The consensus of the ideal

"Getting mired in materialism, adopting the accounting approach to macroeconomics and to the mechanics of voting in society are formulas through which today's elites disfigure realities and shut down horizons."

Mankind goes through a period in which the problem of direction touches on ignorance, and this is paradoxical when considering the rational propensities of 21st century modernity. This can be described as a breakdown in the interpreting mechanism of the ineffable signals which structure the knowledge of the sensitive world's functioning. The creator of the order of things, which insures the equilibrium of cohabitation, becomes increasingly confused under the pressure of neurotic contexts. The universality through societally engaged forces, with an emancipation effect through democracy, is in a symptomatic way being substituted by the crisis inducing hegemony of the structures of financial speculation.

The personalized situation lies in the state of the elites, whose leading function in configuring the winning evolution seems to have disappeared. From being a source of inspiration and innovation to the solutions to society's problems, the elites now have visions which complicate the problems. Getting mired in materialism, adopting the accounting approach to macroeconomics and to the mechanics of voting in society are formulas through which today's elites disfigure realities and shut down horizons. Among other things, instead of the hoped-for openness after the exit from communism and the redemption from the planned dystopia, a trial ground for another experimental extreme was set up: that of the equally violently alienating "divine market".

In spiritual terms, the world goes through an acute crisis of the ideal. The sequestration of creativity in fictitious spaces and the grouping of expectations on the short time, together with the robotic obsession for yield, cloud the mind with the void of dyslexia. The description of the sense and of the trans-generational vehicles is overturned by the cognitive dissonances in the public debate. There is a

preference for the emotional conclusions, with the ideas remaining as artefacts of rational thinking. This reasoning is being given up under the pretext of being to slow in a world where what counts is speed, not the finishing point. The fork in the road is late to appear, with the energies of the winning alternative being sapped by the carnival of the closing path. Shock has become the nourishment of existence.

The social nature goes into anomia due to the ideological reductionisms motivated by schemes of abandoning discernment in the face of the mechanics of the invisible hand. The typology of separating the individual into consumable/human capital – manipulable/voter sets the rule for the human perspective. Practically, mankind undergoes an experiment in which the costs destined for social cohesion are considered useless. From a structural standpoint the society is the sum of individuals, while functionally it becomes the expression of the instinct for closeness. The distribution of chances to accessing resources is dependent on the performance of the public space, while redistribution is linked to the yield-generating behaviour of the individual.

History's lessons are passed in the bluffing game of the world which is assaulted by image. Time flows through the screen of existential emotions which are explained through languages encrypted and decrypted in an impressionist way. The world has little time for the argument in the face of a life filmed through the lens of audience. Reality stems from the fiction of the soap opera; it has the substance of banality presented in violent colours. The supreme institution in forging destinies turns out to be fashion.

The feeling that the position of man as the nervous centre of the things which configure the path of progress is undermined by the avalanche of irrational impositions. The economy of social life eliminates the valuing options on which the cultural memory is founded. Discernment is constructed in the field of referential minimalism, where the consciousness of an alternative is atrophied. The means have become more important than the ends, the mechanisms gaining equilibrium irrespective of the consequences on man. The market, and not man, became the measure of all things.

The sensation of a backward arrangement of reality is sustained by the excessive division at the level of public communication. The aggression on reality through projects meant to change the natural order by overturning the norms of cohabitation, on the basis of ideological justification, has in fact reached a critical level. Liberty has become the badge used to cover the mystification of the equality of chances. The economic biology of competition insures the spectrum of

possibilities in theory, the contingency being inevitably monopolistic. The faces of reality belong to the illusion of the ethics of geopolitical strategies, with the truth being expressed by a single voice – the one of economic power.

Society is economically inhabited, democracy is electorally occupied, the rule of law is covered by the texture of power. The citizen loses identity, the relativism of values amplifies the differences, the orientation becomes ambiguous, while forwards means backward and the cardinal points – just like the planet's magnetic poles – are reversed together with the parallels and the meridians.

This chaos seems to have a single cause: the lack of consensus on what we are. The moving universe is intelligible if we give it a sense. The consistency of society is given by its ideal: the only way of escaping the inferno of materialism.

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Marin Dinu

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Sovereign wealth funds, catalyzers for global financial markets

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Abstract. *In this paper we briefly present the impact of sovereign wealth funds on the global financial markets, the advantages they offer and the concerns they have generated lately. Sovereign wealth funds have emerged as important players in global financial markets and their stability. Although they are controlled by state, they seek to activate in the markets in the same as private investors, showing significant impact on listed companies they invest. Despite of their important presence in global financial markets, little is known about their asset allocation. Significant concerns have been expressed about SWFs limited transparency being suspected to follow other factors besides risk adjusted returns. We believe that SWFs should present clearer governance standards and more transparency in order to ensure a catalyst role for the global financial imbalances. The essential role of authorities relies on implementing an agreement on a set of regulations, standards and best practices for the sovereign wealth funds.*

Keywords: sovereign wealth funds, official reserves, voting rights, financial regulation, asset allocation, benchmark, portfolio diversification.

JEL Classification: F01, F65, G11, G18, O16, P16.
REL Classification: 10A, 10I.

Introduction

Sovereign wealth funds are vast pool investments on behalf of governments with budgetary surpluses or funded by foreign currency reserves, that invest globally through systematic diversification across multiple currencies and asset classes for higher risk adjusted returns. They are typically active investors industries covering financial services, logistics, transportation, healthcare, transportation, real estate, telecom & media, engineering, IT, energy and real estate. Most of the funds are financed budgetary surpluses, mineral royalties, natural resources royalties, budget transfers, privatizations revenues, taxes, luxury goods, alcohol and cigarettes excises or transfers of assets from official foreign reserves (non-commodities sovereign funds). Over the last decades, they have become more visible and in global financial markets and focus on responsible investing in the context of maximizing the wealth creation.

According to their aims, there are various types of sovereign funds: budget stabilization funds, saving and wealth sharing across generation through diversification, pension reserve funds, reserve investment funds (reducing the negative carry cost of holding reserves) and strategic development sovereign wealth funds in order to allocate resources to priority projects according to the national economic, social and political goals. They do not engage in macroeconomic policies with the exception of transfers received from or to the budget or central banks' reserves for exceptional needs (tied to the source of the funds), or in order to stabilize local strategic businesses.

Benefits

Establishing a sovereign wealth fund by a state represents an evidence of government will **for implementing a sustainable long term economic strategy**. This type of funds plays many roles in sustaining the wealth of a nation over the long term, through:

- Protecting the national wealth through long term vision over investments transcending micro and macroeconomic cycles;
- Saving for the future generation's wealth fare and preparing provisions for "rainy days";
- Diversifying the economies of the countries that depend on limited raw material exports;
- Obtaining a better risk adjusted return over the long term than the conventional way of investing the budget surpluses and the national foreign reserves;

- Sustaining national businesses that activate in strategic sectors and industries (agribusiness, energy, real estate, national defense, etc.);
- Funding distressed financial institutions in order to prevent financial systemic risks;
- Proactive role in sustaining national key infrastructure project developments.
- Reducing the volatility of government revenues (including fiscal revenue stabilization);
- Helping central banks to sterilize the surplus of liquidity;
- Countering the macro economic cycles and build up diversified portfolios of savings for future generations' wealth fare, especially for countries that depend on limited raw material exports that wish to diversify their economies. It may be a good strategy for export countries of nonrenewable resources to build up provision in preparation for a "rainy day".

Comparing to other forms of asset management, sovereign funds are highly liquid, with very limited constraints in managing assets. They are long term investors (less sensitive to market conditions than most of the institutional investors) with relatively high risk appetite, highly diversified in searching for higher yields in order to increase the wealth of the state over the following generations. They use little or no debt and typically invest in various asset classes from all over the world: from sovereign and corporate bonds to emerging market equities, high yield corporate bonds, commodities, structured products and derivatives, private equity, real estate and other alternative investments like art, hedge funds and precious metals.

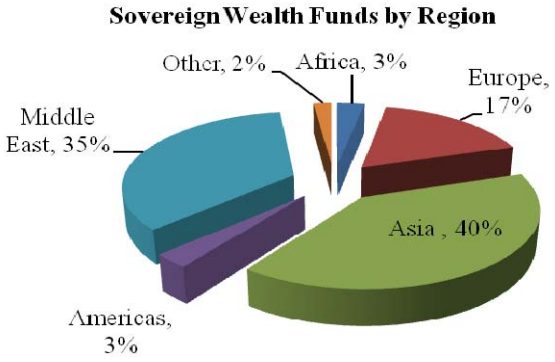
Taking in consideration the source of funds, sovereign wealth funds may be Commodity Funds, financed by sale of commodities and established for budget stabilization and wealth sharing across generations and Non Commodity Funds funded by the excess of assets from national foreign exchange reserves and privatization processes in order to realize its functions mentioned above.

Although the very first fund was established in 1854 (Texas Permanent School Fund), sovereign funds' inceptions started with 1950s (Kuwait 1953, New Mexico 1958), and the dramatically increase in size, number and structure has started over the last 20 years. According to SWF Institute, the total market size in September 2013 was almost US$ 6 trillion, from mostly US$500 billion in the early 1990s raising them into some of the most important participants in global financial markets attracting attention by policy makers, traders and international community (Mezzacapo, 2009).

Since 2005 more than 40 sovereign wealth funds have been created, due to the rising commodity prices for the last years. From the beginning of 2008 until the end of 2012 the assets under management of sovereign wealth funds grew by over 59%.

Some of the largest sovereign funds have their origins in countries like China, United Arab Emirates, Norway, Saudi Arabia, Singapore, Kuwait, Hong Kong, Russia, Qatar, Australia, USA, Iran, Libya and other countries. There are some countries that have more than one SWF (China, UAE, Saudi Arabia, USA, Kazakhstan, Russia).

The holdings are quite concentrated, with the top sovereign funds accounting about 70% of the total assets. More than half of them represent countries with significant export amounts of natural resources. Currently more than 30 countries have set up their own investment funds and about a dozen have expressed an interest in establishing one. The rapid rise in price of the major commodities as the result of excess liquidity nurtured by lax global monetary policies, exports of China and other East Asian Countries over the past decade, increased US dollars cash reserves from exports or privatization proceeds. Commodities SWFs' aim stands on reducing the country natural resources dependency for the future generations through global diversification of wealth over the long term. Sovereign funds have limited or no liabilities, allowing them to pursue different medium and long term investment strategies, diversifying assets (foreign investments) and taking higher risks.



Their holdings may seem significant but they are not huge in the context of the total value of traded securities and GDP of the most developed countries, however may be large enough related to the size of their countries (Norway) or the size of some emerging markets.

In the following pages, there are mentioned the first 12 largest sovereign funds according to the value of assets held under management[(1)]:

- **Government Pension Fund Global (Norway)** – with over US$ 803.9 billion funded in 1990 as a fiscal policy tool to support the country's long term petroleum revenue. The funds are invested abroad in international equity, fixed income and real estate markets (in about 70 countries, including the emerging and frontier markets excluding Norway), to avoid overheating the national economy and obtain the highest possible risk adjusted return over the long term. The fund has generated an annual return of 5.49% between 1998 and the end of the third quarter of 2013 and after management costs and inflation, the average real annual return was 3.41%. The guidelines for strategic allocations are set to hold 60 percent of its assets in equities, 35 percent to 40% in fixed income and as much as 5 percent in real estate. The fund's market value in the third quarter of 2013 was over 4,7trillion NOK with equity investment market value of almost 3 billion kroner and the total accumulated return since 1996 exceeds 1.5 billion NOK. The projecting for the size of the fund by 2020 is to exceed 6.8 billion NOK. The Norwegian parliament has set the framework and the Norges Bank Investment Management (central bank's asset management division) has the operational and risk management tasks of the fund on behalf of the Ministry of Finance. The fund's investments are measured against benchmark indices for different asset classes, and the ownership strategies promote good corporate governance standards and encourage issuers to improve their social and environmental standards, safeguarding shareholders rights and ensuring an equitable distribution of the profits. Norway's sovereign wealth fund represents the global hallmark in terms of disclosure standards.
- **SAMA Foreign Holdings** represent the sovereign wealth funds managed by the Saudi Arabian Monetary Agency the central bank of the Kingdom of Saudi Arabia. The fund was established in 1952 from a significant portion of surplus oil revenues. The funds invest typically in low risk assets and according to SWF Institute it is estimated to have reached over US$ 670 billion assets under management in 2013.
- **Abu Dhabi Investment Authority (ADIA)** – with over US$ 627 billion, established in 1976 to invest funds on behalf of the Government to make available the necessary financial resources to secure and maintain the future welfare of the Emirate through sustained long term financial returns. ADIA's assets are not classified as international reserves. The fund involves in looking for strategies beyond individual economic cycles, capturing secular trends to general long-term sustainable returns, without seeking an active role in the management of the companies in which it invests. The fund's portfolio consists of quoted equities, fixed income and treasury instruments, real estate and infrastructure, private equities and other alternative investments. Is not involved and has no matter to do with the spending requirements of the Government of the Emirate of Abu Dhabi.

- **China Investment Corporation**, established in 2007 as a non-commodity sovereign wealth fund (through issuing special treasury bonds), has reached more than US$ 570 billion assets under management. The fund's stated mission is to manage long term risk and maximize financial return on overseas investment portfolio, consisted of equity, fixed income and alternative assets in both developed and emerging markets.
- **SAFE Investment Company** established in 1997 as a non-commodity sovereign wealth fund is responsible for managing China's foreign exchange reserves. According to SWF Institute, the fund reached more than US$ 567 billion in 2013.
- **Kuwait Investment Authority (KIA)** established as commodity (oil) sovereign wealth funds (General Reserve Fund – GRF 1953 and the Future Generation Fund – FGF 1976) that have reached approximately US$ 386 billion by the third quarter of 2013 and has one of the main aims to achieve a rate of return on its investment that, on a three year rolling average exceeds it composite benchmarks. KIA ensures that the state transfers on an annual basis 10% of the oil revenue into the FGF.
- **Hong Kong Monetary Authority's Exchange Fund** created in 1993 as a non-commodity fund acts as a stabilizer and invests primarily in its local exchange (Hang Seng) and in the local currency and monetary markets to support the HKD exchange rate. The Exchange fund it is consisted in three parts: Backing Portfolio (providing the full backing monetary base for HKMA), Investment Portfolio invested in fixed income and equity markets to preserve the value and long –term purchasing power of the assets and a strategic Portfolio in some key financial local institutions to maintain Hong Kong as a key international financial center. By the end of the third quarter of 2013, the Exchange fund has reached more than US$ 320 billion.
- **Government of Singapore Investment Corporation (GIC Private Limited)** manages the non-commodity funds created in 1981, funds that have reached more than US$ 285 billion by the end of the third quarter 2013. The aim of the funds is to enhance long-term returns through broad portfolio diversification: private equity, real estate, inflation linked bonds, nominal bonds & cash, developed and emerging market equities and alternative investments.
- **Temasek** incorporated in 1974 represent an investment company based in Singapore with over US$ 215 billion dollars in assets under management by the end of the first quarter of 2013. As the years progressed the underlying exposure progressed to 58% to mature economies and 42% to growth regions into various sectors and industries like energy, resources, consumer, transportations, industrials, real estate, telecom, media, IT and financial services.

- **Qatar Investment Authority (QIA)** established in 2005 manages the country's commodity sovereign fund, accumulated from the budget revenue surpluses, in order to strengthen the country's economy through a diversified portfolio into new domestic and international asset classes. According to SWF Institute, QIA's managed fund has reached over US$ 115 billion dollars.
- Other sovereign funds with assets under management comprising less than US$ 100 billion each may be over 30 other sovereign funds from Australia, Russia, Kazakhstan, Algeria, Dubai, Libya, South Korea, Iran, several states from USA (Texas, Alaska, New Mexico), Brunei, Malaysia, Ireland, Iraq, Canada, Chile, Oman, Bahrain, Peru, Botswana, Brazil, Saudi Arabia, United Arab Emirates, Nigeria, Palestine, and many others.

Business models

The legal basis and form under sovereign funds are established varies from country to country although the constitutive legislation is publically available. They have limited or no debts have any pending explicit liabilities, except for certain derivatives, to deliver long term sustainable risk adjusted returns through diversified investments effective management of the entrusted funds. Most of them disclose information limited to institutional and legal framework, accumulated returns, and brief asset allocation and performance description, excepting the Norway's SWF reports, that represents the global hallmark in terms of disclosure standards. Although the governance arrangements differs much from one state to another, the operational independence is mostly assured, while requiring regular financial reports disclosure and performance accountability to the Parliament, Ministry of Finance and the Central Bank. Some of them are managed by a separate entity owned by the government; some are managed by a specific asset management division of the central bank, on behalf of the Finance Minister's given mandate (Norway's Fund) or by one or more private asset managers.

Most of the funds mitigate operational risk through clears segregation of responsibilities (front, middle and back-offices), internal and external audit functions, compliance units, conflict of interests policies, corporate governance codes, reporting standards, investment strategies, rigorous codes of conducts for employees, operational guidelines, business recovery and continuity back-up procedures and facilities.

Some of the funds report performance according to a benchmark with specific investment policies (with risk, asset allocations and sectors restraints), some have

goals in terms of absolute return or others have larger investment possibilities without a specific return objective but to seek long term sustainable financial returns). The most frequent risk management measures and methods are the credit ratings issued by specific agencies, value at risk models, tracking errors, concentration analysis, factor exposure, stress tests, asset and currency weights, rigorous individual exposures management and broad portfolio diversification.

The owner of the fund (usually the government through the ministry of finance) is responsible for setting up the general investment policy (investment universe, exclusion list and asset allocation), in order to ensure consistent risk management, and greater accountability for the chosen investment strategy. The investment policy should formulate specific definitions, objectives, parameters, measures and methods related to various aspects like: risk assessing and tolerance, investment horizon, asset classes allocation, regions and currency allocation, benchmark and the active risk limits for deviating from the policy benchmark, risk budget and investment performance appraisal.

On the other hand, the fund management responsibilities may consist proposing capital market assumptions, implementing the strategy and managing the portfolios (directly or not through external managers), measuring risk adjusted performance and reporting to the owner and 3rd parties.

Investment strategies vary from traditional (equities and bonds) to more advanced like real estate, commodities, hedge funds other alternative investments with general constraints over investments classes, regions, currencies and instruments. The investment horizon, asset and currency composition, performance benchmarks, risk tolerance, asset and liability management differs widely according to the SWF's aims (stabilization, savings, pensions, reserve or development funds). The fixed incomes investments are allocated in a certain percentage according to the issuer (sovereign or corporate bonds), credit rating, currency, region and country. The equity investments may also be spread globally to capture significant risk adjusted returns through adaptive market exposure strategies, sector and market timing strategies.

Due to their global investments, sovereign wealth funds are exposed to various risks: market risk, credit risk, disclosure risks, agency risks, governance risks, reputation risks, political risks, liquidity risks, operational risks, credit risks and many others. That is the reason why these funds need to have a strong risk management culture, risk policies and procedures related to risk identification, measurements, monitoring, auditing and reporting. Reporting and transparency are crucial elements for performing fund governance. Although few funds provide full disclosure (mostly Norway's fund), transparency may contribute to

legitimacy, foster trust, gain commercial advantage and nurture reputation. Transparence is crucial to maintain legitimacy among the citizens of the country as well as for the credibility among international partners.

SWFs potential impact on listed companies, banking sector and on global financial markets

SWFs play an important role in global financial stability. Due to their massive buying power, SWFs are closely linked to public finances, monetary policies and external accounts. Furthermore, they emerge a positive impact on share values listed on stock exchanges. SWFs buying power enable them to act as stabilizing urge and a significant source of liquidity in global financial markets and a genuine institutional customer for the banking sector.

Banks may contribute to the success of the funds through various services provided: financial accounting of asset portfolios, benchmarks, investment market data and analysis, proxy voting agent, market risks assessments, portfolio measurement, external asset management services, transaction settlements with counterparties, custody and clearing of securities and trading technical support. On the other hand, sovereign funds could be the “saver of last resort” for the banks. During the latest crisis some SWFs have helped in recapitalization of many US and European distressed financial institutions (UBS, Citi, Morgan Stanley, Barclays, London Stock Exchange and Merrill Lynch) by purchasing minority stakes and acting as passive institutional shareholders. In absence of SWFs capital fund, probably de deterioration of the financial institutions mentioned above would probably have proven even worse. Buying distressed financial institutions stakes certifies their long term business sustainability and a back-up certificate for recapitalization in case of future financial distressed conditions.

A close coordination with macroeconomic policies and public sector finances is essential in order to flourish their macro stabilization role. They also help in loosening up global imbalances, due to emerging process of low yielding excess reserves of central banks into higher yielding emerging markets assets, since SWFs are considered to be less liquidity oriented and less risk adverse. Their behavior is expected to generate an increasing demand for risky assets and declining investments and low yielding sovereign securities.

On the other hand, there are some critics due to the possible conflict of interest among the rest of the shareholders and the eventually incentives to take exclusive advantages of their positions (benefits not shared with the minority shareholders).

Higher concentrated ownership should reflect a higher profitability through closer monitoring only if other related costs due to the risk of "asset striping" and risk of exploitation disfavoring the rest of the shareholders do not overweigh the benefits or improved monitoring.

In order to develop a consistent reputation, the owner could regulate a set of responsible investment practices, including here the exercise of ownership rights, the observation and exclusion of companies. Defining and implementing ownership strategies are crucial for the reputation of a sovereign wealth fund. One of the most transparent funds, Norway's SWF seeks to promote good corporate governance standards and encourage businesses that improve social and environmental standards, focusing on six strategic areas of ownership activities: equal treatment of shareholders, shareholder influence and board accountability, well-functioning, legitimate and efficient markets, children's rights, water management and environmental management.

Concerns

The confusing limits between private and public investors, limited transparency and the high level of buying power concentration have raised concerns among US and European politicians that the funds may be gaining political advantage and alleviating global tensions. There are some countries where government ownership has long been suspected. Western nations worry about the security implications on foreign relations, because of the risk of being used as instruments for capital account protectionism and gaining important positions in key global industries and companies ensuring technology, knowhow about natural resources, gaining economic and geopolitical advantage leaving triggering security implications for the host countries. In capitalism, shareholders act to maximize the value of their shares but public investments may have adverse impact on corporate governance efficiency triggering geopolitical implications and conflict of interests among shareholders. Public investments are not always driven by risk adjusted profit maximization but simply could be for geopolitical, and security and strategic interest to extract or implement certain technologies, or gain influence for their eventually hidden political agendas. A countermeasure in maintaining control over important and politically sensitive industries (national security interest industries) could be the "golden share" instrument (retaining effective veto power related to takeovers for assets in so called national strategic sectors).

Regulatory intervention

The lack of periodic and reliable information (except of Norway's' fund) has made global authorities to set up a voluntary "best practices" code for SWFs related to transparency, governance and fund organization because nowadays their practices vary widely (Norway's fund being a model of such transparency, but others publish very little information or none). The idea is to reduce their "opacity", so their investments may not let them be used geopolitical strategies implementation instruments like encouraging capital account protectionism, through choosing which country or company to invest, disrupting the financial markets flow or making them less efficient.

Transparence plays a major role in keeping the confidence in the markets; limited transparency allows "market abuse" and "insider trading" practices, undermining market confidence and raising systemic risks. SWFs need to diversify their holdings based on trust and transparence striving to improve efficiency in financial markets. Disclosing their voting records and policies helps market participant to avoid unwelcome surprises and certifies that funds militate against political interference and respect their investment policies supporting markets efficiency. In inefficient markets the prices are not optimal due to the abnormal losses and gains realized by participants. Since the party benefiting from inefficiency may not have much incentive to change things, market alone cannot lead to efficient outcomes and regulatory intervention may be welcomed if SWFs would not offer transparency through voluntary means (Mezzacapo, 2009, p. 41).

Conclusion

As a concluding remark, we believe that exaggerating the risk of investments realized by Sovereign funds may not be fair – because such investments have a vital role in providing liquidity to global markets and in generating wealth for the receiving markets and for future generations' citizens of the home countries. Authorities should take constructive approaches to ease concerns over some eventual political pursues or instruments of foreign policy objectives and showing progress over some issues like governance, transparency fund organization. Disclosures about investment philosophies and strategies in the annual reports would be a sound step. All this may contribute over the reassuring and building confidence for markets, investors and authorities.

Our further research will be towards the opportunity, the benefits and costs of establishing a Romanian sovereign fund for the national economy and for the long term social welfare.

Note

(1) Estimates offered by SWF Institute – November 2013.

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Manipulative marketing: persuasion and manipulation of the consumer through advertising

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Abstract. *The manipulation through advertising became an issue the consumers are facing on almost a regular basis. This practice move away the mission of marketing that of meeting the needs of customers and widens the asymmetries of power between the company and the consumer.*
Many of manipulative advertisements are difficult to prove because of their controversial nature and content. This paper is about how the companies use the stimuli, the techniques and the mechanisms of advertising to manipulate the consumers. At the same time, it advances some suggestions about the diminishing of the manipulative practices. The effectiveness of these solutions will depend on the observance of some principles by the companies which advertise in areas where they and the consumers can find mutual goals and interests.

Keywords: manipulative advertising, manipulative techniques, deceptive advertising, fallacious arguments, emotive persuasion, conscious consumer, conscious advertising.

JEL Classification: M31, M37, M38.
REL Classification: 14G.

1. Introduction: Stimuli of consumer manipulation through advertising

The marketing is directing the business according to the point of view of the customer seems the marketing concept which best throws a light upon the market goal of the company. In other words, the company should focus permanently on the consumers needs. The companies have their interests and objectives which many times are far from aligning with what the consumers need, and, quite often, don' t hesitate to make up marketing solutions which misconduct or deceive the consumers, in order to achieve them. The most appropriate area of marketing for such practices is the communication. The marketing communication is a mix of tools for promoting the products by transmitting particular messages to the consumers aiming at persuade them to purchasing those products. The advertising is the element of communication mix which offers all needed means, tools and ways of action for promoting the marketing objectives of the company. If a company deliberately decides to manipulating the consumer through advertising, in order to achieve its objectives, it could take into account some stimuli or preises which will ease the concrete advertising activities.

A first stimulus consists in the good knowledge of consumer s purchasing behavior and the capability of the company to influence it. The advertising focus on the process and mechanism the customer uses for making the purchasing decision. This purchasing decision process has the meeting of the consumers needs as unique motivation. As Maslow has established, the consumers have three categories of needs. The first category includes the *utilitarian needs* such as the need of shelter, nourishment, and security. At the next level are the *social needs* like to be accepted by others. At the top, we can find the *psychological needs* which make the consumer behaving in certain ways that are consistent with his self image and that enhance his self image to others. The functions of advertising could be linked to different mixes of needs. There are many and various functions the advertising could fulfil such as identification of the product, its differentiation from others, consumer s information which induces the consumer to try new products, suggests the reuse, builds brand value, preference and loyalty (Danciu, 2009; Fowles; gov.2009.wordpress.com/2011/07/29/ad-lecture-3-functions-of-advertising-consumer-needs/). All these functions of advertising prove useful to influence the purchasing decision process of the consumer behavior if the advertising succeeds to persuade the consumer to prefer, purchase and use the product and to become loyal to it.

Another strong stimulus for consumer manipulation through advertising is the capability and the extent of alteration of the mechanism of advertising which aims to persuade the consumer. The persuasive advertising could be divided into two

types which are non-manipulative and manipulative advertising. The non-manipulative persuasion through advertising consists in simply presenting the product or service, in the best possible light. The advertiser doesn't need to lie, omit details or intimidate the consumer. This type of advertising is truthful, that is the facts presented are real, the information is giving in a clear, logical manner, in order to convince by informing (Grover, 2011). The informative and persuasion functions of advertising are based on facts and emotional arguments. The informative advertising gives factual information to the consumer, while the emotional advertising consists in an emotional game which has as goal to favorable influence the decision of the consumer. There are many situations when combined alternatives are needed and they consist in various emotional games which are used as arguments for a certain way of acting on target-groups and individual consumers. Every time when these advertising efforts are focused on getting the consumers to do what the advertiser wants through subversive manners that lack the truth, we can say this is manipulation. Where the advertiser try to persuade the consumer by giving him facts for example, if it is a manipulator may make up or imply facts.

The non-ethical behavior of the advertisers is also a stimulus for manipulation through advertising. The issue of manipulative persuasion in advertising brings out the discussion on the role of ethics. The ethics of marketing has in view to what extent the marketing behavior, decisions and practices fit the rules and principles of good conduct. The advertising practices must have a set of ethical principles that could help the managers to evaluate the moral importance of each action and to decide how far they could go, in order to stay just on line of ethics. The research of the subject highlights three dominant principles of ethics in advertising which obey the law, act in your self-interest and comply with the ethics (Craig Smith, 2000; Danciu, 2009; Gray, 2011). It is not disputed that the advertisers have as obligation to obey the law and to act in their enlightened self-interest. However, many of the present practices of advertising show that are an increasing number of cases when there is no alignment of the marketer s self-interest with customers' interest. There are numerous situations when the companies try to induce the customers the feeling that they maximize the customer s satisfaction through manipulative advertisements. All these arguments support the idea that the law and the self-interest are not sufficient guidelines for good conduct in marketing advertising. The advertisers must also be guided by ethics, especially by normative marketing ethics that is prescriptive, identifying moral principles and methods of moral reasoning that justify rules and judgments of what is right and wrong (Craig Smith, 2000).

2. The manipulative advertising inside the spectrum of the persuasive advertising

In order to show how the persuasive advertising could become a manipulative one, we should answer to the question of what is the range of persuasion which goes in advertising. Since the persuasion is both rational and emotional, the manipulation area that can be utilized in advertising may emerge from the spectrum of persuasion conceived by Creighton (people.creighton.edu). The spectrum of persuasion Creighton proposes shows versions of persuasion occurring from the least rational (coercition) to the most rational (rational persuasion) as in Table 1.

Table 1. *The spectrum of persuasion in advertising*

Coercition/Force	Manipulation	Rational persuasion	Factual information
Threat	Deceitful advertising	Logical arguments	Qualities
Physical violence	Fallacious arguments		Price
	Emotive persuasion		Display

Source: people.creighton.edu, p. 6.

The first type of manipulative advertising is *the deceitful advertising* which uses facts, but deceptive facts. It uses confusing, misleading or blatantly untrue statements when promoting a product, that's why this advertising is also known as false advertising. Facts are given, but they are either false or there are significant facts which are hidden or not mentioned. Another sort of manipulative advertising is that uses arguments, but *bad arguments. The emotive persuasion* is the type which is likely more common and it play on consumer emotions and usually threaten him with dangers or promises amazing results, either of which are questionable, at best. Products like diet pills or exercise equipment sold through infomercials or TV often promise amazing results, and so persuade through sponsoring hopes and visions of happiness. In the same category may be included the advertisements which promote the so called "traditionally made" products. The ads highlight the ingredients and the methods used in the old days and imply they are used for the advertised products too, but these claims rarely are true. The same methods of manipulation may be found in some of green advertising. The green ad claims have more potential than any other type of claims to mislead and deceive the consumers. A misleading or deceptive advertisement is known as "green washing" which is misleading marketing about environmental benefits of the product (Stokes, 2009). The consumers appreciate the green corporate activities and as long as a company is true to its word and truth-in-advertising is uphold the companies who act in a socially and environmentally responsible manner may be rewarded (Rayan, 2012). The consumers are likely to accept green

advertising claims because of their strong desire to improve the environment and their way of life. But even the consumers with high levels of green concerns are not able to detect misleading or deceptive claims better than other consumers. The rapid increase of the green claims for a wide range of products and services create confusion among consumers. A great diversity of misleading and deceptive claims is used by the companies which have not truly green products and try to manipulate consumers. All claims with manipulative role that can be used in advertising no matter the product could be included in the following categories: vague or ambiguous claims, claims that omit important information necessary to evaluate their truthfulness or reasonableness, claims that are false or outright lies, and various combinations of the previous categories.

3. The manipulative advertising at work

3.1. The most claims used with a manipulative role

The ultimate goal of all types of advertising is to persuade the consumer to purchase a product or service. The manipulative advertising intends to do that by using facts, arguments and plying with consumers emotions in a misleading and deceptive manner. The most claims used in manipulation through advertising are the exaggeration of the quality of product, fallacious arguments and emotional appeals.

Exaggeration of quality. An exaggeration can be nothing less than false information about the product, but it can also be a form of puffery. Puffery is the term used to denote the exaggerations reasonably to be expected of a seller as to the degree of quality of his product, the truth or falsity of which cannot be precisely determined. At the same time, puffery is "advertising claims that ordinary consumers do not take seriously" (Berinato, 2010). Claims such as "world best (cup of) coffee" or "king of beers" are examples of puffery in the manipulation by advertising. The puffery seems to influence the people who are not major consumers of the product but turns away the consumers who are experts or have relatively high knowledge. These observations show that such exaggerations are not very useful for achieving the goals of advertising campaigns. The puffery could attract some new consumers but it could lose many consumers which are loyal to the product.

Fallacious arguments. A fallacy is any error in reasoning that occurs with some frequency (Teves, 2009). The fallacies or poor arguments can be made ignorantly and intentionally. The second situation is of greatest importance in marketing

advertising because of its potential for consumer manipulation. The advertising fallacy consists in using reasoning errors when creating, displaying or transmitting messages to the consumers. The fallacies which could be used in advertising fill up a long list; the fallacies of credibility are an important category which can largely be used in advertising.

Emotional appeals are the claims playing with consumers emotions both at conscious and unconscious level. In the advertisements can be included appeals to the need to achieve, dominate, feel safe, nurture, satisfy curiosity, the need of sex, the need of affiliation, guidance, prominence, attention, autonomy, physiological needs such as food, drink, sleep and so on. The advertisers can speculate on the consumer emotions and the ads are work out in such a manner that seem to promise or imply a possible connection between a product and happiness, social acceptance, a good family, a good sex life intimate friendship and so on. They may also use the scare for capitalizing on panic, if necessary. A large –scale contagion provides "the best'' opportunity for companies to perk up the profits. One example is the antibacterial hand gel. Many companies have capitalized on health scares like the swine flu and SARS by connecting their sanitizer products to these outbreaks. A company from US, Lysal, speculated during the swine flu scare. They said on their website that while we don't know how the virus spread, "following proper hygiene routines can help prevent the spread of illness". So they insinuate that using antibacterial soap will prevent people from getting specific illness. But, while hand sanitizer sales amplified, these products actually do nothing to defend against contagions. Both viruses are spread via tiny droplets in the air there are sneezed or coughed by people who are already infected (Tartakovsky, 2011). Some companies take further steps to target panic over these viruses by updating their products or launching new ones. Kleenex came out with "antiviral tissues" which are "virucidal against Rhinoviruses Type 1A and 2; Influenza A and B; and Reparatory Syncytial Virus" or whatever that means.

All previous categories of claims are substantiated in advertisements using linguistic, visual, auditory techniques and various combinations as vehicles for creating manipulative messages.

3.2. Mechanisms and techniques of manipulation in advertising

3.2.1. Manipulation through language

As Harris (1989) suggests, we may think about advertising as the construction of semiotic worlds for the rhetorical purpose of swaying purchasers buy what is advertised. The manipulation of the linguistic form and structure implies linguistic material beginning with smaller or most discrete of segments or forms and leading the quite large linguistic entities will be fashioned to undergo some change, transformation, mutilation, mutation that is relatively unexpected on the part of the reader or viewer. The advertisers bring some elements of information into prominence and, concomitantly, other elements are systematically back grounded or disappear from linguistic string entirely. They adhere at two essential principles in practically all linguistic manipulations. First, one component such as sound or word-form of lexical item-is almost every time manipulated inside a construction and, every broken rule or manipulation is operated at several levels being, therefore, inextricably bound up amongst several entities. Secondly, the viewer must be familiar with the environment of the ad visually on one hand, and linguistically on the other hand.

The most important and effective linguistic manipulation is that of subliminal advertising which aims at the subliminal seduction of the consumer. The basic concept of subliminal seduction in advertising makes possible for consumers to receive information on an emotional level without even being aware of it (www.research-assistance.com/paper/18372_a_ra_default/). The consumer behavior does not depend only of the conscious reaction. His reaction depends also by what non-conscious mind orders or decides, and this is the base of subliminal perception (Tanski, 2004). The consumer ignores the role of unconscious perception of subliminal knowledge that manipulates, direct and control the human behavior. The advertisers are aware of this and they use it to their advantage. They manipulate the consumer's decision by using techniques that interfere with subliminal knowledge and alter it toward the advertiser's objective. The use of any persuasive method to influence on the consumer's thought process may be called manipulation which time when the advertiser has the intention to win and the consumer to lose. This sort of action is facilitated also by the strong belief of many consumers they are immune to advertising and they are prepared not be fooled into buying the products in the ads.

Another motive of such conduct consists in the reality that many of today's products are "parity products" which all or most are nearly identical like beer, gasoline, soap, soft drinks cold remedies and ads help create an illusion of

superiority. The creation of the illusion of superiority of one product could use two major language techniques that are the use of the comparatives “better” and “best” and the effort of making the consumers believe something about the product that is not true. The word better is legally interpreted to be a comparative and therefore becomes a clear claim of superiority. In certain countries, the word best can be used to describe the parity products because if all products are equally good, they can all be considered the best. But, in order to not manipulate the customer, the only time when better can be used is when a product does indeed have superiority over other products in its category or when the better is used to compare the product with something other than competitor brands (malleryk.wordpress.com/writing…). Making the consumer believe something about the product that is not true is another technique with great potential of manipulation in advertising. Two major categories of claims that can be used to make the consumers believe something about the product that is not true are “the weasel claim” and “the unfinished claim” which focus most on the linguistic aspects. The weasel claim involves a modifier, a weasel word that negates the claim that follows it. Some of the most common weasel words include helps virtually, acts, can be, up to, refreshes, comforts, fights, the feel of, the look of, fortified, enriched and strengthened. These words modify the claims that follow them by being subtle enough for consumers to not notice them. The common weasel words perform various categories of functions. A sense of action or of doing something important to consumer is suggested by the words like “helps” and “acts”. That is because the words sound as if the product is being proactive toward the desired result. In the expression “helps control dandruff” for shampoos, the word helps acts as the claim no longer control dandruff but it helps control the dandruff like a good friend might. The prepositional phrases like “up to”, “the feel of” and “the look of” imply either an upward trend or a similarity between products. If the claim is “save up to 30%, the phrase up to is often overloaded as the consumer will save 30%. Additionally, the “up to” has a sense of rising motion in it which translates in consumer as an overall good feeling. “Can be” and “virtually” are phrases that can note the possibility of the product being the claim says it is. The expression “leave dishes virtually spotless” can make the consumer to take it as “leave dishes spotless”. Another function that weasel words perform is to give one product the illusion of strength. “Fortified”, “enriched” or “strengthened” are words that fulfill this role by often describing products that the consumers normally think of as strong and powerful. Other prepositional phrases such as “the feel of“ and “the look of“ are intended to make the consumers think that the product is of high quality or is similar to another product because they imply a comparison between two things.

The unfinished claim suggests that the product has more or is better than something, but does not say what "something" is. The unfinished claims could rely on "more". A clear example is the expression "20% more cleaning power" which could be interpreted as either "20% more cleaning power than competing brands" or 20% more cleaning power than earlier version of the some product". The fact that it does not specify what product has 20% more cleaning power renders the claim meaningless.

3.2.2. Visual techniques of manipulation

Many advertisements which are placed in practically in all media relay on visual and combined techniques to manipulate the consumers. Some of the most used such techniques are the manipulation by photo shopping, the mixture of the amusement with ads, the manipulation of the size and the price of the product and the misleading graphs.

The manipulation by photo shopping. The advanced technique offers a large variety of solutions in visual advertisements and their manipulation. The photo shopping is a technique where photos or photographs are edited in ways in which create an illusion or a different look and feel of the raw image and making it interesting for advertisements. Such technique can be achieved by using photo and vector editing soft wares like Photoshop, Illustrator, Corel and Gimp and many others. In contrast by simply editing like enhancement and corrections, the photo manipulation often includes creative retouching like adding 3D elements, backgrounds, vectors, and other sleek vibrant colors (ninjacrunch. com/40-cool-face-…). The colors play an important role in manipulative ads, since they have meanings and emotions tied to them just like words and images. The warm colors such as red, orange and yellow can represent passion, happiness and energy, while the cool colors like blue, green and violet are used to create a sense of peace, serenity, health and security (Brown, 2010). The advertisers should take into account some basic rules that seem to be universal in the choice of the colors. The primary colors like red, yellow and blue tend to emphasize simplicity as well as speed. The secondary colors are created by mixing two primary colors together. These include green, orange and purple. The tertiary colors can be created by mixing secondary and primary colors together. When choose colors the advertisers have in mind to create consistency, to highlight content, and to emphasize the most important features of the product. If they want manipulate the consumers, the advertisers are mixing the images and colors together in such ways that can persuade and direct the consumers to purchase the product by deceiving and misleading them (For manipulation in advertising see 37 Examples of Photo Manipulation In Advertisements, www.Designyourway.net/37-examples-of

photo-manipulation-in advertisements/). By manipulating photos and colors in advertising, the feelings and emotions can either fully express or be masked, and the products can be presented in the light and colors which positively influence the consumer. L'Oreal used the photo manipulation in the ad for Mabeline products featuring the star Julia Roberts and the supermodel Christy Turlington. The company has been forced to pull ad campaigns after complains that the images were overly airbrushed. L'Oreal UK admitted that the Turlington's image has been "digitally retouched to lighten the skin, clean up makeup, reduce dark shadows and shading around the eyes, smooth the lips and darken the eyes brows" (Sweeney, 2011).The ad for Mabeline featured Turlington promoting a foundation called The Eraser which is claimed to be an "anti-ageing" product.

The mixture of the amusement with ads. Some food companies disguise their ads as entertainment. This is especially appealing to kids on TV but the adults like it too. These games are inherently addictive from nature and allow the advertisers to circumvent the regulations on advertising junk food on television. The biggest US cereal companies General Mills or Kellog's used games to peddle their last nutrition cereals (Tatarkovski, 2011).

The manipulation of the size and the price of the product. When the sales and the profits become lower, shrinking the size of the product is a technique that may be used. The change of the size of the product at the same price is useful when the size is shrinking. One of the most known sweets producers in US used such technique. They have a seasonal candy which is one of the most popular treats around the Easter, The Cadbury Crème Egg that is just a chocolate shell shaped like a chicken's egg with a sugar white-and-yellow filling inside. When the sugar prices started eating into their profits, with consumers unwilling to pay more, the people of Cadbury tried do something. So they shrank the eggs and told consumers that they are simply misremembering how big they were before. Because the eggs are a seasonal item, in 2006 when the company shrank the size of the eggs they posted a message on their website saying that the eggs hadn't gotten smaller, the consumers' hand and mouth had just gotten bigger or as they phrased "you have just growing up". That meant that Cadbury was giving everyone less for their money. The company was forced to change their website messaging to the incredibly vague statement they offer a "broad variety of sizes and flavors of products" (Smallwood et al., 2012).

The misleading graphs. The graphs can be manipulated to mislead being excessively complex or poorly constructed. The misleading graphs are often in false advertising using techniques such as improper scaling, axis lack of scale, omission of data and improper extraction (Boussa). The improper scaling creates a

perceptual leading-comparison, while the change of y-axis maximum how the graph appears by causing a misleading of less volatility, less growth and less steep line a lower maxim. The lack of scale or the improper units make unclear the graph. Additionally, the tick marks prevent the reader from determining the graph bars are properly scaled, and allow the manipulation of the graph bars to create or mitigate the expression of change and just the same effect have the omission of data or the improper extraction of data.

4. Conscious advertising for conscious consumers, a realistic solution against manipulative advertising

Many of the manipulative actions in advertising are difficult to prove. Anyone encounters many difficulties when trying to counteract manipulative ads. More, the regulators tend to be reactive and his give the advertisers some space to update the content of their manipulative advertisements. It is difficult to say if harder regulations will reduce the natural tendencies for manipulation through advertising. Therefore, other ways should be followed in areas where the marketers and the consumers can find mutual goals and interests.

Consciousness in consumption asks for conscious advertising. For the greatest importance in reducing the manipulation through advertising seems to be the consciousness in consumption and business. The conscious consumer is that consumer which presents a complex mix of responsible behaviors in terms of economic, social and environmental and sustainability concerns. This type of consumer rationalizes the unnecessary and even the unwanted consumption by saying that is for a good cause. The conscious consumption is an ethical one at the same time and gives it the character of a consumerism activism that is practiced through *positive buying* which ethical advertising and products are favored. A business could successfully communicate and have relationships with conscious business, in its turn. Such a business has its consciousness that is the ability to experience the reality, to be aware of its inner and outside world. The consciousness allows the business to adapt to its environment and act to promote its interest and goals in a fair and non-manipulative way. The most important component of the outside world of the business is the consumer which has tremendous impact on the achievement of its interests and goals. The business cannot ignore the conscious consumers in all respects. The company has to well know and understand the conscious consumers, if it wants to succeed in making conscious advertising. The better they comprehend the intentions, the methods and the messages of deceptive and misleading advertising, the consumers easier

can distinguish between truth and fallacies or lies. Bomprad and Baranowski (2007) suggest that five values drive the conscious consumers and these are health and safety, honesty, convenience, relationships and doing good. The conscious consumers insist that the companies are honest, that is they reliable and accurately detail and promote the features and the benefits of the products. When the companies make unsubstantiated claims or over promise benefits, they risk breeding cynicism and distrust. The dynamics of the realities about the conscious consumers should have a strong impact on the commercial advertising. The companies have to learn the lessons emerging from the values of conscious consumers and their evolution in the future and create advertising messages accordingly. Real progress could be made in the practice of advertising in many other areas. More ethical behavior, more proactive self-regulation, better marketing cooperation are some with the most potential.

More ethical behavior of the advertising and the consumers could enhance the quality of advertising and reduce the proportions of manipulation through advertising.

More proactive self-regulation of the advertising. The advertising industry has established self-regulatory systems in nearly all major markets. The European Advertising Standards Alliance (EASA) brings together national advertising self-regulatory organizations and organizations representing the advertising industry in Europe who support self-regulation. It is the single authoritative voice on European advertising self-regulation. The International Chamber of Commerce has prepared a Framework for Responsible Food and Beverage Marketing Communication in 2006 with specific provisions relating to the advertising of food and beverage vis-a-vis children (www. responsible-advertising.org/ eself-regulation.asp).

The history of self-regulations shows that active self-regulation has more advantages, one of them consisting in the protection of consumers from ads that mislead (Peeler, 2013). By acting quickly and decisively against misleading advertising claims, the self-regulation significantly reduces the number of potentially misleading claims. The chances of better counteracting the manipulation practices in advertising will rise in the future if the self-regulation has a more proactive role.

Better marketing cooperation between the companies and the consumers. The issue of cooperation is a distinctive feature of the relationship marketing which focus on the cultivation of mutually advantageous relationships between the company and its customers (Danciu, 2009). An enhanced cooperation in

advertising between the two subjects becomes possible when the company, the marketer includes the consumers in its marketing solutions. The consumers should become partners of the marketers, in order to contribute to the creation of value for them and to make a non-manipulative persuasive advertising.

4. Conclusions

The manipulation in marketing has become an issue which accompanies the daily life of the consumers. The companies decide to manipulate the consumers every time when the interests of the consumers don't align to their interests and goals and they don't succeed to persuade them otherwise. A great role in the consumers' manipulation has the manipulation by advertising due to its functions and place in the mix of marketing techniques used to fulfill what the consumerism demands: more consumption, more diversity and better consumption. The techniques for manipulation through advertising are controversial every time the advertiser win and the consumer lose. The critics of manipulative advertising highlight two broad classes of advertising controversies. One type of critique *charges that moral rules against causing harm are violated when manipulating through advertising*. In other words, the advertising has negative financial and health-related effects, negative impact on efficiency, harmfully effects on familial and community ties. Additionally, the advertising promotes self-centered hedonism and lastly it may have negative environmental impact. Another category of controversies about advertising *are liberty-based critics.* These arguments charge that certain forms of advertising rob a person of the capacity for free choice in deciding when to purchase a product, good or service.

No matter the arguments against advertising as a whole, the assumptions of it being always manipulative is not true. People are complex buyers which make decisions based on a variable mix of rational and emotional components. But just this complex, controversial and mixed nature of individual personality make possible to deceive, mislead and misjudge some situations, products, brands or companies as a result of manipulative advertising. The deceptive advertising is most universally thought of to be immoral. The responsibility of the consumer is greatly diminished when one discovers that they are telling lies to buy by the seller or the advertiser. In such cases of fraud, the advertisers certainly hold a majority of the responsibility. When using faulty arguments it is much more difficult to assign blame to the advertisers. Mature consumers are expected to realize which argument is real and which is bad and, if advertisers use fallacies, one would expect that the consumers know better. In such cases, the burden of

responsibility appears to full primarily upon the consumer. More ambiguity exists in the case of emotive persuasion because the main problem consists in the difficulty of gauging how much effect advertisements have on the consumers' emotions. That's why the techniques and mechanisms of advertising should be used in a way that aligns to the convergence of interests and arguments.

Many of the manipulative actions in advertising are difficult to prove and no one can say if harder regulations will reduce the natural tendencies toward manipulation through advertising. Therefore, it seems that other solutions should be found in areas where the marketers and the consumers identify mutual interests, in order to improve the practices of advertising. Some important areas in which the advertisers and the consumers could find reciprocal benefits are the conscious advertising for conscious consumers, more ethical behavior, more proactive role of self-regulation and better cooperation in marketing and the good results could have a significant contribution toward the reduction of the proportions of manipulation through advertising. These efforts will help the reduction of the proportion of manipulation through advertising in these areas at least*, if the advertisers observe some necessary principles.*

The advertisers should move from a sole focus on corporate profits to a belief and practice that an organization can achieve something larger than making money.

- The advertisers should understand that more consumers, especially the conscious ones, recognize that all things are connected. Therefore, they must be in the process of becoming conscious of the impact of advertising and pursuit the mutual benefits of it.
- The advertisers should be aware that the advertising must be authentic. That is all communication with the consumers should be hundred per cent honest and transparent. More than ever, an increasingly proportion of consumers are prizing the transparency, accountability and authenticity.
- The advertisers should align their messages with consumers' values in every aspect and in all components of advertising. The companies which align their values with their actions will earn enduring loyalty among the consumers.

If the companies follow these principles, they easily could translate them in honest, non-manipulative practices in advertising and so become more trusted.

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Global financial crisis-driven mutations affecting the transmission mechanism customized to monetary policy strategies. A VAR, SVAR and BVAR approach

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Abstract. *This paper analyzes the transmission mechanisms of monetary policy in the Central and Eastern European (CEE) countries on the road to euro adoption depending on the monetary policy strategies used by the national central banks (CBs). The scientific construction of the paper is based on three methods: vector autoregressive (VAR), structural vector autoregressive (SVAR) and Bayesian techniques-estimated vector autoregressive (BVAR). The main results have indicated: 1) lack of similarity of the transmission mechanism, a high degree of heterogeneity in the transmission of monetary policy impulses indicated in all three cases subject to analysis: speed, persistence and amplitude, 2) an increase in the speed of monetary policy shocks transmission, a decrease in the amplitude of monetary policy shock impact and a reduction (or the maintaining at a similar level) of the persistence of monetary policy shock effects subsequent to the global financial crisis, regardless of the monetary policy strategy used.*

Keywords: monetary policy; transmission mechanism; autoregressive vector; impulse response functions; Central and Eastern Europe.

JEL Classification: E52, E43, C58, P48.
REL Classification: 8J.

1. Introduction

Currently, there are at least three important reasons to study monetary transmission mechanism in the economies of Central and Eastern Europe on the road to euro adoption. First, a real, accurate understanding of the measure, speed, and persistence of a change in CBs short-term nominal interest rate on inflation is a central element of the inflation targeting (IT) strategy due to the fact that the IT is a popular monetary strategy among states in the region.

Second, monetary policy transmission mechanism has a number of implications for the currency area entry and the proper functioning of the monetary union. The relevance of the transmission mechanism from the euro adoption perspective occurs when the effects of domestic monetary policy on inflation and economic activity are significant and substantially different from the ones identified in the EZ, because given such a context, the cost of monetary policy independence loss could be considerable. Third, the identification of mutations in the monetary policy transmission mechanism as a result of the global financial distress are especially important in shaping the monetary policy decision in the new environment characterized by a high degree of uncertainty.

Closely related to the above, we focus on providing an empirical analysis of the monetary policy shocks consequences on real economic aggregates and prices for CEE countries acceding to the euro area compared to the EZ states, using three methods: vector autoregressive (VAR), structural vector autoregressive (SVAR) and Bayesian techniques-estimated vector autoregressive (BVAR). Hence, we proposed to identify the impact of a contractionary monetary policy shock, customized according to the various types of strategies used by central banks in CEE countries and the EZ, respectively.

Model specification is different for each case, partly because we intend to capture as well a number of distinctive features that characterize each of the strategies applied in selected countries. Specific objectives aimed at three levels: 1) identifying the effects generated by a monetary policy shock both in the aggregate EZ and in the CEE states on the road to euro adoption, depending on the monetary strategies used by their national CBs; 2) compare the impact of monetary policy across countries in the area that apply the same strategy of monetary policy; between countries using different strategies and compare the outcomes identified with those available for the EZ and 3) determine the consequences of the international turmoil on the monetary policy transmission mechanism promoted by the European Central Bank and the monetary authorities of the selected states.

The proposed approach for pursuing our objectives brings several novelty elements: first, the specification of different models for various monetary policy strategies applied in the countries subject to analysis to better capture their

specific features; second, determining the consequences of monetary policy through the Bayesian techniques-estimated vector autoregressive (BVAR), as there is only a scarce literature of individual and comparative studies using the method in the context of CEE states acceding to the euro area; third, to determine the implications of the recent financial crisis on the transmission mechanism in the region, because currently there are only limited non-unitary researches treating CEE countries separately.

2. The application of vector autoregressive models in the analysis of the monetary policy transmission mechanism in Central and Eastern Europe

Vector autoregression models (VAR) introduced by Sims (1980) are considered the reference in econometric modeling of the monetary policy transmission mechanism. Fry and Pagan (2005) argue that this class of models offers the ideal combination between the data-based approach and the coherent approach based on economic theory.

The analysis of the monetary policy effects on key macroeconomic variables using VAR models has been extended to the emerging markets of Central and Eastern Europe. In the case of these states we identify both studies targeted at the individual level, as well as comparative analyses performed for different groups of countries to underline the relative peculiarities of the monetary policy impact on the economy and for making comparisons between these and the euro area.

Regarding individual level analyses, we note the presence of an important number of papers on CEE countries that use or have used until the euro adoption an inflation targeting strategy (Hurník and Arnoštová (2005), Morgese and Horváth (2008) in the case of the Czech Republic; Lyziak et al. (2008), Demchuk et al. (2012) for Poland; Antohi et al. (2003), Andries (2008) on Romania, Kucserová (2009), Horváth and Rusnák (2009) for Slovakia; Coricelli et al. (2006) for Slovenia; Vonnák (2005, 2007) for Hungary.

However, considering the CBs in CEE countries that use or have used, until the single currency adoption, an exchange rate targeting strategy, the number of individual studies focused on identifying the effects of monetary policy is low (especially those based on vector autoregression), because of their inability to promote an active monetary policy, with interest rates determined in the money market and not by a rule or a discretionary decision of central banks and must, in theory, closely follow the path of the anchor currency/ country (in this case, of the ECB). Several examples can be identified at Minea and Rault (2008, 2011) for Bulgaria; Lättemäe (2003) for Estonia; Bitans et al. (2003) in the case of Latvia, Vetlov (2003) for Lithuania.

Of particular importance for our analysis are the researches comparing the effects of monetary policy through the vector autoregression method in different groups of CEE countries against other advanced economies (Ganev et al., 2002; Creel and Levasseur; 2005; Héricourt, 2005; EFN 2005; Elbourne and de Haan, 2006; Anzuini and Levy, 2007; Jarocinski, 2008; Darvas, 2009). These works present a myriad of specific features of the monetary policy transmission mechanism in the new EU member states in Central and Eastern Europe against the old Member States. Such particularities include several aspects, as follows: 1) financial systems relatively much less developed than that of the old EU Member States, which could lead to a weaker impact of monetary policy on the economy; 2) additional difficulties in anchoring inflation expectations, which may lead to higher lag price responses, 3) growing inflation with implications for monetary policy transmission mechanism because in an environment of increased inflation agents adjust their prices more frequently and thus, prices are less rigid, 4) prevalence of exchange rate channel over the other two traditional channels of monetary policy transmission mechanism (interest rate channel and credit channel).

An analysis of the most representative studies focused on identifying the effects of monetary policy in CEE emerging countries can be found at Coricelli et al. (2006) and more recently at Egert and MacDonald (2009).

Presently, we note a new wave of interest towards the study of the recent economic and financial crisis implications on the monetary policy transmission mechanism based on VAR techniques (e.g., Boivin et al. 2010; Cecioni and Neri, 2010).

Research in the case of the CEE region is still at the beginning. We mention the study by Lyziak et al. (2011), which highlights the impact of the recent worldwide distress on the effectiveness of monetary policy transmission mechanism in Poland through a VAR model and a small structural model, pointing out that it depends on both the monetary policy and the structural characteristics of the economy. The financial turmoil, which affected both components, has led to a change in the monetary policy rule and to a significant decrease in the effectiveness of monetary policy. On the same line, Demchuk et al. (2012) emphasized that during the recent crisis, the monetary policy transmission mechanism in a small, open economy such as Poland suffered extensive disruption, with the interest rate channel being the most affected.

Carare and Popescu (2011) performed an analysis of the monetary policy implications in Hungary through a large-scale Bayesian estimated VAR model (BVAR) for the period 2001:6 - 2010:9 and outlined that despite the significant degree of euroisation, high share of foreign capital in the banking and corporate sectors, exponential levels of public debt, altogether likely to diminish the

effectiveness of monetary policy, the decline in economic activity due to the manifestation of a contractionary monetary policy shock appears as obvious and much faster than in advanced economies.

Popescu (2013) underlined the lack of similarities of the transmission mechanisms between all CEE countries on the road to EZ accession and the Eurozone at the aggregate level, which might lead to the manifestation of clear and strong asymmetries at the time of monetary area entry. Cocriş and Nucu (2013) researched the effectiveness of monetary policy applied by the monetary authorities in the region in ensuring financial stability and emphasize that the effectiveness of changes in short-term nominal interest rates on asset prices differ according to the type of monetary policy strategy used.

Based on a structural VAR, Pelinescu (2012) studied the measures taken by the National Bank of Romania at the beginning of the financial turmoil, and underlined the importance of the interest rate channel, the complex impact of the exchange rate channel and the key role of the need for and implementation of appropriate measures to stimulate demand.

Using monthly frequency data for the period 2001 to 2010, Spulbăr et al. (2012) analyzed the functioning of monetary policy transmission mechanism in Romania through a Bayesian techniques estimated VAR model (BVAR). The key findings highlighted by authors stress the importance of the exchange rate channel, which significantly influences the evolution of real economic variables, and the rising importance of the interest rate channel, which over recent years has become more consistent. It should be noted that the authors included in the analysis a real estate market development index, reflecting domestic currency appreciation and the evolution of broad money as decisive factors that have led to these asset prices boom prior to the emergence of the financial crisis.

3. Methodology and data

Depending on the peculiarities of central banks' monetary policy strategies we specify one model for each strategy separately. The attachment of a distinct pattern for each type of monetary policy strategy applied by the CBs in CEE countries, and the specific monetary strategy of the ECB, respectively, aims to best highlight their distinguishing features. We use a recursive (VAR), structural (SVAR) and Bayesian techniques estimated (BVAR) approach for each model.

3.1. Recursive VAR model

Given the below system:

$$AxY_t = C(L)xY_{t-1} + D(L)xX_t + Bx\varepsilon_t \quad (1)$$

where: the A matrix includes all coefficients describing simultaneous relationships between variables, the C(L) matrix includes all coefficients that describe relations between variables lags, the D(L) matrix includes all coefficients describing relationships between endogenous and exogenous variables, the B matrix is a diagonal matrix and the ε vector includes the residuals. By multiplying the VAR system with the inverse of the A matrix, we obtain the followings:

$$Y_t = A^{(-1)}xC(L)xY_{t-1} + A^{(-1)}xD(L)xX_t + A^{(-1)}xB\varepsilon_t \quad (2)$$

That can be re-written as:

$$Y_t = axY_{t-1} + bxX_t + \mu_t \quad (3)$$

where:

$a = A^{(-1)}xC(L)$

$b = A^{(-1)}xC(L)$

$\mu = A^{(-1)}xBx\varepsilon$

Equation (1) describes the structural model and equation (3) is the reduced form of the model; the latter can be empirically observed.

Thus, the considered VAR model has the following representation in the reduced form:

$$Y_t = axY_{t-1} + bxX_t + \mu_t$$

where: Y_t is the vector of endogenous variables, X_t is the vector of exogenous variables, μ_t is the vector of the residual terms (white noise), a is a matrix comprising coefficients that describe the relationship between all the variables, and b is an endogenous matrix comprising all the coefficients that model the relationships between endogenous and exogenous variables.

Hence, for the euro area the recursive VAR (VAR 1) would have the representation shown in equation (4):

$$\text{VAR(1):} \begin{bmatrix} gdp_r_ez \\ cpi_ez \\ m3_ez \\ ir_ez \\ reer_ez \\ pc_ez \\ pp_ez \end{bmatrix} = ax \begin{bmatrix} gdp_{t-1}_r_ez \\ cpi_{t-1}_ez \\ m3_{t-1}_ez \\ ir_{t-1}_ez \\ reer_{t-1}_ez \\ pc_{t-1}ez \\ pp_{t-1}_ez \end{bmatrix} + bx \begin{bmatrix} wcpi \\ gdp_r_us \\ ir_us \end{bmatrix} + \mu_t^{ez} \quad (4)$$

In this case, the vector of exogenous variables includes the followings: global resource prices index (wcpi), U.S. real gross domestic product (gdp_r_us) and short-term interest rate in the U.S. (ir_us). The vector of endogenous variables for the Eurozone comprises the real gross domestic product (gdp_r_ez), consumer price index (cpi_ez), M3 monetary aggregate (m3_ez), short-term interest rate (ir_ez), the real effective exchange rate (reer_ez), private credit (pc_ez) and real estate prices (pp_ez).

For states that use an inflation targeting strategy, the recursive VAR model (VAR 2) is specified according to relation (5):

$$\text{VAR(2):} \begin{bmatrix} gdp_r_n \\ cpi_n \\ reer_n \\ ir_n \\ m3_n \\ pc_n \\ pp_n \end{bmatrix} = ax \begin{bmatrix} gdp_{t-1}_r_n \\ cpi_{t-1}_n \\ reer_{t-1}_n \\ ir_{t-1}_n \\ m3_{t-1}_n \\ pc_{t-1}_n \\ pp_{t-1}_n \end{bmatrix} + b \begin{bmatrix} gdp_r_ez \\ cpi_ez \\ ir_z \end{bmatrix} + \mu_t^n \quad (5)$$

where *n* successive = CZ (the Czech Republic), HU (Hungary), PL (Poland), RO (Romania).

Exogenous variables vector for the euro area in this case includes: real gross domestic product (gdp_r_ez), consumer price index (cpi_ez) and short-term interest rate (ir_ez) and the vector of endogenous variables comprises the real gross domestic product in the selected state (gdp_r_n), consumer price index (cpi_n), real effective exchange rate for the country in question (reer_n), short-term interest rate (ir_n), the size of the national M3 monetary aggregate (m3_n), private credit (pc_n) and real estate market prices (pp_n).

For central banks using a strategy of exchange rate targeting, recursive VAR (VAR 3) will have the representation in equation (6):

$$\text{VAR(3):} \begin{bmatrix} ir_ez \\ gdp_r_n \\ cpi_n \\ m3_n \\ ir_n \\ pc_n \\ pp_n \end{bmatrix} = ax \begin{bmatrix} ir_{t-1}_ez \\ gdp_{t-1}_r_n \\ cpi_{t-1}_n \\ m3_{t-1}_n \\ ir_{t-1}_n \\ pc_{t-1}_n \\ pp_{t-1}_n \end{bmatrix} + bx \begin{bmatrix} reer_n \\ gdp_r_ez \\ cpi_ez \end{bmatrix} + \mu_t^n \quad (6)$$

where *n* successive = BG (Bulgaria), LV (Latvia), LT (Lithuania).

The exogenous variables vector include: the real effective exchange rate for the selected country (reer_n), real GDP in the euro area (gdp_r_ez) and), consumer price index in the EZ (cpi_ez). In turn, in this case, the vector of endogenous variables comprises the short-term interest rate in the euro area (ir_ez), real gross

domestic product in the country in question (gdp_r_n), consumer price index (cpi_n), the expanded national monetary aggregate (m3_n), short-term interest rate (ir_n), private credit (pc_n) and real estate prices in the considered state (pp_n).

Exogenous variables are included to control the evolution of foreign demand and inflation. The inclusion of these variables helps solve the so-called *price puzzle* referring to current empirical results identified in the VAR literature stating that an increase in the interest rate leads to rising price levels. Treating these variables as exogenous implicitly presumes that there is no impact of endogenous to exogenous variables. At the same time, it allows for a contemporary impact of exogenous variables on endogenous factors.

In the case of recursive VAR, the identification of shocks implies imposing zero restrictions on the A and B matrices coefficients in the relation $\mu = A^{(-1)}B\varepsilon$ is achieved through a Cholesky decomposition. In the case of recursive identification, the Cholesky A matrix has a triangular structure, with elements above the main diagonal equal to zero. Given that, we note that the ordering of variables as highlighted by relations (4), (5) and (6) requires implicit assumptions about: (1) what to consider when setting the monetary policy and (2) which variables respond or not respond simultaneously to monetary policy decisions.

Thus, for the Eurozone recursive VAR model (VAR 1), a monetary policy shock is identified by a standard Cholesky decomposition with variables ordered as in (4). The shock identification scheme is reflected by equation (7).

$$\text{VAR(1):} \begin{bmatrix} \varepsilon_t^{gdp_r_ez} \\ \varepsilon_t^{cpi_ez} \\ \varepsilon_t^{m3_ez} \\ \varepsilon_t^{ir_ez} \\ \varepsilon_t^{reer_ez} \\ \varepsilon_t^{pc_ez} \\ \varepsilon_t^{pp_ez} \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ a_{21} & 1 & 0 & 0 & 0 & 0 & 0 \\ a_{31} & a_{32} & 1 & 0 & 0 & 0 & 0 \\ a_{41} & a_{42} & a_{43} & 1 & 0 & 0 & 0 \\ a_{51} & a_{52} & a_{53} & a_{54} & 1 & 0 & 0 \\ a_{61} & a_{62} & a_{63} & a_{64} & a_{65} & 1 & 0 \\ a_{71} & a_{72} & a_{73} & a_{74} & a_{75} & a_{76} & 1 \end{bmatrix} x \begin{bmatrix} \mu_t^{gdp_r_ez} \\ \mu_t^{cpi_ez} \\ \mu_t^{m3_ez} \\ \mu_t^{ir_ez} \\ \mu_t^{reer_ez} \\ \mu_t^{pc_ez} \\ \mu_t^{pp_ez} \end{bmatrix} \quad (7)$$

The ordering used implies that when deciding the monetary policy, the authorities consider the current level of production, prices and monetary developments. At the same time, the implicit assumption is that an unexpected monetary policy shock has no contemporaneous impact on the output, prices and monetary aggregates, but it can have an immediate effect on the real effective exchange rate, private credit and property prices. However, the interest rate does not respond simultaneously to changes in the real effective exchange rate, private credit and real estate prices.

We consider such an assumption to be appropriate, as the aggregate euro area is on the one hand, a large and relatively closed economy, and on the other hand, characterized by the absence of clear guidelines to prevent unsustainable credit growth and asset price bubble formation. Such ordering in the endogenous vector of variables (except for private credit and real estate market prices) is widely used in the literature starting with Peersman and Smets (2001).

For the recursive VAR model in the context of the states using an inflation targeting strategy (VAR 2), a monetary policy shock is identified by a standard Cholesky decomposition with the variables ordered as in (5). The scheme of identifying the shock is illustrated by equation (8).

$$\text{VAR(2):} \begin{bmatrix} \varepsilon_t^{gdp_r_n} \\ \varepsilon_t^{cpi_n} \\ \varepsilon_t^{reer_n} \\ \varepsilon_t^{ir_n} \\ \varepsilon_t^{m3_n} \\ \varepsilon_t^{pc_n} \\ \varepsilon_t^{pp_n} \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ a_{21} & 1 & 0 & 0 & 0 & 0 & 0 \\ a_{31} & a_{32} & 1 & 0 & 0 & 0 & 0 \\ a_{41} & a_{42} & a_{43} & 1 & 0 & 0 & 0 \\ a_{51} & a_{52} & a_{53} & a_{54} & 1 & 0 & 0 \\ a_{61} & a_{62} & a_{63} & a_{64} & a_{65} & 1 & 0 \\ a_{71} & a_{72} & a_{73} & a_{74} & a_{75} & a_{76} & 1 \end{bmatrix} x \begin{bmatrix} \mu_t^{gdp_r_n} \\ \mu_t^{cpi_n} \\ \mu_t^{reer_n} \\ \mu_t^{ir_n} \\ \mu_t^{m3_n} \\ \mu_t^{pc_n} \\ \mu_t^{pp_n} \end{bmatrix} \quad (8)$$

This means a contemporary impact of the national gross domestic product, consumer price index and the real exchange rate on the short term rate variable. On the other hand, there is no immediate effect of the monetary policy shock on extended money supply, private credit and real estate market prices. This type of ordering of endogenous variables (except for private credit and real estate prices) can be found at Peersman and Mojon (2001).

Finally, in the case of the recursive VAR model for the CEE states subject to analysis that use an exchange rate targeting strategy (VAR 3), the monetary policy shock is identified by a standard Cholesky decomposition with the variables ordered as in (6). Such identification scheme is presented in equation (9).

$$\text{VAR(3):} \begin{bmatrix} \varepsilon_t^{ir_ez} \\ \varepsilon_t^{gdp_r_n} \\ \varepsilon_t^{cpi_n} \\ \varepsilon_t^{m3_n} \\ \varepsilon_t^{ir_n} \\ \varepsilon_t^{pc_n} \\ \varepsilon_t^{pp_n} \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ a_{21} & 1 & 0 & 0 & 0 & 0 & 0 \\ a_{31} & a_{32} & 1 & 0 & 0 & 0 & 0 \\ a_{41} & a_{42} & a_{43} & 1 & 0 & 0 & 0 \\ a_{51} & a_{52} & a_{53} & a_{54} & 1 & 0 & 0 \\ a_{61} & a_{62} & a_{63} & a_{64} & a_{65} & 1 & 0 \\ a_{71} & a_{72} & a_{73} & a_{74} & a_{75} & a_{76} & 1 \end{bmatrix} x \begin{bmatrix} \mu_t^{ir_ez} \\ \mu_t^{gdp_r_n} \\ \mu_t^{cpi_n} \\ \mu_t^{m3_n} \\ \mu_t^{ir_n} \\ \mu_t^{pc_n} \\ \mu_t^{pp_n} \end{bmatrix} \quad (9)$$

This identification allows for an output shock to simultaneously affect production, prices, monetary developments, domestic short-term interest rate, private credit and real estate prices; a price level shock to affect the price level, monetary

developments, domestic short-term interest rate, private credit and real estate prices; a shock of monetary aggregates to affect monetary aggregates, domestic short-term interest rate, private credit and real estate prices; changes in domestic short term interest rates to simultaneously affect domestic short-term interest rate, private credit and housing market prices; a private credit shock to impact real estate prices, while changes in market prices affect exclusively the real estate market prices.

The first position of the short term interest rate in the euro area implies that it does not allow for a contemporary impact of shocks in the other endogenous variables on its levels. An ordering of this type of endogenous variables, in the context of CBs targeting the exchange rate (except for private credit and real estate prices) is found in European Forecasting Network (2004).

3.2. Structural VAR model (SVAR)

The optimal highlighting of the three monetary policy strategies distinctive characteristics through recursive VAR models is strongly constrained by the specific rigidity of Cholesky orthogonalization shock identification method. To remove this disadvantage, structural VAR models have been custom built to the three types of monetary policy strategy with the same representation as the recursive ones, differing by shock identification techniques.

Thus, while for VAR recursive models the innovation decomposition is performed by Cholesky identification technique, for VAR structural models, the identification of shocks is a structural process, with zero restrictions freely distributed. Compared to the Cholesky orthogonalization method, the latter allows for a more accurate description of the variables interdependencies, and a greater flexibility of the relationships between them.

For the structural VAR model in the context of the euro area (SVAR 1) the number of zero restrictions imposed is 21 (the system is exactly identified), with the proposed scheme of shock identification given by relation (10).

$$\text{SVAR(1):} \begin{bmatrix} \varepsilon_t^{gdp_r_ez} \\ \varepsilon_t^{cpi_ez} \\ \varepsilon_t^{m3_ez} \\ \varepsilon_t^{ir_ez} \\ \varepsilon_t^{reer_ez} \\ \varepsilon_t^{pc_ez} \\ \varepsilon_t^{pp_ez} \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ a_{21} & 1 & 0 & 0 & 0 & 0 & 0 \\ a_{31} & a_{32} & 1 & a_{34} & a_{35} & a_{36} & a_{37} \\ a_{41} & 0 & a_{43} & 1 & 0 & a_{46} & 0 \\ a_{51} & a_{52} & a_{53} & a_{54} & 1 & a_{56} & 0 \\ a_{61} & a_{62} & a_{63} & 0 & 0 & 1 & a_{67} \\ 0 & 0 & a_{73} & 0 & 0 & a_{76} & 1 \end{bmatrix} \text{x} \begin{bmatrix} \mu_t^{gdp_r_ez} \\ \mu_t^{cpi_ez} \\ \mu_t^{m3_ez} \\ \mu_t^{ir_ez} \\ \mu_t^{reer_ez} \\ \mu_t^{pc_ez} \\ \mu_t^{pp_ez} \end{bmatrix} \quad (10)$$

The first two equations represent the slow reaction of the real sector (GDP and prices) to shocks in the monetary sector (broad money, interest rate and exchange

rate) and shocks from private credit and real estate prices. There is no contemporary impact of monetary policy shocks, M3, exchange rate, private credit and real estate market prices on production and consumer price index.

M3 monetary aggregate is influenced by contemporary innovations of all other endogenous variables. The monetary authority sets the interest rate taking into account contemporary innovations in production (a_{41} can be interpreted as an indicator of excess demand pressure), extended monetary aggregate innovation and private credit (a_{43} and a_{46} interpreted as expression of using the information provided by the monetary analysis pillar line as a distinctive feature of the ECB monetary policy strategy), but it does not simultaneously respond to shocks in the price level (price data available only with some lag), exchange rate (considering the EZ as a large and relatively closed economy) and property prices (assuming that monetary policy conducted by the ECB has not been directed towards preventing the formation of bubbles in asset prices specific to this market) .

Exchange rate, as the price of an asset, immediately reacts to all the innovations of the other variables, except for shocks of the property prices. Private credit is influenced by contemporary production shocks, price level, broad money and asset prices in the housing market. Finally, real estate prices respond simultaneously to innovation of the broad money and private credit.

$$\text{SVAR(2):} \begin{bmatrix} \varepsilon_t^{gdp_r_n} \\ \varepsilon_t^{cpi_n} \\ \varepsilon_t^{reer_n} \\ \varepsilon_t^{ir_n} \\ \varepsilon_t^{m3_n} \\ \varepsilon_t^{pc_n} \\ \varepsilon_t^{pp_n} \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ a_{21} & 1 & 0 & 0 & 0 & 0 & 0 \\ a_{31} & a_{32} & 1 & a_{34} & a_{35} & a_{36} & 0 \\ a_{41} & 0 & a_{43} & 1 & 0 & 0 & 0 \\ a_{51} & a_{52} & a_{53} & a_{54} & 1 & a_{56} & a_{57} \\ a_{61} & a_{62} & 0 & 0 & a_{65} & 1 & a_{67} \\ a_{71} & 0 & 0 & 0 & a_{75} & a_{76} & 1 \end{bmatrix} \text{x} \begin{bmatrix} \mu_t^{gdp_r_n} \\ \mu_t^{cpi_n} \\ \mu_t^{reer_n} \\ \mu_t^{ir_n} \\ \mu_t^{m3_n} \\ \mu_t^{pc_n} \\ \mu_t^{pp_n} \end{bmatrix} \quad (11)$$

$$\text{SVAR(3):} \begin{bmatrix} \varepsilon_t^{ir_ez} \\ \varepsilon_t^{gdp_r_n} \\ \varepsilon_t^{cpi_n} \\ \varepsilon_t^{m3_n} \\ \varepsilon_t^{ir_n} \\ \varepsilon_t^{pc_n} \\ \varepsilon_t^{pp_n} \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ a_{21} & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & a_{32} & 1 & a_{34} & 0 & 0 & 0 \\ a_{41} & a_{42} & a_{43} & 1 & a_{45} & a_{46} & 0 \\ a_{51} & a_{52} & a_{53} & a_{54} & 1 & a_{56} & 0 \\ a_{61} & a_{62} & 0 & a_{64} & a_{65} & 1 & 0 \\ a_{71} & a_{72} & 0 & 0 & a_{75} & a_{76} & 1 \end{bmatrix} \text{x} \begin{bmatrix} \mu_t^{ir_ez} \\ \mu_t^{gdp_r_n} \\ \mu_t^{cpi_n} \\ \mu_t^{m3_n} \\ \mu_t^{ir_n} \\ \mu_t^{pc_n} \\ \mu_t^{pp_n} \end{bmatrix} \quad (12)$$

For considered structural VAR models specific to IT strategies (SVAR 2) and exchange rate targeting (SVAR 3), identification schemes proposed are expressed by equations (11) and (12). Similar to the euro area, these schemes have been constructed aiming at a more accurate description of interdependencies between variables given the country-specific factors for each monetary policy strategy

used. Interpretation of interdependencies between variables amid the strategies particularities can be realized based on the general guidelines detailed above, in the case of the euro area.

3.3. Bayesian VAR model (BVAR)

In order to illustrate the framework of BVAR, the reduced form of the VAR model expressed by the relationship (3) with the extraction of exogenous variables vector (Ko-Ko Minnesota prior distribution used for the estimation does not allow the inclusion of exogenous variables) is refined by introducing the following matrix notations in a compact form:

$$Y_{TXm} = X_{Tx(mp+1)} x B_{(mp+1)xm} + E_{Txm}\,, \quad E \sim N(0, \Sigma) \tag{13}$$

where: $X = \begin{bmatrix} x_1 \\ \vdots \\ x_T \end{bmatrix}$, $x_t = \begin{bmatrix} 1 & y_{t-1} & \dots & y_{t-p} \end{bmatrix}$, $B = \begin{bmatrix} a_0 \\ A_1 \\ \vdots \\ A_p \end{bmatrix}$, $\beta = vec(B)$,

Therefore, in this case, Y is defined as an array (Txm) incorporating the T observations for each dependent variable. This approach allows to easily obtain the posterior distribution required by the Bayesian techniques. It should be noted that the estimation cannot be performed equation by equation, as in the reduced version, because this time the dependent variable is not a vector, but a matrix (Txm).

To formally describe how to build the Bayesian estimation, the model expressed by equation (13) is implemented as relation (14):

$$Y_t = x_t x \beta + \varepsilon_t\,, \quad t = 1, \dots, T \tag{14}$$

with β and Σ the unknown parameters of the model.

The analysis of Bayesian VAR models requires the knowledge of the distribution properties to estimate parameters. If we note the unknown parameters θ = (β, Σ) and consider π (θ ∣ Y) and π (θ) the posterior and prior distribution, and L (Y ∣ θ) a data distribution function, according to Bayes theorem, the posterior distribution is given by (15):

$$\pi(\theta \mid Y) = \frac{L(Y \mid \theta) x \pi(\theta)}{\int L(Y \mid \theta) x \pi(\theta) d\theta} \tag{15}$$

Given the definition of conditional likelihood, the combination of data density function and the parameters π (β, Σ, Y) can be written as in (16):

$$\pi(\beta, \Sigma, Y) = L(Y \mid \beta, \Sigma) x \pi(\beta, \Sigma) = \pi(\beta, \Sigma \mid Y) x \pi(Y) \tag{16}$$

When given π (β, Σ, Y), conditional marginal posterior distribution of data can be obtained based on the relation (17):

$$\pi(\Sigma \mid Y) = \int \pi(\beta, \Sigma \mid Y) d\beta \;\; şi \;\; \pi(\beta \mid Y) = \int \pi(\beta, \;\; \Sigma \mid Y) d\Sigma \tag{17}$$

Under these conditions, the main purpose of the Bayesian estimation is to identify posterior distribution moments for the parameters of interest.

The choosing of prior information for the model parameters has always been an important issue in the Bayesian analysis, as this option is the essential step for model specification. The literature has proposed various types of prior information (Sims-Zha, Koop-Koroblis, Diffuse), with selection depending on the specific economic problem subject to analysis, data samples and parameters determination procedure.

In the present paper, we use a Ko-Ko Minnesota priors distribution developed by Koop and Korobilis (2010). The simplicity of the approach derives from the fact Σ is assumed to be known. Prior information for β appears as $\beta \sim N(\beta_0, V_0)$, with an average of $\beta_0 = 0_{mpx1}$ and covariance in the form of $V_0 \neq 0$. Koop and Korobilis have specified the V_0 prior covariance matrix as a diagonal matrix with elements $v_{ij,l}(l = 1, \ldots, p)$, according to the relation (18).

$$v_{ij,l} = \begin{cases} \frac{a_1}{p^2} \text{ for own lags coefficients} \\ \frac{a_2 \sigma_i}{p^2 \sigma_j} \text{ for } i \neq j \text{ variable lags coefficients} \\ a_3 \sigma_i \text{ for exogeneous variables coefficients} \end{cases} \tag{18}$$

where σ_i^2 is the *i* diagonal element of Σ.

Priors information (values of a_1, a_2, a_3 and β_0 hyper-parameters) can be determined either by using their values from previous studies or by choosing those that reduce the forecast errors. a_1 and a_2 hyper-parameter values have been set based on state-specific data, while for a_3 și β_0 we used values of 100 and 0. To determine the a_1 and a_2 hyper-parameters we searched the $(a_1, a_2) \in ([0,1],[0,1])$ peers that minimizes the root mean square error (RMSE) calculated for country-specific data samples for the selected period in each case. A summary of the hyper-parameter values is shown in Table 1.

Table 1. *Hyper-parameter values used in estimating the BVAR*

Hyper-parameter / Country/ Region	a_1	a_2	a_3	β_0
Bulgaria	0.3	0.1	100	0
The Czech Republic	0.9	0.9	100	0
Latvia	0.1	0.1	100	0
Lithuania	0.1	0.2	100	0
Poland	0.9	0.9	100	0
Romania	0.9	0.9	100	0
Hungary	0.1	0.1	100	0
The euro area	0.1	0.1	100	0

Source: authorial calculations.

3.4. Data

The sample used is restricted, including data from the time central banks have adopted the monetary policy strategy currently in application. It should be noted that such a restriction allows us both to achieve the objective of identifying the effects of monetary policy customized to various types of strategies adopted by CBs, and at the same time, as pointed out in the literature, offers the possibility to remove one of the causes that lead to the manifestation of puzzles between different variables (identification of counterintuitive results, contrary to the fundamental theoretical relationships between variables). Furthermore, this approach also facilitates the avoidance to some extent of the Lucas critique (Lucas, 1976), as the transition from the use of a monetary policy strategy to another represents without any doubt a regime change.

Such an aim focused on a time horizon that starts with the adoption of the CB monetary policy strategy was hampered by the availability of real estate prices development data series. Given quarterly data frequency, the application of the two restrictions above mentioned leads to the following intervals for the baseline scenario: Bulgaria: 1997q1: 2013q1; the Czech Republic: 2004q1: 2013q1; Latvia: 2000q1: 2013q1; Lithuania: 1998q4: 2013q1; Poland: 2002q4: 2013q1; Romania: 2005q3: 2013q1; Hungary: 2001q4: 2013q1; the Eurozone: 1999q1: 2013q1. For the scenario that covers the period subsequent to the international financial crisis, the time span is 2008q4: 2013q1.

The variables included in the analysis are the gross domestic product (gdp) as a fixed-base index (2005 = 100) of real GDP in the euro area, the US and each of the selected countries; consumer price index (cpi) as fixed base index (2005 = 100) of consumer prices for the euro area and for each of the states subject to analysis; broad money (m3) as a fixed-base index (2005 = 100) for euro area M3 monetary aggregate and in each country in the sample; the short term interest rate (ir) with 3M EURIBOR as proxy for the EZ and its equivalents for other countries, respectively; the real effective exchange rate (reer) as fixed-base index (2005 = 100) of real effective exchange rate (taking into account the 27 trading partners) for the euro area and the selected states; global resource prices index (wcpi) as fixed-base index (2005 = 100); private credit (pc) as fixed-base index (2005 = 100) of private credit in the euro area and in analyzed countries and real estate price (pp) as a fixed base index (2005 = 100).

Most data is provided by Eurostat, except for the world resources price index retrieved from the World Bank, the size of monetary aggregates taken from monthly bulletins published on the websites of selected CBs, private credit and the price of real estate, where the data comes from the Bank for International Settlements database.

All series except for short-term interest rate and real effective exchange rate has been adjusted to remove seasonal factors using the X12 procedure applied by the U.S. Census Bureau. Also, all series except for short-term interest rates are logarithmic.

We test the variables stationarity by using Augmented Dickey – Fuller test and Phillips – Perron that returned negative results (non-stationary variables). Most variables are integrated of order 1 (I (1)), and some of order 2 (I (2)).

The variables supporting the VAR analysis should not, however, be stationary. Sims (1980), *inter alia,* argued against differentiation, even if the series contain a unit root, because differentiation causes information losses. What matters for the robustness of VAR results is the overall system is the stationarity of the VAR results for the robustness of the overall system (Lütkepohl, 2006). Moreover, the use of variables in levels and not as first order differences has the ability to maintain long-term relationships (if present) and do not affect the statistical inference (Sims et al., 1990).

Cointegration testing based on the methodology developed by Johansen shows the existence of a number of cointegration equations, r, so that $0 < r <$ endogenous variable number (in this case 7), at a significance threshold of 0.05 (results based on both the Trace test and the Maximum Eigenvalue test). This outcome, in conjunction with those obtained from stationarity tests highlights the possibility of model estimation with level-expressed variables.

The choice of lags number was based on Schwartz informational evaluation criteria, suggesting in all cases the selection of a single lag. We verified the results by applying the lag exclusion test to eliminate lags that are not significant. The Lag Exclusion Wald test confirmed the number of lags indicated by the Schwartz criterion. In case of the Bayesian techniques-estimated VAR models we selected two lags due to the fact that the use of a single lag would not allow the accurate determination of the coefficients.

3.5. The soundness of analysis

VAR, SVAR and BVAR considered models are confirmed if they are stable and the residuals are white noise. We verified the stability of the model by applying AR root tests, with results indicating the stability of all VAR models, subunit inverse roots, non-exceeding the circle of unit radius, respectively. Residual serial non-correlation hypothesis testing is based on *Portmanteau test*; we checked for the normal distribution of errors with the help of *Jarque - Bera test*, and for the residuals homoscedasticity by applying the *White test* statistic. The findings revealed a normal, homoscedastic distribution of errors, a number of small problems related to the existence of a serial correlation of residuals; overall, the

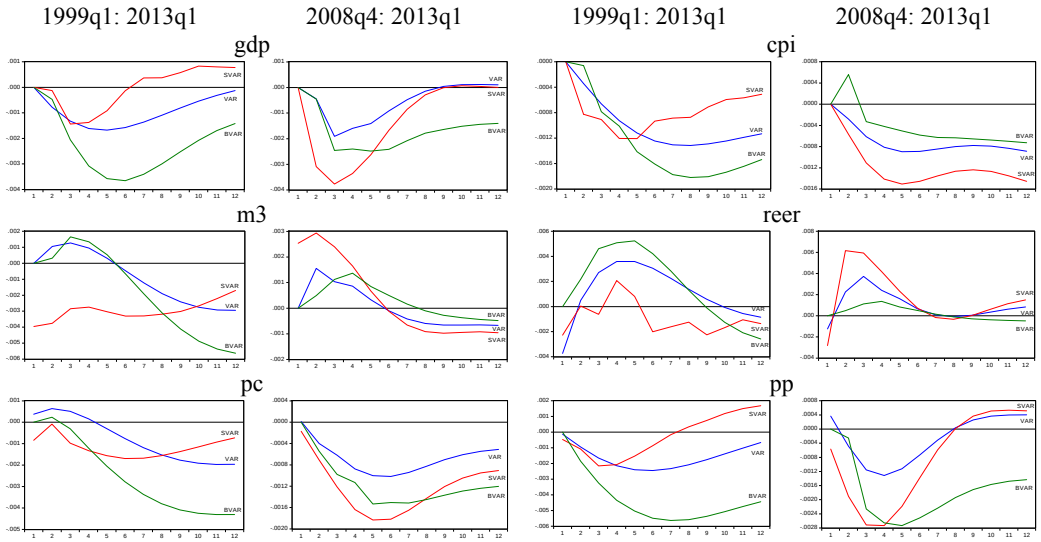
models are able to provide a good picture of the dynamics of variables interactions. The results of the above mentioned tests can be obtained on request from the author.

4. Estimation results

Analyses based on vector autoregression models returned two important results: the impulse response function and variance decomposition. The present paper addresses only the response functions to a monetary policy shock as illustrated in the graphs below, with a confidence interval of 95%, where the shock is represented by a standard deviation and time on the horizontal axis is expressed in quarters.

4.1. The euro area case

In the context of an unexpected event of contractionary monetary policy (sudden increase in short-term interest rate) in the EZ, the variables responses for the two given intervals can be identified in Graph 1.



Source: authorial calculations.

Graph 1. *The response of variables to a contractionary monetary policy shock - the euro area*

A summary of the monetary policy transmission mechanism characteristics in the euro area for the selected intervals considered is indicated in Table 2. The effects caused by a contractionary monetary policy shock on macroeconomic variables

are quantified in terms of three basic characteristics: speed (S), amplitude (A) and persistence (P). *Speed* refers to the number of quarters from the shock emergence until it reaches the peak, *the amplitude* relates to the maximum impact of the shock on the interest variable, quantified as a percentage of the standard deviation (shock being represented by a standard deviation) and *the persistence* is the number of quarters affected by the shock manifestation.

Table 2. *Characteristics of the monetary policy transmission mechanism in the euro area*

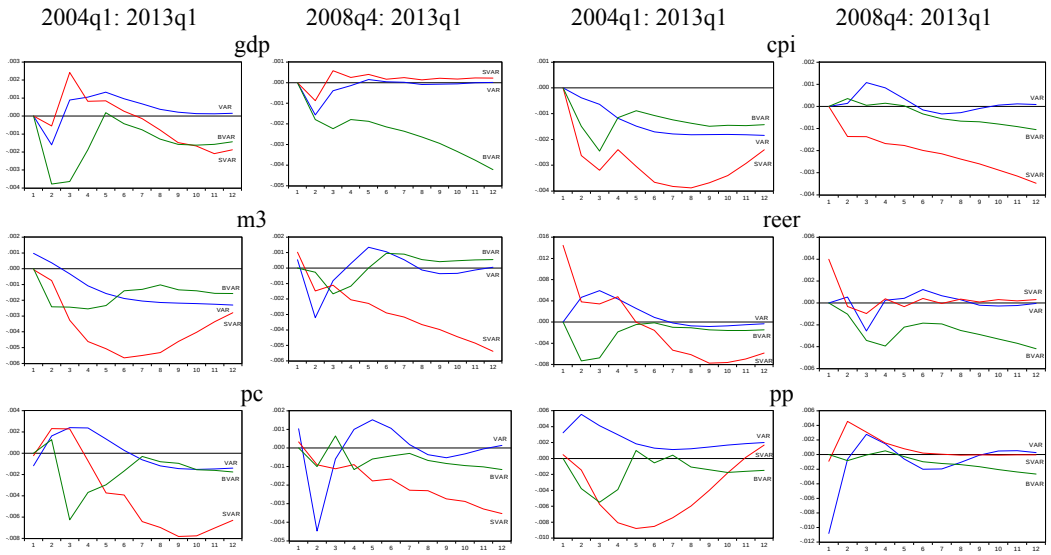
1999q1:	*gdp*			*cpi*			*m3*			*reer*			*pc*			*pp*		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	5	0.18	7	7	0.13	12+	C			1	0.4	2	C			6	0.20	12
SVAR	3	0.15	12	4	0.12	12+	1	0.4	12+	1	0.2	2	6	0.18	12	2	0.20	7
BVAR	6	0.35	12+	8	0.18	12+	C			C			C			6	0.55	+12
2008q4:	gdp			cpi			m3			reer			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	2	0.18	8	4	0.08	12+	C			1	0.1	1	5	0.08	12+	3	0.12	7
SVAR	2	0.35	8	4	0.13	12+	C			1	0.3	1	5	0.18	12+	2	0.26	7
BVAR	2	0.20	12+	C			C			C			5	0.15	12+	4	0.26	12+

Source: authorial calculations.
Note: S – speed of reaching the shock peak (quarters), A – shock effects amplitude (% of a standard deviation;) P – shock impact persistence maintaining (quarters); C – a result contrary to macroeconomic theory.

The comparative approach of the impact of an unexpected contractionary monetary policy shock for the two selected time horizons indicates a higher speed and amplitude, but a lower persistence on real activity for the period subsequent to the global financial crisis. In the same interval, the monetary policy shock is likely to cause a more rapid, with a similar persistence, but with a lower power impact on inflation expressed by the consumer price index. *Ex post* turmoil, the exchange rate reacts with a similar speed, but less powerful and for a shorter time to the unexpected increase in short-term nominal interest rate, while the reaction of private credit to monetary policy shock occurs with relatively close features from the perspective of all the elements of comparison. Regarding the impact on prices in the housing market, it appears to be faster, but of lower amplitude and persistence.

4.2. The Czech Republic case

For the Czech Republic, an unanticipated contractionary monetary policy shock (sudden increase in short-term interest rate) generates responses of the variables of interest for the two considered intervals that can be traced in Graph 2.



Source: authorial calculations.

Graph 2. *Response of variables to a contractionary monetary policy shock - The Czech Republic*

The main features of the Czech monetary policy transmission are summarized in Table 3. The comparative analysis of the transmission mechanism on the two temporal horizons covers the same key elements, namely speed and persistence of effects generated by the manifestation of an unanticipated contractionary monetary policy shock.

Table 3. *Characteristics of the monetary policy transmission mechanism in the Czech Republic*

2004q1:	gdp			cpi			m3			reer			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	2	0.15	3	5	0.18	12+	C			C			1	0.10	1	C		
SVAR	2	0.05	3	7	0.38	12+	6	0.58	12+	C			C			5	0.9	11
BVAR	2	0.38	12+	3	0.25	12+	2	0.25	12+	2	0.7	12+	C			3	0.5	4
2008q4:	gdp			cpi			m3			reer			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	2	0.15	3	C			C			C			C			2	1.1	2
SVAR	2	0.05	3	2	0.35	12+	C			C			12	0.10	12+	C		
BVAR	3	0.20	12+	C			3	0.15	5	4	0.40	12+	1	0.10	2	2	0.1	2

Source: authorial calculations.

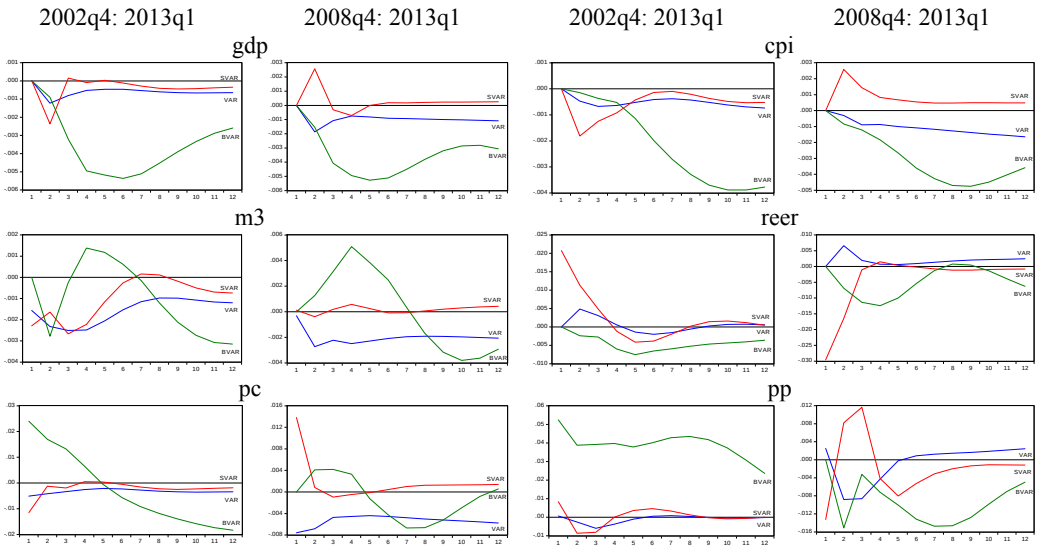
Note: S – speed of reaching the shock peak (quarters), A – shock effects amplitude (% of a standard deviation;) P – shock impact persistence maintaining (quarters); C – a result contrary to macroeconomic theory.

Compared to the extended timeframe, within the range 2008q4: 2013q1, the impact of a monetary policy shock on real output appears to be less powerful but of a higher persistence, while the transmission speed seems to maintain its level. The effect on inflation reveals a similar persistence, but it turns out to be more extensive and manifests more rapidly. At the same time, the decrease in the broad money supply in response to short-term nominal interest rate is characterized by

lower speed, amplitude and persistence, while the exchange rate reaction becomes more faster and lengthy, but less intense. The impact of monetary policy shocks on private credit is slower, but turns stronger and lengthy, and real estate price impulse occurs faster with a higher amplitude, but only limited persistence.

4.3. The case of Poland

As indicated by VAR, SVAR and BVAR models, in Poland, a contractionary monetary policy shock impact on macroeconomic variables leads to a number of effects that can be identified in Graph 3.



Source: authorial calculations.

Graph 3. *Response of variables to a contractionary monetary policy shock - the case of Poland*

The implications of the monetary policy shock in terms of speed, strength and duration are summarized in Table 4.

Table 4. *Characteristics of the monetary policy transmission mechanism in Poland*

2002q4:	gdp			cpi			m3			reer			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	2	0.10	12+	3	0.05	12+	3	0.20	12+	C			1	0.50	12+	3	0.50	5
SVAR	2	0.25	3	2	0.2	12+	3	0.20	7	C			1	1.00	3	C		
BVAR	6	0.55	12+	10	0.50	12+	2	0.25	3	1	2.00	12+	C			C		
2008q4:	gdp			cpi			m3			reer			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	2	0.0	12+	3	0.05	12+	2	0.30	12+	C			1	0.50	12+	C		
SVAR	C			C			2	0.02	2	1	3.00	3	C			1	1.50	1
BVAR	4	0.50	12+	8	0.50	12+	C			4	1.50	7	C			2	1.50	12+

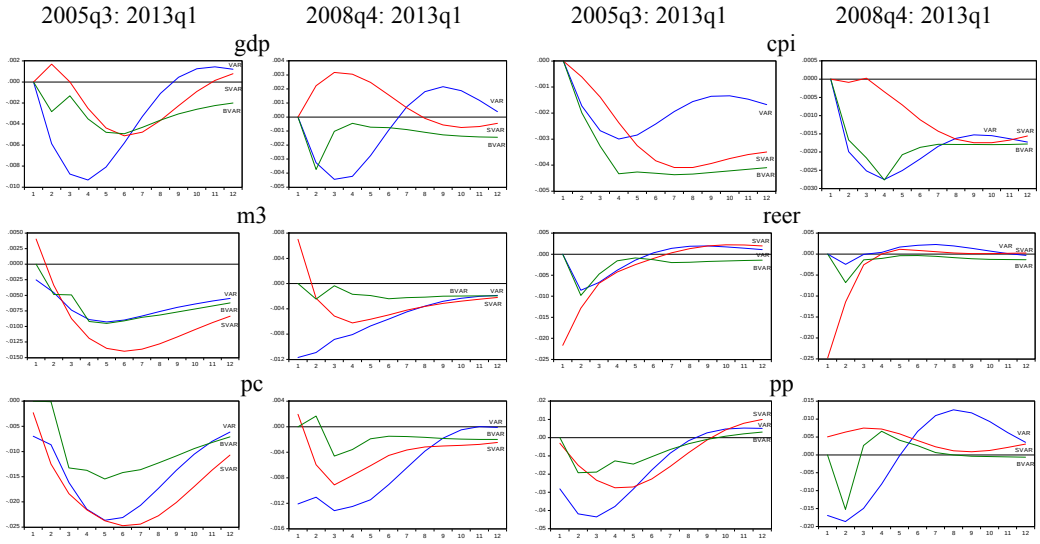
Source: authorial calculations

Note: S – speed of reaching the shock peak (quarters), A – shock effects amplitude (% of a standard deviation;) P – shock impact persistence maintaining (quarters); C – a result contrary to macroeconomic theory.

Comparing the impact caused by an unanticipated contractionary monetary policy shock on selected macroeconomic variables in the two intervals indicates *ex post* the global financial crisis the following results: first, a similar persistence, but an increase in speed and intensity of the shock effects on the economic real activity real and inflation; second, a negative faster reaction, but less powerful and complex of broad money to short-term nominal interest rate rising; third, rising rapidity, persistence and magnitude of the exchange rate impulse to an unexpected change in real interest rate; fourth, the increase in the intensity of monetary policy shocks on private credit and fifth, a decrease in the speed, duration and amplitude of the overall effect on housing market prices.

4.4. The case of Romania

In the context of an unexpected contractionary monetary policy shock (sudden increase in short-term interest rate) in Romania, the impulse responses of the macroeconomic variables indicated by VAR, SVAR and BVAR models are shown in Graph 4.



Source: authorial calculations.

Graph 4. *Response of variables to a contractionary monetary policy shock - the case of Romania*

Based on the results captured in Graph 4, the identification of the impact of a monetary policy shock and of mutations manifested *ex post* the international turmoil, in terms of speed, amplitude and persistence, are summarizes in Table 5.

Table 5. *Characteristics of the monetary policy transmission mechanism in Romania*

2005q3:	gdp			cpi			m3			reer			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	3	0.90	9	4	0.30	12+	5	0.90	12+	2	0.80	5	5	2.30	12+	2	4.50	8
SVAR	C			7	0.40	12+	C			1	2.20	7	6	2.50	12+	3	2.50	9
BVAR	5	0.40	12+	4	0.45	12+	5	0.90	12+	2	1.00	12+	6	1.50	12+	2	2.00	9
2008q4:	gdp			cpi			m3			reer			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	3	0.45	8	4	0.28	12+	1	1.00	12+	2	0.20	2	3	1.40	10	2	1.80	5
SVAR	C			8	0.18	12+	C			1	2.50	4	C			C		
BVAR	2	0.40	12+	4	0.28	12+	2	0.50	12+	2	0.70	5	C			2	1.50	2

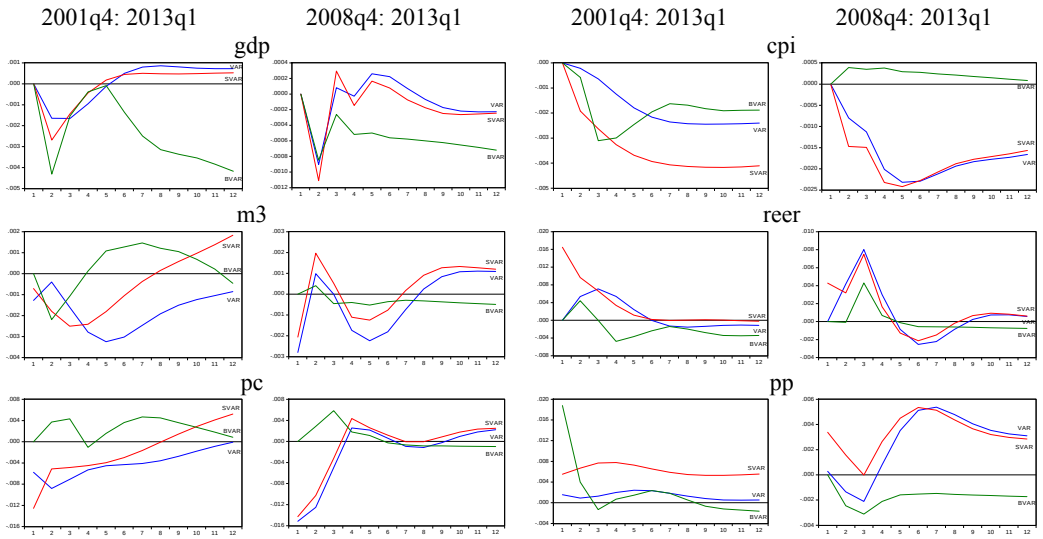
Source: authorial calculations.
Note: S – speed of reaching the shock peak (quarters), A – shock effects amplitude (% of a standard deviation;) P – shock impact persistence maintaining (quarters); C – a result contrary to macroeconomic theory.

Compared to the horizon 2005q3: 2013q1, *ex post* the emergence of the financial crisis, the monetary policy shock impact on the real economic activity appears to be more rapid, but less intense. Persistence of the increase in short-term nominal interest rate on real output appears to be similar to that associated to the extended time interval. A lower shock impact amplitude has also been identified in the case of inflation, which suggests a diminished power of monetary policy in achieving its fundamental objective.

In terms of speed and duration, the effect of a contractionary shock on inflation appears to be relatively identical to that shown in the expanded timeframe. Reduction of the broad monetary aggregate as a result of rising interest rates occurs faster, with similar persistence and amplitude. The real exchange rate reacts with a lower intensity to the shock impact, and also is much diminished in length. Private credit shock impulse response induced by changing short-term nominal interest rate manifests at a higher speed, but has a much reduced intensity and duration. At the same time, the unanticipated contractionary monetary policy shock leads to consequences of limited intensity and persistence on property prices.

4.5. The case of Hungary

In the case of Hungary, an unexpected contractionary monetary policy shock drives responses of the variables of interest that can be identified in Graph 5.



Source: authorial calculations.

Graph 5. *Response of variables to a contractionary monetary policy shock - the case of Hungary*

The analysis of impulse response functions from the perspective of the three defining selected characteristics speed, amplitude and duration of effects induced by the monetary policy shock returned the results summarized in Table 6.

Table 6. *Characteristics of the monetary policy transmission mechanism in Hungary*

2001q4: 2013q1	gdp			cpi			m3			reer			pc			pp		
	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	2	0.15	5	6	0.25	12+	5	0.35	12+	C			2	0.80	12	C		
SVAR	2	0.25	5	6	0.40	12+	3	0.25	7	C			1	1.20	7	C		
BVAR	2	0.45	5	3	0.30	12+	2	0.20	3	C			C			C		
2008q4: 2013q1	gdp			cpi			m3			reer			pc			pp		
	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	2	0.08	3	4	0.23	12+	1	0.25	1	C			1	0.15	3	3	0.20	3
SVAR	2	0.08	3	4	0.24	12+	1	0.20	1	C			1	0.15	3	C		
BVAR	2	0.10	3	C			C			C			C			3	0.30	12+

Source: authorial calculations.
Note: S – speed of reaching the shock peak (quarters), A – shock effects amplitude (% of a standard deviation;) P – shock impact persistence maintaining (quarters); C – a result contrary to macroeconomic theory.

The results presented in Table 6 allow for a comparative approach of the monetary policy transmission mechanism features in Hungary for the two time intervals considered. Hence, for the 2008q4: 2013q1 horizon, a contractionary

monetary policy shock determines a negative response of output, characterized by a reduced intensity and duration against the extended time range. At the same time, the shock impact on inflation appears to be faster, but of lower amplitude.

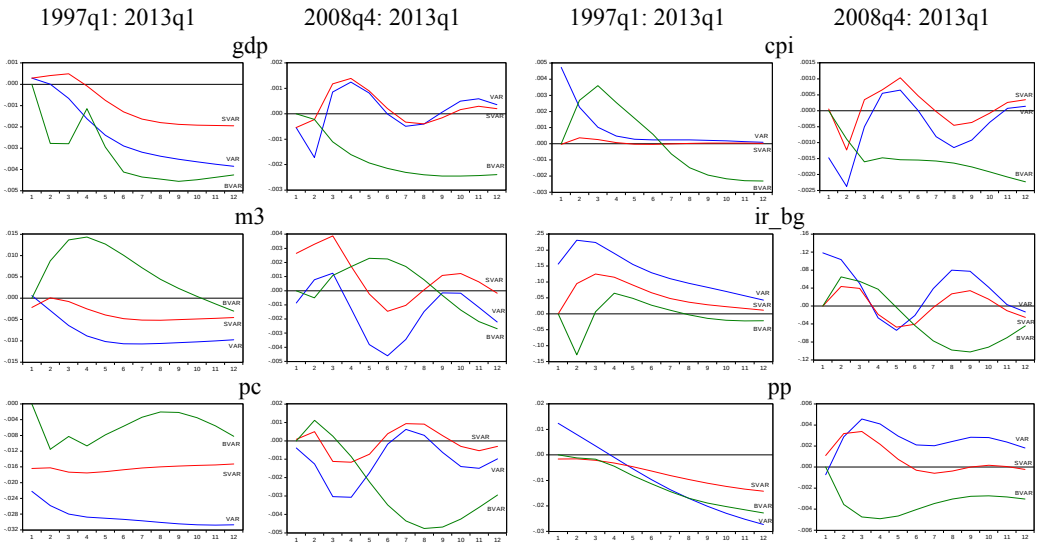
Broad monetary aggregate reaction shows a similar magnitude; it gains rapidity, but loses persistence. The exchange rate behavior seems to be counterintuitive in all estimated scenarios for both periods. The reverse impulse response of private credit is also characterized by a decrease in the intensity and persistence. The comparison of the effects induced by an increase in short-term nominal interest rate on real estate prices cannot be achieved, as the results for the extended interval proved to be counterintuitive.

4.6. The case of Bulgaria

The analysis of the transmission mechanism in CEE countries that currently apply a strategy of exchange rate targeting (Bulgaria, Latvia and Lithuania) presents additional difficulties. In fact, the literature widely recognizes that there is only limited knowledge (at least yet) on monetary transmission within currency boards, and on other versions of such a monetary policy strategy, respectively. The reason lies in their inability to use an active monetary policy (exogenous changes in interest rates or the money supply are not generated by the national monetary policy, both indicators being solely influenced by developments in the domestic economy).

The interest rate in these countries is determined in the money market and not by a rule or a discretionary decision of central banks, with the national rate closely following the trajectory of related anchor currency/country (in this case, the ECB), according to the theory. Thus, in the context of an exchange rate targeting strategy (especially of a currency board), attention is focused on the amplitude, speed and persistence of external shocks transmission (in the ECB interest rate) on domestic savings.

Given the currency board in Bulgaria, VAR, SVAR and BVAR models reveal that an unexpected rise in short-term nominal interest rate in the EZ (which is, as previously shown, endogenous for countries that apply an exchange rate targeting strategy) determines variables response shown in Graph 6.



Source: authorial calculation.

Graph 6. *Response of variables to a contractionary monetary policy shock –the case of Bulgaria*

The main features of the monetary policy transmission mechanism in Bulgaria in the two intervals in terms of speed, amplitude and persistence of the effects caused by a contractionary monetary shock can be identified in Table 7.

Table 7. *Characteristics of the monetary policy transmission mechanism in Bulgaria*

1997q1:	gdp			cpi			m3			ir_bg			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	C			C			4	1.00	12+	2	25	12	9	3.00	12+	C		
SVAR	C			C			6	0.50	12+	3	10	12	2	1.60	12+	11	1.00	12+
BVAR	8	0.45	12+	C			C			C			2	1.20	12+	11	2.00	12+
2008q4:	gdp			cpi			m3			ir_bg			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	2	0.15	3	2	0.25	3	1	0.10	1	2	12	3	3	0.30	6	C		
SVAR	1	0.05	2	2	0.10	2	C			2	4	3	C			C		
BVAR	7	0.25	12+	11	0.15	12+	2	0.05	2	2	6	5	C			3	0.50	12+

Source: authorial calculations

Note: S – speed of reaching the shock peak (quarters), A – shock effects amplitude (% of a standard deviation); P – shock impact persistence maintaining (quarters); C – a result contrary to macroeconomic theory.

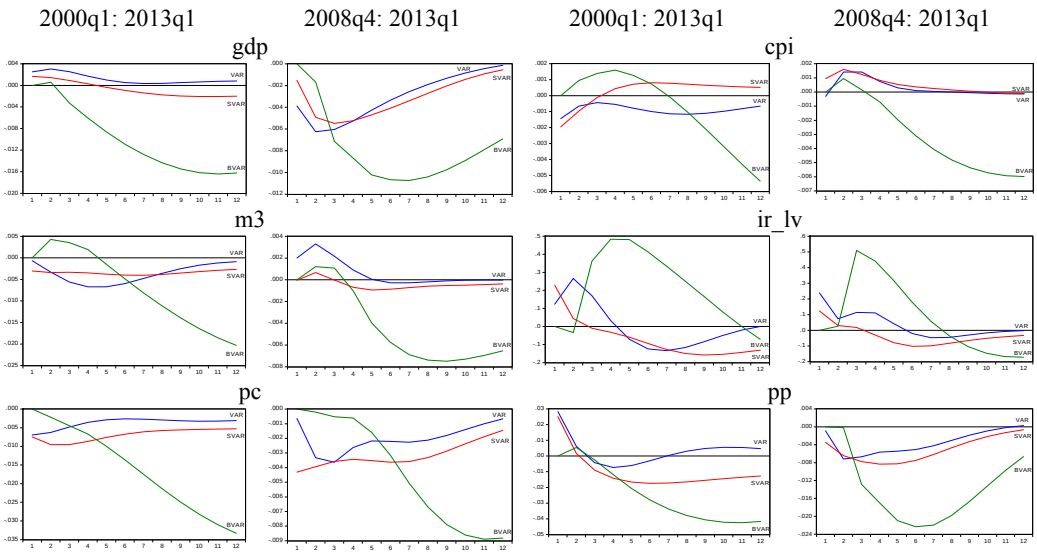
Relative to the expanded time horizon, *ex post* the global crisis manifestation, an unexpected contractionary monetary policy shock in the euro area appears to have

a quick impact, but a lower intensity on real national activity. A comparison between the two periods in terms of inflation reaction to the monetary policy shock cannot be achieved, as VAR, SVAR and the BVAR models analysis identify results contrary to the macroeconomic theory. The negative relationship between the interest rate in the area of the anchor currency and money supply is a finding specific to a currency board manifested much rapidly subsequent to the crisis in Bulgaria, but of diminished intensity and persistence.

The positive relationship between the two interest rates, another result particular to countries that use an exchange rate targeting strategy appears to lose persistence and amplitude. Moreover, under the monetary policy shock, private credit reacts slower, less intensely, with an impact that greatly diminishes over time. The negative impact generated by the short-term nominal interest rate rising in the euro area on the national real estate market prices seems to gain speed and lose intensity.

4.7. The case of Latvia

In the context of Latvia, where there is a conventional fixed exchange rate against the European single currency, a contractionary monetary policy shock, defined as an unanticipated increase in the interest rate of the ECB, has led VAR, SVAR and BVAR models to return responses of selected macroeconomic variables as illustrated in Graph 7.



Source: authorial calculations.

Graph 7. *Response of variables to a contractionary monetary policy shock – the case of Latvia*

The main characteristics of the monetary policy transmission mechanism in Latvia, for the two timeframes in terms of speed, intensity and duration of effects induced by a monetary policy shock on macroeconomic variables of interest are presented in Table 8.

Table 8. *Characteristics of the monetary policy transmission mechanism in Latvia*

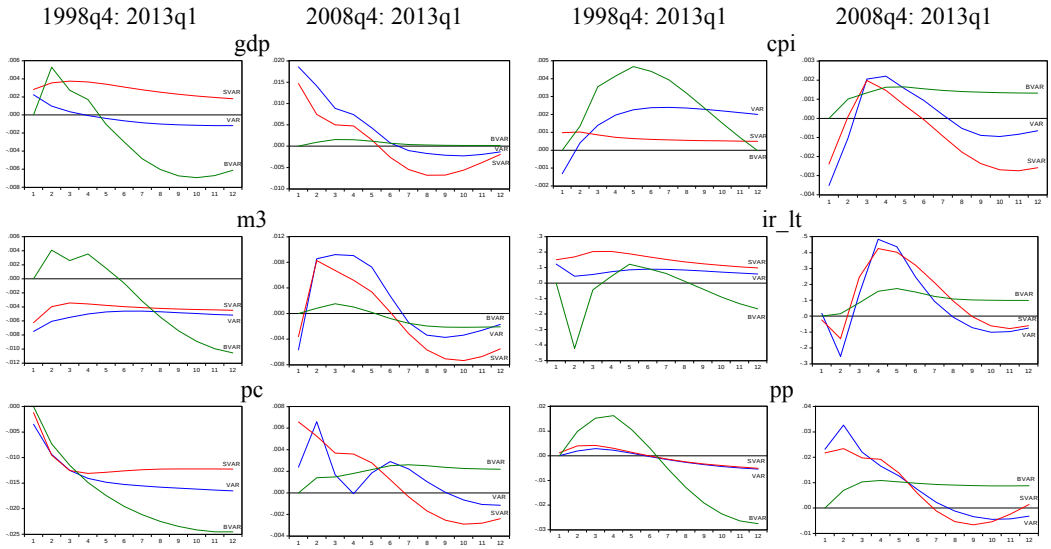
2000q1:	gdp			cpi			m3			ir_lv			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	C			1	0.15	12+	4	0.50	12+	2	28	6	1	0.80	12+	C		
SVAR	C			1	0.20	3	5	0.30	12+	1	25	2	2	1.00	12+	C		
BVAR	C			C			C			C			12	3.50	12+	C		
2008q4:	gdp			cpi			m3			ir_lv			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	2	0.60	12	C			C			1	25	6	3	0.40	12+	2	0.70	11
SVAR	2	0.50	12	C			C			1	15	2	1	0.45	12+	4	0.80	11
BVAR	6	1.10	12+	C			C			2	50	7	12	0.90	12+	6	2.20	12+

Source: authorial calculations.
Note: S – speed of reaching the shock peak (quarters), A – shock effects amplitude (% of a standard deviation); P – shock impact persistence maintaining (quarters); C – a result contrary to macroeconomic theory.

A comparative analysis of the monetary policy transmission mechanism in Latvia given the three characteristics researched faces additional difficulties, most selected variables reacting contrary to the macroeconomic theory in at least one of the two time intervals. VAR, SVAR and BVAR analysis revealed possible interpretable results only in the case of domestic interest rates and private credit. The effect of an unanticipated increase in the short-term nominal interest rate in the EZ on domestic interest rate seems to be more persistent, *ex post* the global turmoil, while the impulse reaction of private credit to the monetary shock loses intensity.

4.8. The case of Lithuania

Following the impact of an unanticipated contractionary monetary policy shock, defined as an unexpected rise in short-term nominal interest rate in the euro area, the responses of macroeconomic variables of interest are illustrated in Graph 8.



Source: authorial calculations.

Graph 8. *Response of variables to a contractionary monetary policy shock – the case of Lithuania*

The main features of the monetary policy transmission mechanism in Lithuania for the selected time intervals in terms of speed, amplitude and persistence of the monetary policy shock effects can be identified in Table 9.

Table 9. *Characteristics of the monetary policy transmission mechanism in Lithuania*

1998q4:	gdp			cpi			m3			ir_lt			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	C			1	0.20	2	1	0.80	12+	1	5.00	12+	3	1.50	12+	C		
SVAR	C			C			1	0.60	12+	3	20.00	12+	3	1.20	12+	C		
BVAR	C			C			C			C			12	2.50	12+	C		
2008q4:	gdp			cpi			m3			ir_lt			pc			pp		
2013q1	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
VAR	C			1	0.20	2	1	0.60	1	C			C			C		
SVAR	C			1	0.25	1	1	0.40	1	C			C			C		
BVAR	C			C			C			2	15.00	12+	C			C		

Source: authorial calculations.
Note: S – speed of reaching the shock peak (quarters), A – shock effects amplitude (% of a standard deviation); P – shock impact persistence maintaining (quarters); C – a result contrary to macroeconomic theory.

As in the case of Latvia, VAR and BVAR SVAR analysis has led in many cases to counter-response functions; the achievement of results contrary to the macroeconomic theory is otherwise a popular finding in the literature addressing the transmission mechanism of monetary policy under fixed exchange rates regimes through vector autoregression models.

Despite all aspects mentioned, we can identify a number of results that allow for a comparative approach on the selected time intervals. Thus, in the aftermath of the global financial crisis, the impact of a monetary policy shock on inflation appears to be characterized by a higher intensity. Also, extended monetary aggregate decrease under the influence of rising ECB short-term nominal interest rate has lost persistence and amplitude, while the contractionary shock effect on the domestic interest rate is delayed and diluted.

4.9. The comparative study of monetary policy transmission mechanisms features and of the mutations caused by the recent financial crisis

Regarding the impact of an unexpected contractionary monetary policy shock on inflation in the case of selected states that apply an IT strategy, the analysis yielded results consistent with the macroeconomic theory. The same cannot be said about CEE countries that use a strategy of targeting the exchange rate; in this case, the VAR models usually identified the presence of a price puzzle (except for Latvia).

From the standpoint of the transmission speed of the monetary policy shock on inflation in most countries in the region where CBs apply an IT strategy, the impact is faster compared to the situation in the Eurozone. A number of significant differences also occur from the point of view of the magnitude of short-term nominal interest rate shock impact on inflation, which indicates a high degree of heterogeneity in the transmission of monetary impulses. From the perspective of impact persistence, the analysis has revealed a more homogeneous context.

The focus of attention on states practicing a strategy of targeting the exchange rate, yielding counter-intuitive results, has allowed for the highlighting of some characteristics similar to the euro area in the transmission of monetary impulse on inflation from the perspective of impact persistence, but not from the point of view of amplitude and speed.

Mixed results have also been identified in case of aggregate output impulse response to rising short-term nominal interest rate, with GDP puzzle phenomenon sometimes present. In addition, the heterogeneity of real activity responses to a contractionary monetary policy shock appears obvious in terms of all features: speed, persistence and amplitude.

A high degree of heterogeneity compared to the situation in the euro area could be observed for both countries in the region that use an IT strategy and those that target the exchange rate relative to the impact of the monetary policy shock on the broad monetary aggregate, private credit, property prices and exchange rate.

All the above mentioned aspects underline the lack of similarity of the transmission mechanisms between all the CEE countries on the road to the euro adoption and the Eurozone as a whole, which can drive the emergence of clear and powerful asymmetry at the time of currency area entry.

The study of the international turmoil impact on the monetary policy transmission mechanism promoted by the ECB and the monetary authorities of selected states has led to the results summarized in Table 10.

Table 10. *Changes in the effects generated by a monetary policy shock ex post the global financial crisis*

	gdp			cpi			m3			reer/ir_n			cp			pp		
	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P	S	A	P
ez	+	=	-	+	-	=	n.a.	n.a.	n.a.	=	-	-	+	=	=	+	-	-
cz	+	-	=	+	-	=	+	-	-	-	-	=	-	=	+	+	-	-
pl	+	-	=	+	=	=	+	-	-	-	-	-	=	=	=	+	+	+
ro	+	-	=	=	-	=	+	-	=	=	-	-	+	-	-	=	-	-
hu	=	-	-	+	-	=	+	-	-	n.a	n.a	n.a	+	-	-	n.a	n.a	n.a
bg	+	-	=	n.a.	n.a.	n.a.	+	-	.-	+	-	-	+	-	-	+	-	=
lv	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	+	-	=	=	-	=	n.a.	n.a.	n.a.
lt	n.a.	n.a.	n.a.	=	=	=	=	-	-	=	-	=	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: authorial calculations.

Note:

1) The signs "+", "-" and "=" indicate an increase / decrease / maintaining of effects generated by the monetary policy shocks on selected macroeconomic variables between 2008q4: 2013q1 compared with extended time range specific to each country/area y;

2) n.a. - The comparison is not possible based on the results;

3) reer – in the case of inflation targeting states and the euro area; ir_n - for countries targeting the exchange rate;

4) EZ – the Eurozone; CZ – the Czech Republic; PL – Poland; RO – Romania; HU – Hungary; BG – Bulgaria; LV – Latvia; LT - Lithuania.

A first result highlighted in Table 10 identifies an increase in the speed of transmission of monetary policy shocks on macroeconomic variables both in the EZ and in CEE countries acceding to the currency area, regardless of the monetary policy strategy applied. This translates into a faster achievement of the impact peak driven by the monetary policy shock on inflation, the real economic activity, the money supply, private credit and property prices. The only exception concerns the exchange rate for countries where the monetary authority uses a strategy of inflation targeting, which speed of the unanticipated change in the interest rates reaction seems to be diminished by the crisis.

A second result reveals a decrease in the amplitude of the monetary shock impact on the variables subject to analysis under the empire of the global economic downturn, a result valid for all states in the region and for the EZ. This is equivalent to a reduction in the ability of monetary policy to influence the selected macroeconomic variables, or a diminishing in the efficiency of thee monetary policy in the aftermath of the turmoil.

Third, because of the international financial distress, the study based on vector autoregression has found a decrease or the maintaining of the monetary policy shock implications persistence. This means a shorter (or similar) duration of the impact in the aftermath of the crisis.

5. Conclusions

The analysis of the monetary policy transmission mechanism in the CEE countries on the road to the euro adoption compared to the EZ, based on three methods-vector autoregression (VAR), structural vector autoregression (SVAR) and Bayesian techniques estimated vector autoregression (BVAR) with emphasis on monetary policy strategies used by the CBs in selected countries-has led to the obtaining of two important conclusions.

First, the identification of the effects generated by a monetary policy shock and the comparison of monetary policy effects across countries in the CEE region separately, depending on the types of monetary strategies applied by their central banks has underlined the absence of transmission mechanism similarly among all CEE states acceding to the euro area and that found in the case of the aggregate EZ, which may lead to the manifestation of clear, strong asymmetries at the time of the currency area entry. A high degree of heterogeneity in the transmission of monetary policy impulses has been identified from all three perspectives analyzed: speed, persistence and amplitude.

Second, the assessment of the impacts of the international financial crisis on the monetary policy transmission mechanism promoted by the European Central Bank and the monetary authorities of the CEE selected states has led to the following outcome: an increase in the speed of the monetary policy shock transmission, a decrease in the effects amplitude and a reduction (or the maintaining) in the persistence of the monetary policy shock implications *ex post* the worldwide distress, regardless of the applied monetary policy strategy.

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Examining Public Private Partnerships in ASEAN countries: the role of investment climate

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Abstract. *Evidently, the ASEAN countries are among those which have achieved remarkable economic growth rates in the world. But they are facing significant infrastructure bottlenecks which can threaten the sustainability of their development, if not solved effectively and efficiently well in time. Apparently, Public Private Partnership (PPP) arrangement promises to be an ideal solution for developing countries that have limited fiscal capacity such as ASEAN. However, PPP performance in this region is not very encouraging compared with other countries. This study attempts to look at the role of investment climate especially the economic and political factors that may affect the economic growth performance of PPP projects. For empirical investigation panel data approach is utilized, where mostly the estimated coefficients exhibit expected signs but are not statistically significant. Besides, each country has unobserved special characteristics that can affect the conduciveness of PPPs which should also be considered by policymakers.*

Keywords: public private partnership, infrastructure, investment climate, government policy, ASEAN.

JEL Classification: D73, F21, H54, I28.
REL Classification: 8D, 13B.

1. Introduction

After suffering from the Asian crisis in 1997/98, the ASEAN(1) countries are now back on the growth path collectively enjoying one of the highest growth rates in the world. Led by Indonesia, the biggest economy in the group, their economic growth reached the average rate of 5%, which is higher than that of the rest of the developing world, which only reached 4%. Indonesia, itself, has achieved remarkable growth rate of 6.3% during the last two years, the second fastest among the G-20 countries, behind only China which expanded by 8.6% in the same period. This high growth rate was made possible, among others, by the availability of infrastructure which facilitates the economic activities in each country resulting in expansion in commodities and products either for domestic consumption or export.

However, most of these ASEAN countries now are facing increasing pressure from the infrastructure bottleneck which can threaten their economic growth. Since the Asian crisis which huge cost is still borne by some of these countries until today, the development for infrastructure has not received major attention which resulted in serious lack of infrastructure such as roads, ports, bridges, power generation stations, and drinking water facility. As shown in Table 1, compared to other regions in the world, the basic infrastructure in ASEAN countries is still behind the OECD, Latin America, and even the rest of Asia.

Table 1. *Comparison of Basic Infrastructure in ASEAN and other regions*

	Roads (km)	Rail (km)	Phones (number)	Electrification	Clean Water
Per 1,000 people			Percentage		
ASEAN	10.51	0.27	3.53	71.69	86.39
Asia	12.83	0.53	3.47	77.71	87.72
OECD	211.68	5.21	13.87	99.80	99.63
Latin America	14.32	2.48	6.11	92.70	91.37
Africa	n.a.	0.95	1.42	28.50	58.36

Source: Proposed Equity Contribution and Administration of ASEAN Infrastructure Fund (ADB, 2011).

This trend is made worse by the external shocks which hit these countries such as the global crisis in 2008 and the present recession in Europe, USA and Japan which can lower their growth through in many of these ASEAN countries will harm their economic growth prospect and sustainable development. Meeting the increased demand for these infrastructure services certainly require substantial resources. According to Asian Development Bank (ADB) estimate, the fund needed by the ASEAN to overcome their infrastructure shortage would reach US $ 600 billion for the period of 2010-2020 (ADB, 2011). This is a big amount

of money that is not possibly fulfilled by the governments themselves without cooperation from their development partners.

Due to scarce state resources to finance the development of infrastructure has forced the governments to turn to private sector to ask for their participation in this endeavor. One of the popular modes in this regard is what is called PPP where a government makes an arrangement with a private sector party to build infrastructure facilities based on win-win situation principle.

The private partners could be businesses or investors with technical or financial expertise needed to implement the project. The partnership can also include multilateral and bilateral organizations such as the World Bank or Japan's JICA. The private partner may contribute investment capital, depending on the arrangement thus bearing much of the project risk with the public part taking over at the end of contract. Besides its potential to supply the resources needed for infrastructure investment, Public Private Partnership is also perceived to bring in additional benefits such as improving efficiency in project construction and operation, and allowing access to more advanced technology. This Public-Private Partnership scheme has become popular since early 1990s led by UK and other advanced countries such as Japan and Australia. Since then this arrangement has been adopted in many parts of the world including in USA, Western Europe, Latin America, Australia, East and South Asia.

Looking at the ASEAN PPP achievement, however, the figures are not encouraging. These countries are still under the global average both in term of PPP investment value and number of projects. Compared with some countries in Latin America and India especially the state of Gujarat, ASEAN still lags behind. Therefore, it is important to find out the factors that affect PPP performance in the ASEAN countries.

A question arises which is why PPP performance in ASEAN is relatively weak? According to the theory and empirical studies, the main reason that affects the growth of PPP is investment climate, which in turn, consists of a number of factors such as political, economic and infrastructure variables. A policy and regulatory environment that is not conducive or accepting of PPPs will result in low PPP investment. Therefore, the problem to be investigated in this paper is "What are the factors that affect the PPP performance in ASEAN countries?"

PPP has been a valuable instrument to help the developing countries to cope with their infrastructure problems due to their limited fiscal capacity to finance development projects. The lack of PPPs can affect their future growth if delays in infrastructure development continue to persist. The past studies have shown that the variables affecting the growth of PPPs are varied; therefore it would be useful

if the common factors irrespective of the geographical location of the countries and the common factors specific to a group of countries can be found out (Cheung et al., 2012). This research attempts to find out the common variables that affect the growth of PPPs in the ASEAN region. However, the scope of this study is the 4-ASEAN countries namely Indonesia, Malaysia, Thailand and the Philippines. Apart from the advice to help the policy makers, the outcomes of this study will surely contribute to the growth of literature on the subject under the study.

This paper is structured as follows. Next section 2 reviews the relevant literature includes on investment climate for public private partnership. Section 3 deals with materials and methods. Section 4 presents finding and discussion. Finally, section 5 concludes the study and provides some requisite policy implications.

2. Literature review

The available literature on the PPP in the context of ASEAN countries is no doubt very limited. More studies are required to probe into depth and identify the more relevant factors regarding PPP based on the condition of ASEAN environment. Some prior studies have been conducted to examine the variables that affect PPP as presented by the theory. In the context of Malaysia, for example, Ismail and Ajija (2011) using a questionnaire survey and found that the critical success factors (CSF) for PPP implementation are good governance, commitment of the public and private sector, favourable legal framework, sound economic policy and availability of finance market. Kwak et al. (2209) trying to explain the factors contributing to successful PPP projects came up with four main elements: the competence of the government, the selection of an appropriate concessionaire, an appropriate risk allocation between the public and private sectors; and a sound financial package. Some other researchers emphasize the importance of a stable political and social environment for successful implementation of PPP. As an example, the frequent changes of the Prime Minister in Thailand have led to many cancellations of PPP projects in the country. Besides this political factor, several studies found the existence of an efficient domestic financial market is also crucial to enable private sponsors to access relatively cheaper financing packages (Cheung et al., 2012).

The ADB (2011) in its effort to evaluate the environment for PPP in Asia Pacific countries has commissioned the Economist Intelligence Unit to conduct a study. EIU used six categories: legal and regulatory framework, institutional framework, operational maturity, investment climate, financial facilities and sub-national adjustment factor. According to the study, United Kingdom and Australia have become the leading PPP countries in the world, while in Asia Japan, Korea have achieved significant success in that respect. Thailand, Indonesia, and the

Philippines, while still lagging behind, have made significant progress in creating the enabling condition and are poised to attract large interest from PPP private investors in the near future. The International Monetary Fund (IMF) made an empirical investigation regarding the determinants of PPP investment. They found that countries with high sovereign debt levels and large market size tend to have more PPPs. Their findings also show the importance of macroeconomic stability in attracting PPP as well as quality institutions and effective rule of law. Experience with PPP was also found to have a positive correlation with PPP (Hammami et al., 2006). Khan (1999) examined why there were low inflows of foreign direct investment in Pakistan. He offered ten main crucial factors: local business environment, labour force, infrastructure, economic strength, government economic policies, quality of life, welcoming attitude, law and order, government bureaucracy and political stability.

In another study, Sharma (2012) analyzed the factors determining PPP in infrastructure by using a unique data set on Private Participation in Infrastructure (PPI) for the period 1990-2008 for 22 developing countries, namely, Argentina, Bangladesh, Brazil, Chile, China, Colombia, Egypt, India, Indonesia, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Russian Federation, South Africa, Sri Lanka, Thailand, Turkey, Venezuela and Vietnam. The study observed that that large size and relatively high income markets enhance more PPP projects. Furthermore, the study results suggested that macroeconomic stability, quality of regulation and governance are the significant factors in determining PPP in the infrastructure. However, the study failed to find any robust support for the role of political factors and budget constraint as important factors.

2.1. Investment climate for Public Private Partnership

The existence of good climate has long been recognized as a pre-requisite for attracting investment and thus fostering economic growth. The investment climate is defined as the institutional, policy, and regulatory environment in which firms operate. Key determinants of the investment climate include economic and political stability, rule of law, infrastructure, approaches to regulations and taxes, functioning of labor and finance markets, and broader features of governance (World Bank, 2005).

Investment climate can also be defined as the institutional and policy environment that influence the actual and potential performance of business establishments. Three broad sets of factors make up the overall investment environment: macro fundamentals, institutions and governance, and market size. Investment climate is crucial because the private sector would not be interested to participate in a PPP arrangement if the situation in the country is not conducive. Therefore, an enabling environment should be established so that private sponsors can be

compensated with reasonable returns for putting a significant amount of resources which constitute a high degree of risk due to long-term nature of this kind of investment.

While there are many factors that affect investment climate for PPP, some of the more commonly mentioned in the literature, among others, in ESCAP's Public Private Partnerships: A Financier's Perspective (undated), are as follows:

2.1.1. Macroeconomic stability

Macroeconomic stability including fiscal stability is essential for PPP because investors will be more encouraged if the country has relatively low inflation rate, stable exchange rate and tolerable sovereign debt level. Fiscal stability will make long-term financing and its terms and conditions from financiers more attractive.

2.1.2. Political stability

Political stability is an important factor for a country that tries to attract investment including PPP. This involves relative stability of the government, orderly change of government and limited political violence. Political stability will minimize cost to investors arising from risks of appropriation, nationalization, and contract renegotiation.

2.1.3. Development of local capital markets

Infrastructure projects require long-term financing that means long pay-back times. If the country has a relatively developed local capital market, potential investors can access the financing in the domestic currency to be repaid by the project's revenue, and therefore, protect them from the exchange rate risk. This in turn, requires long-term institutional investors such as pension funds, insurance companies who are willing invest in infrastructure projects.

2.1.4. Regulatory environment

PPP will be more forthcoming if there is a favourable regulatory environment as well as good institutional framework that will facilitate successful and efficient infrastructure project development. This is possible if the relevant government agencies have sufficient capacity to produce such an environment.

2.1.5. Legal environment

The existence of favourable legal framework can enable all parties participating in the project work toward the successful completion of the project. This also is related with contract enforcement, contractual documents, procurement and other regulation issues such regional and municipal legislation. Among these, legislation concerning land acquisition needs to be established or refined because

investors often face obstacles in acquiring land for infrastructure projects especially in ASEAN countries.

2.1.6. Governance effectiveness

Government effectiveness is necessary to fostering sustainable and efficient PPP infrastructure projects. A government that promotes good governance through some generally accepted core principles, such as accountability, , transparency, fairness, efficiency, participation, and decency will result in more efficient and effective implementation of public policies and outcomes. A transparent and efficient administrative environment will reduce red tape and bureaucratic procedures thus saving time and cost to the private investor.

2.1.7. Level of corruption

A country that has a low level of corruption will enhance its image in the eyes of infrastructure investors because they know they will not incur too much extra cost that can reduce their profit margins. Besides, an environment that tolerates corruption, bribery, kickbacks will not create conducive situation among the public and private participants in implementing the ventures.

2.1.8. Market conditions

Demand for services provided by a PPP facility will be also affected by the market conditions. If the market is large and the customers' purchasing power is high, then there would be strong demand which guarantees the sales of the services.

So far, to the writer's knowledge, no study has been made yet to investigate the effect of investment climate on PPP specifically in the bigger ASEAN countries as a whole. This study will attempt to fill this gap.

3. Materials and method

PPP data used in this exercise are obtained from the World Bank's PFI/PPP database. Governance indicator data are taken from the World Economic Forum data found in the World Bank's Worldwide Governance Indicator database. Economic data are derived from the World Bank Indicator data base. Although PFI/PPP data are available from the early 1990s for most countries, data for the latter case are limited and incomplete. For example, data for governance indicators are available every year only from 2002. Data for central government debt are missing for certain countries in some years. Therefore, to fill in the gaps, the author has tried to use data from some other sources, e.g. IMF Article IV Reports. Due to this limited data availability, this study covers only ten years from 2002 to 2011 by employing panel data model considering the 4 countries chosen in this study:

Indonesia, Malaysia, Thailand, and the Philippines are ASEAN members and middle-income countries. Although the 4- ASEAN countries are more or less comparable they may have different characteristics specific to each country.

The following multiple regression model is used in this study to test the impact level of central government debt, Gross Domestic Product (GDP) per capita, market capitalization, level of political stability and absence of violence, the degree of governance effectiveness, regulatory quality, level of legal environment and the degree of control of corruption on PPP.

The proposed model can be symbolically expressed as follows:

$$PPP=\beta_0+\beta_1 CGD+\beta_2 GDPC+\beta_3 MC+\beta_4 POL+\beta_5 GOVEF+\beta_6 REG+\beta_7 CLEG+$$
$$+\beta_8 CORR+\varepsilon \quad (1)$$

Where PPP is the number of Public Private Partnerships projects, CGD is the level of Central Government Debt, GDPC is GDP per capita, MC denotes the measure of market capitalization of the listed companies, POL represents the level of political stability and absence of violence, GOVEF is the degree of governance effectiveness, REG denotes the measure of regulatory quality, LEG is the level of legal environment, and CORR represents the degree of control of corruption and ε denotes error term.

4. Estimation, findings and discussion

The panel set is balanced whereby there are 10 observations for each of 4 the cross-sections, therefore, total observations are 40 in this study. This balanced panel supports the use of the fixed effect method in order to capture the unique differences of the countries (Asteriou and Hall, 2007, p. 348). With the fixed effect method, we hope to find out the magnitude and significance of the independent variables on the PPP performance by controlling all inherent differences among the countries concerned, reflected in each intercept.
The results of the fixed model are reported in Table 2. It is evident from Table 2 that the variations in the independent variables used in this study can only explain 26.79 percent of the variations in PPP performance, which is in the case of panel data acceptable. The influence of special characteristics favorable to PPP investment existing in each country has been taken into account indicated by a separate constant (C) ranging from negative (Malaysia), almost zero (Thailand) and very positive for the Philippines.

The results demonstrate that all independent variables, except legal framework, have positive relations with PPP, which are in line with the hypotheses and most previous studies. Though most of the variables have no statistically significant

influence on PPP performance, theoretically there are close relationships between the dependent and most of independent variables. However, the relation between legal environment and PPP performance is negative and also significant where p value of 0.0409 is less than 0.05 (with the significance level of 5 percent level). This result which is not in line with the theory that predicts a positive relation may be due to the limited availability of data which have resulted in less than robust estimates during the period under the study.

Table 2. *Regression results (dependent variable: PPP)*

Variables	Coefficient	Std. Error	t-Statistic
CGD	0.008654	0.062465	0.138534
GDPC	0.009277	0.261839	0.035432
MKTC	0.029077	0.028795	1.009774
POL	11.68478	6.550320	1.783849
GOV	6.957269	12.69356	0.548094
REG	2.638642	22.00072	0.119934
LEG	-36.96947	17.24666	-2.143573
COR	17.05792	14.31299	1.191778
Indonesia-constant	3.075821		
Malaysia-constant	-2.964603		
Thailand-constant	0.227615		
Philippine-constant	4.041610		
R-squared	0.267950		
Durbin-Watson stat	1.990412		

5. Conclusion and policy recommendations

From the study results, we can see that, except one variable, the relationships between the PPP performance and the explanatory variables used in this exercise are positive. This means that based on this study, in respect of Indonesia, Malaysia, Thailand, and the Philippines, we can conclude that government debt levels, GDP per capita, market capitalization of listed companies, governance effectiveness, regulatory quality, and control of corruption tend to have a positive impact on PPP arrangement in those countries. The study further reveals that besides independent variables, there are also special factors specific to each country, which can be conducive or in-conducive to PPP investment. All of these factors should be considered by policy makers in creating the enabling environment for PPP in the region.

One interesting finding is that legal framework appears to have a negative relation with PPP, and this relationship is statistically significant. This result is not in line with the theory which presumes that a good legal environment would constitute a favourable situation for PPP. The limited data availability may have led to this counter-intuitive result. Therefore, this study suggests that another study using

more data series/observations possibly would produce more conclusive findings. Also due to the complex factors that affect PPP performance, the use of an econometric model which covers more relevant explanatory variables and sophisticated regression techniques could give a better explanation about this important development issue.

Note

(1) Association of Southeast Asian Nations (ASEAN): Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar (Burma), Philippines, Singapore, Thailand and Viet Nam. However, this study included only Indonesia, Malaysia, Thailand and the Philippines

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The financial auditor's credibility in postcrisis economic policies

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Abstract. *Given the nowadays economic instability, we might consider that financial auditors could have been one of the important triggers for the economic crisis. Companies that, shortly after undergoing financial audits and publishing their financial statements, seemed to display a viable and true and fair view of their performance in the financial statements – endorsed by financial auditors – faced economic tribulations and needed financial aid to be able to survive on the market, banks' case included. Scholars believe that the banks and investment companies decisively contributed to the unfolding of the financial crisis. This study presents the important role played by the financial auditors in deploying the economic crisis, as well as solutions for re-instating the financial audit activity, as we outline a discrepancy between expectations and results. The role of financial auditors and of corporate governance should shape the economic re-launch by means of differentiated and finely-tuned approaches and be correlated, as well as proportional, with the dimension and characteristics of the audited company.*

Keywords: audit, crisis, credibility, corporate governance, financial institutions.

JEL Codes: M41, M42, H21.
REL Code: 11B, 14J.

Introduction

The existence of economic crisis has generated several problems regarding the banking area and its evolution measured on the national level. As a fact, many financial institutions or investment societies had dealt with huge financial problems or were bought by the government in order to come across their bankruptcy. Not only the ways through which those financial institutions influenced the economy is a general interesting element, but also the fact that these had been audited, and no elements were identified which could suggest the influence of economic crisis upon their evaluation. Establishing high ranking values or subtracting an unfavourable audit opinion upon the financial situation, are facts that ask how reliable this operation had been realized and the way the audited persons' behaviour influence the changes in economic environment. The auditor responsibility and the techniques used by him are also discussed by the Green Paper Document, taking into account that there none signals about the economic crisis appearance had not been identified. Moreover, the auditor responsibility has high magnitude as his opinion should provide reliable information about the financial statements realized by the executive committee.

Even though there are some audit standards that are used in international area, the auditor's opinion shouldn't be questioned. The existence of uncompleted reporting regarding the evaluation process, the connection between the audit staff and the audited society' managers or the pressure upon them for approving and giving a proper and favourable opinion are elements that contribute to the fact that nowadays the auditor opinion has lost a high degree of its credibility.

Literature review

The literature review is revealing the fact that the auditors' behaviour can influence the performance obtained by several entities, either financial institution, either non- financial ones. Sikka (2009) emphasis that the auditors are pointing out that the economic crisis couldn't be predicted, so, as a fact, they were not prepared to evaluate financial problems with such distress. Even considering these, there is a long debate about the bankruptcy of some financial institutions; the bankruptcy that could be justified by the managers' salaries, by the uncompleted reports provided by the audit team or by the unreliable audited techniques that were applied to the audit society.

On the other hand, we can conclude that the managers tend to report unreliable financial information, generally higher results that the results obtained through a financial period, as their remuneration and other financial benefits are high correlated with the performance obtained by the society they managed. Prawitt,

Smith and Wood (2009) discovered that there is a strong correlation between the quality of internal audit function and the managers' salaries, formed by abnormal accumulations in their financial statements and also by the propensity to realize the performance established by financial analysts.

The problems that appear are related with the ways that auditors can identify the irrational behaviours, and can use several techniques for mitigating the negative effect that unreliable financial statements can generated.

As a fact, we asked the question who should be or what should be the auditors' activity, taking into consideration the macroeconomic evolution. Bayou et al. (2011) identified that there are still major problems regarding the accuracy of information that the auditors present through their audited reports. The justification can be found in the fact that there are several interest for the stakeholders of the company or of a financial institution through which the financial situation and the auditor report could be manipulated in order to gain those benefits. As a fact, the quality of audit practices is questioned. Humphrey et al. (2007) suggest the fact that when the audit quality is associated with the audit practices, the auditors will react taking into consideration the institutional pressure.

Buchanan and Gibb (2007) consider that the internal audit should emphasis all the information needed that is related with financial indicators in order to identity the proper information taking into account the company's resources. As a fact, the improvement of audited techniques can generate a more reliable and transparent financial reporting and also, can mitigate the activity through which the managers of the company can raise artificially the remuneration related with the performance obtained.

When the correlation between the performance obtained by financial institution and the audit function is analysed, there are some international regulation that are generally applied. In order to assure a minim level of sustainability, the financial institutions are requested to fulfil some economic criteria, criteria which refer to the way of reporting, to the solvability indicators or to other indicators that are requested by the national/internal regulation. As a fact, the supervision institution of the Basel Committee (2002) considers that the existence of an independent auditor is mandatory, and moreover the existence of a strong relationship based on communication between the supervision activity and the activity that the internal and external auditors are pointing out is also compulsory. The explication can be formed in the way that the internal auditors could actually have a supervision function of banking activity, in the way that they can identify the internal risks and can suggest proper measure for vanishing the,. Also, it is mentioned that the manager should be the person who identifies, measures, controls and monitors the risks that can appear beyond the audit activity. As a fact, they should be focused

not on reporting a higher performance, the fact that could generate the increase of managers' salaries, but on a correct, proper and reliable reporting technique that can generate the development of financial institution on the long run. Jeong, Jung and Lee (2005) consider that a high degree of audit practices' objectivity could be realized if the auditors would be proposed by a commission, the measure mitigating the connection between the managers that the company has and the persons who give the professional audit opinion. Pierce and Sweeney (2005) reveal that any controls at inferior level haven't been realized, and as a fact, the benefits gained by the audit services are given to partners, fact that is influenced by the opinion that they provide.

Pollitt et al. (1999) identify the fact that the audit and the performance of audit practices is essential in order to establish the credibility of audit used techniques. On the other hand, he points out that depending on the place where these policies are applied, the accounting and audit practices are different. As a fact, the managerial principles are different, and the influence of governmental programs upon the performance obtained is high correlated with them.

Regarding the connection between the financial institutions' performance and the audited techniques, it is considered that the audit should provide a minimum level of assurance when the financial statements are discussed, as Arens, Elder and Beasley (2012) suggested. On the other side, Otusanya and Lauwo (2010) point out that the auditors and the auditing practices had an crucial function in Nigeria by approving low financial performance and influencing in this way the bankruptcy of many financial and non-financial companies.

Li (2010) established an idea through which the audited practices could be improved by using the linear programming techniques, but he also reveals the fact that there is not an exhaustive application of these techniques when the financial institutions have different ways of reporting their indicators, while other specialists suggest that the improvement is obtained firstly by the internal audit which has to monitories the operational risk practices.

Nonetheless, we have to evaluate the meaning of word "performance", and moreover the meaning of" bank performance". This has an ambiguous meaning as there is not a general concept accepted through the financial literature. Bergendhal (1998) considers that among the profit maximization, the risks implied by the banking activity, the intermediation function, the provision and the way they are used are elements that define the performance in a general way. Kosmidou and Zopounidis, D (2008) point out that the bank performance can be expressed in multiple ways, from banks that report the increasing of the net profit, to banks that use several techniques in order to attract more clients and to become more competitive on the market, to banks that obtained high financial loses and are

characterised by economic decline. Hays, De Lurgio, and Gilbert (2008) emphasise the importance of discriminant analysis in evaluating the performance of financial institutions by revealing the factors that can determine is a bank is in bankruptcy or not.

Taking the Romanian national level, a recent study about the bank performance was realized by Munteanu and Brezeanu (2012), by comparing the classical ways of measuring performance with the modern ones like EVA, MVA. They concluded that some Romanian banks are value creators, while others do not add value to the Romanian economic environment.

Taking this into consideration, the question about the reliable and proper are the financial situations and if the performance obtained by the financial institutions has or not a high degree of credibility.

The research methodology

In order to identify the function of financial audit upon the performance obtained by the financial institutions from Romania, we considered that pointing out some performance indicators is important and also the ratings given by a rating company. The data for establishing the rating was offered by Flich Company, as it is one with a high degree of credibility among users.

The idea of research was based on the fact that for observing the evolution of financial institution for a long period of time, the companies that act in the Romanian market for at less 3 year period were analysed. The idea was to realize a comparison between the profitability indicators chosen before and after the economic crisis came into discussion. As a fact, the data were analysed for a 5 year period. The data have been taken form financial statements of the companies analysed.

Not only the financial situation on the long run was analysed, but also the way that auditors provide favourable opinions to financial institutions. We can observe that, even though in some financial audit reports modification about elements from financial statements are stipulated, like Transilvania Bank case, no changes in the auditor opinion could been identified.

The analysed was realized using 10 banks from Romania, chosen by the amount of credits offered to the public and also by realising their activity from a long period of time.

In order to quantify the performance obtained, the following indicators of financial performance were analysed:

- Net profit- it is considered to be a performance measurement as it points out the financial result obtained through the analysed period.

- The general liquidity ratio – calculated as ratio between liquidity assets that the bank has and the current liabilities of the institution.
- The ratio calculated by dividing the amounts of credits given to the public to total assets, the ratio determine in order to reveal have the company is going to act in the long run.
- The solvability indices which has to take into account the regulation imposed by the National Bank of Romania, by considering the restriction imposed to own funds.
- The general risk ratio – established as the ratio between the value of balance sheet and outside the balance sheet assets multiply with their risk coefficient and the amount of own funds.

The period through which the elements form the financial statements were analysed was between 2005 and 2009. This period was chosen in order to reveal the period before the Romania has entered the European Union, the moment of entrance (2007), and also the period when the financial crisis started, this being considered by some specialist in 2008, while others refer to it as the beginning of 2009. What we wanted to focus was firstly the evolution of the indicators analysed. After that, we try to establish a correlation on one side with the audit standards and the international one, and on the other side a correlation with the rating offered to them, and the way the market risk raised on the Romanian market. After that, we put into discussion elements that can improve the audit techniques, that can generate a higher credibility of them and that can integrate in more detail the financial audited statements among them.

Findings and discussion

The first element that was analysed was the net profit that the company obtained through the period analysed. This is presented in the next table

Table 1. *Diferences between net profit calculated by using a ratio*

Institution	2006/2005	2007/2006	2008/2007	2009/2008
Banca Carpatica	1,08	1,90	0,02	-46,26
Banca Romaneasca	3,72	1,04	1,51	0,12
BT	1,21	2,83	1,17	0,16
BCR	1,10	1,33	2,20	0,57
BRD	1,43	1,45	1,54	0,73
Credit Europe	1,02	0,15	5,53	-1,11
OTP	1,21	0,81	-0,33	-1,05
Piraeus	0,47	24,12	1,39	2,11
Procredit	1,77	0,63	-2,07	-2,65
Raiffeisen	0,76	1,98	3,01	0,40

Source: own calculation.

As it can be seen in Table 1, some financial institutions started to obtain financial loses at the end of 2008, while others, the effects of the international economic crisis began in 2009. Even though the majority of financial institution reported important loses, the auditors haven't identify any problems regarding the financial statements of them. What it should be improved is the way that analytical procedures are applied through a long period of time in order to point out that the results are based on reliable information. As a fact, the auditors should confirm the accuracy of financial information presented in the financial statements, by comparing the net profit obtained and the gross margin of profit. Also, when the evaluation of net result is realised, they have to take into account not only the financial information, but also the information that has a non-financial character.

Regarding the solvability of the banks, we can admit that there is not any rule established by the National Bank of Romania unapplied. As a fact, even though the companies analysed seemed to have a strong sustainability on the long run, one essential element is realising the correlation of calculated indicator with the rating offered by the Fitch company, facts that are presented in Table 2.

Table 2. *The rating offered by Fitch Company to the financial institution analysed*

Institution	Banca Carpatica	Banca Romaneasca	BT	BCR	BRD	Credit Europe	OTP	Piraeus	Procredit	Raiffeisen
Rating	B	B-	BB-	BBB+	BBB+	B+	BBB+	CCC	BBB-	BBB-

Source: own calculation.

At a deep analysis, we observe that many financial institutions suffered a decrease in their rating offered by Flich Company among the period analysed. This aspect deals with the fact that the total confidence in the degree of performance obtained by companies has decrease sharply, element that point out an unfavourable effect among different stakeholders. From this point of view, the auditors have to pay more attention to the financial situations, pointing out, as often as is necessary, detailed reports about some elements from financial situations that can raise important problems regarding the credibility and reality of them. Moreover, the auditors should analyse the results obtained by the company by comparing them with the companies expectations and by revealing if the differences obtained are justified or not, taking into consideration that they have to provide a minimum level of assurance.

Another indicator that was analysed was the general liquidity rate of the company. From the financial institution analysed, 40% had values under the 100% threshold. These banks are presented in the next table:

Table 3. *The general liquidity ratio*

Institution	2005	2006	2007	2008	2009
Banca Romaneasca	106,85%	70,37%	34,07%	37,93%	32,15%
BRD	157,69%	107,43%	81,83%	86,03%	71,86%
Piraeus	112,14%	67,87%	75,78%	74,53%	83,08%
Raiffeisen	146,57%	93,08%	79,65%	100,52%	107,66%

Source: own calculation.

As it can be seen from the previous table, the banks that have important problems when the general liquidity rate is analysed are BRD, Banca Românească and Piraeus Bank. As a fact, the auditors have to establish a proper amount of objectivity and to practice a professional behaviour when interpretation to the indicator is conferred. As a fact, the auditors should write a distinctive paragraph in their audit report, where they must present their own opinion regarding the way the indicator would influence the companies' profitability. In the case that the payment of current liabilities is necessary to be made, the financial institutions could have problems when the liability issue is discussed. Moreover, an efficient communication between auditors and shareholder deals with creating or suggesting some ways of cutting off the financial distress. Nonetheless, there has to be an efficient communication between the internal and external auditors and the shareholders in order to provide that there are not gaps regarding the monitoring and detailed checking of the elements from financial statements.

Another indicator analysed is the percentage of credits given to the public divided to total assets. A summary statistics of the variable analysed is presented in Table 4.

Table 4. *Summary statystics of credit to assets ratio*

Institutuin	Minim	Year	Average	Maxim	Year
Banca Carpatica	34,73%	2009	52,27%	60,03%	2005
Banca Romaneasca	61,20%	2009	63,77%	67,55%	2007
BT	59,10%	2009	61,22%	64,70%	2008
BCR	47,25%	2005	58,66%	67,62%	2009
BRD	51,38%	2005	63,24%	69,92%	2009
Credit Europe	64,70%	2006	68,66%	74,22%	2007
OTP	43,73%	2005	58,94%	71,94%	2008
Piraeus	52,91%	2006	61,90%	68,18%	2008
Procredit	67,18%	2005	70,14%	74,09%	2007
Raiffeisen	46,46%	2005	50,54%	55,31%	2008

Source: own calculation.

From Table 4 it can be seen an important increase of the crediting operation as the Romania became a member of European Union. The explication can be found it that period, the level of interests was relative low, in order to facilitate the credit

operation as new investment could have been realised with an important impact upon the economic growth. As a fact, we consider that auditors should pay plenty of attention to the way the financial institution offers funds to the Romanian population and to Romanian companies, if it offers some benefits to the customers and if the risk that it assumes is not to high.

The last indicator analysed is the general rate of risk. This indicator is pointing out which is the risk that the company assumes. As a fact, it takes into consideration not only the elements form the balance sheet, but also the elements which are presented outside the balance sheet.

Table 5. *The evolution of general rate of risk*

Institution	Minim	Maxim	Trend
Banca Carpatica	60,65%	76,46%	Fluctuating increase
Banca Romaneasca	66,49%	71,44%	Constant between the average
BT	69,64%	73,03%	Constant between the average
BCR	58,35%	75,19%	Increasing shaply
BRD	63,12%	78,64%	Increasing shaply
Credit Europe	69,04%	78,64%	Increasing shaply
OTP	51,24%	73,02%	Increasing shaply
Piraeus	67,87%	112,14%	Decrease
Procredit	70,24%	77,00%	Fluctuating increase
Raiffeisen	40,56%	100,95%	Decrease

Source: own calculation.

From the previous table, it can be identified the fact that in general Romanian banks continue to increase their general risk, as the percentage of toxic assets has increased, elements that can influence the performance obtained through a fiscal period of time. As a fact, we consider that the auditor role is crucial, as they have to reveal a proper opinion regarding the results obtained. Also, they should realize a more detailed analysed by comparing the results with those that characterize the average of the area where the company acts and moreover, by comparing the results with the results obtained in previous financial years.

In the situation where the risks that the bank is supporting is not identified, the auditor should be the person who try to signals some toxics behaviours, by pointing out the elements that can affect the performance not only at the bank level, but also at national one.

Other aspects regarding the audit during crisis periods of time

Taking into account the importance of audit practices, it is mandatory for the audit to respect the behaviour principles and to keep a degree of objectivity when he evaluates the financial statements. Moreover, the auditor has;

- To be independent by the shareholder distribution is analysed;
- His remuneration should not be correlated with the benefits gained by the managers or by the performance obtained by society by presenting unreliable information;
- To respect the deontological and professional principles of audit profession;
- To present detailed reports regarding the financial situation of the company taking into account that these kind of information are essential for stakeholders;
- He has to analyse the activity of the bank not only by comparing it with the results from the previous period, but also by comparing the performance with the performance obtained at sectorial or national level, and also by comparing with the companies' expectations.

Conclusions

The audit role is to assure the financial statements of the institution audited are credible, taking into account the deontological and professional principles. The problems that appear are connected with the fact, in the actual economy, the credibility of auditors is questioned as it is viewed taking into account recent financial distresses happened through financial institutions.

As a fact, we considered that a special attention should be paid to financial sector, not by considering the bankruptcy for important banks on the international level, even though the audit haven't observed any financial problems, but also from the point of view when the banking sector is the area that influence the whole economy. Due to this aspect, an inadequate evaluation of this system can generate important problems not only on the national level, but also on the international one.

As a fact, the performance or the indicators that are measured at banking level are definitely important for the repercussions that they could have. This article followed the evolution of 5 financial indicators that can affect the profitability and the performance of financial institution on the Romanian market.

Regarding the research, lags of it are due to the lack of transparency of Romanian banks and also are due to the fact that few banks are listed on the Bucharest Stock of Exchange. Further research could be realised by evaluating the performance measured by financial indicators of the entire Romanian Banking Market and by

realising a econometric model in which a connection between performance, audit indicators and managers' salary could be found.

The conclusion of the study is that the Romanian market has not a high degree of risk when the financial sector is analysed, and that the banks are not going to come immediately to a bankruptcy. The auditor opinion should be more prudential, he should present a detailed report about each element that could generate futures problems and moreover he should provide information about indicators or fact that can generate the modification of financial problems. This fact has to be discussed with the directors of the financial companies, in order to adopt a proper decision that would not affect the future performance.

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The implications of the economic crisis on public old age pension spending in European countries

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Abstract. *The financial and economic crisis has come on top of an existing demographic crisis that is straining the public pension schemes throughout Europe. As the population is aging, projections of future pensions show that they will not reach target replacement income. The demographic and economic crises have forced regulators in Europe to speed up the long-needed pension system reforms, but also to take some immediate steps to help them cope with the immediate effects of the crisis. The main objective of this paper is to analyze the impact of the financial and economic crisis on public old age pension spending.*

Keywords: old age pension, public spending, demographic crisis, global crisis.

JEL Classification: H80, I390, J140.
REL Classification: 8Z, 13Z.

Introduction

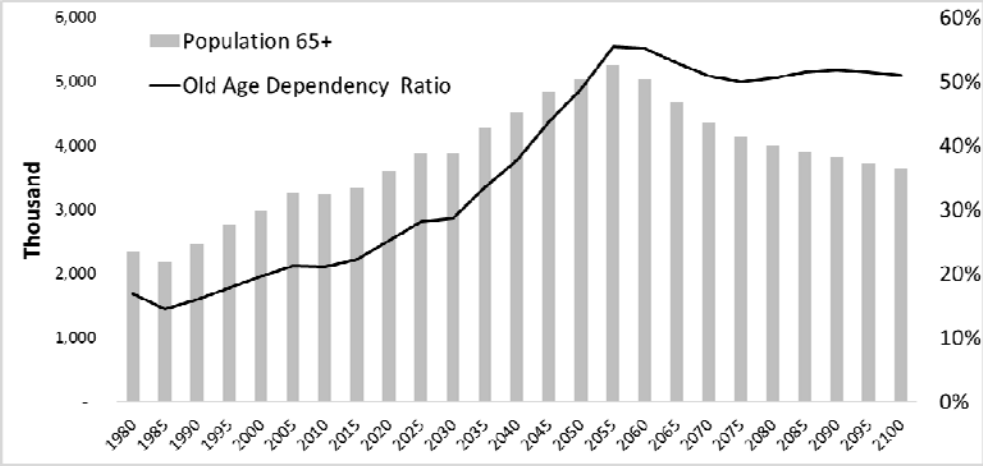
The recent economic crisis has come on top of an ongoing demographic crisis that is straining the public finances of many European countries. The economic crisis has forced regulators in Europe to speed up the pension reforms. In order to cope with the economic and demographic situation, governments have introduced parametric measures like increase of retirement age or of the required contribution period. While these measures were necessary, they have not had an immediate effect on public pension spending that continued to keep the same the pace of growth correlated with the inflation and real wage growth rates. In Central and Eastern European countries, in particular, that had recently introduced a mandatory private component to their public schemes, governments were forced to temporarly shift part of contributions from mandatory private to public schemes in order to cope with current outpayments. Other countries, mainly from Western Europe, have used their public pension funds as a counter cyclical tool, meant to stimulate the recovery of their economies.

The demographic crisis and the pension problem

An incrementally higher proportion of the population will be pensioners that will have to be financed by the salaries of working age population. Within the EU, about 30% of the population is projected to be 65 or over in 2060, up from 17% in 2010 (EU, 2012). In particular, in Romania 35% of the population will be over 65 in 2060, up from 15% in 2010 (EU, 2012). In response to the *aging of the population challenge*, in the last decade many governments in EU have expanded the role of existing private pension schemes or introduced new elements of pre-funded, privately managed pensions into their pension systems (Börsch-Supan, 2012), in order to diversify provision, boost choice, improve transparency and foster greater individual responsibility (EC, 2010). This private component of the pension should contribute to the future adequacy of pensions which are supposed to help avoid poverty and provide an adequate income replacement, but the extent to which it should do so is unknown. The addition of the mandatory private scheme has placed more responsibility on individuals for their pensions, as they now have to choose from various investment funds and decide how to invest their money for a part of their pension contributions. In light of the recent financial crises, this shift has raised the individual uncertainty about retirement income and whether their future pension will be sufficient to provide a financially worry-free old age.

The European Union's projections for old age dependency rates (the ratio between people over 65 years old and people between 16 and 64 years old) show an upwarding trend that will reach a peak in 2060, when this ratio will

be 52.5% (EU, 2012), a level double from its current level. Similarly, the demographic crisis will reach a critical point in 2050-2055 in Romania, when the old age dependency rate projections by United Nations (2012) are going to be at their highest (Figure 1), more than double from its current level.



Source: United Nations: "World Populations Prospects: The 2012 Revision.

Figure 1. *Old age dependency ratio projections for Romania (%)*

As a response to the demographic crisis, European countries are forecasting larger public pension spending. *However, the pace of public spending growth will be outpaced by old population growth rates*. In OECD countries, old population will increase by 43% on average by 2025, while public pension spending will rise by 14% over the same period (OECD, 2012). In the EU27, public pension expenditure will grow to 12.9% of GDP in 2060 from its current level of 11.3% of GDP, while its +65 population will almost double (EU, 2012).

In Romania, the public old age pension expenditure is forecasted to reach 13.5% of GDP in 2060 from its current level of 9.8% of GDP (EC, 2012). The share of private pension expenditure will be relatively small relative to the public expenditure share in 2060, as private pension expenditures are forecasted to be 1.1% of GDP in 2060.

There are several factors that influence the variation of the public old age pension growth, but the largest contributor factor is by far the old age dependency ratio in Romania, as well as in EU27 countries (Table 1).

Table 1. *Contributor factors to the growth of public pension expenditures*

	2010 (%)	Contribution of:						2060 (%)
		Dependency Ratio	Coverage Ratio	Employment Effect	Benefit Ratio	Labour Intensity	Residual Effect	
EU27	11.3%	8.5%	-2.9%	-0.8%	-2.7%	0.1%	-0.6%	12.9%
Romania	9.8%	12.9%	-4.7%	0.4%	-3.7%	0.0%	-1.2%	13.5%

Source: European Commission, 2012: "The 2012 Ageing Report" Economic and Budgetary Projections for the 27 EU Member States (2010-2060)".

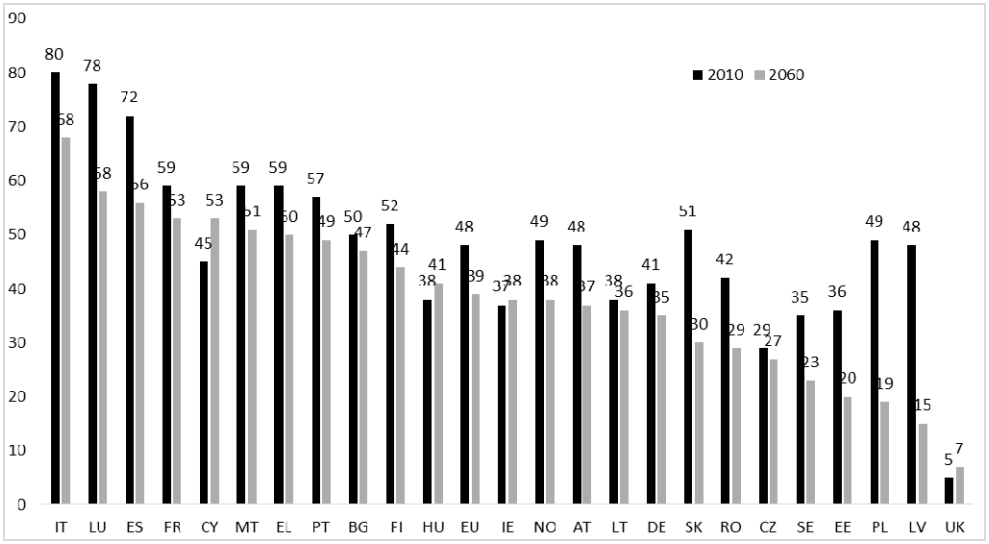
The reforms undertaken by countries within EU were necessary and well justified by the demographic crisis. However, it is not clear to what extent they will contribute to the future adequacy of pensions and to the sustenability of the public pension system (Börsch-Supan, 2012).

A good measure of the extent to which pensions will allow pensioners to maintain a similar life style post-retirement is the income replacement rate that is calculated as the ratio between the average first pension and the average last salary. While the minimum required level of the income replacement rate is still a subject of controversy amongst economists, many agree that it should be at least 60-70% (Scholz, Seshadri, 2009).

The projected level of public pension expenditure relative to the ratio of old people raises *a serious question about public finances' capacity to provide a proper income to future pensioners.* Current projections by international organizations show that, in spite of the reforms, the future pension incomes will not provide an adequate replacement income to pre-retirement revenues. Even current pension income in many countries is not sufficient for maintaining the same life-style after retirement. As shown in Figure 2, current data show that average income replacement rates in EU is 49% (EU, 2012). A survey conducted conduced across 10 leading European countries (AON, 2010) revealed a mismatch between expected income at retirement and expected consumption needs. The "average European" thinks that 74% of the current income would be sufficient to live comfortable, yet upon retirement they will have only 57% of the current income.

The projections for future income replacement rates show that the situation will be even more critical over the next 50 years. The drop of the income replacement rate is a direct reflection of the demographic crisis problem. It is estimated that in EU in 2060 the income replacement rate will reach 39% (Figure 2), while in Romania this rate will be only 29% (EU, 2012). The projected income replacement rates are clearly below minimum desired levels, indicating that future public pensions will not be adequate in many European countries. Recognizing

this problem, the governments of most developed countries heavily support savings for retirement. Many forms of savings receive tax advantages, yet even with these incentives the common wisdom is that the financial assets of most households still fall considerably short of what they need to maintain their consumption in retirement (EBRI, 2010).



Source: European Commission, 2012: "The 2012 Ageing Report" Economic and Budgetary Projections for the 27 EU Member States (2010-2060)".

Figure 2. *Public pension income replacement rates in 2010 and 2060 (%)*

Global crisis impact on pensions

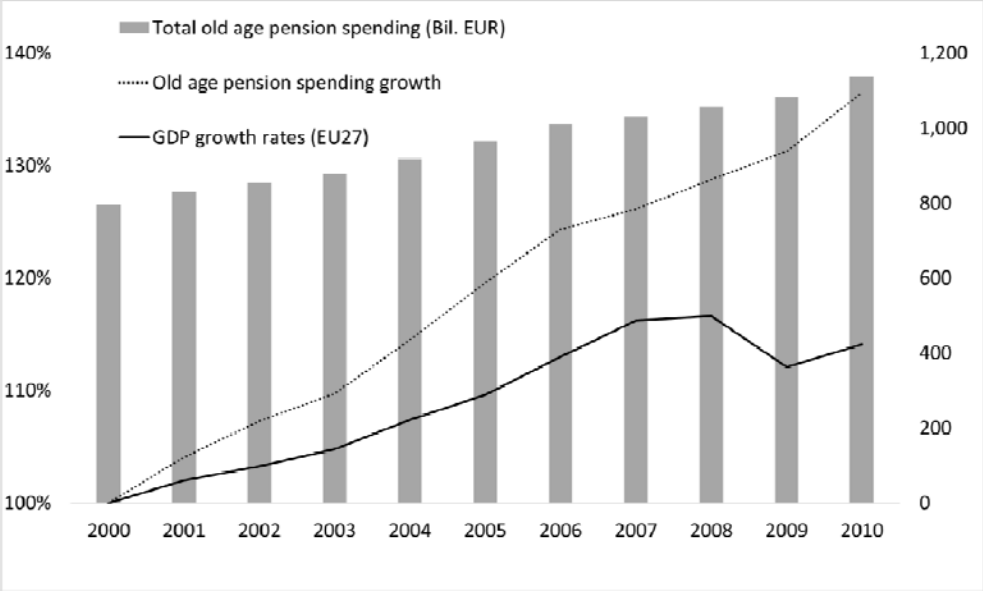
In the wake of the recent economic crisis, many governments have initiated reforms or have accelerated the pace of ongoing reforms to their public pension system. The 2008 financial crisis, followed by a deep economic crisis, *provided an extra opportunity to accelerate the pace of long-needed reforms in order to improve the future financial sustainability of pension systems*. Many European countries introduced parametric reforms, that have already been implemented or are scheduled to be implemented, such as: reducing or abolishing early retirement opportunities; cutting the value of first pensions; changing pension starting point from final salary to career average; increasing required contribution periods; changing indexation rules; or increasing retirement age (Casey, 2012). Amongst all these parametric measures, raising retirement age was universally on the agenda of European governments (Table 2).

Table 2. *Retirement age pre and post-reforms*

Country	Retirement age prior to reforms	Retirement age changes
Spain	65	67 (gradually until 2017)
France	60 (public), 65(private)	62, 67 (gradually by 2018)
UK	65	66 (accelerated, proposed 68 link to longevity risk)
Italy	60	66 (by 2018; longevity related increases from 2015)
Ireland	65	68 (by 2038)
Netherlands	65	66 (by 2020) and 67 (by 2025)
Hungary	62	65 (by 2012)
Poland	60 w / 65 m	67
Romania	59 w / 64 m	60 w / 65 m (by 2015) - 63 w (by 2030) – 65 (2038)

Source: Casey 2012 and Romania Draft Modification Law regarding Law nr. 263/2010.

The introduction of parametric reforms did not immediately affect the level of current public pension spending, but they are supposed to improve the future financial sustainability of the pension systems. Public pension expenditure growth maintained a constant growth rate, as governments did not cut current pension benefits and the effects of the parametric reforms will be visible in the long-run. Total average old age pension expenditure growth for EU 27 countries was around 2.5% and in 5.2% in 2009 and 2010, respectively (Figure 3), which is within the historical range for growth rates from 2000 until 2010. Of all countries included in the analysis, only four countries reduced their total public pension expenditure (Iceland, UK, Sweden and Hungary) in 2009 versus 2008, but not public pension benefits to their pensioners. Cutting current pensioners' benefits was attempted without success in Romania and Latvia, as constitutional courts ruled the measure unconstitutional. However, the Greek government was forced to cut current pensioners' benefits (IMF, 2013), as they were trying hard to meet conditions of the IMF stand-by agreement. Most governments, rather than cut current pension benefits, chose to moderate their increases by reviewing indexation procedures or removing additional benefits (Casey, 2012).



Source: European Commission, Eurostat Statistics.

Figure 3. *Total old age pension spending growth vs. GDP growth*

In some Western European countries, the public pension funds were used as a *counter-cyclical tool* for stimulating economic growth or aiding national companies in difficulty (Casey, 2012). For instance, public pension reserve funds were used in Finland for buying commercial paper in solid Finnish companies, while in Spain these funds were used to buy government bonds in order to reduce the public borrowing rate. The Dutch government *urged pension funds to invest in the financial sector in order to help with the economic recovery* (Casey, 2012). In Iceland, Denmark and Spain, rules and penalties for early pension withdrawals were relaxed in order to help the unemployed. In Germany and Sweden, the government failed to cut pension benefits, even though the calculation formula required it (i.e. in Germany pensions were tied to real wages that fell in 2009, in Sweden newly paid pensions were tied to the extent to which the system's liabilities exceed assets).

In Central and Eastern European countries, that had engaged in a transition process of their pensions systems prior to the economic crisis, governments *temporarily shifted all or part of the contributions going to the mandatory private schemes to the public schemes in order to cope with current pension payments.* As revenues to the pension budget dropped due to the economic crisis, some governments had to find solutions to help them meet current pension obligations (Table 3).

Table 3. *Pension contribution rate shifts after crisis*

Country	Total pension contributions (%)	Of which going to Pillar II (%)	Diverted to public schemes
Slovakia	18	9	5
Lithuania	18.5	5.5	2
Hungary	31	8	Scheme nationalized
Romania	19.5	2 (gradually raising to 6% until 2016)	Frozen at 2.0 in 2009
Poland	19.5	7.3	2.3

Source: Casey 2012 and www.reuters.com

Hungary, for instances, nationalized the mandatory private scheme altogether. As public pension schemes have a future sustainability problem, reversing some of the recent reforms will not help with this problem.

The fall of the financial markets in 2008 had implications for pension funds, especially for those pension fund members whose portfolio was heavily invested in stocks. On average, in OECD countries *pension funds lost over 20% in real terms in 2008* (OECD, 2013). This fall affected predominantly new pensioners, as they have seen their pension accumulations fall right before retiring. Pension plan members that had several years until retirement, will have more time to see their portfolio recover the losses, thus are less affected by the crash of the financial markets of 2008. In countries where occupational or private pension schemes provide an important share of pension benefits (UK, Netherlands, Denmark, Sweden) the crisis contributed to the decrease of public confidence in the private funds' capacity to meet their needs (OECD, 2009). Some governments of these countries proposed measures in order to provide better protection against financial market fluctuations, such as: adjusting asset allocations with age, or guaranteeing a minimum rate of return for mandatory saving plans. In CEE countries, were private schemes are small and new, the fall of equity markets did not affect pensions. In addition, these countries are strictly regulating pension funds and asset allocations are restricted in pre-retirement years, so they are better sheltered from future financial market fluctuations.

Conclusions

The economic crisis forced governments to accelerate the pace of long-needed reforms of the pension system, but also to adopt some immediate crisis coping measures. Many states introduced parametric reforms that will have an effect on pension spending in the long-run and are supposed to raise the public pension systems future sustainability. In addition to long-ranging measures, many European states responded to the financial and economic crisis of 2008 and 2009

with short-term coping measures: some countries in CEE decided to temporarily divert contributions to public schemes from private mandatory schemes in order to cope with current payments; in some Western European countries, public pension reserve funds were used as a countercyclical tool to stimulate ailing national companies or to help with the recovery of the financial markets.

While some unfortunate new pensioners that were heavily relying on private defined contribution pension funds for their pension income saw their accumulations drop, and thus their pension income dropped due to the financial crisis, this phenomenon was restricted in the few European countries where the private pension funds provide an important part of pension benefits. Overall, the economic crisis had welcomed effects on the European public pension systems, as the measures adopted in light of the crisis are going to help with the system's future sustainability.

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Fiscal consolidation through fiscal rules?

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Abstract. *Following the financial crisis, the budget deficits and public debt have recorded levels that no one would have considered a few years ago. Therefore, efforts are needed to achieve fiscal consolidation. Both in academic debates and policy many believe that fiscal rules should be the central element of a successful strategy, idea argued by the fact that a rule would restrict the discretionary actions of the government, thus strengthening the fiscal consolidation. However, there are differences when it comes to precisely specifying a rule.*
Therefore, in this article we want to analyze how much policy makers can rely on fiscal rules, factors necessary to achieve a high degree of effectiveness of fiscal rules, if a fiscal rule should be based on the budget balance level or the debt balance level and we will analyze whether the restrictions imposed ex-ante to the fiscal policy are superior to the ex-post penalties.

Keywords: fiscal consolidation, fiscal rules, credibility, budgetary deficit, public debt.

JEL Classification: E62, F42, G01, G18, H60.
REL Classification: 8K.

The sovereign debt crisis in the euro area is a bad memory of the fact that no country can ignore the requirements of a fiscal discipline. The crisis has shown, moreover, how slow the fiscal discipline can rise. Fiscal discipline consists of three clear implications. First, it is not a concept which changes from year to year, but a characteristic that involves a medium to long term, which may allow significant temporary deviations with surpluses to compensate them. Then a solid budgetary framework is necessary but it is not a sufficient condition because private debts may become public debts in crisis situations. Third, the issue of political domination is a concern that no central bank can avoid, no matter how independent it is (Wyplosz, 2012).

When we consider fiscal discipline, this translates into two types of processes: ***fiscal rules and fiscal institutions.***

Fiscal rules are of different forms, but all have the same characteristic, namely the imposition of numerical rules. These standards can take into account the budget balance, public expenses or budgetary revenues. In other words, the fiscal rules are legal agreements that promote the fiscal discipline "tying the hands" of policy makers in order to constrain the decisions regarding the scheduling of the budgetary revenues and expenditures (Bergman, 2013).

Fiscal rules may vary from country to country, some rules apply from year to year, others define boundaries over many years, sometimes for an entire business cycle. Some are national, others supranational (such as those related to the fiscal Compact).

In theory, if properly implemented, the fiscal rules can eliminate government's deviations from deficit targets ("deficit bias"). There are, however, several limitations of the rules.

First, a rule is vulnerable to *inconsistency in time*. A simple to avoid rule is often useless and a strict rule may not be followed in certain situations (such as periods of economic turbulence). In general, when unexpected situations appear the easiest solution is to draw up derogatory clauses. They cannot be entirely accidental because too many relevant events are unpredictable, and certain foreseeable events can guarantee predictable rule adjustments without affecting the disciplinary effect (case of cyclical fluctuations). The practice of derogatory clauses is unlikely to be effective as policy makers generally choose to be fiscally undisciplined choosing to pass the debt burden to the account of future generations. As long as the political costs of ignoring tax compliance requirements are smaller than the political benefits of allowing public debt growth, the latter option will be chosen over the other. Rules are useful as long as

the political costs of fiscal indiscipline are extremely high. Thus, it appears the need to incorporate them into institutional arrangements. Legal sanctions require the law to be written in terms strong enough to face the challenges, being also against the principle of simplicity. Otherwise, a government that wants to practice deviations from deficit targets can quite easily convince public opinion that the current circumstances are exceptional and technocratic arrangements should not stand in front of serving the interests of the population.

Another limitation concerns the *aging population*. In a system such as "pay as you go" the present generation supports the previous generation, and the present generation is supported by the future one. Given the fact that there is a demographic reduction (as it is, in fact, in the present), the burden on future generations regarding pension payments is much higher. According to a European Commission (2009) report, 20 countries in the European Union will have annual pension costs higher by more than 2% of GDP by 2060. The additional cost for these countries is estimated at 5.8% of GDP. In order to reduce the burden the measures would mean that the present generation should agree to pay more taxes, receiving lower benefits or a longer work program. All these measures can be seen as numerical rules that affect specific elements of the state budget.

For the rules to have a high degree of efficiency, they should depend on four main factors (Bernanke, 2010):

- To be transparent;
- To be addressed to the basic problem;
- To be focused on variables that can be directly controlled by policy makers;
- Not to be substituted to the political will.

In case a rule is transparent, then it serves the clarifications made by policy makers, it facilitates a dialogue with the general public and encourages policy makers to recognize the more extended fiscal consequences of their decisions. Transparency is certainly strengthened when there are also fiscal councils (Calmfors and Wren-Lewis, 2011). Then, a rule should be ambitious enough to address a core problem. Thus, incomes and future expenses (such as social security charges) should be forecasted. Even if such forecasts are complicated and generate uncertainties, a number of studies highlight the benefits of conducting fiscal projections, such as increasing fiscal sustainability (Anderson and Sheppard, 2009).

To be effective, the rules should be focused on a set of variables that can be controlled directly by decision makers (such as the budgetary deficit which depends on the decisions made for expenditure and budgetary revenues) because in case the targets are missed to be easier to assume responsibility. So constraints

regarding the cyclically adjusted budget deficit are welcome. Measuring the output gap is a complicated task, but can be achieved more easily by including a fiscal council in government fiscal policy. Moreover, fiscal rules cannot be substituted to the political desire, which means that understanding and support from business agents are welcome.

In Romania, the principles underlying fiscal-budgetary policy, according to the Fiscal-Budgetary Responsibility Law 69/2010, are:

- The principle of *transparency* regarding fiscal-budgetary goal setting and implementation of fiscal and budgetary policy;
- The principle of *stability*, the Government having the obligation to conduct fiscal-budgetary policy in a manner that ensures predictability for a medium term, in order to maintain macroeconomic stability;
- The principle of *fiscal responsibility*, the Government having the obligation to conduct fiscal-budgetary policy prudently and manage resources and budgetary obligations, as well as fiscal risks in a manner that ensures sustainability of the fiscal position on medium and long term;
- The principle of *equity*, the Government implementing fiscal-budgetary policy taking into account the potential financial impact on future generations and the impact on economic development on medium and long term;
- The principle of *efficiency*, the fiscal-budgetary policy of the Government being based on the efficient use of scarce public resources;
- The principle of *effective management of expenses* with the personnel paid from public funds.

Regarding *fiscal institutions*, they generally translate into fiscal councils. Their powers vary from an objective analysis of fiscal-budgetary policy decisions to actual decisions on the budgetary balance. In the first case, the intention is to have a "watchdog", receiving official recognition.

Most times, they realize both **ex-ante** fiscal surveillance – through the analysis and drafting of opinions and recommendations on the official macroeconomic and budgetary forecasts, the fiscal strategy, annual budget laws, budgetary adjustments, other legislative initiatives that may impact the volume of budgetary expenditures - and **ex-post** by making annual reports containing the assessment of objectives, targets and indicators set by fiscal-budgetary strategy and annual budget, Government's performance evaluation and how the principles and rules provided by the present law have been followed, opinions and recommendations of the Fiscal Council to improve fiscal-budgetary policy.

Some of the fiscal rules verified by the Fiscal Council in Romania are, according to the fiscal-budgetary responsibility Law no. 69/2010, the following:

- general consolidated budget balance and personal expenses of the general consolidated budget, as a percentage of GDP, cannot exceed the annual limits set in the fiscal-budgetary frame from the fiscal-budgetary strategy for the first two years covered by it;
- the total general consolidated budget expenditures, excluding financial assistance from the European Union and other donors and personnel costs, taking into account the state budget, the state social insurance budget, local budgets, the budgets of self-financing institutions, special funds and other component budgets, shall not exceed the limit specified in the fiscal-budgetary frame from the fiscal-budgetary strategy for the next fiscal year;
- for each of the three years covered by fiscal-budgetary strategy, the annual growth rate of total expenditures of the general consolidated budget will be maintained below the annual nominal growth rate of GDP projected for the respective budgetary year, until preliminary balance of the general consolidated budget has recorded a surplus in the year previous to the year for which the budget project is drafted.

Thus, in most of the cases fiscal councils have advisory role, and governments are exposed to reputational risk and may lose credibility if they choose to disregard their opinions and recommendations without thoroughly explaining the reasons thereof.

As the rules are rigid and exceptionally they cannot even be met, in the current period, due to the economic turmoil manifested in the European Union, there are simultaneously conducted both fiscal rules and fiscal councils. This is recommended this because when we use the derogatory clauses of the fiscal rules, *governments lose their credibility if independent and competent institutions authorize such deviations*.

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The effects of bureaucracy over the business environment from Romania

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Abstract. *The business environment from Romania is facing many problems, including bureaucracy. At global level, entrepreneurs face different bureaucratic systems that affect more or less the interest in investing in certain regions or fields. This study aims to analyze the main effects of bureaucracy over the business environment from Romania and their impact on sustainable economic development. Also, I will analyze a questionnaire among young people (21-34 years) about the bureaucracy role in their decision to open their own business. Therefore, it will be seen if the Romanian bureaucratic system is among the main negative effects that affect the entrepreneurs decisions to invest or not in Romania.*

Keywords: bureaucracy, entrepreneur, competition, market, business environment.

JEL Classification: A1, B0, M2.
REL Classification: 1A, 5K, 14D.

Introduction

From the historical point of view, entrepreneurship is one of the oldest activities. Since ancient times people have tried to develop different strategies using them to sell goods, services or ideas, thus contributing to the emergence of the first forms of entrepreneurship.

Thus, throughout history we have been able to observe many important examples of entrepreneurial activities (from small manufactures to large companies). The last decades have seen a wave of entrepreneurial activity. In the 1970s and 1980s we have seen huge changes in the world - oil crisis, economic recession, technological progress, increasing globalization, and major policy changes in favor of a strong market-oriented ideology. This created uncertainty and imbalance that led to the emergence of new business opportunities and new associations (Bettis, Hitt, 1995, pp. 7-19). As a result, new and small firms have been observed by politicians, economists and policy makers as the main contributors to the economy and creating value and wealth in society (Landstrom, 2005, p. 4).

For this reason it was always important for business people to discover or identify new business opportunities and exploit these opportunities in new projects for a sustainable economic growth.

Regarding business environment, especially entrepreneurship, Max Weber has made some contributions to the development of this intensely debated topic through several papers and research during the 1910s when he contrasted the entrepreneur with the bureaucrat. As society becomes more rational the bureaucracy tends to grow in importance and can come to dominate the individual businesses. However, the entrepreneur is the only person who can keep bureaucracy to a certain level in the company. Thus, only the entrepreneur may have more knowledge about a company than the bureaucrats (Landstrom, 2005, p. 45). Max Weber is known for his studies in the research of the bureaucratic phenomenon that currently can adversely affect the activities of entrepreneurs (Weber, 1978, pp. 25-30).

Throughout history and especially today businesses have faced and still face bureaucratic problems, both within their companies (problems that only the entrepreneur is able to adjust) and the interaction between entrepreneurs with public institutions and their employees (bureaucrats). In this case the economic progress is suffering (Dobrescu et al., 2012).

The bureaucratic phenomenon and its effects can be seen very well in Romania. This problem is always present when we are facing the attraction of foreign investors in Romania or when the young people start a business.

When we want to attract foreign investors we can observe some disadvantages which we are reproached by them: lack of infrastructure, corruption, political instability, shifting and high fiscality and not least the bureaucracy.

The effects of bureaucracy over the business environment from Romania

Currently Romania is facing a major problem which means encouraging future entrepreneurs to invest in starting a business. An important problem is created by the bureaucracy that is dominating the Romanian public institutions and the effects generated by the bureaucracy over the businesses.

In Romania there are many possibilities for developing business in areas such as agriculture and tourism. It is well known that our country has a high agricultural and tourism potential, and this should be exploited as there is a high demand in the domain of the tourism from the protected areas (Minciu et al., 2012, pp. 99-113). Also in this case, the development of tourism businesses in protected areas can help sustainable development of Romanian tourism (Minciu et al., 2010, pp. 83-98) and hence the economy. But these opportunities are often lost due to excessive bureaucracy that drives the investors away from these domains.

Indeed bureaucratic phenomenon is present in all countries, including Western European countries, but in the case of Romania the effects of bureaucracy has resulted in a competitive disadvantage relative to other countries or the European Union in terms of attracting investment.

Among the negative effects created by the bureaucracy on business environment can be found:

- The large number of taxes in conjunction with the time spent paying them. The Romanian companies pay the most taxes in the European Union. To pay their taxes the entrepreneurs end up losing 200 hours annually, while in this time they might solve more important issues. Now Romania is ranked 134 of 189 countries surveyed in a poll conducted by the World Bank and by the company of consulting and audit PwC on the payment of taxes. In this case, we are situated on an inferior position comparative with less economically developed countries. According to the report Paying Taxes 2013, a company in Romania must make 39 payments each year by the State on account of taxes and contributions, it is 3 times more than the EU average that is 13,1 (http://www.curierulnational.ro). The report analyzes the ease of paying taxes in 189 countries around the world and there are taking into account three main indicators: the total tax rate (which measures the share of taxes and contributions paid by a company as a percentage of profit), the time needed to comply with tax laws (in this case is known the big number of hours you assign

a firm to fulfill its reporting obligations and to pay taxes imposed) and the number of payments that a company need to make to meet tax obligations (http://www.curierulnational.ro).

- Time spent with obtaining information and documents required to open a business or to obtain some authorizations. This problem can have a major impact on young people's decision to open a business or to attract foreign investors. In this case the rules and regulations of the bureaucratic phenomenon impede the proper conduct of economic activities. In this case we can speak about an opportunity cost for the entrepreneur, for example what business opportunities might lose it in the time spent to obtain certain information or approvals from public institutions. More specifically, in this case, one can think of if it is more advantageous to invest in Romania or in a neighboring country where bureaucracy is less present in the business environment.
- The lack of transparency in the provision of public information by the public institutions. In this case the entrepreneurs are facing a very important issue, because they have difficulties in obtaining the information necessary for the proper course of the economic activities. The public institutions must be transparent in providing public information to satisfy the needs of the natural and the legal persons to obtain information: the need to provide detailed information on the progress of an administrative proceeding or on services available; the need to provide clear guidance on the obligations that the natural or the legal persons must meet and the documents they need to submit when they are dealing with a public institution; obtaining timely information about the personal situation of the natural and the legal persons; the existence of a common database that can be accessed easily; an efficient communication between the departments of public institutions, but also between the public institutions (Magnini et al., 2000, pp. 1-2).
- The presence of the corruption in different forms in the bureaucratic institutions. This effect of the bureaucracy is the worst because it has a major impact on how local business people, and potential foreign investors will perceive the image of Romania. Regarding the corruption perception index in 2012 Romania was situated on the 66th place out of 176 countries analyzed with a score of 44 points out of 100 points (http://www.transparency.org.ro). This situation does not encourage the business men to work in Romania. Thus, by reducing bureaucracy can be reached a low level of the corruption.
- The lack of access to education for the people in deprived areas. It is obvious that the role of education is extremely important and that is why Romania is trying to increase the access to higher education forms (Badea, Rogojanu, 2012, p. 137). Unfortunately to solve these problems we face bureaucratic barriers. In this case it should be noted that to have a healthy business

environment it is important to invest in education. An entrepreneur can not maintain himself on the market if he doesn't have studies in the field in which he operates.

- The bureaucrats behavior (employees of public institutions) that often hinder the activities of the entrepreneurs. In this case we can talk about the lack of interest of public officials in carrying out their characteristic activities because of various reasons: lack of motivation, lack of education and training, daily routine and conservatism (reluctance on everything new in the field) and not least the self-interest which in many cases does not coincide with their duties. The bureaucratic behavior may play an important role in some situations, because they are in direct contact with the external environment (citizens, business men, potential investors).

Therefore, It can be seen that the bureaucracy and its effects play an important role in the business environment in Romania. Many entrepreneurs are influenced in terms of investment they want to do in a country and the role that may have the bureaucratic phenomenon over that country. Therefore, to have a competitive advantage compared to other countries in the region to attract investment and foreign or domestic investors, Romania must find an answer to the problems posed by bureaucracy and its effects.

Case study: the role of bureaucracy in the decision on opening a business in Romania by young people

To observe the role and the effects of bureaucracy on the decision of opening a business by the young people in Romania it was made a questionnaire on a sample of 100 students from the Academy of Economic Studies, Faculty of Economics.

The questionnaires were conducted among the students from the third year and masters, aged between 21 and 34 years. There were selected the young people from this category because they are better anchored in the Romanian economic realities. Most respondents have a job (68% of respondents) and most of the respondents are from the urban areas (98% of respondents).

In terms of opening a business in Romania or abroad, the majority of respondents want to do this in our country. It can be seen from the graph in Figure 1 that 94% of young people want to open a business in Romania, unlike the 6% who will not want to do this.

It can be seen, in this case, a clear trend of young respondents to invest in our country. This result may be due to the knowledge of the local business environment and its implications, so we should take that opportunity and we

should be given the necessary conditions for future young entrepreneurs to develop their business.

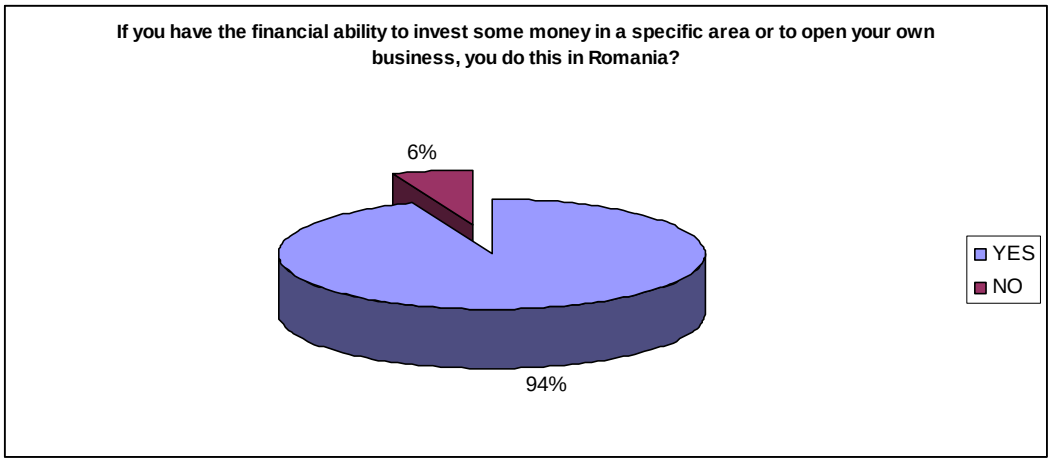

Figure 1. *Opening a business in Romania*

In the table below there have been analyzed through a questionnaire the main obstacles that the young people can observe in starting a business in Romania. They can choose from five possible answers depending on their importance. In this case respondents had to rate from 1 to 5 - depending on the importance they attach to (1 most important and 5 least important) - the main obstacles to starting a business.

After analyzing the results (as shown in Table 1) there have been observed the following results:

- According to the respondents the main obstacles to start a business are the bureaucracy with 38% and the corruption with 36%;
- The fiscality is ranked third in importance by 18%;
- In the case of the infrastructure and the political instability can see that there are on the last two places in terms of the problems that young people may encounter when they want to start a business (the infrastructure with 3% and the political instability with 5%);
- However, in the case of the infrastructure we can observe that it has a high percentage, namely 34%, of the third variant as importance regarding the issue of opening a business.

Table 1. *The main obstacles to start a business in Romania*

Which are the main obstacles in opening a business in Romania?					
Bureaucracy	1	2	3	4	5
	38%	30%	17%	10%	5%
Corruption	1	2	3	4	5
	36%	32%	13%	15%	4%
Infrastructure	1	2	3	4	5
	3%	11%	34%	26%	26%
Fiscality	1	2	3	4	5
	18%	22%	21%	27%	12%
Political instability	1	2	3	4	5
	5%	5%	15%	22%	53%

Regarding the role that the bureaucracy is having in the start of a business by young people we can see the following results: 93% of respondents were of the view that the bureaucracy has an impact on this decision and makes the process of opening a business to be very difficult, while only 7% felt that the bureaucracy has no role in this case.

In the present case it can be seen the important role that is having the bureaucratic phenomenon among young people when they are willing to open a business in a particular field.

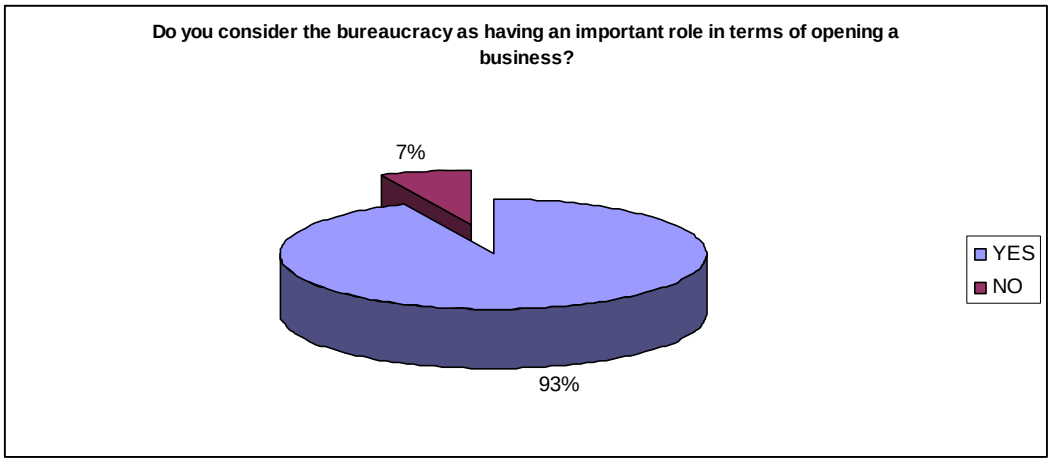

Figure 2. *The role of bureaucracy in opening a business*

In the table below there have been analyzed through a questionnaire the main negative effects of bureaucracy that the young people can observe in starting a business in Romania. They can choose from five possible answers depending on their importance. In this case respondents had to rate from 1 to 5 – depending on the importance they attach to (1 most important and 5 least important) – which are the negative effects of bureaucracy in starting a business.

After analyzing the results (as shown in Table 2) there have been observed the following results:

- the respondents believe corruption is the most important negative effect of bureaucracy with 45%, followed at quite a big distance by the others (lack of transparency with 11% as the first variant and with 27% as the second variant, the misinformation with 19% as the first variant and with 23% as the second variant, the lost time with 11% as the first variant and with 15% as the second variant, the behavior of bureaucrats with 14% as the first variant and with 23% as the second variant);
- it can be seen that, besides corruption, respondents felt that the misinformation togheter with the lack of transparency and bureaucratic behavior are important negative effects of bureaucracy that are worth taking into account in the decision of the young people for opening a business.

Table 2. *The main effects of bureaucracy in opening a business*

Which are the main negative effects of the bureaucracy regarding to open a business?					
Corruption	1	2	3	4	5
	45%	12%	23%	13%	7%
Lack of transparency	1	2	3	4	5
	11%	27%	28%	22%	12%
Misinformation	1	2	3	4	5
	19%	23%	18%	23%	17%
Time lost	1	2	3	4	5
	11%	15%	20%	19%	35%
The bureaucrats behavior	1	2	3	4	5
	14%	23%	11%	23%	29%

Through the question from Figure 3 we wanted to see the role that the bureaucracy it has on the behavior of the bureaucrats. Following responses has been observed that young people consider in proportion of 98% that bureaucracy plays an important role on the abusive behaviour of the civil servants, as opposed to only 2% of those who considered the bureaucracy as haven't any important role in this case.

After there were analyzed the results it can be concluded that excessive bureaucracy of public institutions lead to abusive behavior of public servants. Here we can talk about the public informations and how there are transmitted and the access of business men to this informations. When the business men are receiving incomplete information from public institutions we can observe many negative effects on the business environment (lack of investors, no possibility of adequate market research, bankruptcy, etc.).

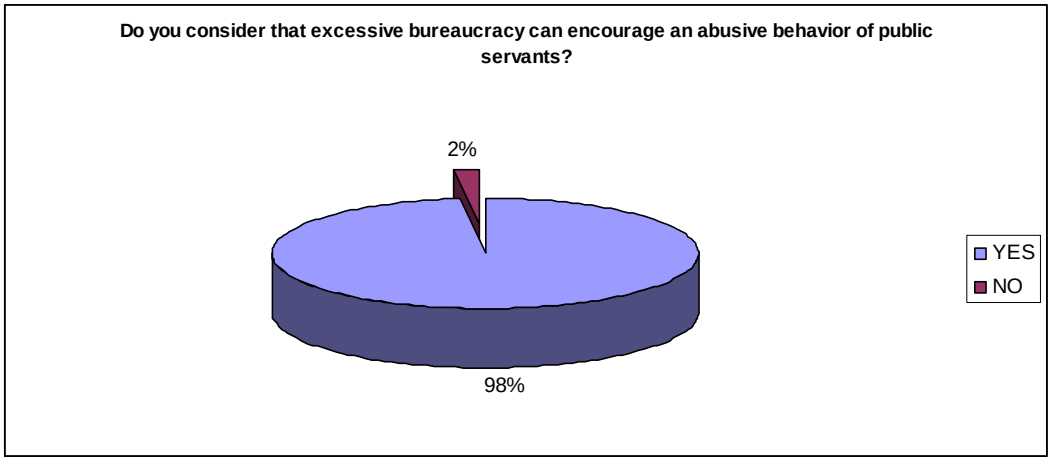

Figure 3. *The effect of bureaucracy on the behavior of public servants*

Through this question we wanted to observe the effects of bureaucracy on Romania's image among potential investors. It was found that 97% of respondents felt that the bureaucracy and its effects affect Romania's image among potential investors, and the remaining 3% did not feel that the bureaucracy plays an important role in this case.

In conclusion the Romania's image is suffering in front of the investors and the future entrepreneurs because of the bureaucracy and its effects that are making the economic activities not to be held in optimal conditions.

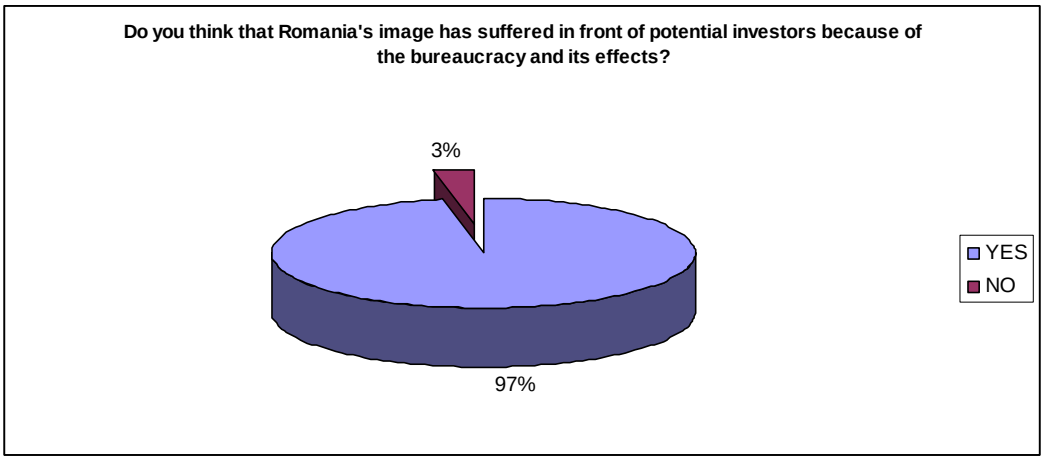

Figure 4. *The effect of bureaucracy on Romania's image among potential investors*

Trough the last question we wanted to know the solutions that the young people (people surveyed) can see to eliminate or to reduce the negative effects of bureaucracy. Among the solutions proposed by respondents there are included:

- implementation of a efficient electronic systems (a performant informatic system);
- increased transparency;
- a unique office;
- better legal basis;
- a closer supervision of the civil servants and a better motivation that can help to eliminate corruption;
- logistical improvements;
- reducing the bureaucratic hierarchy;
- providing clear and accurate informations;
- attracting well-trained personnel and motivated to work in public institutions;
- reducing the number of documents required to open a business;
- a more efficient communication between state institutions.

It can be seen that the solutions proposed by the respondents are relevant and some of them can get to be a solution in the future.

Conclusions

Following the analysis made on the basis of the questionnaire it has been observed that the bureaucracy and its negative effects play an important role in the decisions that the young people can take on the development of some business domains in Romania.

The problems created by the bureaucracy affects attracting investors in Romania and makes difficult in most cases the development of new business opportunities. By eliminating these problems young people may be more motivated to try to start their own business and so the economy could be helped to go on an growing trend.

In conclusion it was observed that the business environment in Romania and entrepreneurs are affected in different ways by the effects generated by the bureaucratic phenomenon that is always present in public institutions and everything related to them. Because of this it is necessarily to found a permanent solution to reduce or even eliminate the negative effects of bureaucracy on business environment.

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