance, making use of entities closely connected by location such as: local authorities, renters, institutions for higher education, some business entities and so forth [Swianiewicz, Mielczarek and Klimska, 2004, p. 15–22; Kożuch, 2012, pp. 4–9, 15–17]. Faced with the imperative to collaborate, collaborative networks crop up within local governments, integrating the actions executed by listed entities to foster regional development [Kożuch and Przygodzka, 2012, p. 29; Mah and Hills, 2012, pp. 85–97].

Collaborative networks are the upshot of activities committed to jointly solving problems and delivering shared objectives unlikely to be achieved individually by the participants of the given network and within the existing boundaries [Agranoff, 2006, pp. 56–65; Lee, Feiock and Lee, 2012, pp. 253–262]. By and large, they are formed by entities characterized by autonomy, geographic dispersion and heterogenous actions [Camarinha-Matos and Afsarmanesh, 2005, pp. 439–452]. Collaborative networks account for unrestrained relationships consisting in setting off collective ventures once the need arises. They are centred on the completion of tasks, organizational learning and the undertaking of activities within networks is underpinned by cutting-edge IT technologies. Collaborative networks are open-ended, further logical grouping of activities and resources both by individual organi-
Collaborative networks as a basis for internal economic security in sustainable...

Collaborative networks represent one of several tools used for management of regional development because they contribute to the increased value of public services [Lee, Feiock and Lee, 2012, pp. 253–262; Sienkiewicz-Małyjurek, 2012, pp. 51–60]. They are characterized by correlation, while simultaneously enjoying autonomy of their operations and the formulation of rules through negotiations with an emphasis on organizational and legal factors. From the perspective of local governmental management, collaborative networks stimulate collective activities, and enable a flexible response to changes in local conditions, trim down costs of activities and augment the scope of social participation [Torfing, 2005, pp. 305–315]. As highlighted by Rodrigo Lozano, collaborative networks appear to be a key element for pursuing the strategy of sustainable development [Lozano, 2007, pp. 370–381]. In the broader approach, collaborative networks largely provide the following opportunities [Kożuch and Przygodzka, 2012, p. 29]:

- gaining access to necessary resources,
- spreading of risk and costs,
- easier attaining effects of the production scale,
- innovative development of products, services and processes,
- broader access to cutting-edge technologies and information,
- promoting organizational learning,
- enhanced flexibility,
- easier attainment of a competitive advantage through strengthening the value creation chain, the synergetic effect and so forth.


- increased innovativeness and investment in new branches of the economy, e.g. the energy economy, renewable energy sources, sustainable residential construction,
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- development of business environment institutions, e.g. science and technology parks, business incubators,
- enhanced transfer of technology and commercialization of scientific research,
- broader access to various resources possessed by individual partners,
- boosted flexibility and regulation of costs due to the combination of resources,
- heightened entrepreneurship and competitiveness of the region,
- augmented effectiveness of the collective system of public transport,
- decreased labour-related migration.

The effects of collaborative networks in local governance reinforce sustainable development through harnessing the synergy effect as a basis of economic security. Streamlining operations by public institutions, tapping into leading-edge management concepts as well as bolstering innovativeness and investments through collaborative networks enhances the effectiveness of sustainable activities performed by local and regional governments. Equally, increased social awareness among the population and formation of civic communities tends to be conducive to retaining rationality when managing natural and other resources. All of this is conducive to economic security. In essence, it allows for the overcoming fragmentation of business activities, more effective exploitation of resources, being available for network participants, making the production volume flexible etc. and thus for the significant elimination of threats to processes related to maintaining internal economic security.

5. Good practices in sustainable local government as a basis of economic security

An example of good practices with regards to collaboration in sustainable local governmental management is a programme which was completed in 2009 in Edmonton, Canada. In essence, it aimed at making use of public transport and reducing car traffic. Due to the collaboration, mainly between public administration and NGOs, schools and the local community, the following results were attained: increased
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awareness among residents of alternative possibilities for travelling across the city, the decline in the number of single occupant car journeys and a decrease in the emission of greenhouse gasses [Khare, Beckman and Crouse, 2011, pp. 227–235]. Another example illustrating the employment of collaborative networks to promote sustainable development is the Regional Centre of Expertise set up in 2005 in Hamburg to provide a platform for sharing information and experience as well as reporting the required directions for regional and local development. The centre integrated activities undertaken by public administration, teachers and NGOs, institutions of higher education and local companies. Its operations involve promoting knowledge in the following thematic areas: sustainable construction, boosting awareness and the coherence between environmental protection, lifestyle and network collaboration. Due to superior competences and credibility, the Regional Centre of Expertise in Hamburg is recognized as a prime centre consolidating local problems and initiatives of entities involved in common programmes shoring up sustainable development of the region [Filho and Schwarz, 2008, p. 498–508]. Meanwhile in Sao Paulo and Rio de Janeiro network relationships gave rise to regulating political operations, deepened the level of social awareness with regards to problems caused by climate changes and streamlined the process of decision making, notably within the scope of limiting greenhouse gas emissions [Martins and Ferreira, 2011, pp. 344–357].

The surveys on food security, being an element of economic security, were conducted in the Songkhla province in Thailand. The findings from the surveys showed that collaborative networks affect the increased product self-sufficiency and resources protection. The corroborative network in Songkhla was set up across public organizations as well as private sectors (producers, suppliers and recipients) [Thaennin, Visuthismajarn and Sutheravut, 2012, pp. 334–335]. Whereas in the Guangdong province in China, collaboration in favour of wind resource assessment was initiated with the goal of enhancing energy security in the region. The collaborative network was established by the local government, non-governmental organizations, the university and international consultants. The benefits gained were as follows: increased cost effectiveness, enhanced potentials for the implementation of cutting-edge wind technologies as well as the transfer of knowledge and resources. Also, it was acknowledged that local
resources and organizational structures (e.g. the social network) set the stage for a collaborative network which is essential for achieving sustainability goals [Mah and Hills, 2012, pp. 85–97].

In Poland there are numerous operations executed with the use of collaborative networks in the management of sustainable development at local and regional levels. One example is in Gdańsk where as a result of joint ventures launched to further regional development, the following effects were gained, among others: the setting up of support systems for entrepreneurship, an advance and technology centre, the construction of parks and sport facilities as well as cycle paths and the expansion of the road infrastructure [Czepczyński, 2009, pp. 249–259]. Whereas in the Śląskie province there is a functioning Cluster “3×20” focused on the market co-ordination of entities operating to prop up the accomplishment of 3×20 Climate and Energy packages. The cluster tends to incorporate activities run by public administration, small and middle-sized enterprises, institutions of higher education, non-governmental organizations as well as suppliers of energy technologies and equipment for innovative distributed energy and renewable-gaseous energy. Collaboration covers, among others: the transfer of experience and innovations from EU states and the popularization of good practices, the development of distributed cogeneration resting on local resources of renewable energy, the reduction of embodied energy in buildings and production processes, the promotion of innovations designed to whittle down the emission of CO2 gasses into the atmosphere and the expansion of ecological education in communes. The prominence of education in compliance with the principles propelling sustainable development is also highlighted in the programme of the Zachodniopomorskie Network of Ecological and Nature Education which since 2004 has been reinforcing the efforts initiated by NGOs, foundations, information and education centres, research centres and other institutions. The actions of the network are devoted to sharing experience, enhancing qualifications of the entities engaged and promoting collaboration to underpin sustainable development [The Manual…, 2008, p. 38].

The foregoing instances corroborate the significance of the collaborative networks for sustainable local governmental management. In effect, they demonstrate that execution of joint actions in support of sustainable development produces the outcomes unlikely to be achieved by local governments when acting single-handedly.
6. Conclusions

One of the primary aims of sustainable local governmental development is achieving economic security. On the whole, it encompasses all areas of activities launched not only by local governments but also other institutions, in the private sector as well as NGOs. Therefore, under contemporary circumstances, local governments are capable of delivering the principles of driving sustainable development through collaboration with other public and private entities as well as the local community within collaborative networks. Drawing upon these deliberations, sustainable local governance was described in this paper as a process run by local governmental bodies within inter-organizational collaborative networks aimed to boost a specific region socially and economically, while respecting environmental protection and land development as well as being committed to internal economic security.

Accordingly, inter-organizational networks are constructed so to enable the transfer of information, access to essential resources as well as the mitigation of risk and operational costs. Furthermore, due to an effective synergy surge, regional competitiveness takes place while respecting economic, social and environmental wealth. Basically, that provides support for the view that collaborative networks prove to be a principal driver for accomplishing economic security within sustainable local developments.

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CHAPTER 19

Changes in European foreign trade in the context of economic security

Agnieszka Głodowska*

Abstract

Nowadays, foreign trade may play an essential role in gaining an economic advantage over competitors. It also constitutes a component of the state’s economic security. In this article, changes in the European foreign trade have been analyzed in reference to economic security. First of all, the link between foreign trade and economic security was established. Secondly, the role of foreign exchange for the European economy as well as the status of the EU in regard to the world’s trade were presented. Finally, geographical and commodity structures of the EU’s trade and their advantages and drawbacks were elaborated.

Keywords: European Union, economic security, export competitiveness, geographical and commodity structure of trade

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1. Introduction

In the literature regarding foreign trade, the influence of foreign exchange on a state’s economic development, international competitiveness, economic modernization or innovation within the elimination of technological gaps is usually analyzed. All of these aspects boil down to a broadly defined state’s economic security. Currently, foreign trade which defines an international interdependence assures the economy is functioning, its development and the realization of private economic interests. Therefore, it constitutes a component of economic security. Former articles which discuss directly the subject of foreign trade and economic security make reference, mainly to trade and custom policies, or they analyze the illegal trade of i.e. weapons or drugs etc. This article aims to verify, empirically, changes in the EU foreign trade within economic security thanks to the analysis of European trade between 2007 and 2012. Firstly, the analysis concerns research about the strategically important foreign exchange of goods in the EU. On the other hand, it also assesses trade as a growth and development factor of the European countries. Therefore, the extent and dynamics of exports and imports within the EU as well as their directions and commodity structure are essential. Since the research, the EU was treated as a unity and the examination focused on its trade with third countries, the above-mentioned period of time was chosen for the analysis. In this respect, since the EU has consisted of 27 countries since 2007, this year was set as a starting point in the research. It must be mentioned that the analysis of the EU’s foreign trade in which the EU is perceived as a certain homogenous organ, is not simple and to some extent doomed to simplification, since the union still remains economically incoherent and member states are unevenly involved in the international exchange. Discrepancies are great. Even though, the undertaken project seems to be fully relevant. Firstly, because the EU has a common trade policy and the implied objective of this article is to verify the effectiveness of this policy regarding economic security. Secondly, all of the strategic documents regarding the Union’s development, such as the European 2020, refer to the EU as a whole.

The whole article has been divided into a couple of sections. In the second part, the conceptualization of economic security was made. Furthermore, an effort to place the foreign trade in the concept of economic security was taken. This way, the area of the empirical analysis
was further drafted. The third section demonstrates the extent and dynamics of the foreign trade of member countries as well as it defines the role of this trade for the European economy’s development. In the fourth part of the article, the geographical and commodity structure of the EU’s foreign trade are presented. These aspects are of great importance for the EU’s international competitiveness and at the same time for its development. The analysis of the export competitiveness of European countries was also performed. The work ends with a conclusion and some recommendations for further research.

2. Foreign trade’s place in the concept of economic security

The concept of economic security as an important element of national security has evolved over the centuries. Without any doubt, a turning point in redefining this notion was at the end of the so-called “Cold War” and a transition from bipolar geopolitics to a multipolar system. In recent years and especially with the world’s financial crisis, provoked a situation in which once again the economic security became extremely important and it also acquired a different – new – dimension. In a traditional understanding of this notion, the economic security refers to the economic and defensive aspects which determine a state’s economic capacity to oppose an external economic intervention as well as the potential development of a state’s defence [Kłosiński, 2006 pp. 42–43]. Perceived in this way, economic security may concern a country’s independence and its important characteristic – economic self-sufficiency. Nowadays, economic security has a considerably broader meaning. Firstly, it refers to stability and sustainability as well as progress and development. According to Katarzyna Żukrowska, economic security concerns a harmonious economic development which allows to build sustainable prosperity of a country’s citizens [Żukrowska, 2011]. Barry Buzan states that the country is economically safe when it has unhindered access to markets, resources and investments which are indispensable for its sustainable progress and development [Brodzicki, 2006, pp. 29–42]. It is an ability to benefit from state’s internal resources and external opportunities to allow an unthreatened development. In this aspect, international interde-
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pendence, integration, exchange and co-operation may turn out to be significant to reach this goal. Hence, foreign trade plays a key role here. It can be stated that the importance of foreign trade for economic security is equivalent to the importance of foreign trade for a given economy’s development and its international competitiveness. A positive impact which foreign trade has on economic development was already demonstrated in the classic theories of growth. However, a crucial importance is given to modern theories, especially those of Romer and Lucas which indicate knowledge, innovation and technologies as the growth’s driving force. In these models, foreign trade is a basic channel of technology and knowledge diffusion [Afonso, 2001]. The recent financial crisis has also brought up the meaning of economic security and the role of foreign trade (concerning this security), since it is considered to be one of the transmission channels of crisis-genic factors. Therefore, the question of an optimal level of exports arises. On the other hand, the EU’s economic situation after the world crisis demonstrates that it is relevant to search for economic security sources in the external demand with a constantly small demand within the EU itself.

To conclude, the basic area of the analysis of foreign trade as a component of economic security may be an examination of the exchange of goods which is of strategic importance for a given economy [Księżopolski, 2004, pp. 39–41]. Then, the balance of current turnovers with special attention paid to the geographical and goods’ trade structures and the export competitiveness can be taken into account. The geographical structure of trade exchange indicates that exports and imports are sufficiently diversified and the economy is not excessively dependent on a different country. According to modern growth and international trade theories, the export commodity structure is also significant. Consequently, the turnover of technologically advanced goods may be key for economic security. Taking the commodity structure into consideration, one cannot omit such goods as food and resources: petroleum, natural gas, electricity and other strategic goods.

3. Importance of trade for the European Union’s economy

Since its creation, the EU has been in favour of a gradual removal of limitations and barriers within international exchanges. The Treaty of
Rome introduced the basic legal norms on the common trade policy of the EU towards third countries. In 1968, a custom union was established between member states of the former European Economic Community in order to eliminate internal custom fees and to introduce a common custom tariff for third countries. In the following years, other instruments of the trade policy were introduced, such as: protection against dumping and excessive subsidisation, and instruments concerning the development of exports. Since 1994, the EU has been a member of the World Trade Organization. Current objectives of the EU’s common trade policy focus mainly on the liberalization of the union’s trade, the introduction of fair-trade rules and norms, the assurance of sustainable development within the EU through the trade exchange and the creation of jobs. Currently, all documents determining the EU’s development strategy after the crisis demonstrate trade as a one of growth-stimulating factor [European..., 2013]. In the literature of the subject, the thesis on the foreign trade impact on economic growth is not clearly verified. The theoretical dissertation as well as the empirical analysis did not give any answer to the question of the trade’s role in the economic growth. A broad study of this subject is presented by Tomasz Brodzicki [2006, pp. 29–42]. Other authors who significantly contributed to the subject matter are: Luis Rivera-Batiz, Paul Romer and Richard Baldwin [Rivera-Batiz and Romer, 1991; Baldwin, 2003]. The general conclusion boils down to the statement that foreign trade may be a significant factor enhancing economic growth, however it is not its quarantor. The commodity structure of exports and imports constitutes a fundamental question. Furthermore, directions of trade relations, especially in regard to economic security, are also important.

To assess the importance of foreign trade for the EU’s economy commonly used openness indexes based on foreign trade were applied. The EU’s position in the world’s trade were also presented since it is considered to play a certain role in respect to economic security.

In the first period of the analysis, the EU’s exports to third countries were more than 1,200 bln EUR’s which was around 200 bln less than the EU’s imports. The smallest value of exports and imports was noted in 2009 which was caused by the world trade’s situation. Since then, there has been a visible increase in the EU’s trade exchange, however the exports increased more than the imports which is re-
flected in the trade balance. Within the examined period of time, the EU’s trade turnover balance is negative, and was at its worst in 2008 when it amounted to 260 bln EUR’s.

![Graph](image)

**Figure 1.** European Union export and import value and trade balance (2007–2013 in mln EUR)

Source: Own work based on the Eurostat database.

The analysis of trade balance may be important for the state’s economic security, but its interpretation remains ambiguous. Such deficit may be desired in case of developing countries goods of which are not very competitive. In this situation, it illustrates that a country receives modern products and new technologies through imports. Therefore, if the deficit is of an investment and supply nature, it can contribute to the promotion of investment opportunities of an importing country and at the same time it may lead to the increase of its competitiveness. The maintenance of a negative trade balance within a longer period of time, especially in case of consumer goods, may negatively influence the balance of current turnovers and as a result other macroeconomic indexes [Księżopolski, 2004, pp. 39–41]. As far as the EU is concerned, it can be assumed that if the trade deficit in the European strategy is tolerated and it is acceptable to some extent. All the more so because this deficit does not exceed 1.8% of the Gross Domestic
Product (GDP) in any examined period of time – it means that it does not threaten the EU’s economy. A clear interpretation of this index is possible in respect to the commodity structure of the union’s trade and it will be presented in the fourth part of this article.

The participation of a given country in the world trade reflects its position and competitiveness on the international arena. The EU’s participation in the world exports and imports in comparison to certain countries is demonstrated below.

* lack of data for Brazil in 2011

Figure 2. Trade performance of the EU as a share of worlds total – comparison with selected economies (%)

Source: Own work based on the Eurostat, WTO and OECD databases.

The European Union is the third economy in the world measured by the number of its inhabitants after China and India and it’s the first one with its participation in the world’s GDP. As Figure 2 shows, the EU also makes the biggest contribution to the worlds trade. The average EU’s participation in the worlds exports and imports within the analyzed time were 16.6% and 18.2% respectively. The extent of the union’s trade exchange measured per inhabitant places it third after Japan and the USA. In 2012, the exports in the EU per capita were slightly above USD 4,265, and imports – USD 4,530. To compare, in
Japan the exports amounted to USD 6,260, and the imports to USD 6,944. As far as China, India and Brazil are concerned, an increase of their importance in international exchange can be noticed. These countries are currently characterized by the greatest growth dynamics in respect to the gross domestic product, demand or their participation in the trade exchange. This phenomenon can play a significant role in the geographical structure’s perspective of European foreign trade.

To estimate the foreign trade’s importance for the union’s economic development the following indexes were applied: the foreign trade intensity index, export and import rates, the import dependency ratio, the turnover sustainability rate and relative export orientation measurements. The trade intensity index represented, as a relation of trade value and GDP measures the openness of the economy based on foreign trade [Brodzicki, 2006, pp. 29–42].

**Table 1. European Union openness – selected indicators (2007–2012)**

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<th>EU27 2007</th>
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<tr>
<td>Trade intensity index</td>
<td>24.1%</td>
<td>26.7%</td>
<td>20.9%</td>
<td>24.0%</td>
<td>27.8%</td>
<td>26.3%</td>
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<td>Export rate</td>
<td>11.2%</td>
<td>12.1%</td>
<td>9.9%</td>
<td>11.3%</td>
<td>13.2%</td>
<td>12.8%</td>
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<tr>
<td>Import rate</td>
<td>13.0%</td>
<td>14.6%</td>
<td>11.1%</td>
<td>12.7%</td>
<td>14.6%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Import dependency ratio</td>
<td>11.7%</td>
<td>12.7%</td>
<td>10.6%</td>
<td>12.6%</td>
<td>13.8%</td>
<td>14.1%</td>
</tr>
<tr>
<td>Trade balance to export</td>
<td>–16.2%</td>
<td>–19.9%</td>
<td>–12.0%</td>
<td>–12.6%</td>
<td>–10.5%</td>
<td>–6.2%</td>
</tr>
<tr>
<td>Relative Export Orientation Index</td>
<td>0.44</td>
<td>0.46</td>
<td>0.46</td>
<td>0.47</td>
<td>0.51</td>
<td>0.5</td>
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Source: Own calculation based on the Eurostat, WTO and OECD databases.

In Table 1 a synthetic picture of the relationship between the EU’s foreign trade and its economic growth was shown. The presented rates confirm the important role of the foreign trade in the European development. It is implicated by the increase of the trade intensity index as well as the export and import rates. As far as the openness of the economy, the EU is placed second in the world after China, the index of which is approximately 30% for the examined period of time.¹

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Changes in European foreign trade in the context of economic security

Within this period, the growth’s dynamics were the largest for the import dependency ratio. It is noteworthy that since 2010, the increase of trading was accompanied by a gradual reduction of the union’s trade deficit. The turnover sustainability rate confirms this dependency. Despite the fact that this index is negative for the whole of the analyzed period of time which locates the EU in the worst positions in comparison to other examined countries, until 2012 its decreasing negative value indicated the growing exports’ role in the EU’s development. The European’s relative export orientation rate shows that every year the level of the European economy’s openness is growing compared to other countries. For the majority of the presented ratios from Table 1, there is a visible influence of the world’s crisis on the EU’s foreign trade values. It is seen in 2009 that the escalation of negative factors connected with the above-mentioned phenomenon took place. Most of the indexes depicting relations between foreign trade and the EU’s economic growth deteriorated.

![Figure 3. Relation between the export/import rate, unemployment rate and GDP growth rate in UE27 (2007–2012 in %)](image)

Source: Own work based on the Eurostat database.

In Figure 3 the relations between the exports and imports and GDP dynamics and unemployment rates are demonstrated. A certain corre-
lation may be noticed when analyzing the graph’s curves. Along with the increase of export and import rates, the unemployment decreases and GDP grows. The GDP’s growth dynamics are greater than those of trade and unemployment changes. It is undoubtedly connected with the world’s financial crisis.

In summary, the conducted study indicates that foreign trade is important for the EU’s economy. The European economy occupies one of the leading positions in the international arena as far as trade turnover is concerned. Its economy is characterized by a considerable openness. It should be stressed that the situation provoked by the world’s financial crisis being reflected in the data on trade makes it impossible to clearly interpret the presented ratios. In spite of that, this data confirms the relevance of the EU’s foreign trade analysis in respect to economic security. The opportunities and threats assessment in this aspect which may imply the European economy’s development is possible to be made only through the examination of the geographical and commodity structures in the EU’s exchange of goods.

4. Geographical and commodity structures of the European Union’s foreign trade and economic security

The geographical structure of foreign trade is important for the economy’s security, because it determines the level of export and import concentrations. When the import concentration is too big, it indicates a certain dependency on a given goods’ supplier. If goods have a strategic meaning for the importing country, its supply’s suspension may disturb the functioning of the whole economy and lead to the decrease of its national incomes. In the case of exports, its excessive concentration can also pose a kind of threat, especially when one takes into consideration the economic situations of the states where given goods are exported and influence their competitiveness. Bearing in mind these aspects, it is desired to aspire to an optimal diversification of the EU’s trade partners.
Table 2. Geographical structure of the UE’s trade (2007–2012 in %)

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<td>South Africa</td>
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<td><strong>11.0</strong></td>
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<td><strong>13.8</strong></td>
<td><strong>13.9</strong></td>
<td><strong>14.2</strong></td>
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</tbody>
</table>

Source: own work based on the Eurostat database.
In Table 2 the directions of the European trade are demonstrated along with the most important trade partners who are involved in more than 60% of the union’s exports and imports. The presented geographical structure may be described as diversified. The Herfindahl – Hirschmann index calculated in 2012 was 0.056 for the exports and 0.064 for the imports.\(^2\) Over the years analyzed its considerable improvement regarding exports took place. In 2007 it was 0.067. It should be noticed that four major trade partners of the EU are the same countries for exports as well as imports. These are: the USA, China, Russia and Switzerland. Their total share in the union’s exports and imports is 40% and 45% respectively. The NAFTA countries (the North American Free Trade Agreement), mainly the USA, constitute the most important group of recipients to which the EU exported goods within the examined time period. Nonetheless, their importance falls in favour of BRICS (Brazil, Russia, India, China and South Africa). In 2012 those countries received 1/5 of the EU’s exports. This trend may be seen as positive as far as economic security is concerned, bearing in mind that these countries currently show the greatest growth in dynamics and drive the highest demand. BRICS are also the main source of European imports. They contribute 1/3 of all of the EU’s imports. In this group, the most important union’s trade partners are by far China and Russia. Within the whole time period which was, the EU’s turnover balance with BRICS was negative and amounted to more than 200 mln EUR’s. The positive balance of the EU’s trade occurred in the whole examined period time within the co-operation with the USA, the surplus was approximately 62 mln EUR’s. The case of exports’ surplus took place also in the exchange with Switzerland, Turkey, Mexico and Singapore.\(^3\)

The export and import commodity structure plays a key role in economic security. First of all, because of the fact that the above-mentioned goods are of strategic meaning. Secondly, the analysis of goods’ structure allows us to define in which groups of goods and branches there are comparative advantages as well as whether the specialization of a given economy may be observed. As for building

an economy’s competitiveness and consequently its security, the most important goods’ group refers to technologically advanced products, the so called ‘high tech’ goods. Trade with highly industrialized goods has a strong positive impact on economic growth. Exports of high tech products enhances the effectiveness in the improvement of production factors’ use as well as it has positive external effects such as knowledge, innovation and technology spread. Thanks to knowledge spread, imports of high tech goods may also stimulate the enterprises’ innovation in the importing country.

Table 3. Commodity structure of EU trade (2008–2012)

<table>
<thead>
<tr>
<th>Commodity group SITC</th>
<th>2012</th>
<th>Average growth rate (%)</th>
<th>Share in 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export (mln euro)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,686,295</td>
<td>3.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Food, drinks and tobacco (SITC 0+1)</td>
<td>99,600</td>
<td>1.7</td>
<td>-4.2</td>
</tr>
<tr>
<td>Raw materials (SITC 2+4)</td>
<td>47,499</td>
<td>2.6</td>
<td>-7.2</td>
</tr>
<tr>
<td>Mineral fuels, lubricants and related materials (SITC 3)</td>
<td>123,653</td>
<td>6.9</td>
<td>24.3</td>
</tr>
<tr>
<td>Chemicals and related products (SITC 5)</td>
<td>275,985</td>
<td>4.6</td>
<td>10.8</td>
</tr>
<tr>
<td>Machinery and transport equipment (SITC 7)</td>
<td>707,056</td>
<td>2.1</td>
<td>10.7</td>
</tr>
<tr>
<td>Manufactured goods (SITC 6+8)</td>
<td>382,069</td>
<td>1.6</td>
<td>10.5</td>
</tr>
<tr>
<td>Commodities and transactions not classified elsewhere in the SITC</td>
<td>50,433</td>
<td>8.2</td>
<td>58.0</td>
</tr>
<tr>
<td>Import (mln euro)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,791,618</td>
<td>0.2</td>
<td>-2.0</td>
</tr>
<tr>
<td>Food, drinks and tobacco (SITC 0+1)</td>
<td>92,791</td>
<td>0.3</td>
<td>-6.0</td>
</tr>
<tr>
<td>Raw materials (SITC 2+4)</td>
<td>80,932</td>
<td>-1.6</td>
<td>-12.4</td>
</tr>
<tr>
<td>Mineral fuels, lubricants and related materials (SITC 3)</td>
<td>545,051</td>
<td>1.4</td>
<td>0.3</td>
</tr>
</tbody>
</table>
In Table 3 the export and import structure of the EU was presented and divided into goods’ groups according to the Standard International Trade Classification (SITC). The largest share in European export belongs to machinery and transport equipment. Moreover, the same group has also been characterized by the greatest growth dynamics since 2008 and the positive turnover balance. Other important groups of goods constitute industrial, chemical and related products. The growth dynamics of their exports were relatively high, but the positive turnover balance occurred only in case of chemical and related goods. As for the imports, the most significant groups are the following: mineral fuels, oils and related products, vehicles, transport equipment and industrial goods. In 2012, 1/3 of all European exports concerned fuels.

Table 4. Top EU import and export commodities – 2007 and 2012 comparison

<table>
<thead>
<tr>
<th>Export (in mln euro)</th>
<th>2007</th>
<th>2012</th>
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<tbody>
<tr>
<td></td>
<td>Value</td>
<td>RCA</td>
</tr>
<tr>
<td>Motor cars and other motor vehicles principally designed for the transport</td>
<td>71,025.07</td>
<td>1.27</td>
</tr>
<tr>
<td>Petroleum oils, other than crude</td>
<td>17,60.01</td>
<td>0.04</td>
</tr>
<tr>
<td>Medicaments (excluding goods of heading 30.02,30.05 or 30.06)</td>
<td>53,920.56</td>
<td>2.25</td>
</tr>
<tr>
<td>Other aircraft, spacecraft</td>
<td>23,326.09</td>
<td>2.10</td>
</tr>
<tr>
<td>Parts and accessories of the motor vehicles of headings 87.01 to 87.05</td>
<td>24,968.35</td>
<td>0.97</td>
</tr>
</tbody>
</table>
Among the key goods exported from the EU, five of these are classified as high tech products. They are: medicaments, other planes and spaceships, turbo jets, turbo propellers and other gas turbines, electrical equipment and blood for therapeutic purposes. It is worth mentioning that within the analyzed period of time, the EU gained a comparative advantage in all of these categories except for electrical equipment. Furthermore, in 2012 this advantage was bigger than in 2007. The balance of the high tech goods’ trade was positive for the given
time period. It proves that the share of these goods in European exports is higher than their share in the world’s exports. It indicates the positive changes in the EU’s competitiveness for this type of product. The EU’s import structure is dominated by fuels. They occupy the first three places in the list of the most important goods imported to the EU. These are goods of a strategic character. Their main suppliers are Russia and Norway. In 2012 these countries were involved in the imports of the three mentioned goods – Russia at 45% and Norway at 15%. It indicates a huge concentration of these products’ imports in the EU which is undoubtedly disadvantageous from the economic security point of view. Other goods of strategic importance are manufactures within the EU, therefore it does not threaten its security. Among the most important imported products there are also high tech goods. It concerns the following: electrical equipment, medicaments, diodes and transistors. Measured by the amount of high tech good types, more products of this kind are exported from the EU than imported to it. Yet, as far as the goods quality is concerned, data is similar for both types of high tech product exchanges.

The EU as a group of countries is ranked third after North America and Eastern Asian countries by the share in the world’s export of high tech goods. The significance of these products in European exports compared to all of the countries can be described as medium. However, when comparing the EU’s economy with those of the USA or China, the first comes out much poorer. In 2007 exports and imports of this kind of goods were 13.8% and 19% respectively, in the total of European trade. In the following years the import share of this category of goods decreased to 16.5%. Simultaneously, the exports rose slightly to 14.7%. This signifies that the EU was relatively rarely involved in the trade of technologically advanced goods. It is placed lower than the USA (18% – 2011), China (26% – 2011), North Korea (26% – 2012) or Switzerland (24% – 2012).  

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Changes in European foreign trade in the context of economic security

Figure 4. Share of the individual high tech goods in total export/import value in the EU – 2007 and 2012 comparison

Source: Own work based on the Eurostat database.

From Figure 4 it is visible that among high tech goods, electronics and telecommunication products have the biggest share in the EU’s trade exchange, equally when it comes to imports and exports. In this case, trade may be described as an intra-industry one. As far as air, electrical and non-electrical equipment and chemical products are concerned, the situation resembles the previous one. Nevertheless, for computers and office machinery these are products which are more imported than exported from Europe. Comparing 2007 with 2012 there is a noticeable increase in the exports of high tech goods such as: pharmaceutical products, scientific, research, non-electronic and air equipment.

To conduct the analysis of the exported commodity structure in the EU the Revealed Comparative Advantage (RCA) and Contribution to Trade Balance (CTB) indexes were also used [Duchawska, Jagiello, Kotyński and Marczewski, 2007]. These measurements were applied to the analysis of the EU’s export specialization, however the groups of goods according to the SITC were mostly examined.
In Figure 5, the presented ratios show either a comparative advantage or loss of a given goods group. It should be added that the adopted level of exported goods aggregation is very general and divides these products into six main groups. In spite of this fact, the information given in Figure 5 presents the strong and weak points of the EU’s export structure and they constitute an indirect picture of the European economy’s structure. In the Figure it is visible to see that the trade balance is not evenly distributed among all groups of goods according to their share in European trade. It is assumed that the positive CTB signifies a structural surplus, and the negative one – deficit [Duchawska, Jagiełło, Kotyński and Marczewski, 2007]. Taking CTB and RCA indexes into account, the EU’s specialization in machinery and transport equipment exports (framed spaces on the chart) can be observed. The second group, the RCA of which exceeds 1 and CTB of which is positive, consists of chemical and related products. The third group of goods in reference to which one may demonstrate the specialization and comparative advantage concerns industrial products.

5. Conclusion

Foreign trade plays a huge role in the EU’s economic security. The economy’s openness rates based on the foreign trade’s measurements
revealed dependence between exports and imports and the gross domestic product. The general data on the extent and dynamics of trade turnovers in the EU compared with given countries confirms the relevance for further analysis of the European trade’s directions from the economic security’s perspective. Nevertheless, the key meaning is given to the analysis of the European export and import structures including mainly, groups of goods. Over the years which were examined, there were no significant changes in the subject matter structure of the EU’s exports and imports. The main goods exported from the EU were transport machinery and equipment, mostly vehicles. Furthermore, the EU specializes in the exports of air equipment and chemical goods, including medicaments. The basic and most important group of goods imported to the EU constitutes of fuels, mainly from Russia and Norway. The geographical diversification of European trade is on a rather good level and it does not pose a threat in an economic sense, excluding the above-mentioned fuel supplies.

To summarize, the positive transformations in European foreign trade regarding economic security are connected with the focus on the turnover of highly industrialized goods, mainly on their exports. It seems though that this phenomenon is not proportional to the potential held by the European economy, this potential is not fully exploited. The geographical diversification of the union’s exports, mainly towards developing countries, also constitutes a positive aspect. The disadvantageous situation in the European foreign trade from the economic security’s perspective refers to the turnover of fuel. Firstly, a large concentration on only one supplier takes place. As a matter of fact, almost half of the supply comes from Russia. Over the analyzed years, this concentration has risen. Secondly, it concerns goods of strategic importance which poses a certain threat to the EU in an economic sense.

The subject brought up in this article is important and relevant. Therefore, it requires constant and further research. In future studies it is worth to focus on the analysis of the commodity structure of the EU’s trade on a more sophisticated level of aggregation. An analogic examination of the intra-union trade is probable to give new interesting information, bearing in mind the diversified level of a member states share in the international trade and hence the diversified level of security which concerns individual European countries.
References


CHAPTER 20

The impact of non-military threats to economic security

Andrzej Limański *
Zbigniew Grzywna**
and Ireneusz Drabik***

Abstract

Inherent components of the category of security is economic security. Shifting the emphasis to the economic sphere resulted in a situation in which the force of the economy largely determines the capabilities of the state in the broad sense of security (the economization of security). Current research focuses on the identification and characterization of non-military threats related to the availability and type of reserves held by the state, the functioning

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and organization of state authorities during the crisis, efficiency and cost of the crisis response system and the impact of non-military threats to the economic security of the state. The creation of the concept of economic security, requires, taking into account the long-term interests of the state, with a particular vision of the economic and social future and transformations taking place. Evaluation of the prospects of the security and the assessment of the economic situation, in the long term is based on the resources and information that make up the knowledge of the contemporary environment that is the source of the occurrence of non-military threats. It is required to rely on a system monitoring a set of indicators, which allows identifying risk situations early and leads to making the right preventive decisions. In other words, it is necessary to estimate the consequences of both the risks and decisions made in the field of security and economic interests. The purpose of this paper is to systematize the basic concepts and issues related to economic security in the context of non-military threats, as well as the presentation of the impact of such risks to Polands economic security in the context of increasing economic interdependence of international character.

**Keywords:** state, economy, non-military threats, economic security, national security, international security, critical threshold of economic security

### 1. Introduction

The definition of economic security is most often derived from the general concept of security, defined as a state of no threat, peace, security and development opportunities [Drabik, 2012, p. 325]. Despite different understanding and instantiation in various historical and socio-cultural circumstances, security should be considered as a universal value. Universality of this value results from the necessity of security for human existence. This value is required in every culture, society and the lives of everyone. Its importance seems to be directly proportional to the level of safety-infringement because it is a value largely compromised and often challenged and bedevilled [Marek, 2007, p. 103].
National (or state) security can be defined as “freedom from threats posing a risk to the survival of the state (...), it is about ensuring the territorial integrity, sovereignty, freedom to choose the political structure and conditions for prosperity and development” [Czaputowicz, 2003, p. 13]. This understanding of national security is closely related to its vital interests, which means that the level of security guarantees the definition and implementation of self-interest in a free and sovereign way. The interests of the state are linked with actions aimed at ensuring the widest possible range of benefits arising from the implementation of political and economic processes. Vital interests can be defined as “a whole of needs to be met to protect the existence and the possibility of a stable development of the individual, society and the state” [Nowakowski, Szafran and Szafran, 2009, p. 60]. “Interest shall be precisely considered and then included by selecting the appropriate action from among many possible that are shaped under the influence of other motives” [Hirschman, 1997, p. 46]. On the other hand, any attempt to restrict the freedom and sovereignty of these interests is treated as a threat to national security.

When it comes to international security, the attention is put to the fact that the international system is a kind of system of connected vessels and interactions. Security of the country is dependent on the level of security of other states and the quality and level of interaction at various levels (political, legal, military and economic relations, technology and ecology, social, cultural, scientific relations, flow of information and humanitarian issues). There is a close relationship between the actions of a single state and the attendant aspirations facing inside and outside, its internal and external security and the level of international security.

In the current conditions it is impossible to analyse the security of the state in an autonomous way, without taking into account the increasingly powerful influence of external factors. International security combines the security of the state, but also other subjects of international relations (so-called non-state entities require special consideration) with the way of organizing and functioning of the international environment. This means that national interests of security are integrated into the broader structure of the international system, especially in the mechanism of its institutionalization, transparency, predictability and stability. In this way, the spatial extension of the scope
of the interests of national security takes place and international security, which constitutes new quality in international relations, is not the sum of national securities. It is actually shaped through the creation of institutions, norms and values, which will provide its participants, states and other entities of international relations, not only with existence without a sense of external threats, but also with important values, such as development, identity and sovereignty [Limański and Olak, 2012, pp. 313–314].

This does not mean questioning the existence of contradictions between the interests of individual countries or rejecting the postulate of national security policies taking into account the different perceptions of risk. It rather shows the need for a proper diagnosis and taking into account the interests of other countries, as well as the collective perspective in security policies. At the same time it must be emphasized that the provision of international security is a difficult task, among others because of the dynamic processes taking place in the contemporary international system. Both single-state and international security are not states that can be achieved once and for all. Security changes depending on the current balance of power and the relationship of individual participants in international relations, including both state and non-state participants [Limański, 2012, pp. 7–19; Drabik, 2012, p. 20–37].

2. The economization of security in today's market conditions

Security issues have become more complicated when purely military risks, defined primarily in terms of territorial integrity, drifted towards a different kind of threat, based on economic grounds. During the Cold War, military dimension almost entirely “dominated” the security area, but after its end a new trend, consisting in leaving far beyond the military sphere in the consideration of the safety of the state has appeared. The Post-Cold War security approach resulted in the appearance of so-called partial securities as an integral part of national and international security. As a result of internationalization and globalization in a growing number of aspects of socio-political and economic life, the growth of interdependence in international relations and scien-
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tific and technological revolution, a one-dimensional concept of security was replaced by a multidimensional one, including: political security, economic security, social security, cultural security and ecological security. Currently, the military dimension has relatively lost its importance, but it does not mean that it is no longer valid. In today's globalized world there are processes and phenomenas, which may require the possibility of using military force. For example, the fight against international terrorism brings a kind of appreciation for military instruments in the security policy of some countries (so-called security rearmament) [Limański, Olak and Drabik, 2012, pp. 317–329].

Economic security is defined by many authors. For example, Konrad Raczkowski proposes a definition, according to which “economic security is a relatively sustainable endogenous and exogenous state of functioning of the national economy, in which a risk of imbalances is kept in a designated and acceptable organizational and legal standards and principles of social coexistence” [Raczkowski, 2012, pp. 81, 84–85]. Zygmunt Kołodziejak defines economic security as “state of the economy (economic relations), its structure and relationships that enable effective prevention to the negative external impacts that may weaken the economic development and stability of the socio-political and defence capacity” [Freytag-Mika, Kołodziejak and Putkiewicz, 1996, pp. 8, 9–10, 16–17]. Janina Pach understands the term as “the ability of the economy to create and use interdependencies (both internal and external) between the entities in order to boost economic development, to create such potential that can provide the ability to effectively adapt to changes in the country in the global economy and to eliminate potential threats and/or conflicts” [Pach, 2001, pp. 16, 51–52].

Today, we are faced with the intensification in the process of economization of security, which means an increase in the importance of the economic factor in maintaining security. Economization of security is a long, objective process, resulting from changes in the relations between states, as well as in the functioning of the global economy. One needs to remember that military potential grows out of the economic potential, which also determines the feasibility of the policies objectives and the country's position in the international arena. From the above it can be concluded that in the current environment, the most effective tool for ensuring national security is economic security. Economic risks cause disruption to the macro-economic processes, but also make the country vulnerable to external political pres-
sure and reduces its sovereignty (freedom to make decisions) in the internal and external dimension [Księżopolski, 2011, p. 21].

In the literature available, one can find the concept regarding the economics of security. Economics is essentially a narrower or more detailed field of research – as part of an economic theory and descriptive economy – which deals with selected management processes. The relationship between the economy and economics refers to the level of instantiation (detail) of a particular brand term (e.g., economics of agriculture, transport and security) and sector term (e.g., economics of services, industry and the public sector). A common feature in economics is improving the economic efficiency in a specific field [Raczkowski, 2012, pp. 81, 84–85]. Economics of security can be defined as “a detailed study of economics located in military science that combines elements of economic, military and political knowledge, including links between the economic sphere of the activity of the entity and its overall security” [Kurek, 2011, p. 282]. According to Zenon Stachowiak “the subject of interest in the economics of security are the economic bases of the security of the state (continent); one has to notice that their basis is the national economy of each country, that implements tasks of varying degrees of relevance to meet the needs of security (defence) of the state. Not all elements that constitute the economy are of equal importance to the issue of security (defence), because some resources are better suited to meet the specific needs than others, because they act indirectly. Economic bases of security become the subject of inquiry of economics (geographical location, the conditions of survival) and in organizational and decision-making or stream systems” [Stachowiak, 2010, p. 123].

Janusz Placzek says that in the modern economics of security, there are three main streams of research, which include:

- traditional economics of war – in the scope of resource allocation, resource policy of war, human resources in the economy of war, distribution and consumption at war, war agricultural policy, the economic problems of the coalition during the war or the war finance theory,
- economics of defence – completed by broader issues and containing the economics of alliances – indicating the government's role in stimulating the defence tasks in the economy, economics of disarmament, economic problems of peacekeeping, resource
management during crises and the potential for reducing the financing of global terrorism,
- economic non-military threats – the availability and type of reserves of the state, functioning and organization of the state authorities during the crisis, the efficiency and cost of an operation of a crisis response system [Placzek, 2009, p. 18].

3. Dimensions of the analysis of economic security

From the definition of economic security we can see that it can be viewed through the three-component structure: economic independence, stability and sustainability and the ability to make progress and develop. The first of these elements, i.e. economic independence is not of absolute character. The international division of labour makes the modern economy mutually interdependent. In these circumstances, economic independence means the ability of state to take control over national resources to achieve such levels of production, efficiency and quality of production, which protects the competitiveness of the economy and allows partners to participate in world trade, such as, cooperation bonds and in the exchange of international developments. The second element of the economic security is the stability and balance of the national economy, which assumes ownership of the defence system (with different – because of the regime – accents on private and public property), to create favourable conditions and warranties for entrepreneurship, eliminating factors capable of destabilizing the situation (fighting criminal structures in the economy and serious differences in income). The last cited element of economic security is the ability to develop and make progress, which is especially important in today's dynamic world. It is required to create a favourable climate for investment, innovation and modernization of production, improving the skills of educated and culturally developed staff [Kłosiński, 2006, p. 41].

Economic security refers to the sphere of the economy, the nature of economic growth and development. It can be seen in two areas: socio-economic (overall economic), economic and defence. The socio-economic dimension of the state expresses development of the economy and international relations – development that ensures the func-
tioning and resilience to threats and destabilization of the social system, as well as factors weakening its defence capabilities. The economic and defence dimension of a single country is the state of the economic system's ability to effectively resist external economic interference, to develop its economic and defence potential and to allow the functioning of different models of the economy of defence [Stachowiak, 1994, p. 189–200].

In accordance with a subjective recognition, economic security can be analysed in the context of a single country, a group of countries or the world economy as a whole, but there are quite significant differences in their goals. In the case of a single country's economic security, it is about the development of the national economic system, which ensures the proper use of internal factors in the development and effective opposition to outside interference of the economy. Economic security of a group of countries means integrating economic activities of the groups of countries in order to accelerate the development of national economies and the integrated system, while also to provide collective economic sovereignty. On the other hand, the global economic security concerns: the normalization of international economic relations, the development and construction of economic trust, creating conditions for global economic challenges, the elimination of all forms of discrimination and economic war [Frejtag-Mika, Kołodziejak and Putkiewicz, 1996, pp. 8, 9–10, 16–17].

In the analysis of the international determinants of international economic security, it is important to answer the question of how the global economy affects the economic security of states and international security. Addressing this problem requires us to pay attention to some of the features and characteristics of the global economy and its effectiveness and impact on economic security. This concerns processes such as:

- growing economic interdependence of countries,
- internationalization and globalization of economic processes leading to the production relations of countries and the emergence of global markets divided into sectors,
- growing importance of foreign trade in the national economy, considered as a requirement for the economic security of the country [Pach, 2001, pp. 16, 51–52].

A separate analysis of safety in terms of raw materials, food and finances, which are treated as components of economic security, seems
logically justifiable. This approach refers to the subjective scope of economic security that takes into account the goods and values (or lack of them) relevant to the functioning of the subject of security. Security of raw materials is the ability of the country's economic system to ensure the availability of economic resources (energy – oil, gas, coal, electricity – and metals, water, minerals, etc.) from national and international sources at the level and structure that meet the needs of the economy and society and at the same time to guarantee the capacity to resist external pressures and securing unchallenged development of the national economy. The concept of food security is the ability of the economic system of the state (group of states) to use internal development factors, elements of exchange and international co-operation to ensure public physical and economic availability of food of the proper structure and quality and to ensure the ability to efficiently and effectively resist the negative impulses (external and internal), also to ensure a safe food production sphere. Financial security should be analysed in two dimensions: internal and external. The external dimension is perceived and assessed in terms of foreign debt and the ability of the economy to withstand a financial crises. In the internal dimension it is important for the public finance system to ensure the financing of the national economy and the ability of financial institutions to implement national interests [Jakubczak, Flis, 2006, p. 396].

The problem of a great theoretical and practical nature is to determine the so-called critical threshold of economic security of the country. In general it can be said that it means “the internal state of the economy, the level of its integration, interdependencies and international relationships that, in the case of outside interference, do not allow to autonomously decide on the country's development and to effectively oppose the interference. The consequence of exceeding the critical threshold of economic security is a resignation under the influence of external pressure of a country's own identity, i.e. of specific values, structures and mechanisms typical of the state” [Frejtag-Mika, Kołodziejak and Putkiewicz, 1996, pp. 8, 9–10, 16–17]. In practice, it is difficult to clearly identify the critical threshold of economic security, because it not only depends on the measurable values, but also on non-economic factors. This makes it necessary to additionally determine this threshold using different indicators, such as the degree of economic dependence, its nature and geopolitical system, the amount
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do of debt in relation to exports in the area of payments, the possibility of external and internal economic room for manoeuvre in the event of external pressure attempts, etc. An attempt to determine the critical threshold of economic security can fulfil the role of warning a business practice and a created system of economic security [Frejtag-Mika, Kołodziejak and Putkiewicz, 1996, pp. 8, 9–10, 16–17].

4. Non-military threats and their impact on the economic security of Poland

According to the Constitution of the Polish Republic, one of the fundamental objectives of the operation of our state and its structures are to ensure the safety of existence and the development of the citizens, while respecting their dignity. Considering the possible risks, while referring to the structure of non-military threats, it can be seen that economic and legal negligence occurring since the nineties of the twentieth century can be seen up to the present day. Extensive fires, floods, flooding, severe consequences of incidents with chemicals and mining damage are largely the result of failures of the late twentieth and early twenty-first century.

A problem of disasters, accidents, natural disasters and emergency hazards are quite complicated [Fleming, Gołębiewski and Olbryś, 1997, pp. 11, 17, 94–95]. Therefore, one of the first solutions, namely the provision of Art. 232 of the Polish Constitution was adopted as a basis for further consideration: “In order to prevent the effects of natural disasters or technological accidents typical of a natural disaster and in order to remove them, the Council of Ministers may introduce the period, not longer than 30 days, of the state of emergency in parts or in the whole territory of the state (...)” [Polish Constitution on April 2, 1997]. It should be noticed that the legislator gives natural catastrophes or technical failures the character of a natural disaster, in order to determine the basis of the procedures and the principle of the introduction of a natural disaster. So, there may be natural catastrophes and technical failures that are not a natural disaster. The disaster means that an event or situation that human (social group) is not able to deal with, and further continuation of normal social processes is problematic [Fleming, Gołębiewski and Olbryś, 1997, pp. 11, 17, 94–95]. It
should be noted that it is a category of expressing emotional attitudes to a given phenomenon, so not every event can be considered in terms of a natural disaster (in effect until the amendment of the Act on Crisis Management on the 17/07/2009). It is also implied that not every catastrophe is a disaster. Acting only in accordance to the provisions of the Constitution, however, it is very dangerous, because the announcement of the state of emergency can only be made by the Council of Ministers. As a result, a contradiction appears that a disaster, in fact, does not mean the state of disaster in a legal sense. The fact that its existence depends mainly on the subject, which is endangered (citizen, community, state) and the one who performs a kind of threat assessment and priority values. Bearing in mind a multidimensionality of the risk and special position of the society, it must be assumed that the existence of certain equipment, systems and materials and the potential to activate the forces of nature (e.g., nuclear power plant, large bodies of water, the presence of air corridors for aircraft, fires over a large area, infectious diseases, tremors, mining damage and heavy precipitation) are also a source of danger or hazards that may cause a disaster in Poland [Grzywna, 2000, pp. 5–9].

Technical and natural hazards can have various causes. Some of them result from intentional or deliberate activity and some are the result of activation of the forces of nature. These threats influence people, their properties and the environment in which they live and operate. Despite many contradictions, the Polish society is currently fighting for something more and not against anyone, however a huge threat is Islamic fundamentalism and terrorism, or bioterrorism in all its meanings. Positive and negative megatrends are not without significance for the economic security. They can include:

- democratization of the world system,
- developing a new approach to the understanding of international security, co-operation and development,
- formulation of new cultures,
- the creation of a new order through discussions, agreements, contracts and compromises,
- reduction of the military factor in shaping the new reality.

Such conclusions are possible after the analysis of emerging economic, social, cultural, environmental and other factors in solving international problems that can cause:
– possibility of further exploitation of land resources (minerals and energy sources, etc.),
– the possible emergence of natural and industrial disasters,
– attempts to disturb the natural and biological balance,
– the creation of new and unknown challenges.

Confirmation of this can be negative megatrends in the development of countries around us – neighbours from Europe, such as:
– difference of living standards between developed and developing countries,
– ethnic, nationalistic and religious conflicts,
– the spread of transnational organized crime or terrorism,
– the growing threat of a global ecological disaster.

In this situation the most important problem is to identify the threats of economic security which, in order to oppose them, will require decisive action. Another important issue is to identify the risks involved, the preparation of forces and means leading to the elimination of that danger, the struggle with and acting after its elimination. In addition to this, it is necessary to revise the law department to provide protection and defence and to use benefits in kind imposed on the institution, legal entity or an individual to perform specific tasks in peacetime for internal security [Grzywna, 2004, pp. 164–172]. Disasters such as floods or typhoons have never recognized borders, but the risks associated with human activities such as pollution, radioactive waste, etc. correspond to specific countries, companies and managers.

Non-military threats in the country at the present stage of civilization, can be formed as a by-product of the activities of neighbouring countries that, in order to achieve specific positive benefits, as intentional or unintentional activities may result in other negative events and occur as consequences of the development of civilization, or natural phenomena.

Assuming a country is a subjective criterion to areas where non-military threats often appear, the following aspects should be noticed:
• the development of civilization and culture, where the risks arise from:
  – clash of civilizations,
  – differences between state and religion,
  – the idea of globalization,
  – exacerbation of conflicts between different cultures,
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- destroying all obligatory canons,
- collapse of authority, blurring the boundaries between good and evil,
- possibility to use scientific opportunities against humanity;

- the political situation in which the sources of threats mainly are:
  - destabilization of the political situation of the country,
  - unresolved ethnic or minority problems,
  - local conflicts on various grounds;

- the economic situation in which the risks often result from:
  - destabilisation of the country's economy,
  - international financial relations,
  - economic exploitation of the economy as a substitute means of fighting,
  - technical and technological dependence,
  - growth of economic crime;

- the ecological situation in which the sources of risk are mainly:
  - the collapse of the natural balance,
  - pollution of the atmosphere, land and oceans, seas, rivers and lakes,
  - global violation of the balance of nature,
  - degradation of ecosystems,

In the coming years the various components of the economic security of Poland will largely depend on the political and economic space taken by our country in Europe and the world. Other important factors in the development of security will be, on one hand – further integration within the European Union and on the other hand – good relations with neighbours. Signing the “Treaty on Neighbourly Relations and Friendly Co-operation” [Spotkanie…, 2000, p. 33] with all the neighbouring countries, this has led to the situation in which the political and military environment of our country is now relatively safe. This is not a condition that cannot be changed. Therefore, an excessive optimism and taking no actions in this regard is not recommended.

Analysing the current situation of non-military threats against Poland and a growing tendency of these issues in order to minimize their effects, as well as seeing the declarations of the government, it should be noted that there is a process of consolidation in efforts to achieve
excellence in the field of co-operation to reduce all types of non-
military threats. However, if they occur, there should be a concept of 
 rational use of resources, in order to minimize losses and damages.

Considering the number of potential threats against Poland and its 
weak position (not just economic), it can be said, that there is no 
proper reaction of neighbouring countries to the protests and diplo-
matic notes. Polish diplomacy does not fully exploit the whole range 
of forms of pressure that could be used to eliminate hazards. We can 
observe the inconsistency in inquiring into rights when pursuing cer-
tain goals, to achieve common security, a good example here could be 
nuclear power plants near the Polish border. It can be concluded that 
a widely understood issue of non-military threats should become 
a frequent subject of inquiry and interest in theoretical and empirical 
research in many fields of science, including among others the econ-
omy. The ability to predict the development of an emergency in a cer-
tain area can be a precondition for the effective prevention of risk 
situations and for the rational use of existing resources in a given area. 
We should therefore be aware that only imagining things that do not 
exist and the ability to diagnose symptoms and trends in international 
and social relations, will generate tasks for parliamentarians in the 
changing role and position of our country in Europe. Impacts on ele-
ments of the international system of collective security, directions of 
the neighbouring countries and also the wider strategy of using eco-
nomic resources incase of non-military threats and political, economic 
or social crisis is an essential attribute of good governance [Wrób-
lewski, 1996, pp. 9–12]. In order to control the development of emer-
gency situations, a complete and reliable diagnosis of it is necessary. 
Modern threats allow distinguishing certain patterns and factors that 
contribute to the intensification or limitations of such can be identi-
fied. Here are some negative elements enhancing non-military threats 
to the economic security of the state:

- degradation of the environment,
- nuclear weapons tests,
- disaster of shipments with hazardous substances,
- import of production waste into the country,
- failure of nuclear power plants,
- industrial pollution of the environment,
- disposal of radioactive waste.
5. Summary and conclusions

Both presented theories about the causes of threats and examples of threat-intensifying factors, confirm the complexity and variability of the considered problem. In summary, we can say that at the root of today's non-military threats lie overlapping main groups of independent factors, including climate conditions, economic failure and low public awareness. The correlation coefficient between these threats and the direct effect of interaction in the development of the losses caused by these risks or effects after they have occurred, is different. However, the situation in each of these areas can be developed in such a way to be so important that in extreme cases, it will lead to the formation of non-military threats, covering a large area of the country.

International and regional disparities, but also an increasing rank of economic risks can be an economic cause of internal non-military threats. World economic diversification, glaring inequality, extreme poverty almost colliding with excessive wealth – bring all kinds of tensions and conflicts [King and Schneider, 1992, p. 23]. Depending on a group of economic development (high, medium and weak), a country has its own crises, political and economic goals and different elites. If any changes were marked via a line in the graph of relative economic strength of the state and if the second line would stand for changes of risk influence, one might come to the conclusion that the richer the country, the better it is prepared to prevent and respond to threats in time. It should also be noted that today's security is expensive, especially in its full range.

Analysing the national and international literature which deals with national security, there are often misunderstandings that result from differences in language and conceptual scope of terms. In discussion papers about the system of civil protection [Fleming, Gołębiewski and Olbryś, 1997, pp. 11, 17, 94–95], the authors cite a number of definitions of an extraordinary threat (usually Anglo-Saxon and French terminology) as a sudden and serious event requiring immediate action. This is a situation that can precede a disaster, which results in a crisis [Słownik…, 2008, pp. 31, 33] and requires all forces and means (for a given level of government). Exceeding the critical point of physical (technical) capabilities of any man-made system (involving a significant loss of property or loss of human life) is a disaster. The defeat is
social rather than a physical category and reflects the emotional connection with the phenomena.

Another term that can be included in economic threats is a natural disaster, i.e., an event that causes or may cause environmental degradation, posing a serious threat to human life or living natural resources and economic activity [Slownik..., 2008, pp. 31, 33]. In legislation, the state of a natural disaster is defined in a different way, as the law determines the regulations of the public authority and rules of operation. As a result of technological progress and economic development of our country and neighbouring countries, the imbalance in the surrounding nature has appeared. In today's world there is no continent, country or region, without outstanding environmental problems or pollution. Until recently, it was foolishly assumed that nature would always absorb and neutralize the waste of human activity in the air, soil, rivers and oceans. This assumption was wrong. The research of the environment proved that the “magic barrier of impunity” has been exceeded, and further degradation will have an impact on the population and the environment, in the form of abnormalities or damage. The development of environmental awareness around the world was of great importance in the first decade of the twenty-first century, but now it also affects the shape of a new approach to see the causes of the risks. Due to the seriousness of the problems related to the environment, the world's economy and politics, a group of environmental factors as a potential source of danger was distinguished. The main factors include: the development of technology, economic development, intensive agricultural development, environmental degradation and to name but a few. It needs to be noticed that there is no country in Europe with an undamaged environment. Acid rain, deforestation, water pollution and its chronic shortage, steppe instead of growing areas, are not just internal problems of these countries. These phenomena have exceeded the limits of the continents, so they require a completely different, new approach that allows maintaining the relative biological balance. Lech W. Zacher, analysing the Palme Commission Report, warns that the ecological crisis and its effects may become a threat to collective security which may arise as a result of environmental disturbance. There is a growing belief that certain types of development destabilize the natural systems and may lead to the expansion of the social breakdown. The interaction of poverty and environmental de-
struction causes a spiral of activities that can cause migration of environmental refugees, the spread of deserts and deforestation areas and conflicts over access to water and its resources [Palme, 1989, p. 7].

Following this study, the researchers predict that the increasing lack of natural resources (renewable and non-renewable) and increasing environmental degradation, combined with obsolete technology are the potential threats. The threat is also uneven economic growth or economic crisis and limited access to modern technology. The underdevelopment of these can lead to a crisis between states. Throughout the world there is a threat of disaster. Risks arise in chemical plants, in warehouses or depots of hazardous materials, or in nuclear power plants and can be caused by outdated technology. Terrorist attacks that take the most tragic form of non-military threats are another possibility. It is known that forms of impacts on ecology and environmental issues are very different, they have different political or economic resonance and therefore the degree in the conflict of interest is high. Also environmental safety which is a component of the security requires an individual approach.

The search for an effective security system on a global or regional scale aims at replacing the concept based on the mutual commitment for common survival, which is reflected in today's new concept of cooperation. “Awareness of the organization of the security system in the absence of the spirit and clearly defined powers and responsibilities means that problems are undertaken by various institutions and for different parts of the system” [Kitler, 1999, pp. 12, 26–30, 31, 68]. These difficult, unpredictable situations that threaten the national or internal security are generally referred to as the crisis [Ibidem].

According to the researchers involved in the issue of security, in order to explore closer and further future and thus, possible risks, we should use some of the basic methods for future studies:

– method of scenarios,
– structural analysis,
– morphological analysis,
– the Delphi method,
– tree validity.

These methods can not only be used to study the area of non-military threats, but generally to analyse economic security threats. Contemporary countries and each region or province – as a result of the enor-
Mous progress – must prepare for eliminating threats, to do well in this confrontation and to “know” their “opponent, rival, or a threat.”

We distinguish anthropogenic disasters – caused by a man and non-anthropogenic, also called natural disasters – caused by factors more independent than by a human [Kitler, 1999, pp. 12, 26–30, 31, 68]. Natural disasters are probably the most dangerous, because they are caused by floods, droughts, cyclones, whirlpools (tornados), avalanches, landslides, forest fires and prolonged severe frosts, as well as the development of locally occurring parasites or pests, which undoubtedly indirectly contribute to the safety or economic threat.

Anthropogenic disasters are those that are created by the failure, resulting in the emission of harmful gasses or liquids. They include chemical or nuclear emergencies involving radioactive substances as well as those arising from long-term harmful emissions or polluting water with toxic and radioactive waste. Not without significance is the emission of carbon dioxide and other so-called greenhouse gasses (e.g. resulting from the combustion of fossil fuels). These gasses, together with water vapour in the atmosphere, increase the greenhouse effect and CFCs released into the atmosphere destroy the ozone layer, forming active protection against biological (malicious) components of ultraviolet (UVB) light. To maximally limit risks, it is required to strictly comply with environmental rules while preventing environmental disasters.

The range of non-military threats, including technical failures, can stimulate inhabitants of our country, region or province to a reflection. The result/effect of the listed events can be sudden emergencies, formed, as shown, for different reasons. Most often the one to be blamed is a human operating a different device. Occasionally, it is possible to detect and document the impact the forces of nature have, intrinsic design flaw or fatigue of materials before a failure occurs. Non-military risks will certainly continue to appear, so the attention should be put at the entity's opportunities to eliminate or mitigate the effects.

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CHAPTER 21

The right to deduct input VAT from a dummy invoice vs. economic security of the EU Member States

Jerzy Duży*

Abstract

This paper looks at the problem of a taxpayer’s eligibility to input VAT deductions in case its business partner provided the taxpayer with a fabricated invoice. The paper proposes a thesis that, in fact, in this context, the very extensive recognition of the right of the unaware participant to a fraudulent scheme to deduct the tax actually breaches the rule of VAT neutrality. The author believes that, considering the systemic aspect, only denying the VAT deduction right even to an unaware participant to a criminal manipulation in the broadest spectrum of cases possible, can provide an efficient and, more importantly, permanent means of undercutting the economic motivation for committing offenses consisting of the abuse of the VAT mechanism.

Keywords: VAT, tax deductibility, dummy invoices

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1. Introduction

The value-added tax (VAT) is a tax on each increment of the value of an item of merchandise or a service that occurs at a given supplier in the way from the initial producer/provider to the end consumer. Its basic feature is the right to deduct the input tax from the output tax, which serves to the taxing of the increment of value (value added) at each individual link of the production and supply chain. The right to deduct the input tax is not a privilege of the taxpayer but it’s a basic right resulting from the nature of this tax [Bartosiewicz, Kubački, 2006, p. 10]. The purpose of the construct consisting of the deduction of the input tax from the output tax is to neutralize the burden of the tax imposed on the taxpayer in connection with the accrual of the tax at the previous link of the chain. As a consequence, each business entity representing a link of the production and distribution/supply chain may deduct the tax paid to its supplier from the tax accrued to its client [Gibasiewicz, 2012, p. 53, 75, 263, 368]. The construct of VAT assumes that the burden of the tax should be imposed only on the end user or consumer using the product or service for its own purposes (unrelated to the performance of any business liable to taxation). This rule is likely to explain a kind of paradox reflected in the companies’ interest in obtaining the status of a VAT payer [Ibidem], which demonstrates that VAT is neutral to their business.

2. The right to deduct input VAT from a dummy invoice vs. economic security of the EU Member States

“Neutral” taxation is the one that does not influence the decisions of the entity choosing between different economic solutions. A neutral taxation assumes the evasion of these fiscal aspects that could influence the economic decisions of the market players concerned [Johansson, 1999, p. 169]. The VAT neutrality rule originates not only in the regulations that govern VAT directly (the 6th Council Directive 77/388/EEC of 17/05/1977 on the harmonization of the laws of the Member States relating to turnover taxes, common VAT system, and the Council Directive 2006/112/EC of 28/11/2006 on the common VAT system)
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but also in the Treaty establishing the European Community of 25/03/1957 including without limitation its sections 2 and 3 [Gibasiewicz, 2012, p. 53, 75, 263, 368].

The case law of the European Court of Justice (ECJ) and then the Court of Justice of the European Union (CJEU) stresses in connection with the VAT neutrality rule, that the right to deduct the tax constitutes an integral feature of the VAT model and basically, must not be restricted see TCJ rulings in the joint cases of C-177/99 and C-181/99. Thus, the right to deduct the tax is one of the basic rights of the taxpayer, which materializes the principle of neutrality of the tax. Unfortunately, the same mechanism of VAT that makes it neutral to taxpayers can quite easily be used as an instrument of offense.

Once a VAT payer has concluded a taxable transaction, it is required to make out an invoice. The invoice, as evidence of the transaction, authorizes the buyer of the goods or services concerned, being an active VAT payer, to deduct the input tax contained in the invoice from the output tax charged to its own clients. However, the mechanism can be easily abused by the creation of the input tax from thin air by issuing so-called “dummy” invoices, i.e., invoices documenting non-existent transactions. The 6th VAT Directive (section 21.1.c) enabled the Member States to pass legislation requiring the issuers of such invoices to pay the taxes specified in the invoices. The current section 112 of the Directive 2006/112/EC has retained this authorization. Unfortunately, the sanction, even when applied, is usually unenforceable as the issuer of a dummy invoice is typically also a dummy company with no assets, whereas the very existence of the possibility of imposing the sanction raises certain problems with interpreting the fiscal obligation and accordingly, the way of seeing the nature of such behaviours. The VAT payment obligation resulting from the issuance of the invoice alone cannot be considered as a VAT payment obligation because the issuance is not related to any real performance. It is a classic fiscal sanction aiming to prevent fraud.

The principle of the deduction of the input tax from the output tax leads to taxation fraud [Kardas, 2006, p. 34]. The typical VAT system abuse mechanism in the domestic trade consists of recovering the input VAT that has never been paid by the previous links of the chain on the sale of taxable goods or services. The scheme provides the seller an undue competitive advantage. In fact, the perpetrator’s gain consists of
the non-existent input VAT. Perfectly simple. It is enough to obtain dummy invoices as evidence of payment of the input tax to the previous link of the chain for the fraud to succeed. In an economic sense, the perpetrator’s behaviour consists of “intercepting” the tax due to the government [Stolarczyk, 2010, p. 107]. The difference between the output and input taxes, net of the cost of arranging for the fraud, is the perpetrator’s gain. The next link in the chain, usually unaware of the scheme, applies to the price paid to the supplier (usually a dummy covering for the real disposers of the object of transaction that prefer to stay in the shadows) to its accounts with the tax office. Thus, the government never receives the intercepted portion of the aggregate VAT.

Regarding international trade, the most frequent fraudulent pattern involves demands for the undue return of VAT by recording in their accounts dummy invoices obtained from entities created specially for this purpose (typically also dummies) or fictitious transactions of the intra-community supply of goods. Physical goods do not exist at any phase of the fraud: their existence and movements are just simulated in the records. Finally, the goods “return” to the state of origin [Pabianński and Śliż, 2007a, p. 23, 24]. These are the so-called carousel offenses. The typical fraud mechanism consists of the appearance of a “vanishing taxpayer” in the chain of supply in the territory of one of the Member States. The taxpayer supplies, or reports the supplying of goods or services for a price including the input VAT but actually never pays the output VAT to the state’s government.

Such behaviour is very costly to the Member States: the related annual tax revenues not earned are estimated at EUR 250 bln [Raczkowski, 2011, p. 1]. Note that VAT revenues represent very significant shares of the overall budgets of the Member States. For the new Member States, the share of indirect taxes in government revenues is clearly higher than for the old ones (U-15) [Krajewska, 2010, p. 165; Kruczkowski, 2012, p. 383]. This is a consequence of a different governments financing models adopted by the former: higher indirect taxation and reduced income taxes. Earning sufficient indirect tax revenues by the Member States, including the new ones, is critical to ensuring their economic security in view of the continuing crisis. Meanwhile, it seems that individual Member States are not interested in disclosing their actual VAT gaps for political reasons, not mentioning problems involved in the accurate measurement of the shortage.
It could seem that it is just the tax evasion in its various forms that contributes to the deliberated problem. However, this is not the main but rather a secondary motive to the fraud. In fact, the offenders do not just avoid taxes but they directly steal from the government.

Tax evasion, even if by the means of tax fraud [Kalinowski, 2001, p. 22], means the minimization of the fiscal burden by a taxpayer running a real business. As a consequence, the government gains smaller tax revenues than those expected under the fiscal laws. Such acts harm the government but to a much smaller degree than the abuse of fiscal mechanisms. The latter is not designed to minimize the burden but to gain undue profit at the expense of the government. The typical mechanism of abuse is based on a network of entities posing as normal business organizations. The government does not earn any revenues on such fictitious business other than symbolic ones related to the feigning business [Duży, 2013, p. 29, 30, 39].

According to the fiscal law doctrine, tax evasion means a taxpayer’s unlawful efforts made to eliminate or reduce its tax burden. It consists of non-payment of taxes due, by either the explicit refusal to pay or by concealing the actual taxable assets or transactions from the sight of the fiscal administration [Brzeziński, 2008, p. 114; Sowiński, 2009, p. 15, 16].

In the case of numerous breaches of the fiscal law involving the fabrication of invoices or related documents, and the resulting tax return misrepresentations, we deal with a purely fiscal context of the offenses. The fiscal mechanisms are just an instrument used by the perpetrators to avoid paying taxes. The offenders just misuse the fiscal mechanisms. They misuse the constructs of certain taxes to “steal” from the government. This goes beyond the unlawful practice of tax evasion meant to eliminate or to reduce the tax burden, consisting of the non-payment of taxes due by either the explicit refusal to pay or by concealing the actual taxable assets or transactions from the sight of the fiscal administration.

VAT offenders use entirely fake invoices. They do not hide their actual taxable assets or transactions from the fiscal authorities but create a fictitious business reality, resorting to a number of tricks. This means criminal abuse of the fiscal mechanisms, which should not be confused with the tax evasion.

In the case of abuse of the fiscal mechanisms, it is the intention to cheat the government out of money that motivates the offenders and it
is the protection of the government’s revenues that should be viewed as the priority for the provision of protection under criminal law [Duży, 2013, p. 29, 30, 39]. This requires the penalization of such abuses. Briefly speaking, both of the deliberated unlawful types of conduct (tax evasion and abuse of the fiscal mechanisms) deserve penalization and/or other (non-penal) response, depending on the gravity of the offense.

Criminal abuse of the VAT mechanisms is a part of the organized crime and produces huge, though difficult to measure, losses to the government. The cost to the society they produce are much larger than just the gap in the government’s revenue because these offenses, involving the inherent money laundering, threaten the commerce by undercutting fair competition and distorting the allocation of capital [Wąsowski and Wąsowski, 2001, p. 20]. On the other hand, the beneficiaries of the practice, apart from the offenders, include business entities taking advantage of cheaper than usual (untaxed) sources of supply, either deliberately or unknowingly. Considering this, it is possible that taking away the right to deduct the input VAT from each participant to a criminal VAT scheme, even if innocent, in the situation where its supplier used dummy invoices (and particularly where the supplier itself is a dummy) could undermine the specific economic motivation for the offense. From the point of view of the system, given the unsatisfactory efficiency of fighting such crime by the law enforcement authorities, resulting among others from its organized nature, the foregoing solution is likely to be more effective than any other method of controlling the practice. Although such a measure is reasonable, at first sight, in the context of a number of national VAT legislations (see, for instance, section 88.3a.1 of the Polish VAT Law – according to this regulation invoices and customs documents do not authorize an output tax reduction or return of the tax difference or return of the input tax, as such documents represent feigned transactions.), ECJ (CJEU) voiced its doubts on this matter. In its ruling of 12/01/2006 (joint cases C-354/03, C-355/03 and C-484/03; Optigen, Fulcrum, Bond Mouse), The ECJ decided that the regulations of the 6th Directive does not allow a Member State to set off its loss of revenues on the criminal practices of vanishing traders at the expense of bona fide taxpayers that got involved in the tax carousel mechanism [Pabiański and Śliż, 2007b, p. 15]. However, the ECJ’s (CJEU’s) case
law is not consistent and in general, references to the laws of the Member States in the matter of resolving on the tax deduction rights. In its ruling of 6/07/2006 (joint cases C-439/04 and C-440/04; Kittel, Recolta), The ECJ noted that it is a national court that is competent to refuse tax deductibility to a taxpayer where it has been objectively proven that the taxpayer was or should have been aware of its involvement in a VAT scheme. In another ruling of 21/06/2012 in the joint cases of C-80/11 and C-142/11, The CJEU reminded us in its pre-judiciary answers that, in accordance with the established case law, the taxpayer’s right to deduct the input VAT from the output VAT is a fundamental principle of the common VAT system established by the European Union (see in particular the following rulings: case C-78/00 of 25/10/2001, the Commission vs. Italy, Rec. s. I-8195, section 28; case C-25/07 of 10/07/2008, Sosnowska, Court Reports, p. I-5129, section 14; case C-274/10 of 28/07/2011, the Commission vs. Hungary, yet unpublished in the Court Reports, section 42). The CJEU emphasized that the right to deduct the tax provided for, in sections 167 and following the Directive of 2006/112, constitutes an integral part of the VAT mechanism and as to the principle, is not subject to any limitation. Specifically, the right holds for the whole tax applicable to a transaction that produces the accrual of the tax (see specifically the following rulings: joint cases from C-110/98 to C-147/98 of 21/03/2001, Gabalfrisa et al., Rec. s. I-1577, section 43; joint cases C-439/04 and C-440/04 of 6/07/2006, Kittel and Recolta Recycling, Court Reports, p. I-6161, section 47; of 30/09/2010 on the C-392/09 Uszodaépít, Court Reports, p. I-8791, section 34; the foregoing ruling in the case of the Commission vs. Hungary, section 43). According to the Court, the purpose of the system for deductions is to relieve the business from the burden of the output VAT, or VAT paid, as part of its whole business. This is how the common VAT system guarantees the neutrality of taxation to each type of business, notwithstanding its purposes or performance, provided that, as to the principle, the business is taxed with VAT (see specifically, the foregoing award in the joint cases of Gabalfrisa et al., section 44; award of 21/02/2006 on the C-255/02 Halifax et al., Court Reports, p. I-1609, section 78; the foregoing award in the joint cases of Kittel and Recolta Recycling, section 48; award of 22/12/2010, 438/09 Dankowski, yet unpublished in the Court Reports, section 24). The Court decided, at the same time that
the question whether a taxpayer has actually paid the output VAT on its earlier or later sales has no effect on the taxpayer’s right to deduct the input tax (see the decision of 3/03/2004 for case C-395/02, Transport Service, Rec. p. I-1991, section 26; award of 12/01/2006 in joint cases C-354/03, C-355/03 and C-484/03, Optigen et al., Court Reports, p. I-483, section 54; and the foregoing award on the joint cases of Kittel and Recolta Recycling, section 49). As highlighted by the Court for the actual circumstances of the deliberated cases, the pre-judiciary questions were based on the assumptions that, firstly, the transaction to justify the deduction had been concluded, as proven by the corresponding invoices and secondly, the invoice contained all information required by the Directive 2006/112, while the ruling of the national court did not suggest that the plaintiff had been found guilty of an unfair act such as a misrepresentation or the fabrication of invoices. According to the Court, in these circumstances the taxpayer could be refused the right to deduct the tax only based on the case law established in sections 56–61 of the award in the joint cases of Kittel and Recolta Recycling, which requires objective proof that the taxpayer, client for the goods or services rising the right to tax deduction, knew or should have known that the purchase transaction involved an offense committed by the supplier or other persons acting as the previous link of the supply chain. The taxpayer who knew or should have known that the purchase transaction involved an offense committed by the supplier or other person acting as the previous link of the supply chain should be considered an accessory to the offense, whether the taxpayer gains benefits from the further resale of the goods or services (see the foregoing award in the joint cases of Kittel and Recolta Recycling, section 56). On the other hand, penalizing in this manner, the taxpayer who neither knew nor could know would conflict the rules of the right to deduct discussed in sections 37–40 of the award (see similar awards in the Optigen et al. case, section 52 and 55; and the joint cases of Kittel and Recolta Recycling, section 45, 46 and 60). The Court pointed out, that implementing a system of punishment without guilt would exceeded the scope of measures necessary for the protection of the interests of the government (see similar cases of 11/05/2006, C-384/04 Federation of Technological Industries et al., Court Reports, p. I-4191, section 32; and C-271/06 of 21/02/2008, Netto Supermarkt, Court Reports, p. I-771, section 23). The Court decided that since,
pursuant to section 45 of the ruling, refusing the right to deduct would be an exception from the basic principle (the eligibility to this right), the fiscal authority is required to prove, *lege artis*, the existence of reasonable grounds for the supposition that the taxpayer knew or should have known that the purchase transaction involves an offense committed by the supplier or other persons acting as the previous link of the supply chain.

According to the Court, “the measures applied by the Member States under section 273 of the Directive 2006/112 to ensure correct tax collection and control offenses may not go further than necessary for achieving this goal. Accordingly, such measures must not be used in a manner preventing on a regular basis the exercise of the VAT deduction right and thus, lifting the principle of neutrality of the tax as one of the basic principles of the common VAT system (see similar awards, including those in the joint cases of Gabalfrisa *et al.*, section 52; Halifax *et al.*, section 92; award of 21/10/2010 in the case C-385/09, Nidera Handelscompagnie, yet unpublished in the Court Reports, section 49; the foregoing award in the case of Dankowski, section 37). Fiscal authorities may not require, on a general basis that a taxpayer intending to exercise the VAT deduction right should check that the issuer of the invoice for the goods or services to be covered by the deduction is a taxpayer that is the actual disposer of the subject goods or services, is able to supply them, or whether it has fulfilled its obligation to submit a tax return and return the applicable VAT in order to ensure that the entities operating at the previous links of the chain of supply are not guilty of non-compliance or offenses, or that the taxpayer should have relevant evidence. This is so, because, as to the principle, it is the fiscal authorities who are responsible for performing necessary inspections of taxpayers for the purpose of detecting non-compliance with, and violations of, the VAT law and punishing taxpayers guilty of such non-compliance or violations. Thus, by imposing the obligations discussed in section 61 of the award on taxpayers under the threat of refusing the right to deduct, fiscal authorities would delegate to taxpayers its own control responsibilities in breach of the cited regulations. Considering the foregoing, the Court (the 3rd chamber) decided the following: 1) Sections 167, 168.a, 178.a, 220.1 and 226 of the Council Directive 2006/112/EC on the 28/11/2006 in the common VAT system should be construed as inhibiting the national
practice, under which a fiscal authority denies a taxpayer the right to deduct from the output VAT, the amount of this output tax or tax paid on the account of the services provided to the taxpayer, for this reason that the issuer of the invoices concerning these services or one of its service providers is guilty of non-compliance, without proof from the fiscal authority based on the objective premises that the taxpayer knew or should have known that the transaction supposed to constitute the foundation of the right to deduct involved an offense committed by the issuer of the invoice or another party operating at the previous link of the supply chain; 2) Sections 167, 168.a, 178.a and 273 of the Directive 2006/112 should be construed as inhibiting the national practice, under which a fiscal authority denies the right to deduct for the reason that a taxpayer has not made sure that the issuer of the invoice for the goods, to which the right to deduct is supposed to apply, is a taxpayer, was the disposer of these goods and was able to supply them and that it has discharged the obligation to place the return and pay VAT, or for this reason that the taxpayer has no other documents, apart from the invoice, confirming compliance with the foregoing conditions even if the substantive and formal requirements for the rise of the right to deduct defined in the Directive 2006/112 have been met and the taxpayer had no premises to suspect that the issuer of the invoice was guilty of non-compliance or offense.”

Please note that in connection with the foregoing rulings that the Court of Justice of the European Union “decodes” the rules of community law by deriving them from the provisions of the Treaty and then resolves a specific case using the so-construed rule [Maliszewska-Nienartowicz, 2007, p. 35]. The gravity of the rulings by the ECJ (CJEU) is large enough for the case law to have a significant influence on the interpretations of the tax law even in such legal systems, which, as the Polish legislation, the fiscal law lacks statutory references to the notions used by the Court, such as, for instance, those used in the joint cases of C-80/11 and C-142/11 discussed above: the criterion of due diligence. All of this makes it difficult to predict whether, or rather to what extent, the fiscal authorities and administrative courts specific for the Member States will follow the rules indicated by the ECJ (CJEU) as setting the limits of questioning the VAT deduction right of an unaware participant to a criminal mechanism. Note, however, that a reversed process is possible, which means that the subsequent rul-
ings by the CJEU in the face of a rising threat from the phenomenon of criminal abuse of the VAT mechanism and the lack of an effective method in controlling it by other means can be in the deliberated subject, the grant of the right to deduct the tax, more stringent. Finally, it cannot be ruled out in the future that under the pressure from the Member States suffering particularly high losses as a result of criminal abuse of the VAT mechanisms, the VAT Directive will be amended, generally towards the inability to deduct VAT by an unaware participant to a criminal manipulation where the business partner of the taxpayer used fabricated cost invoices, particularly in the situation where it just endorsed transactions that were actually concluded by someone else. In view of the un-abating economic crisis, such a scenario be very likely. Apart from practical and purely economic arguments, we should also take a look at the arguments of a legal nature that support the acceptance of the position on the principal inability to deduct VAT by an unaware participant to a criminal mechanism. Against the appearances, these are not brittle; on the contrary: they find a deep axiological and systemic justification.

Assuming that a fabricated invoice is supposed to raise the right to deduct VAT as a consequence of influencing further trade, this means that a specific property right is related to it. As a consequence, recognizing the VAT deduction right in such situations is the equivalent of undertaking by a Member State a property obligation that results from the fictitious, indeed, document. A thought of an offense against money or securities arises at this point as a natural parallel. Under the legal systems of the Member States of the European Union, where a legal tender that is, for instance, forged, gets to a completely unaware “entity” that, then, uses it, such a tender will be seized and eliminated from circulation. It does not come to anyone’s mind to demand the competent authorities to return the value of the tender: exchange to a legal tender on account of the inadvertent coming into its possession. The Member States of the European Union would not assume responsibility on this account for the loss, even if prosecuting such fraud and protecting citizens against its consequences is one of their responsibilities. What is more, should such person become aware in time that he/she is in possession of a counterfeit legal tender and having this knowledge, “introduces it into circulation” to avoid personal loss, this person would commit an offense. So, the legislation of the Member
States of the European Union in the name of protection of the security of the circulation punishes, indeed, for the wish to avoid non-culpable loss by citizens (we cannot talk so much about recklessness or carelessness in all instances). The perpetrator acts to avoid a loss or to evade the possible legal consequences of holding a fabricated document though the intent behind the action is not characteristic for the offense defined in section 212 of the Criminal Code [Ćwiąkalski, 2006].

Thus, for the foregoing instance, the legislators transfer financial liability on an unaware citizen so that no one wants to have counterfeit money in his/her wallet. It is the best, though drastic, from the point of view of civic rights, guarantee for minimizing the loss and prompt detection of the practice. Someone could ask a perverse question why the Member States of the European Union are supposed to guarantee the compensation for the loss to stronger entities (professional business operators) and not do the same for the weaker (i.e., the citizens) in comparable situations (in the deliberated context an obvious comparison of the function of counterfeit money to the function of dummy invoices comes to mind as an obvious parallel).

In the case of granting the right to deduct VAT by an unaware participant to a criminal manipulation of the VAT mechanism, a diametrically different point of view is adopted. Returning to the ruling by the CJEU in the joint cases of C-80/11 and C-142/11, cited above, in which the Court claimed that “it is the fiscal authorities who are responsible for performing necessary inspections of taxpayers for the purpose of detecting non-compliance with, and violations of, the VAT law and punishing taxpayers guilty of such non-compliance or violations (…) imposing the obligations discussed in section 61 of the award on taxpayers under the threat of refusing the right to deduct, fiscal authorities would delegate to taxpayers, its own control responsibilities in breach of the cited regulations,” note that in the case of counterfeit money, this is exactly what the legislations of the Member States of the European Union do. They charge their citizens with the duty of care that no counterfeit money gets into circulation under the penalty of personal loss. This is generally acceptable in the name of ensuring circulation security.

In the relationships between individuals, and also in the commercial procurement of goods originating from unlawful acts, the penalization of the handling, with the distinction of inadvertent handling, apart
from ethical barriers, efficiently prevents this type of offenses. It is the awareness of the penalization of the purchase of goods originating from an offense, in the circumstances indicative of such origins, that significantly reduces the criminal motivation for a number of criminal behaviours committed against specific categories of objects that, simply, find no buyers. For the same reasons, citizens do not want to hold counterfeit money because they will either suffer a loss or, trying to avoid it, expose themselves to criminal liability.

In the case of the deliberated categories of offenses consisting of abusing the VAT mechanisms, it is difficult to talk about buying goods originating from an offense. Usually it is the goods coming from an unknown source, which is not equivalent to the “origination from an offense.” It is not the sale of the goods as such, that profits the perpetrator but the unlawful addition of VAT to the selling price. The perpetrators of these crimes can afford to offer dumping prices for easier disposal of the goods even considering the costs of the unlawful practice. In this situation, companies trading in a given line of goods that is most often used in the practice, have no economic interest in introducing strict systems for the validation of their suppliers. On the contrary, such suppliers are “subsidized” by the Member States in a specific manner, become particularly attractive on the market due to their ability of offering dump prices. Thus, honest companies with a strict approach to the validation of credibility of their suppliers cannot compete with those that do not investigate into the sources of the goods whether they trade with the actual disposer of the goods. Earning quite a different profit margin, they can be eliminated from the market. In the case of the deliberated phenomena, it is thus necessary to introduce instruments that would make the buying of goods from uncertain sources unprofitable as carrying a risk of loss. As highlighted above, considering the mechanism of the offense, it is hard to imagine (apart from willful involvement in the practice, but this is quite a different matter) that such solutions could be sought in the domain of criminal law, as in the case of the offense of handling. However, we may and should think about non-penal means of undercutting the economic basis of the deliberated practice. Apparently, it could seem that such measures could consist of implementing a mechanism of a reverse charge for the trade in specific types of goods particularly prone, due to their features, to the application of criminal misuse of the construc-
tion of VAT. This method consisting of passing up the obligation of setting the output VAT on the client on the basis that a reverse charge provides partial results. The Polish practice provides an interesting example illustrating the response of criminal groups to the implementation of the reverse charge mechanism in the trade of scrap metals, one of the main sources of criminal abuse the VAT mechanisms in Poland had until April 2011. After the implementation of the mechanism, some of the entities that used to abuse the VAT mechanisms “against the background” of the trading in scrap metals shifted their activity to trading in other product lines including, trading in steel and reinforcement bars. Polish manufacturers of steel goods associated with the Chamber of Industry and Commerce for the Metallurgical Industry, concerned with the problem, commissioned Ernst&Young to write a report on this practice. The report published on the 16/01/2013 stated that the average annual sales in Poland established, based on statistical data concerning the sales of reinforcing bars amounted to 1.4 million tons, whereas the actual demand remained at the level of 921 thousand tons. This information suggests that the practice of criminal abuse of the VAT mechanisms in the case of trading in reinforcing steel represents as much as 40% of the market!1

In the context of the foregoing example, it turns out that the implementation of the reverse charge mechanism is not a means that could make the practice unprofitable in economic terms for good (unless it covers the entire VAT collection system). This is because the offenders will always find a commodity of specific features not covered by the mechanism, which will do perfectly as an object of criminal manipulation. The response of criminal groups to the implementation of the deliberated mechanism is practically instantaneous, as shown by the foregoing example, This does not mean the instrument should be abandoned; we should rather realize that it will not resolve the problem for long. After a relatively very short time, the activity of criminal groups shifts to another line of goods and the offense-suppressing effectiveness of the reverse charge mechanism becomes limited to a single narrow category of commodities that falls out from the circle of interest of the criminal groups and is almost immediately replaced by another category. What is more, this creates specific difficulties to fiscal

1 Report by the General Prosecutor’s Office from the monitoring of steel and non-ferrous metal sales fraud cases of 22/04/2013 (case PG III PZ 404/14/13).
and law enforcement authorities that have to explore into new or unknown business communities and the nature of the trading in the new types of goods.

3. Conclusions

In the systemic aspect, only denying the right to deduct the tax even to unaware participants to criminal manipulation of the VAT mechanism, possibly in the broadest spectrum of cases, can provide an efficient and, more importantly, permanent means of undercutting the economic motivation for the deliberated offenses. In this context, the case law by the ECJ (CJEU), approaching very narrowly, the possibility of restricting the tax reduction right, seems to excessively stretch the situations in which an unaware participant to a criminal manipulation of the VAT mechanism on account of trading with a business partner that used dummy invoices is eligible to deduct the input tax. In the light of the unsatisfactory experience with the reverse charge mechanism, a growing scale of the deliberated offenses and the legal arguments, in the systemic aspect, the questioning of the right to deduct the input tax in possibly the broadest spectrum of cases in which dummy invoices occurred at the previous link of the supply chain (i.e., with the smallest number of acceptable instances of non-compliance to soften the rule) seems to be the most efficient and more importantly, permanent means of undercutting the economic motivation for the deliberated offenses. However, the current case law by the CJEU can become an obstacle to the application of such practices by fiscal authorities and courts of the Member States. Nevertheless, we should hope that the next CJEU’s rulings will not approach the right to deduct VAT by an unaware participant to a criminal manipulation so strictly, giving consideration to the rank of the problem and arguments of a legal nature. This is because, paradoxically, the CJEU’s reliance on the principle of neutrality of VAT as giving, indeed, the right to deduct the tax contained in a fabricated invoice (apart from the awareness of being involved in the practice) harms honest business establishments by giving preferences to the ones that can buy goods cheaper by trading with offenders, even if unknowingly. This is how these organizations become indirect beneficiaries of the practice. As a consequence, the
abuse of the VAT mechanism leads to business winning the competition that do not validate the credibility of their business partners. It would be naive to expect that, given the present situation, businesses will exercise due diligence in the actual validation of their partners going beyond, purely formal approvals for the purpose of possible fiscal inspections because their economic interest in the long term will be exactly the opposite. In view of the amassing problem and the weakness of fiscal and law enforced authorities, the companies following strict business partner validation practices can be displaced from the market by those feigning such activities to formally meet the criterion of due diligence. This means honesty may not pay. As a consequence, we should ask whether or not it is the actual, very broad tax deduction eligibility of unaware participants of criminal mechanisms that breaches the VAT neutrality rule. Asking this question can encourage the Member States of the European Union to abandon their current very liberal treatment of the VAT deduction right in the foregoing circumstances. It is worth citing the Confucian maxim as the punch line for the foregoing deliberations: make honesty pay more than theft and there will be no theft.

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CHAPTER 22

Role of the Polish construction industry in the protection of the nation’s economic security

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Abstract

The establishment of economic security in business transactions in leading Polish sectors should be a paramount issue for enhancing the economic situation over the coming years. The construction sector experiences huge difficulties with payment gridlocks and crisis in the real estate market. The most serious problems hit the sector of industrial industry, trade and construction. The construction industry has been recognized as an efficient buffer protecting the economy against disruptions, both cyclic and those caused by the overregulation of business. In the future it is vital

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to boost the conditions for innovative operations run by enterprises and to improve the availability of capital.

**Keywords:** economic security, construction sector, crisis of entrepreneurship in Poland, bankruptcy of enterprises, financial and trade risk

1. **Introduction**

Economic security is a desired phenomenon with regards to business operations. Of significance is the economic situation of the state and state policy in respect to building economic security and activities focused on innovative efforts made by enterprises. **This paper aims to explore the possible effects of the sector’s health in Poland’s economic security in the forthcoming years.** Increased economic and political interdependence requires determined and coherent actions for setting common national, European and global goals. Economic security of a business and financial trading guarantees prosperity for society and it applies to each realm of life. A sense of security refers to a lack of threats and hinges on a variety of factors both individual, related to self-esteem through the outlook on life professed, and collective, connected with the involvement in a specific type of local, national or international community [Raczkowski, 2012, pp. 69–70]. The recent difficult years of 2011–2012 revealed certain weaknesses within the European economy. Debt soared and millions of people lost their jobs. The future of Europe is determined by actions which the member states are willing to launch. The European Commission put forward seven flagship initiatives to catalyse progress under each priority theme. The Europe 2020 strategy appears to be critical for entrepreneurship to recover. The major sectors hardest hit by the crisis in Poland include: the processing industry, trade and the construction sector, which is burdened with high trade and financial risk. The Economy Watchers Current Index gauging growth trends and a level of business activity reported the record low in September 2012 which implies a deteriorating situation of enterprises and worsening crisis in liquidity across the Polish economy.
2. Trends for increased economic security in Europe by 2020

The place of economic security in actions undertaken by a state may be approached, in terms of subordination of economic policy to the security policy. Principally the point is to support objectives of foreign policy through the use of economic instruments [Książopolski, 2011, p. 21]. The initiative „Innovation Union” under the Europe 2020 strategy aims to improve framework conditions and access to finance for research and innovation so that innovative ideas may be translated into new products and services, thereby spurring economic growth and creating new jobs. Another important initiative includes “An industrial policy for the globalisation era” seeking to improve the business environment, especially for SMEs and to support the development of a strong and sustainable industrial base able to compete globally.

To some extent, economic growth and job creation employment over the last decade in the Union was squandered. In 2009 GDP dropped by 4%, industrial production fell to the levels of the 1990s. It is worrying that 23m (that is 10% of the active population) are now unemployed. Crisis heightens uncertainty as to economic growth across the EU states. The situation of the financial system effectively holds back enterprises and households from the availability of loans and credits, which translates into the disinclination to invest within the limitations of current expenditures. Two years of the crisis wiped out 20 years of fiscal consolidation. The crisis halved the growth potential. Numerous investment projects, talents and ideas are doomed to failure because of uncertainties, sluggish demand and lack of financing.

In Europe, weaknesses that have negative effects on entrepreneurship, the credit policies of banks, boosted consumption and society’s spending, which in particular, include: Europe’s average growth rate was structurally lower than that of its major economic partners, largely due to a difference in business structures, lower levels of investment in R&D and innovations, insufficient use of information and communication technologies, reluctance in some parts of our societies to embrace innovation, barriers to market access and a less dynamic business environment.

It is imperative to improve conditions for innovative activities run by enterprises and to enhance the availability of capital, setting up
effective innovative models for investment schemes and thereby shoring up enterprises, notably SMEs and contributing to increased production and consumption rates. As part of the initiative “An industrial policy for the globalisation era” the EU will focus on the improvement of the business environment through cutting down the transaction costs of doing business in Europe, the promotion of clusters and improving affordable access to finance; it is required to promote the internationalisation of SMEs. At a national level it is vital to improve the business environment, notably for SMEs, including through the use of public procurement intended to support investments. Access to the single market for SMEs should be facilitated. Entrepreneurship needs to be developed by concrete initiatives, e.g. the simplification of company law and initiatives allowing bankrupt entrepreneurs to restart their businesses. Participation in the single market will be empowered through strengthening their ability and confidence to buy goods and services cross-border, in particular on-line. Smart regulations involving the use of regulations rather than directives, reducing administrative burdens, monitoring the market, removing tax obstacles and improving the business environment, particularly for SMEs, while putting in place an efficient European venture capital market so as to facilitate access to capital markets and creating incentives for private sector funds that make financing available for start-up companies and for innovative SMEs.

3. The situation of enterprises with an emphasis on the construction industry

A continual deterioration in the financial situation of enterprises and a worsening liquidity crisis in the Polish economy undermined the stability of major sectors. In Polish entrepreneurship, Table 1 shows the number of bankrupted enterprises in 16 Polish regions from 2007 to June 2013.

The number of bankruptcies among Polish business organizations operating in all regions of the country taken together almost doubled from 2007 to 2012: from 447 to 877 bankruptcies, respectively. This is an outcome of many factors, the coincidence of which had a direct influence on the financial performance of companies. The largest growth
Table 1. Bankruptcies in the regions over 2007 – VI.2013

<table>
<thead>
<tr>
<th>Province</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>H1 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mazovia</td>
<td>96</td>
<td>91</td>
<td>118</td>
<td>134</td>
<td>141</td>
<td>168</td>
<td>69</td>
</tr>
<tr>
<td>Silesia</td>
<td>67</td>
<td>63</td>
<td>104</td>
<td>93</td>
<td>89</td>
<td>103</td>
<td>55</td>
</tr>
<tr>
<td>Lower Silesis</td>
<td>42</td>
<td>44</td>
<td>86</td>
<td>77</td>
<td>87</td>
<td>110</td>
<td>69</td>
</tr>
<tr>
<td>West Pomerania</td>
<td>27</td>
<td>34</td>
<td>59</td>
<td>58</td>
<td>70</td>
<td>64</td>
<td>34</td>
</tr>
<tr>
<td>Lublin</td>
<td>32</td>
<td>29</td>
<td>34</td>
<td>17</td>
<td>25</td>
<td>38</td>
<td>10</td>
</tr>
<tr>
<td>Warmia-Mazurania</td>
<td>25</td>
<td>24</td>
<td>23</td>
<td>25</td>
<td>18</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Małopolska</td>
<td>21</td>
<td>20</td>
<td>53</td>
<td>52</td>
<td>64</td>
<td>51</td>
<td>44</td>
</tr>
<tr>
<td>Kujawy-Pomerania</td>
<td>28</td>
<td>20</td>
<td>47</td>
<td>42</td>
<td>35</td>
<td>43</td>
<td>26</td>
</tr>
<tr>
<td>Sub-Carpathian</td>
<td>21</td>
<td>18</td>
<td>30</td>
<td>23</td>
<td>23</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td>Wielkopolska</td>
<td>19</td>
<td>15</td>
<td>45</td>
<td>54</td>
<td>64</td>
<td>103</td>
<td>31</td>
</tr>
<tr>
<td>Łódź</td>
<td>16</td>
<td>14</td>
<td>34</td>
<td>26</td>
<td>35</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td>Pomerania</td>
<td>18</td>
<td>12</td>
<td>18</td>
<td>21</td>
<td>29</td>
<td>47</td>
<td>18</td>
</tr>
<tr>
<td>Świętokrzyskie</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>8</td>
<td>9</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Lubusk</td>
<td>9</td>
<td>7</td>
<td>20</td>
<td>7</td>
<td>12</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Opole</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>11</td>
<td>9</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Podlasie</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>13</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>447</td>
<td>411</td>
<td>691</td>
<td>655</td>
<td>723</td>
<td>877</td>
<td>455</td>
</tr>
</tbody>
</table>

Source: Own study based on annually published reports Coface on bankruptcies in Poland within 2007–2012 and I–VI.2013.

of the number of bankruptcies was noted in the Wielkopolska, Podlasie, Pomerania and the Lower Silesia provinces (442%, 167% and approx. 161–162%, respectively). The main causes of the problem included the preceding decline in the financial performance of businesses and related payment bottlenecks (or even gridlocks) that have become more frequent as a result of the companies’ response to the continuing crisis. In contrast, the situation in some other regions was much better. For instance, the rates for the Warmia-Mazuria, Lublin and Sub-Carpathians provinces were just 12% and 19%, respectively. Naturally, the consequences of the economic slowdown also affected
the wealthiest province of Poland, Mazovia, where the incidence of bankruptcies increased by 75% (i.e., almost 6 times less than in the Wielkopolska province). This geographic distribution of bankruptcies is a statistical phenomenon. The provinces with the highest bankruptcy rates are the ones with the largest populations of business organizations and higher commercial turnover figures. This is why the Mazovia province was the one with the highest bankruptcy rate in 2012. The number of bankruptcies in the Wielkopolska province grew by approx. 61% from 2011 to 2012: an immediate consequence of the fall of many construction contractors. Most of the province’s 2012 bankruptcies occurred in the construction and transport industries. According to the province’s courts, there were more than 100 bankruptcies in 2012. In the same year, 110 local employers reported their planned group layoffs were expected to affect almost 3,500 employees. The actual loss of jobs was more than 2,700 and the number of the province’s official unemployed (as measured by the Polish Central Statistical Office, GUS) was 142,000.

Based on the published reports studying the construction industry, the largest losses in the number of jobs in the industry from 2011 to 2012 were noted in the following provinces: Lublin and Warmia-Mazuria (11.3%), Kujawy-Pomerania (10.2%), Sub-Carpathians (9.2%) and Opole (9%). The least affected areas were Mazovia (2.5%), Lubusk (3.7%) and West-Pomerania (4.4%) [Construction Market Study, 2013, p. 195]. See Table 2 for the bankruptcy statistics by industry (specifically the construction industry) from 2007 to mid-2013.

The foregoing statistics show that the tide of bankruptcies affected practically all industries. The bankruptcy rate for the construction industry increased almost 4.5 times from 2011 to 2012 (75 more bankruptcies), which is indicative of a serious crisis. The construction industry is still considered as a high-risk one, experiencing significant liquidity issues. This projects onto real estate services (bankruptcy rate growth by 311% from 2007–2012 and 32% from 2011 to 2012).

1 Considering the 2008 financial crisis in the mortgage loan market, that also affected Poland as of 2009, the structure of the classification of regions in terms of bankruptcies in 2009–2012 was slightly different. The Opole province with its bankruptcy rate growth by as much as 467% was the bankruptcy leader during the deliberated period. The provinces of Podlasie (166%), Pomerania (161%) and Wielkopolska (129%). On the opposite pole we had provinces with the largest bankruptcy rate drop: Sub-Carpathians (−17%), Kujawy-Pomerania (−8.5%) and Mazovia (−42%).
### Table 2. Bankruptcy rates by industry between 2007 and mid-2013

<table>
<thead>
<tr>
<th>Industry</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Mid-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial processing including</td>
<td>N/A</td>
<td>168</td>
<td>277</td>
<td>250</td>
<td>218</td>
<td>227</td>
<td>141</td>
</tr>
<tr>
<td>– Manufacture of metals and finished metallic goods</td>
<td>19</td>
<td>18</td>
<td>51</td>
<td>50</td>
<td>47</td>
<td>39</td>
<td>32</td>
</tr>
<tr>
<td>– Production of foods and beverages</td>
<td>40</td>
<td>32</td>
<td>44</td>
<td>35</td>
<td>34</td>
<td>37</td>
<td>21</td>
</tr>
<tr>
<td>– Manufacture of clothes and textiles</td>
<td>8</td>
<td>24</td>
<td>26</td>
<td>28</td>
<td>15</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>– Manufacture of machinery, equipment and electric devices</td>
<td>N/A</td>
<td>9</td>
<td>23</td>
<td>18</td>
<td>17</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>– Manufacture of goods from other mineral non-metallic raw materials</td>
<td>12</td>
<td>8</td>
<td>22</td>
<td>20</td>
<td>6</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>(incl. construction materials)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Manufacture of rubber and plastic goods</td>
<td>11</td>
<td>13</td>
<td>N/A</td>
<td>15</td>
<td>21</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>– Manufacture of wooden and cork goods excluding furniture; manufacture</td>
<td>21</td>
<td>11</td>
<td>N/A</td>
<td>23</td>
<td>22</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>of straw goods and materials used for weaving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Printing and copying services</td>
<td>18</td>
<td>9</td>
<td>21</td>
<td>15</td>
<td>10</td>
<td>14</td>
<td>N/A</td>
</tr>
<tr>
<td>– Manufacture of furniture</td>
<td>25</td>
<td>12</td>
<td>10</td>
<td>15</td>
<td>12</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>– Other manufacture</td>
<td>N/A</td>
<td>56</td>
<td>80</td>
<td>45</td>
<td>34</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>Other services</td>
<td>4</td>
<td>9</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Manufacture of paper and paper goods</td>
<td>5</td>
<td>8</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>10</td>
</tr>
<tr>
<td>Farming, forestry and fishery</td>
<td>7</td>
<td>6</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Manufacture of chemicals and chemical goods</td>
<td>7</td>
<td>4</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Commerce including</td>
<td>N/A</td>
<td>92</td>
<td>186</td>
<td>147</td>
<td>180</td>
<td>208</td>
<td>111</td>
</tr>
<tr>
<td>– Retail trade</td>
<td>18</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>46</td>
<td>67</td>
<td>26</td>
</tr>
<tr>
<td>– Wholesale trade</td>
<td>89</td>
<td>63</td>
<td>138</td>
<td>107</td>
<td>115</td>
<td>124</td>
<td>71</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>22</td>
<td>15</td>
<td>52</td>
<td>40</td>
<td>40</td>
<td>31</td>
<td>18</td>
</tr>
<tr>
<td><strong>Construction industry</strong></td>
<td><strong>49</strong></td>
<td><strong>59</strong></td>
<td><strong>82</strong></td>
<td><strong>98</strong></td>
<td><strong>143</strong></td>
<td><strong>218</strong></td>
<td><strong>106</strong></td>
</tr>
</tbody>
</table>

392
The market for new construction projects is remaining slow with the developers and individual investors still fearing to take the risk [Ministry of Treasury “Wiadomości Gospodarcze”]. As can be seen from the foregoing table, the largest number of bankruptcies reported in 2012 (227) occurred in the broadly defined “industry.” The increase over 2008 was 35%. The situation of “commerce” was not optimistic either with the 126% growth of bankruptcy incidence since 2008. The 2007–2012 growth rates for the “transport and warehousing” sectors was 41% (a drop in the bankruptcy rate by 22.5% from 2011 to 2012). Viewed as a whole, the growth in the number of bankruptcies in 2007–2012 was 96%. For “professional, research and technology business” the growth rate was 31% from 2007 to 2012 and as much as 70% from 2011 to 2012. Now, comparing the first halves of 2012 and 2013, we can see that the growth rate was 7%, which confirms the longer-term nature of the problem the businesses have with paying their current debts. In 2013, the issues mainly affect the processing industry whereas the situation of the construction industry, the last year’s bankruptcy leader, is now defined as stable though not risk-free. Construction contractors have been noting continuous deterioration of their economic performance from year to year since 2007/2008. As a result of their extremely aggressive pricing policies and on the other hand, growing costs of materials and fuels under existing contracts. Consequently, the industry recorded PLN 1 billion of aggregate net

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2 The value of the construction market dropped by 0.6% from 2001 to 2012. According to GUS, the number of new buildings decreased by 1.3% and expert construction work by 0.7%. On the other hand, the civil engineering market noted a 0.5% growth. Approx. 152K new apartments were built, approx. 141K were started and approx. 165K received building permits in 2012. In comparison, the 2011 numbers were approx. 131K, 162K and 184K.
loss in mid-2012. The shares of the foregoing industries in the “pool” of the bankruptcies changed over 2012, which is important for studying the sector. According to the mid-2013 figures, 33% of the recent bankruptcies are manufacturers: a growth of 4.5% from mid-2012. Now the construction industry is third in the ranking of bankruptcy leaders. The numbers one and two in mid-2013 were the “industrial production” and “commerce” sectors.³

Figure 1. Bankruptcies by industry from mid-2012 to mid-2013 (%)

Source: In-house study based on the Coface Report on bankruptcies in Poland in mid-2013 (press release of 1/07/2013)

The numerous infrastructural projects related to the “Euro 2012” soccer championship gave the construction market a strong growth stimulus in early 2012. However, early June 2012 brought the first signs of decline in the construction output. The industry closed the first half of the year with an 8% growth whereas the following months brought two-digit drops. After 9 months, the growth rate declined to just 1.4%. In September 2012, the Construction Industry Growth In-

³ Austrian AlpineBau with EUR 2.6B debt (triple the EUR 661M assets) petitioned for bankruptcy in June 2013. The company built 3 stadiums in Gdansk, Poznan and Warsaw for the “Euro 2012” soccer championship.
The weaker performance of the construction industry is a consequence of the drop of the value of work done by all the types of construction contractors. The average rates of growth of prices of construction deliverables and the pay offered by the contractors to their employees are clearly lower and the spirits in the industry went down in the second half of 2012. Table 3 shows the numbers of bankruptcies by company type in 2007–2012.

As shown (see Tab. 3), limited liability companies were the 2012’s bankruptcy leaders among all the types of companies with their 73% bankruptcy incidence growth rate. However, joint stock companies and general partnerships “prevailed” over the whole 2007–2012 period with their common 138–137% share of the bankruptcies. We can

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4 PMR Research has been a dedicated research unit of PMR, UK/US market intelligence and research/consulting service provider to organizations interested in Central, East and South Europe and other emerging markets since 1995.
also see a significant, 150% growth of bankruptcies among owner-manager businesses: a result of the all-embracing crisis that affects both the large and the small. The current slow economy expectancy and high levels of commercial risks are likely to keep the bankruptcy rates high.

### Table 3. Bankruptcies by company type in 2007–2012

<table>
<thead>
<tr>
<th>Company type</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited liability company</td>
<td>290</td>
<td>260</td>
<td>444</td>
<td>454</td>
<td>475</td>
<td>502</td>
</tr>
<tr>
<td>Owner-manager business</td>
<td>84</td>
<td>84</td>
<td>135</td>
<td>96</td>
<td>133</td>
<td>210</td>
</tr>
<tr>
<td>Joint stock company</td>
<td>34</td>
<td>28</td>
<td>70</td>
<td>42</td>
<td>52</td>
<td>81</td>
</tr>
<tr>
<td>General partnership</td>
<td>19</td>
<td>13</td>
<td>21</td>
<td>31</td>
<td>29</td>
<td>45</td>
</tr>
<tr>
<td>Co-operative</td>
<td>11</td>
<td>14</td>
<td>12</td>
<td>20</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>State-owned enterprise</td>
<td>8</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>11</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>447</td>
<td>411</td>
<td>691</td>
<td>655</td>
<td>723</td>
<td>877</td>
</tr>
</tbody>
</table>

Source: In-house study based on the annual reports published by Coface concerning bankruptcies in Poland between 2007–2012.

4. **Growth rates: the economy as a whole vs. construction and other industries**

The deteriorating financial performance of business and the deepening liquidity crisis in Poland made the 1st quarter of 2013 the worst period since 2005 in terms of the number of bankruptcies. The nation’s economy is increasingly suffering from the slowdown in the whole of the European Union. However, the downturn in the domestic consumer sentiments can have a much stronger effect. The business is starting to lack funds for efficient performance of work and for this reason, the pace of the work has slowed down. According to the REGON business registry, the population of construction companies of all sizes declined by 0.2% from 2001 to 2012. Both large and small companies faced troubles. The numbers of bankruptcies in terms of a companies size
Role of the Polish construction industry in the protection of the nation’s...

were as follows: 1,100 businesses with 10–79 employees, 69 companies with up to 249 members of staff and 8 of the largest players. The growth forecasts for the construction industry turned even worse in 2013. The drop in the industry’s output is likely to reach as much as 11% (compared to 4.3% according to the March 2012 forecast).

Also some public construction companies suffer multi-million losses. The cuts in all construction project types will slow down the production growth rates in the forthcoming years, which is likely to worsen the construction and assembly output even further. The suspension of housing projects and delivery delays in 2013 will produce a reduction of 6–7%. It is mainly the road building segment, which drove some foreign contractors off the Polish market and made numerous family construction businesses bankrupt, that is blamed for the 2013 decline. It is expected that the housing sector will be the steadiest segment of the market in 2014. The factor that slows down the construction industry is the high level of indebtedness of local governments, which undermines both ongoing and proposed public projects.5

Figure 3. GDP and added value growth in the construction industry between 2004–2012 (%)

Source: In-house study based on GUS’s data.

5 In-house study based on the “Construction Market Study” report by PMR, 2013.
The construction industry was the fastest growing area in 2011 with its growth rate close to 12% compared to 4.5% for GDP. The profile of the phenomenon of bankruptcy changed after the 2012 avalanche of bankruptcies (the loss of 218 companies). Now the liquidity issues are shifting to the earlier links of the chain of supply. Manufacturers of goods for construction and other industries are facing increasing problems. The number of bankruptcies in the furniture and metal processing industries and commerce are increasing. We are receiving more signals that the slowdown has affected not just the construction industry⁶ but also other sectors of the economy relying on private consumption and the absorption capacity of foreign markets. In 2013, the processing industry is struggling against limited demand from both private consumers and businesses unwilling to accept ill-timed exposures. 2013 is and will remain a difficult year in which many companies will be unable to defend their financial liquidity vs. so many inopportune trends; another year of loosening debt discharge discipline and further growth in the number of bankruptcies. There are no prospects for a rapid recovery of the construction industry, which will remain a very risky one. Its share in the pool of bankruptcies will decrease but mainly as a consequence of the rapid deterioration in other industries. The broadly defined industrial production and commerce will be the sectors where the risk of insolvency will grow the fastest. The ever fiercer struggle for the increasingly thrifty client will continue driving trade margins down. Further consolidation of the sector is unavoidable. On the other hand, the accessibility of EU funding and the acceleration of power industry projects in 2014 can give the business hopes for surviving the forthcoming years.⁷

Based on the industry data published by the Central Statistical Office (GUS), the Polish companies’ sales grew by 7.5% from 2010 to 2011. This can be linked to weaker demand on foreign markets. The growth of production was noted for all industrial groups. The construction and assembly production is an indicator that reflects the condition of the construction industry. It was 12.4% higher in 2001 compared to 2010. The construction and assembly output of companies

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⁶ Developers over-invested in 2009 by buying out grounds for housing developments above the demand capacity of the market. Now they perceive the situation as a collapse of the housing market.

⁷ Coface report on bankruptcies in Poland in the 1st quarter of 2013.
with more than 9 employees in December 2012 was 14.6% (year-to-year) higher than in the earlier months of 2012. The road and railroad projects drew the construction work. Civil engineering facilities representing 60.1% of all projects in terms of value drove the construction industry in 2011.  

Figure 4. Construction and industrial production growth between 1996–2012 (year-to-year, fixed prices)

Source: In-house study based on GUS’s data.

The issue of economic security of running a business in the construction industry exposed to high commercial and financial risks made the Central Construction Industry Surveillance Authority undertake the investigation into construction disasters in Poland. According to the Building Law, a “construction disaster” means an inadvertent, sudden collapse of the whole or a part of a building and/or its structural scaffolds, formwork or excavation sheet piling (section 73.1 of the Building Law).

5,939 disasters have happened in Poland during the last 18 years (330 per year, on average). This is 222 less in 2012 than in 2011 and 305 less than in 2010 and can be contributed to the industry’s slowdown. On the other hand, the number of disasters grew more than

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8 In-house study based on the “Construction industry in Poland and review of foreign markets as possible targets of exports by the Polish construction industry,” report published in Polskie Budownictwo, Sept. 2012, developed as part of the Ministry of Economy’s systemic project titled “International promotion of the Polish economy, subordinated tasks 6.5.1 of the ‘Innovative Economy’ Operating Program.”
8 times over the years between 1995–2012. The disasters had various causes and are divided into 2 categories: category 1 for culpable (man-caused) disasters and category 2 for non-culpable ones (caused by natural disasters). The number of disasters in 2007–2008 represents 29.2% of all disasters during the period of the 18 years shown in the diagram. In 2007–2008, poor maintenance of buildings was the main cause of category 1 disasters and category 2 disasters, caused mostly by hurricane winds and tornados, represented 92.5% of all disasters during that period. In 2012, most disasters resulted from natural factors, poor maintenance and neglect of inspection obligations [Construction Disasters in 2012, March 2013, pp. 2, 6].

![Graph](image)

**Figure 5.** Construction disasters in Poland in 1995–2012

Source: In-house study based on the *Construction Disasters in 2012* by the Central Construction Industry Surveillance Authority, Warsaw, March 2013.

### 5. Construction industry growth perspectives

2014 will not bring the expected growth of the construction performance ratios. The mood among the stakeholders is very pessimistic in connection with the sales decline expected for 2014. The utilization of the construction contractor’s capacities is declining for another year in a row, at a 60% rate on average. The businesses perceive tenders as the most effective way of sourcing new contracts. 32% of the respondents are ready to accept break-even or below the line contracts because of insufficient demand. They complain about the high cost of labour, strong competition, bureaucracy and insufficient demand from
the public sectors as critical barriers to the growth of the industry and the sourcing of funds. All of the managers interviewed want to intensify their efforts towards the improvement of operating efficiencies. The procurement process and financial optimization are their improvement priorities [Construction Industry in Poland, 2013, p. 16].

143 representatives of large, medium-sized and small civil engineering contractors were interviewed over the phone in March and April 2013.\(^9\) The largest players (38% of the respondents, 13% more than in 2012) considered power industry projects as the most attractive segment within the next 2 years’ time frame. Lesser companies perceived the housing segment as attractive (12% in 2013 vs. 22% in 2012). The following diagram illustrates the Polish businesses’ priorities for the next 12 months.

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\(^9\) In-house study based on the “Construction industry in Poland and review of foreign markets as possible targets of exports by the Polish construction industry,” report published in Polskie Budownictwo, Sept. 2012, developed as part of the Ministry of Economy’s systemic project titled “International promotion of the Polish economy, subordinated tasks 6.5.1 of the ‘Innovative Economy’ Operating Program.”
The ASM’s/Market Studies and Research Center’s studies on Polish construction contractors confirm that the businesses think about exporting too. The typical barriers to the development of their export business mentioned by the owners of construction contractors include product certification, logistics, and bureaucracy. One quarter believe that the barriers can be overcome.

**Figure 7.** Key barriers to export faced by construction material manufacturers (%)

Source: In-house study based on the “Construction industry in Poland and a review of foreign markets as possible targets of exports by the Polish construction industry,” report published in *Polskie Budownictwo*, Sept. 2012, developed as part of the Ministry of Economy’s systemic project titled “International promotion of the Polish economy, subordinated tasks 6.5.1 of the ‘Innovative Economy’ Operating Program.”

One third of the manufacturers believe that there are no weaknesses to the idea of exporting their product but they often complain about the costs of transportation (16.3%) and their own poor marketing skills (19%). These good attitudes among the businesses can lead to the utilization of their construction service export potential.
Role of the Polish construction industry in the protection of the nation’s...

**Figure 8.** Weaknesses of Polish exports (%)
Source: Author’s study based on the “Construction Industry in Poland,” report by KPMG, 2013.

Most of the companies surveyed are optimistic about their own export prospects within the next 4 years. As many as 65.2% of the 72.8% of companies planning to expand their exports plan to look for and win new foreign markets contracts.

**Figure 9.** Construction material
Source: In-house study based on the “Construction industry in Poland and a review of foreign markets as possible targets of exports by the Polish construction industry,” report published in *Polskie Budownictwo*, Sept. 2012, developed as part of the Ministry of Economy’s systemic project titled “International promotion of the Polish economy, subordinated tasks 6.5.1 of the ‘Innovative Economy’ Operating Program.”
Eastern Europe is the main export destination being taken into consideration. One half of the respondents mentioned Russia, the Ukraine and Kazakhstan, Russia being perceived as the largest market for construction materials and services. Polish companies look forward to collaboration opportunities in the context of preparations for “Mundial 2018,” a huge sporting event.

6. Conclusion

The Polish construction industry grew faster than the whole of the national economy between 2004–2011. The current situation is very inopportune, particularly to businesses operating in the 3 industries associated with the highest risk of bankruptcy: industrial production, commerce and construction. Construction contractors still have problems with finding clients, which compels them to reduce outlays and cut employment. They also complain about problems with recovering debts from their business partners, which has an adverse effect on their financial liquidity. The rate of interest in bank loans remains small and the funding is used mainly for the financing of current operations. The availability of bank loans to companies is still limited. The problems of 2012 in the construction industry were also very painful to the steel and metallurgical industries. The businesses perceive general uncertainty and problems with sourcing funds as the main barriers to the growth of Polish enterprises. Also the economic situation of the rest of Europe, including the financial problems of the Union and the collapse of the construction market in Spain, influence the construction sector in Poland. EU funds allocated for 2014–2020 and the “Polish Projects” program for supporting Polish enterprises and strategic goals of the government can provide a growth stimulus to the Polish construction industry.

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CHAPTER 23

Security of electronic transactions
in business trading in Poland

Sylwia Wojciechowska-Filipek*

Abstract

A dynamic advance of information and communication technologies affects both our private life as well as our business operations. The way that individuals communicate has changed – personal relationships are increasingly replaced by much quicker and easier remote channels. Networks and mutual interdependence became common manners of organising collaboration that ensure effective use of resources as well as huge resilience and swift responses to the changes on the market. For present-day organizations, connection to a complex environment such as the Internet is no longer a choice but imperative in market survival. Thus, they jeopardise a substantial portion of their intangible assets (database, programmes, logistic and production processes, customer’s data and other business secrets) which frequently appear to be more important than real estate or other tangible assets. Ensuring a high level of security

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for information, information systems and electronic transactions in business trading is core for the growth of business’ built upon these networks. Such security should not be perceived merely in the perspective of costs but as a “creator of values” which reinforces and facilitates operations in e-business. Providing an adequate level of security mitigates customer’s fears, enhances trust and hence, convinces them to utilise new electronic forms of running a business.

This paper has set two primary objectives. The first is to give an insight into the impact of information and communication technologies on the shift from the traditional form of conducting business operations to electronic forms. The second aim is to analyse the threats posed by electronic transactions and methods of ensuring the level of security is acceptable to companies and their customers.

**Keywords:** e-business, e-commerce, electronic transactions, security

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1. E-business and electronic transactions

Today’s companies evolved to the point where their business capacities rely on the advance of information and communication technologies. IT predominance in all spheres of life and work and its huge impact determines the development of e-business. Recent years have seen rapid advances in e-business applications and an increase in the number of companies that drifted into e-business. Its expansion was largely driven by three correlated innovations: the application of new technologies, the development of new business models and new cooperation forms [Lin and Hsia, 2011, p. 1885].

E-business is defined in the literature as [Chmielarz, 2007, p. 16]:

- any form of transactions related to the commercial use of individual and institutional business entities, based on digital data processing and transmission,
- business conducted on computer networks such as the internet, while taking into consideration the related infrastructure involved,
- production, distribution, marketing and the sale of goods and services, using ICT networks.

E-business encompasses four elements [Wieczorek, 2003, pp. 17, 73–74]:

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– electronic trade (e-commerce) – applications related with internet shops, electronic forms, accounting for payments and orders,
– supply chain management – solutions facilitating conducting business with trade partners (inventory management, logistics, distribution, financial transactions and the supply of goods),
– customer relationship management – setting up interfaces linking customers with an enterprise,
– internal company network management (intranet) – applications related to business processes within an enterprise.

E-business is connected with the **internet business transactions market** – a virtual Internet space where transactions performed by participants of business trading are executed, using the technologies and services of this medium [Małachowski, 2001, pp. 59, 61–62, 114–118].

Electronic markets are structured as [Wrycz, 2010, pp. 491–495, 502, 513–515]:

– vertical – characterized by a wide variety of products from one industry, they are mostly organized by purchasers and suppliers,
– horizontal – serve numerous industries, finished goods are principally subject to trading.

Leading industries in the electronics market include: electronic finances (electronic banking, electronic payments), electronic services (recruitment of employees, tourist services) or electronic trade [Kasprzak, 2006, p. 251].

Given the manner of running activities on the Internet the following may be identified [Małachowski, 2001, pp. 59, 61–62, 114–118]:

* Passive consumers* – individuals or legal persons harnessing the internet – they browse websites, electronic mails, communicators, visit internet shops,

* Active enterprises* – carrying out activities using the network. These are the companies which know how to tap into the Internet so as to enhance the scope, form and efficacy of the business which is conducted,

* Internet services providers* – operators of telecommunication networks, providers of equipment and software, specialized Internet service providers (ISP – *Internet Service Provider*). ISP offers access to [Małachowski, 2001, pp. 59, 61–62, 114–118]:

  – Portals – virtual place (provider’s server) designed for collecting websites of enterprises – customers (e.g.: Onet.pl; Wirtualna Polska),
– Wortale – thematic portals, e.g. economic, financial websites, etc.
– BBS (Bulletin Board System) – server together with software, collecting files and making them available, allowing for holding discussions in discussion groups, offering an electronic mail.

– B2B (business to business) – transactions executed between enterprises,
– B2C (business to customer) – transactions executed between enterprises and retail recipients,
– C2C (customer to customer) – transactions executed between individual customers, predominantly in the form of auctions, announcements, internet forums and electronic mail.

Electronic trade is a specific type of venture in the field of e-business, focused on trade transactions executed with the use of electronic resources, performed through the Internet [Wrycz, 2010, pp. 491–495, 502, 513–515]. Given the type of goods and services (including information) e-trade may be divided into [Niedzielska, 2003, p. 350]:
– direct e-commerce – ordering and supplying intangible products and services through television-transmission networks (e.g. music and software),
– indirect e-commerce – ordering tangible goods through the network and their delivery through physical channels (through mail or courier).

Given the medium employed for transactions the following may be identified [Niedzielska, 2003, p. 350]:
– on-line shopping – use of the computer,
– mobile shopping – use of the mobile,
– teleshopping – use of interactive TV,
– intelligent agents – use of virtual intermediaries.

The elementary technologies to be harnessed when performing business transactions on the Internet include [Małachowski, 2001, pp. 59, 61–62, 114–118]:
– www landscape, including: websites, portals, vortals,
– internet shops (sale outlets, supermarkets, hypermarkets),
– EDI technologies (Electronic Data Interchange – allows for the realization of the entire cycle of business transactions between
the market participants), SWIFT (Society for Worldwide Interbank Financial Telecommunication), FEDI (Financial EDI), EDIXnet (EDI version adjusted for the Internet),
– payment on the Internet.

2. Development of electronic transactions 
illustrated with an example of Poland 
– comparative analysis

Poland is an EU state with immense potential for an e-commerce market. In the close future a number of customers doing shopping on internet shops may increase by almost 25%. This process is driven by an ample offer of products made available on the internet, increasingly improved logistic services, numerous promotions and dynamically rising number of internet shops (in 2012 there were over as many as 12,000 shops. This is a 12% surge compared to 2011).¹

Almost half of the society search for information on goods and services on the net (Fig. 1) and 21% tend to do shopping through the internet (Fig. 3), though they were mostly under the age of 45 years old (Fig. 2).

Figure 1. Search for information on goods and services on the Internet

Security of electronic transactions in business trading in Poland

Figure 2. Persons ordering or buying goods and services Over the Internet by the age (% of the total)

Source: GUS (2012), Information society in Poland, Statistical information and studies, Warsaw, p. 119.

Figure 3. People purchasing products over the Internet in selected countries across Europe in 2012 (% of the total)

Despite the increasing popularity of electronic commerce, Poland still lags behind the European leaders where for example, in the United Kingdom almost twice as many people do their shopping through the Internet (Fig. 3). Huge differences occur in types of the most frequently ordered products, e.g. a Pole buys six times fewer holidays and excursions as an average European (Fig. 4).

![Figure 4. Products most frequently ordered over the Internet (% of people that order and buy over the Internet)](source)

Source: GUS (2012), *Information society in Poland, Statistical information and studies*, Warsaw, p.122

### 3. Management of electronic transactions security

E-commerce opens up new potentials, brings comfort at work and in life, yet its progress is still hindered by issues of security of the electronic transactions performed. Surveys show that over 68% of people dislike on-line shopping due to concerns over security matters. Customers will refrain from performing business transactions through an unsecured network as it may result in the leak of confidential business and personal information, threat to the privacy and, in effect, losses. A key issue of electronic commerce is security, including identity au-
Security of electronic transactions in business trading in Poland

Authentication of both parties to the transaction and the secure transfer of information [Xiaohan, Junzhuo, 2011, pp. 5640–5642]. Management of electronic transaction security in business trading is not a simple process to be accomplished. It stems from the fact that [Wieczorek, 2003, pp. 17, 73–74; Perechuda, 2005, p. 19; Białas, 2007, pp. 28–34]:

– tele-information systems are enormously complicated, swift, dispersed and diverse in technological terms,
– systems and their surroundings continue to undergo changes,
– landscape of threats are volatile and hard to fully identify,
– management processes are very diverse, interdisciplinary and complex – there occurs mutual correlations not always fully recognized, and feedback,
– an occurred need to incorporate customers to the corporate network,
– numerous issues are hard to be identified, and unpredicted due to the human factor,
– approved concept of the network structure presumes its prevalence and its easy access,
– easy and widespread access, especially without administration of the network remains in conflict with the security of information,
– structure of information enables easy and widespread access (hypertext).

When talking about electronic transactions we deal with an electronic message, thus security is mainly associated with attributes of security for telecommunication and IT systems such as: confidentiality, integrity, accessibility and reliability. Research on security principally centres on technical aspects of security such as: methods of data encryption [Chai, Kim and Rao, 2011, pp. 652–659]. However, it should be highlighted that systems work for mankind and they are operated by mankind. This fact brings additional aspects to the issue – legal, socio-logical, psychological and cultural [Białas, 2007, pp. 28–34]. Hence, security of electronic transactions is interdisciplinary in its nature, and implies the need to co-ordinate efforts made by specialists from various domains and multiple areas [Raczkowski, Żukrowska and Żuber, 2013, p. 10]. Management of electronic transaction security in business trading may and should be examined in three dimensions:

– security of information systems,
– security of logistic sale services,
– security of transaction settlement.
Due to limitations of security technologies and the complex nature of the issue of security, it is difficult to find a complete and utterly secure solution addressing the security of e-commerce [Zhang, Deng, Wei, Deng, 2012, p. 3611]. Organizations handling the issues of security shift the spotlight from technical to the economically optimal possibilities in terms of the prevention of potential errors [Bojanc, Jerman-Blazic and Tekavcic, 2012, p. 1032].

3.1. Security of information systems

Classification of threats to information systems may be effected based on varied criteria. The threat most frequently cited areas in literature can be typified as falling into the following categories [Wawrzyniak, 2002, p. 40; Gospodarowicz, 2002, p. 183; Grzywacz, 2003, pp. 13, 17, 70]:

- **passive and active:**
  - *passive* – disclosure of information in an unlawful manner, though without jeopardizing and affecting the IT system (e.g. eavesdropping, analysis of traffic in networks and compromising emanation),
  - *active* – mainly caused by employees in the form of abuse or omissions;

- **internal and external:**
  - *internal* – are the results of operations by authorized system’s users,
  - *external* – by the fault of persons unauthorized to use the system, natural environment (lightning discharge) and hazards related to the surrounding area (fire);

- **incidental and intentional:**
  - *incidental* – e.g. equipment malfunction, users’ omissions and mistakes as well as errors in software,
  - *intentional* – deliberate operations by systems users;

- **equipment and software:**
  - *equipment* – refer to irregularities in functioning of the computers equipment
  - *software* – related to erroneous operations of software.
According to CERT in Poland that prepares and provides access to annual statistics with regards to incidents for ICT security in internet resources, Poland fared well when compared to other countries in terms of the number of websites dedicated to phishing and malicious software – in the statistics we are not rated within the top ten. However far more problems plague computers of individual users which entails large numbers of bots, scans and spam sent. In 2012 CERT Polska recorded over 10.5 million automatic reports related to the disruption of security [CERT Polska, 2012].

Activities undertaken by perpetrators typically in the following forms [Grzywacz, 2003, pp. 13, 17, 70]:
- input manipulation – insertion of false data,
- software manipulation,
- output manipulation – output-input devices are the target of attack, e.g. ATMs.

The complexity of the security issues triggers the urgency to implement the policy of security, thus a plan or method of operations adopted to ensure system security and data protection [Bia/łas, 2007, pp. 28–34]. Surveys reveal that information on investments in information security is positively viewed by stock exchange investors and generate measurable benefits in the equity market [Chai, Kim and Rao, 2011, pp. 652–659].
Security of information systems is grounded on numerous levels [Wieczorek, 2003, pp. 17, 73–74]:

– security of information disclosed (not to be modified by anyone),
– security of information possessed (not to be accessed by anyone),
– security of information sent (so that sent information reaches a the correct recipient in an unaltered form),
– security of information received (after inserting into the system it did not cause damage).

Determination of security boundaries, in the situation of rapidly soaring popularity of remote access control, is currently unlikely [Reuvid, 2007, p. 113]. Enterprises tapping into the network as an effective and affordable tool for the distribution of goods, services or information need to take into account natural threats to security of a business run through the Internet such as unauthorized access to resources, manipulation of data or eavesdropping.

The effective security system should cover [Grzywacz, 2003, pp. 13, 17, 70]:

– protection of information against loss or distortion (back-ups, mirror back-up),
– protection against data abuse – prevents unauthorized individuals from performing transactions,
– preparation of the system for operations in the case of a breakdown.

The management of security of IT systems involves risk management (monitoring of threats, training and risk analysis) as well as change management, which is the identification of new requirements (procedures, functions, update and users) or configuration management (tracing changes within a systems configuration so as not to diminish security) [Białas, 2007, pp. 28–34].

To ensure security of electronic business and related data exchanges there are a variety of securities employed. They include [Wrycz, 2010, pp. 491–495, 502, 513–515]:

– firewalls – devices designed mainly to protect local networks against attempts to break into IT systems and the surveillance of services harnessed by users;
– cryptography – methods for sending messages in an encoded form so that only the intended recipient is able to decipher the message sent, with the certainty that nobody has modified it. The message to be send is called a clear text or plain text, and
the process of concealing its contents encryption [Gospodarowicz, 2005, p. 84];

- authentication – verifies the credibility of the person, thus attempts to determine that a user is indeed the person he represents himself as [Liderman, 2002, p. 195]. It strives to ensure for a recipient that the information comes from the source as expected by the recipient. Authentication requires evidence represented by authenticating data likely to take various forms (password, private key or finger prints) [Howard and LeBlanc, 2002, p. 40];

- SSL and certificates – Secure Socket Layer (SSL) is a protocol allowing for secure communication between a customer and a server. It is based on certifying institutions which sign their certificates for specific servers so that a user has certainty of the authenticity of the server.

3.2. Security of logistic sale services

Despite numerous merits, electronic business is subject to certain constraints. The foremost among which is the lack of trust towards sellers originating from paucity of direct relationship. In commercial transactions, principally on the Internet or through other mobile channels, trust plays a critical part due to a high level of uncertainty and risk. Accordingly, trust is central to understanding consumer behaviour in e-commerce and significant for embracing new technologies [Lin, Lu, Wang and Wei, 2011, pp. 615–625]. Trust is a dynamic concept. It may be approached before the deployment of technologies (pre-use-trust) which determines adoption of new business forms and after the utilization of electronic channels (post-use-trust) which exerts an influence on further use of electronic services [Hernandes-Ortega, 2011, pp. 523–538]. Though electronic transactions are increasingly popular and more and more people make use of them, it is an established fact that the specifics of these transactions will never assuage certain concerns [Dutko, 2013, pp. 43–52]. In the case of networking enterprises there are difficulties with determining their real location, unclear ownership structures or obscure authority structures [Perechuda, 2005, p. 19]. Thus, a seller faces a challenging task – he needs to win the customer’s trust and convince him of the security of the transactions
performed. Essentially, customers concerns do not regard complicated securities of transactions and systems through which they are executed. Customers have insufficient knowledge about complex securities to verify their accuracy. The lack of trust towards electronic commerce stems from the fact that a customer [Dutko, 2013, pp. 43–52]:

- fails to see a virtual seller,
- has scant information about a seller,
- fails to know achievements of the company,
- is concerned with no post-sale service.

Major reasons for avoiding electronic commerce given by customers (in addition to habits preferring traditional shops) include: no possibility of examining the products or fears of receiving totally different products (Fig. 6).

![Figure 6. The most frequent reasons for avoiding shopping through the Internet](image)


The most common mistakes made by e-sellers are (in 2012)² [Dutko, 2013, pp. 43–52]:

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² Surveys from the 14th–17th of January 2012. An analysis of 1000 negative opinions given on the website Allegro.pl was carried out. The survey covered 40 sellers with a status of “company” with the number of transactions exceeding 1000.
– poor contact with a seller – poor communication, for instance no response from a seller, automatic responses,
– poor quality of products or damaged products – it is the result of the spate of low quality goods or no possibility of examining goods – we are increasingly feeling disappointed,
– a long time for order completion – shopping on the Internet basically postpones the delivery time from the order or payment time, yet the problem lies in the discrepancy between a declared and real time. The borderline for “time patience” is defined between 7–10 days,
– failure to supply products – within 4 years in Poland, the number of customers who did not receive their products fell by almost half. Occasionally they are prompted by fraudulent transactions, but in most cases by mistakes and omissions in the system of accepting orders,
– non-compliance of products received with the description given – on one hand, hasty and careless service of the transaction results in orders incorrectly completed, on the other hand sellers seeking to boost the sale performance manipulate information so as to entice a customer to shop,
– paucity or poor quality of post-sale services – over recent years, according to customers’ opinions, the quality of post-sale services has dropped,
– shortage of products in stock – over 4 years the percentage doubled – more and more companies deal in products without physically having them in stock,
– inflated delivery costs – increasing number of customers feel deceived due to the excessive inflation of delivery costs.

To enhance the level of trust and suppress resistance of customers, companies should [Xiaohan, Junzhuo, 2011, pp. 5640–5642; Dutko, 2013, pp. 43–52]:
– use the function of electronic confirmation of the order to avoid denial of the orders placed,
– find some place on the website to place key information about the seller,
– boast of everything likely to boost the seller’s appraisal for the customer. It would be recommended to display certificates, awards and mentions,
inform a customer of his due rights,
provide warranty covering the products purchased or the possibility to reimburse payment for unsatisfactory service,
inform about the principles of maintenance services – to which maintenance services a customer is entitled to and in which form the assistance is provided.

A significant role for progress of e-business is played by price comparison sites, these are websites making it possible to search for and compare a specific product in various shops. They augment security of transactions executed as these websites sign relevant agreements with shops, hence eliminating dubious entities without entire legal documentation evidencing their operations. Furthermore, each person may share his experiences which improves the standard of service and removes unqualified shops [Wrycz, 2010, pp. 491–495, 502, 513–515].

Table 1. An offer of the most common price comparison sites in Poland

<table>
<thead>
<tr>
<th>No.</th>
<th>Price comparison site</th>
<th>Number of products</th>
<th>Number of shops</th>
<th>Number of major categories</th>
<th>Monitoring of shops/ auction websites</th>
<th>Appraisal of shops/ products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>skapiec.pl</td>
<td>600,000</td>
<td>350</td>
<td>13</td>
<td>yes/no</td>
<td>yes/yes</td>
</tr>
<tr>
<td>2</td>
<td>ceneo.pl</td>
<td>300,000</td>
<td>400</td>
<td>17</td>
<td>yes/no</td>
<td>yes/yes</td>
</tr>
<tr>
<td>3</td>
<td>9sekund.pl</td>
<td>454,000</td>
<td>-</td>
<td>17</td>
<td>yes/yes</td>
<td>yes/yes</td>
</tr>
<tr>
<td>4</td>
<td>nokaut.pl</td>
<td>300,000</td>
<td>300</td>
<td>15</td>
<td>yes/no</td>
<td>yes/yes</td>
</tr>
<tr>
<td>5</td>
<td>kupujemy.pl</td>
<td>100,000</td>
<td>540</td>
<td>10</td>
<td>yes/no</td>
<td>yes/yes</td>
</tr>
<tr>
<td>6</td>
<td>gemino.pl</td>
<td>30,000</td>
<td>35</td>
<td>5</td>
<td>yes/no</td>
<td>yes/yes</td>
</tr>
</tbody>
</table>


3.3. Security of electronic transactions settlement

Reliability and security of the payment system is at the core of the entire e-commerce and its guarantee [Huang and Zhao, 2011, p. 5641]. Currently, electronic transactions may be settled in three ways [Maciejowski, 2004 p. 205]:

Management and economic security
Security of electronic transactions in business trading in Poland

- use of traditional settlement methods – a transaction itself is performed on the network, but its payment is made outside the Internet (payment to the account specified or cash on delivery);
- use of the electronic method for a transactions settlement:
  - on-line banking operations (electronic transfer, partnership programmes),
  - payments by card (system of Internet payments, payment services),
  - payments made through a text message;
- barter transaction – „product for product” or „product for service” – possible principally in relationships between enterprises.

Preferences for payment methods while shopping on the Internet differ in specific countries. For instance, in the UK, the payment methods most frequently used include credit cards (40% of transactions), debit cards (35%) and PayPal. Other methods only account for 4% of transactions in total. Whereas in Denmark, credit and debit cards amount to 89% of all payments in e-commerce.\(^3\) However we can find a totally different situation in Poland, where cash on delivery stands at 42.9% (Fig. 7).

E-payments became essential for successful electronic businesses. Compared to the traditional methods they offer numerous beneficial attributes, including security, reliability, privacy, acceptance, efficiency and comfort. Despite these merits they have to be free of security breaches. A report by the Gartner Group found that 95% of customers are concerned with the security of privacy as well as the security of credit card usage on the Internet. Six out of ten customers are worried about card theft [Kim, Tao and Shin, 2010, pp. 84–91]. Therefore, the enhancement of security protection and thus maintaining the customers trust while performing transactions is central to attract and retain users of e-payments.

For on-line transfers, Polish banks utilize a two-stage level of security – one for logging in to the account and second for confirming transactions. For security reasons, banks apply combinations of various authentication methods. These include passwords (static and mask), scratch cards, text messages (with one time passwords or one time

passwords related to the transaction), Tokens (devices generating one time passwords) or electronic signatures (software and hardware).4

Figure 7. Share of payment methods in the total number of purchase transactions on the Internet

Source: M. Polasik, J. Marzec, P. Foszeder, J. Górka (2012), Modelowanie wykorzystania metod płatności detalicznych na rynku polskim [Modelling the use of retail payment methods in the Polish market], Materiały i Studio, Zeszyt 265, NBP, Warsaw, p. 41.

When using a payment card for electronic transactions, the security level is heightened by Standard 3-D Secure. This is an additional security measure that involves passing, despite the card number, its expiry date and CVV2/CVC2 code, an extra, mostly a one time password generated by the token or received by text message. The password is not used in any transactions requiring the physical presence of the card and thus there is no peril of identifying it while shopping at any outlets.5 Moreover, cards with an EMV microprocessor may be

equipped with new functions, also with the application of remote Internet channels. A microprocessor is embedded with an application fostering one time passwords to confirm the transaction. Passwords are generated by a special reader to which the user’s own card is inserted and confirmed by PIN [Akademia…, 2008, pp. 40–41]. Also interactive payment cards with an embedded generator of one time passwords operated by an LCD display were released. In an extended version a card includes a numeric keypad comprising of 12 buttons (digits from 0 to 9, buttons “OK” and “C”). A card with a generator of one time passwords is a response to heightened needs of customers of banks performing remote payments in terms of adequate level of operations security).6

Another innovative solution in banking is the introduction of biometric systems. Biometric techniques top the security rankings. In essence, they are automated methods for verification and identification of a person’s identity. Biometric methods examine [Gajewski, 2010]:

− physical features – iris of the eye, finger prints, blood vessel structure on the palm or wrist, shape of the palm, shape of the crease lines of the palm, etc.,
− behavioural features – related to behaviour, e.g. handwritten signature, manner of typing on the computer keypad and voice.

For authentication of internet transactions, banks typically apply one time passwords which fail to verify the identity of the person performing a specific financial transaction on the electronic account. A scratch card, token, and, above all, mobile phones may be captured by unauthorized persons. This risk may be eliminated by the application of biometric readers. According to the surveys completed, this banking area may prove to be a crucial place for implementation of biometric systems [Kaszubski, 2009, p. 52].

When embracing new methods for securing transactions, it should be kept in mind that far too complicated logging in and authentication procedures and the inconvenience involved erode the appraisal of security of payment systems in the customers view [Kim, Tao and Shin, 2010, pp. 84–91], and effectively discourage their use.

4. Conclusions

Advances of information and communication technology, mostly widespread use of the Internet utterly altered the manner of communicating on the market. Traditional forms shifted into electronic forms, mainly revolving around the exchange of information. Certainly this is a positive development because it allows for improved functioning of individuals, organizations and economies throughout the world. However, the substitution of traditional relationships with electronic transactions pose a range of threats, previously unknown in traditional business trading. Fears of security of electronic transactions prove to be a major hurdle to the expansion of electronic business. To be able to capture potentials attainable by the network, enterprises need to, not only ensure the security of their own information systems but also provide comfortable and secure payment methods, as well as to gain and maintain customers’ trust. Security of electronic transactions requires co-ordination of specialists from various domains and areas as well as the involvement of all parties in transactions performed; that is enterprises offering products and services, payment systems and customers themselves. It should be emphasized that the systems are only as safe as their weakest element.

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Security of electronic transactions in business trading in Poland


Management and economic security


CHAPTER 24

Risk factors in the management of real estate enterprises

Piotr Tomski*

Abstract

The aim of the research presented in this paper is the identification of groups of risk factors in the functioning of the enterprises of the real estate sector listed on the New-Connect market. The research is the outcome of the analysis of the documents published by the examined enterprises. Their content was ordered and interpreted with reference to the research goal. There, 27 groups of risk factors have been identified.

Keywords: risk, risk management, real estate market, construction industry, New-Connect (NC)

1. Introduction

In the contemporary global economy, business opportunities and threats are constantly changing, having a vital impact on enterprise manage-

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The outcome of the turbulent environment, particularly combined with enterprise strengths and weaknesses, has a critical influence on an enterprises’ safety, understood in terms of its success and survival. In such unsafe and difficult conditions managing a contemporary enterprise requires identifying, assessing, managing and monitoring business opportunities and risks.

Risk cannot be eliminated from a business’ activity but it is possible to recognize it in order to manipulate it efficiently. Risk management is the process most frequently consisting of six stages: planning the risk management process, risk identification, risk classification, risk measurement, planning the ways of reacting to risk and risk supervision and control. To be able to manage the risk efficiently, it is necessary, most of all, to identify and measure it [Korombel, 2011, pp. 330–337]. These activities are particularly significant in case of aggressive enterprises and difficult markets, being the subject of strong influences from the global crisis. Such enterprises are the companies of the New-Connect (NC) market.

The NC market is a platform of financing and trading for young companies with a high growth potential which aim at using innovation to achieve a competitive advantage. Due to their orientation towards fast growth and development in the context of the difficult construction market and real estate market, undergoing the influences of adverse changes and conditions resulting from the crisis, it is particularly important for these companies to recognize the risks. Fast identification of risks and taking preventative actions may determine their success or failure.

The objective of this paper is to present the results of the research focused on the analysis of risk factors and the indication of groups of risk factors identified for the real estate enterprises on the NC market. Risk factors, such as uncertain events, are included in each business activity. Each of the risks may have a negative impact on the activity, financial situation and prospects of development of the examined enterprises. Therefore, it is necessary to acknowledge the appropriate recognition of risks, simultaneously constituting the basis of the effective risk management, as of the key value. In spite of the fact that risk management is the topic broadly analyzed in the world literature, it is necessary to pay attention, after Iwona Gorzeń-Mitka, to the fact that the literature clearly indicates that risk management is still in the early stages of development [Gorzeń-Mitka, 2012, p. 1090]. Therefore, it is
necessary to state that the comparison and the synthetic analysis of risks of the enterprises of the real estate sector on the NC market may bring about the generating of advantages both for the examined enterprises, other business units functioning in the analyzed sector and enrich some practical evidence for the risk management theory.

2. Risk management in the context of the real estate market

As Paweł Nowodziński [Nowodziński, 2013, p. 87] underlines, the enterprises functioning in the competitive environment are exposed to the risk of not realizing the adopted strategy. It is caused by: unpredictability, connected with a wide range of multi-optional characters of the environment and unpredictable situations, the difficulty in specifying the size of risk, the possibility of taking wrong strategic decisions and the lack of ability to react properly to the changing market conditions.

Numerous threats generated in the turbulent economic environment seem to be particularly important and, at the same time, this involves a considerate approach towards the issue of risk [Gorzeń-Mitka, 2011, pp. 322–329] and its effective management.

Risk management can be considered as an increasingly important business driver. Enterprises' stakeholders have become much more concerned about risk. Risk may be a driver of strategic decisions, a cause of uncertainty in the organization or it may simply be embedded in the activities of the organization. For all types of organizations, there is a need to understand the risks being taken when seeking to achieve objectives and attain the desired level of reward. There is a need for the enterprises to understand the overall level of risk embedded within their processes and activities. It is important to recognize and prioritize significant risks. The outputs from successful risk management include compliance, assurance and enhanced decision-making. These outputs will provide benefits by way of improvements in the efficiency of their operations, the effectiveness of tactics and the efficiency of the strategy within the organization.1

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The financial and economic crisis has had an adverse impact on the world's economy and simultaneously, on the construction industry and the real estate market [Risk..., 2005]. The benefits of risk management include identifying and analyzing risks, the improvement in the construction project management processes and the effective use-age of resources. Risk and uncertainty can potentially have damaging consequences [Flanagan, Norman and Chapman, 2006]. Therefore, the risk analysis and management are major features of the project management in construction projects in an attempt to deal effectively with uncertainty and unexpected events and to achieve project success [Pheng and Chuan, 2006, pp. 4–37]. The consideration of risk in the decision-making process is now becoming an important element influencing the effectiveness of the organization [Bernstein, 1996]. In case of construction projects, the consequences of risk appearance may influence an increase in the costs of realization, extending the duration and lowering the quality of the performed works [Madyda, 2011, pp. 338–346].

Large construction projects are exposed to uncertain environments because of factors such as planning, design and construction complexity, the presence of various interest groups (owner, consultants, contractors and suppliers, etc.), resources (manpower, materials, equipment, and funds) availability, environmental factors, the economic and political environment and statutory regulations [Banaitiene and Banaitis, 2012]. Similar factors occur in case of real estate investment and management projects.

The activities of risk management in a real estate investment firm are similar to the activities in other financial enterprises. They include: identifying material sources of risk, measuring and monitoring those risks, devising approaches to control, mitigate or hedge those risks. Risk managers need to understand risks at all levels of the organization [Peyton and Bardzik, 2008, p. 2].

Due to the specific characteristics of real estate, the risk connected with the above is also very special. The most general specification of the kinds of investment risk on the real estate market are macroeconomic, market, financial, legislative risk and risk of investment realization [Bernstein, 1996; Werner, 2001, pp. 75–76; Jajuga, 2004, p. 22; Kuraś, 2006, pp. 134–143; Kuraś, 2009, pp. 45–58].

Monitoring and forecasting, concerning the development of different macroeconomic conditions in the environment of the enterprise realizing an investment project, enables the identification of macro-
economic risk factors and forecasting of possible probability of their development in the future. Market risk refers to the risk connected with market changes. In the case of the real estate market, market risk factors are particularly the change of prices of properties being the result of demand and supply changes. The factors recognizable within the financial risk include a loss of liquidity by the enterprise or the investor, changes in exchange rates and unstable interest rates. Changes in the legal environment are the factors constituting the source of the legislative risk in the real estate market. On the other hand, the risk of realization of investment results from interferences appearing during the execution of the project [Sitek, 2012, pp. 181–192].

3. The characteristics of the conducted research – the methodology

The objective of this research is the identification of groups of risk factors in the functioning of the enterprises of the real estate sector listed on the NC market. The research was conducted with the use of the analysis of the documents published by the examined enterprises. The ordering and interpretation of their content was made with reference to the research goal.

For the analysis of risk factors there were selected companies listed on the NC market. The NC market is a platform of financing and trade for young companies with a high growth potential which aims at using innovations (products, services, business processes) to achieve a competitive advantage. Therefore, these companies seem to be the appropriate empirical material enabling the assessment of the actual risk factors in difficult, generated both by “standard” circumstances of the turbulent environment and the additional ones, existing in relation with the crisis present on the market. These companies are dynamic, young and highly oriented towards development. Due to their orientation towards fast growth and development in the context of the difficult construction market and the real estate market undergoing the influences of adverse changes and conditions resulting from the crisis, it is particularly important for these companies to recognize the risks. Fast identification of risks and taking preventative actions may determine their success or failure on the dynamic market.
The presented risk factors were recognized in the examined enterprises and they were referred to the present conditions of running a business activity. The data comes mainly from the annual reports of 2011. An essential fact is that this data concerns exactly how the companies are running their activity in the real estate sector (by NC), whereas the used reports are the individual reports, characteristic of the individual companies, and not the ones consolidated for the whole capital groups. This way of analysis was adopted for the purpose of the unambiguous specification of risks factors for the selected examined enterprises, with no impact of the related companies.

4. The characteristics of the activity of the enterprises under research

For the real estate sector, within the meaning of the NC market, there belongs 18 companies. The characteristics of their activities are presented in Table 1.

**Table 1.** The characteristics of the activity of the enterprises of the real estate sector listed on the New Connect market

<table>
<thead>
<tr>
<th>ID</th>
<th>The characteristics of the main activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Purchase of building or land properties, raising its value by means of modernization or the building of a new object, commercialization and management. The owner of a few properties of A and B+ class in the area of Warsaw. Offering office and commercial areas.</td>
</tr>
<tr>
<td>2.</td>
<td>Building and sale of apartments and detached, semi-detached or terraced houses.</td>
</tr>
<tr>
<td>3.</td>
<td>Purchase of residential, commercial real estate and the land. Investments in stocks and the shares of the forward looking companies from the construction industry and real estate sector.</td>
</tr>
<tr>
<td>4.</td>
<td>Activity in all the sectors of the real estate market in Poland. The company offers apartments, houses, office and commercial real estate, land, industrial real estate and warehouse centers for sale or to rent.</td>
</tr>
<tr>
<td>5.</td>
<td>Searching for and sale of investment areas (commercial real estate) for external investors and the investment process service. The operating activity is focused on the market of commercial and residential real estate.</td>
</tr>
</tbody>
</table>
The comparison indicates that the examined enterprises run their activities as both an investment, development kind and the one connected with the service of the real estate market in the form of providing services of real estate management and real estate brokerage.

5. Risk factors of the examined enterprises

The conducted analysis brought about the recognition of 27 groups of risk factors in the activities of the examined enterprises, belonging to the real estate sector of the NC market. The factor groups were marked...
with the symbols A to Z and AA and AB. The listing of the individual risk factors with reference to the examined enterprises is presented in Table 2.

**Table 2.** The matrix of the recognized risk factors

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Company ID</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18</td>
<td></td>
</tr>
<tr>
<td>A</td>
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<td>12</td>
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<tr>
<td>B</td>
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<td>12</td>
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<tr>
<td>C</td>
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<td>5</td>
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<tr>
<td>D</td>
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<tr>
<td>E</td>
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<td>11</td>
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<td>F</td>
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<tr>
<td>G</td>
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<td>H</td>
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<tr>
<td>I</td>
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<tr>
<td>K</td>
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<tr>
<td>L</td>
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<td>M</td>
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<td>T</td>
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<tr>
<td>U</td>
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<td>2</td>
</tr>
<tr>
<td>V</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
Risk factors in the management of real estate enterprises

<table>
<thead>
<tr>
<th>W</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
<th>AA</th>
<th>AB</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of factors: 9 9 11 10 13 10 7 4 8 7 13 19 8 – 18 – 6 –

Source: Author’s own research.

5.1. Group A – risks connected with the macroeconomic situation of Poland

The market, in which the examined enterprises operate, is strictly connected with the economic situation. The main factors of general economic character may include: the growth rate of GDP, the level of inflation and interest rates, the level of investment, the debt level of enterprises and households. There is a risk that the slowdown in economic growth, the fall in the investment level of enterprises or an increase in debt of enterprises may negatively influence both the direct operational activity and the financial situation of the analyzed enterprises by decreasing the demand.

There is a risk of an increase in interest rates on the interbank market, which, consequently, may adversely result in an increase in financial costs connected with the repayment of installments of the liabilities incurred. There is also the probability of an appearance of the exchange risk connected with the exchange rates of foreign currencies, in which housing loans are granted, raised by the purchasers to finance the purchase of real estate. This may cause a decrease in the demand for new apartments and houses.

Some of the utilized building materials come from import, therefore, there is a risk that in case of considerable fluctuations in exchange rates, the costs of materials purchased may be the subject to significant changes and they may affect the financial results.
5.2. Factor B – legal and administrative conditions of a business’ activity in Poland – legislation instability, interpretation difficulties, expropriation for public use

The danger for a business’ activity is the instability of the Polish legal system. Frequently changing regulations and their interpretation hinder running a business and considerably limit the predictability of financial results.

There is a risk that in case of a change in provisions, bringing about limiting the possibility of real estate division or extending the time of this division, this may significantly influence the way of the functioning of enterprises, which, in turn, may result in the necessity of the verification of the realized business strategy.

The implementation of the cadastral tax may cause increase in tax burdens, which, with a simultaneous increase in interest rates, may result in an increase in the costs of real estate use (more expensive loans).

The changes of legal regulations in the area of planning and spatial development may bring about the elongation of activity at the stage of planning and realization of a given project as well as they may affect the fall in real estate prices.

In relation to the government plans concerning the deregulation of some jobs including an estate agent and a real estate manager (withdrawal of the requirement of the license possession), there is a risk of lowering the prestige of these jobs and general lowering the level and quality of the services provided on the market, which may negatively influence the situation of the examined enterprises.

Real estate as an investment object is inextricably linked to a particular location and therefore, it may be an object of expropriation for the benefit of the Treasury or local government units for public use. The amount of compensation due to expropriation may vary from the real estate market value.

In case of the companies whose activity includes the traffic in building plots it is possible to indicate the risk connected with betterment levy, which may negatively influence the financial results.

There is also a risk connected with ineffective work of the land and mortgage register system. Such a situation may affect the certainty of real estate brokerage as it may cause delays in the process of realiza-
tion of sales orders and in extreme cases, it may be the reason of ineffective sales due to exceeding contractual terms.

5.3. Group C – weather conditions

An element characteristic of a considerable activity run by the examined enterprises in the area of the realized projects is its dependence on weather conditions. It is additionally intensified by the seasonal character of the works carried out. Unfavourable weather conditions may lead to exceeding the schedules of the realized projects and consequently, an unplanned increase in costs and a lowering of the financial results.

5.4. Group D – long time of administrative decisions and change of conditions of decisions in relation to the developer’s intentions

A long-term process of obtaining essential administrative decisions and lack of spatial development plans constitutes an important factor of realization of the intended investments. It is difficult to assume that allowances, permits or permissions required with reference to development project realization will be granted on time or granted at all. Lack of such allowances, permits or permissions may have negative impact on the ability of the examined enterprises to realize projects. This may have an essential negative effect on the activity, financial situation or results of the enterprises under consideration.

5.5. Group E – business cycle in the real estate market, the construction market and in the development industry

In spite of the fact that this factor could be qualified for the macroeconomic factors, it was referred to separately on account of aiming at the presentation of the features of the analyzed industry.

Business cycles have a considerable impact on the activity of the examined enterprises. Stagnation or essential slowdown in the rate of growth of the real estate market in Poland may bring about a fall in the demand for real estate which, consequently, may affect the lower
evaluation of residential, commercial real estate and land. Moreover, as a result of the deterioration of the situation in the real estate market, the liquidity of the mentioned kinds of real estate may fall. The change of stages of a business’ cycle may hinder the intended transactions or investments.

5.6. Group F – seasonality

The real estate market in Poland definitely shows irregularity in a number of the transactions made (rent, sale, purchase) in the first and the second half of the year. It is possible to observe two clear increases: spring and autumn and two falls: summer (holiday time) and winter (suspension of renovations due to low temperatures).

5.7. Group G – terrorism

A risk factor in this area is the possible danger of terrorist attacks.

5.8. Group H – investment cycle in the development activity – generating income unsystematically

An element characteristic of the development activity is irregularity of generating income. This results mainly from the possibility of gaining lands, which are attractive with regards to the price and investment, which may constitute a starting point for development project realization. This also results from the length of the commercialization process of newly built houses and apartments. Difficulties connected with the above factors may cause the examined enterprises will not be able to earn a profit in a given settlement period.

5.9. Group I – the situation on a particular foreign market – e.g. Russia

This area is characteristic of the enterprises dependent on one foreign market. An enterprise, while running a business on an exemplary Russian market, is exposed to risks connected with its specificity. Such risks include a large margin of interpretation of the construction stan-
standards and provisions causing that the decisions taken in similar cases by the administrative and controlling organs may considerably differ from each other.

5.10. **Group J – competitive environment**

The market in which the examined enterprises operate is characterized by a high density of the activity of the same kind.

5.11. **Group K – wrong decisions taken in the enterprise; leading to maladjustment to the changing environment or insufficiency of activities in the realization of strategies and goals**

The realization of the development strategy assumptions of the examined companies depends on their ability to adapt to the changing conditions in the real estate market. Unsuccessful activities arising from wrong assessments of the environment or incompetent adjustments to the changing conditions of the environment may have an important negative impact on the activity, financial situation and financial results.

5.12. **Group L – unreliability of partners – contractors and subcontractors**

In case of using co-operation with subcontractors there is a generated risk connected with the realization of construction works by this group of partners. The quality of co-operation between the examined enterprises and their subcontractors directly influences the performance level of the contracts realized by them and their reputation. The risk of failure in performance or inappropriate realization of works by subcontractors may result in a quantifiable financial loss of the examined enterprises. A special kind of risk is the loss of financial liquidity by subcontractors who were commissioned to carry out specific works. The loss of financial liquidity may lead to delays in works realization or complete cessation of works by the subcontractor, which results in the necessity of their change. All delays and costs connected with the failure or inappropriate contract execution by subcontractors may significantly negatively influence the financial result of the construc-
tion project and consequently, the business activities and financial situation of the examined companies.

5.13. Group M – dependence on subcontractors and suppliers

The risk connected with the dependence on the suppliers of building services refers to the companies which, in the realization of investment projects, at the stage of building a new object, use the services of construction companies. This risk is also related to the companies which deal with the sale of real estate generated by developers. In this case there is a risk of failure in the realization of the investments planned by developers. A potential risk is also the risk of dependence on the main purchaser – in case of distortion of co-operation with the buyer there is a risk of reducing the range of activity.

5.14. Group N – price changes of raw materials, materials, services; increase in the costs of project realization

The projects carried out by the examined objects at the stage of construction involve considerable expenditure on building materials. On account of the expenses, spread out in time, on construction works, there is a risk that the contractors of these works do not transfer all or part of the risk of the price change of materials to themselves, which exposes the examined companies to increase in investment costs and at the same time, lowering profitability of individual projects and all of its activity.

5.15. Group O – human resources – the risk of departure of employees or lack of appropriate qualifications

The activity of the examined enterprises is significantly affected by experience, skills and work quality of members of the board and the strategic managers. The departure of any employee who is essential for the company may have a negative impact on the activity, financial situation and operating results. In some cases the specificity of a business’ activity enforces the necessity of the employment of employees possessing different kinds of professional licenses.
5.16. **Group P – sources of financing investment projects realized by the examined companies, loss of financial liquidity and financial results**

In the above area it is necessary to mention mostly the risk connected with gaining funds and the risk of loss of financial liquidity (for real estate to rent – in case of too few tenants and too low prices; for real estate for sale – lack of a purchaser).

5.17. **Group R – accessibility of loans (financing) for the customers of the analyzed companies**

Following the Polish Financial Supervision Authority directives, banks began considerably tightening the criteria concerning the credit policy, and part of the households facing crisis abstained from buying an apartment in spite of a significant fall in their price.

5.18. **Group S – accidents on building sites**

In the analyzed sector, especially the development one, the risk connected with accidents on building sites is recognized. The risk connected with accidents at work refers, first of all, to two areas. The first one refers to possible necessity of satisfying claims or damages, the other one relates to delays in construction works caused by accidents.

5.19. **Group T – technical problems**

Some of the examined enterprises indicate the risk connected with the appearance of technical problems consisting in difficult access to infrastructure or failures with the IT system.

5.20. **Group U – directions of market development and the existence of the grey market in the area of real estate brokerage**

Since the brokerage services in real estate trade are not as popular among the Polish society yet, there is a risk concerning the direction of the further development of real estate brokerage in Poland. An essential risk for the activity in real estate brokerage is the existence of
the so called “grey market” in the real estate market in Poland. Therefore, there is a risk of the appearance of regulation of market practices changing unfavourably for real estate agencies.

5.21. Group V – negative characteristics of real estate and other, referring to real estate, legal and technical defects of real estate

It is necessary to indicate the risk connected with the attractiveness of the realized development project and particularly, with the choice of proper location, as particularly important in this area. There is also a risk of legal faults of real estate and the expropriation risk. In spite of thorough checks of the legal status of investment areas before purchasing them, there is a possibility of an appearance of legal defects of real estate. While indicating the real estate characteristics which constitute risk factors, it is necessary to indicate the problems connected with unfavourable land conditions. In this area there is a risk connected with infrastructure – a development project may be realized only when the investment site has access to an appropriate infrastructure.

5.22. Group W – difficulties in gaining attractive real estate

In some cases in the activity of the examined enterprises, one of the basic success factors is gaining attractive land. This factor ensures development and appropriate margin levels. The ability to gain attractive land depends not only on the activity of the examined enterprises themselves but also on objective factors such as the insufficient supply of lands included in local plans of spatial development or possessing the required infrastructure. Gaining land for building areas is extremely difficult in relation to strong competition in the construction market.

5.23. Group X – legal defects during entering into agreements with partners and customers and other conditions of the concluded agreements

Transactions in the real estate market are connected with the necessity of purchase-sale agreements enabling an effective and fluent real estate takeover. Making a mistake in the concluded agreement or failure
in the formal requirement may result in, in an extreme case, the invalidity of the contract.

In the above area it is also necessary to indicate the risk connected with the use of forbidden contractual provisions – the risk of allegation of not using illegal contractual clauses and the risk connected with opposition proceedings (disputes connected with the realized projects, including the participation in court cases).

5.24. Group Y – the environment

In the activity of the examined enterprises there appears a risk connected with responsibility due to environmental pollution and social protests. On account of the specificity of the sector it is not possible to eliminate the situation in which there will be an imposed punishment or the enterprise will be obliged to repair damages connected with pollution of the natural environment in real estate used by the examined companies.

It may happen that, as a result of the changing environmental conditions or the wrong analysis, the areas of investment interest may become the object of protests from environmental organizations and in some cases the prevention of the realization of investment plans.

5.25. Group Z – loss of value of the possessed assets

In the activity of the examined enterprises it is possible to identify the risk of loss of value due to the inappropriate use of real estate. The risk of loss in real estate value may take place in the situation of intensive use not fully compliant with the functional purpose of the facility. Such an activity may influence the decrease in the market value of real estate as a result of the above average technical use or excessive exploitation.

5.26. Group AA - the risk of not gaining customers, tenants or new contracts; the risk of loss of customers and not extending contracts and the risk of loss of customers

The risk in this area includes the danger of not gaining or gaining to a degree lower than the assumed tenants levels for real estate offered by the examined enterprises. There is also a risk connected with diffi-
culties in gaining a building company by the developer on time. This concerns the situation when there is no possibility to began the investment on time due to an increased demand for construction services. There is a risk that the degree of use of the areas offered to rent will be insufficient or rental prices per meter will fall unfavourably.

5.27. Group AB – transactions with the related companies

The examined enterprises are exposed to the risk connected with entering into transactions with the related companies. In the mode of the conducted business activity, they include a significant number of transactions with the related companies, including the ones related by shares. Transactions with the related companies support running a business effectively. Transactions of this kind should be conducted following the market principles. In the case of noticing the difference between the market value and the value of the concluded contract with the related company, the examined enterprises and the related companies are exposed to an overestimation of the declared income and tax costs and consequently, imposing administrative punishment by the tax authorities.

6. Conclusions

The identification and control of these areas and the potential events leading to the appearance of undesirable changes and generating unwelcome conditions of an organization may be regarded as an extremely important element of enterprise management. It is necessary to assign particularly critical meaning to such activities in the contemporary dynamic environment. The appropriate identification of risk factors seems to be of key importance for the existence of each enterprise since in each business activity, even the easiest decisions are connected with the risk appearance.

As a result of the conducted research there were 27 groups indicated of risk factors in the activity of the examined companies included in the real estate sector of the NC market. For the discussed group of enterprises the identified risks constitute the mix of risks characteristic of the real estate market and the ones characteristic of
construction projects. However, due to the specificity and connection between the two fields, these risks constitute a relatively homogenous group. A lot of risk factors result from the specificity of the real estate market and the construction industry themselves. However, these belong to the group difficult to eliminate. It is possible to indicate the factors inside or coming from the inside of the examined organizations as the ones susceptible to eliminating activities.

In the present paper, there are indicated risks characteristic of the enterprises functioning in the real estate sector. Although this name is not a formal name of the economic sector, this term was adopted on the basis of the classification used in the NC market. The recognized risk factors were divided into homogenous groups, whose kind is characteristic of the business activity conducted by them. It is necessary to state that a lot of factors are generated by the external environment of the examined companies. The macroeconomic environment connected with the Polish law in force is a dominating source of the most important and the most frequently appearing risk factors. A potential risk resulting from the possibility of changes of the economic condition may be adopted as far exogenous and not easily controllable although the Polish economic policy is run definitely towards achieving stabilizing goals. The factors, particularly burdensome for the analyzed group of enterprises are the processes of changes in legislation and confusion connected with the interpretation of the provisions in force. While taking into consideration specific negative synergy taking place among these last factors, running a business activity by the examined enterprises is considerably endangered by the State itself, generating additional turbulences, summing with natural market fluctuations and difficult conditions resulting from the co-existence of enterprises in the market.

The identified groups of risk factors appear in the examined enterprises in varied configurations and with different frequencies. The listing of groups of risk factors by the frequency of appearance in the examined enterprises is presented in Table 3.

The analysis of the listing allows for the conclusion that the most frequent risk groups are A and B resulting from the macroeconomic situation and unpredictability of legal regulations. The rarest groups are G (terrorism) and I (situations in foreign markets).
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Table 3. The groups of risk factors by the frequency of appearance

<table>
<thead>
<tr>
<th>Group of factors</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B</td>
<td>1</td>
</tr>
<tr>
<td>E, J</td>
<td>2</td>
</tr>
<tr>
<td>P</td>
<td>3</td>
</tr>
<tr>
<td>O</td>
<td>4</td>
</tr>
<tr>
<td>D, L, N</td>
<td>5</td>
</tr>
<tr>
<td>K, M</td>
<td>6</td>
</tr>
<tr>
<td>V, AA</td>
<td>7</td>
</tr>
<tr>
<td>C, R</td>
<td>8</td>
</tr>
<tr>
<td>H, W</td>
<td>9</td>
</tr>
<tr>
<td>X, Y</td>
<td>10</td>
</tr>
<tr>
<td>F, S, T, U, Z, AB</td>
<td>11</td>
</tr>
<tr>
<td>G, I</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Author's own research.

The risk factors were recognized and grouped. 27 subgroups were identified. Then, there an attempt was made of synthesis, aiming at the presentation of the smallest number of possible broad groups of risk factors. Therefore, there were identified the following groups:

I. The factors completely exogenous which are not influenced by the selected enterprises in the sector – the global economy, the Polish economy (including the availability of financing), climate and weather conditions. This group includes subgroups marked as: A, C, E, I, N and R.

II. The exogenous factors of a random character, such as the risk of terrorism, technical problems or accidents. This group includes the subgroups marked as: G, S and T.

III. The exogenous factors being the subject of influences and lobbing such as legislation. This group includes the subgroups: B and D.

IV. The factors of exogenous character resulting from the specificity of real estate and the real estate market and also from the specificity of the construction industry. This group includes the subgroups marked as: F, H, P, O, U, V, W, Y and AA.
V. The factors originating from the competitive environment, referring to the relations with competitors, customers and business partners. This group includes the following subgroups: J, L, M, Z, AB.

VI. The factors inside the organization, originating from the enterprises themselves, the ones being the subject of the analysis – K and X.

In Summary, it is necessary to state that the largest group of risk factors constitute the ones resulting from the specificity of real estate, the real estate market and the construction industry. The most frequent identified factors and simultaneously, the ones causing the largest anxiety on the side of the examined enterprises are the factors resulting from the economic situation and the Polish legal system.

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