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INFLUENCE OF TRANSFORMATION PROCESSES OF ECONOMY ON FINANCIAL STABILITY

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Abstract. Financial stability is a basis of thriving economy. Frequent financial crises destroy anticipated growth effects of economy after introducing financial liberalisation. Negative effects of crises appear to be the strongest in transition countries. Over a century scientists work on creating methodologies of dealing with financial stability, on creating models of assessing financial stability levels, identifying sources of financial instability, and the ways of diminishing effects stemming from these sources. Nevertheless, it is evident that the problem is not solved yet. Fostering financial stability requires comprehensive knowledge of causes of financial instability, which are discussed in this paper.

Keywords: financial stability, financial liberalisation, transition, capital account liberalisation, commercial banks, bank-based financial system.

JEL classification: D81, D82, E02, E44, E61, F32, G18, O43.

1. Introduction

Essence of financial crises has changed substantially after the industrial revolution. In Middle Ages major causes of financial crises were wars, scarce yields, and excessive expenditures by the aristocracy (Reinhart, Rogoff 2009). It is believed that all the tree factors provoked the Great French Revolution, when the French government faced an extensive fiscal crisis in the 1780s. Now as the financial system has become much more complicated a plethora of factors could be named as making substantial influences to financial stability and to financial crises. The subject of study of financial stability requires systematisation of currently known factors, introducing new terminology, identifying the most important sources of instability, and creation of new approaches to the issue of fostering financial stability.

Financial liberalisation, a process concept of which was developed by McKinnon (1973), and Shaw (1973), was initially believed to empower financial systems to make positive effects on economic growth. The hypothesis of financial liberalisation implies that reduction of control over financial systems would make interest rates for savings instruments more attractive. This consequently should have increased the level of funds to be available for crediting enterprises. The following increase of depth of financial system should then have fostered the economic growth (Moore 2010). Nevertheless, this hypothesis is currently not widely accepted because its empirical testing in the real life appeared to be more different than it was expected mostly due to effects of financial crises.

For countries with transition economy, among which Lithuania finds itself starting from the beginning of the 90-s, the process of financial liberalisation is embedded into much more complicated processes of transition from the centralised economy to the market economy. Initial effects of financial crises were far more severe than elsewhere. Lithuania is believed to have lost 63% of its GDP at the very beginning of the transformation process (Kuodis 2008).

In the paper factors influencing financial stability for the countries, which embarked financial liberslisation, are discussed.

2. Transformation processes of economy and their impact on the financial sector

Transition countries, the countries which entered into the process of switching from the centralised economy to the market economy, simultaneously found themselves entering the process of the global integration of their economies, otherwise called the process of globalisation. Lithuania is one of such countries, which started the process of transformation in the 90-s.

The major goal of transformation processes is to reduce participation of the state in country's economy. More precise tasks of transformation were formulated by McKinnon (1991):

– reducing the centralised control;
– introducing and fostering taxation system;
– introducing elements of market economy together with privatisation of state enterprises;
– establishement of commercial banks;
– control over inflation and lending.

Lithuania together with other post-communist transition countries embarked to the process of globalisation in the early 90-s. As the global processes of economic globalisation commenced in the 80-s, transition countries were not left far behind: financial liberalisation processes in transition countries disgorged into the globalisation processes taking place all over the world, embracing almost every country.

Transformation processes in transition countries are much more complicated than globalisation processes in other countries. Major difference in terms of finance is the fact that in transition economies financial system was at the embryonic state; financial intermediation was not present (European bank for reconstruction and development 1998). Lithuania can serve as a good example: industry was well-developed, while the financial system was carrying out only settlement operations; importance of money was insignificant. In contrast, in industrial countries financial capital was accumulated even before the Industrial Revolution (Coricelli *et al.* 2008).

Transformation processes in the financial sector can be regarded as the process of financial liberalisation. As transformation of the economy did not yield expected results in transition countries, the importance of studying financial liberalisation as the major cause of financial crises becomes natural as financial crises destroy country's economic growth achievements. The analysis of transformation processes in the Lithuanian financial sector show the necessity of strengthening supervision of the financial sector.

For helping transition countries to cope with the extensive transition processes European Bank for Reconstruction and Development was established. In 1994 the bank has introduced indexes of transformation of economy. The indexes were gradually amended, their list extended. In 2010 new indices, representing the state of transformation of the financial sector were introduced. Changes in the banking, insurance, other financial sectors, capital markets, private capital markets are reflected from now. The European Bank for Reconstruction and Development regularly reveals state of each transition country in its Transition Reports. Transformation processes are showed in Table 1, where processes related to the financial sector can be easily identified.

They can be observed, besides the legal system group, in groups "Market and trade", and "Financial institutions". Current state of the level of transformation reforms in Lithuania and its neighbours in the financial sector can be observed in Table 2. Maximal value of transition indicators is 4+, which means that a country has reached the state of complete market economy in the named realm of transition.

Lithuania has successfully and rapidly underwent reforms in price liberalisation, foreign exchange, and trade liberalisation. In all realms of transition besides capital and securities market Lithuania has reached a satisfactory state. Nevertheless, for complete conversion of its economy to the market economy this country still has to make changes in transforming its capital and equity markets, banking and other financial institutions' sector, in competition environment. In the banking sector Basel standards set by Bank for International Settlements must be fully implemented; competitiveness in the banking sector increased; supervision of the banking sector made more effective; intensified lending for private enterprises; widened bank services.

Table 1. Fields of integration of transition countries (sources: European Bank for Reconstruction and Development Transition Reports; compiled by the author)

Transformation of economy				
Corporate	Market and trade	Financial institutions	Infrastructure	Legal system
Privatisation of large enterprises Privatisation of small enterprises Re-structuring of enterprises	Price liberalisation Trade and foreign exchange system Competition policy	Banking reform and interest rate liberalisation Securities market and non-bank financial institutions Insurance and other financial institutions Capital market Private equity SME sector	Telecommunication Electricity supply Railway Roads Water and sewage Use of natural resources Renewable energy Public transport	Commercial legislation Financial legislation Corporate governance legislation

Table 2. Transformation indexes of the European Bank for Reconstruction and Development of the Eastern European countries (source: European Bank for Reconstruction and Development Transition Reports; compiled by the author)

	Market and trade			Financial institutions			
	Price liberalisation	Trade and foreign exchange system	Competition policy	Banking sector	Insurance and other financial institutions	Capital market	Stock market
Lithuania	4+	4+	3.33	3.33	3.33	3.0	2.33
Croatia	4.00	4+	3.00	3.33	3.33	3.00	2.67
Estonia	4+	4+	3.67	3.67	3.33	2.67	2.67
Hungary	4+	4+	3.33	3.33	3.67	3.33	3.00
Latvia	4+	4+	3.33	3.33	3.33	3.00	2.33
Poland	4+	4+	3.33	3.33	3.33	3.67	3.33
Slovakia	4+	4+	3.33	3.67	3.33	2.67	2.33
Slovenia	4.00	4+	2.67	3.33	3.33	2.67	2.33

In the financial sector and the financial market small investors' rights better protected; network of non-bank institutions, such as investment funds, pension funds, etc. intensified and increased; higher liquidity of stock market, and stock market capitalisation achieved. The described anticipated processes can be regarded as being in the final stage of transformation of the financial sector. These processes serve to the task of increasing effectiveness of the financial sector, which has positive impact on financial stablility.

3. Influence of the financial liberalisation on financial stability

As has been mentoned in the part 2 of the paper, financial liberalisation is an integral part of transformation processes of economy in a transition country, among which Lithuania finds itself. Financial liberslisation creates possibilities for the financial system to foster economic growth. Nevertheless, financial crises crises destroy growth effects of economy, which are anticipated after introducing financial liberalisation. In bank-based financial systems, such as Lithuanian financial system, financial crises are called bank crises.

Paradigm of the liberslisation in most of scientific papes is described as reduction of control by the Government, an intention to introduce the market economy, setting an objective of shifting from the centralised economy to the market economy. Founders of the liberslisation concept McKinnon (1973), and Shaw (1973) believed that financial liberalisation must create opportunities for the economic growth. Nevetheless, frequent financial crises having nullified effects of economic growth significantly reduced support for these hypotheses.

Currently, financial liberslisation is going by in most of the countries in the world, and is not present in coutries with few exceptions, such as North Korea, Iran, etc. Cuba and Libya can be considered as potential canditates for financial liberalisation.

Financial liberslisation concept is wider than just reducing State control over the financial sector. Deregulation of the financial sector is the starting point of liberalisation reforms. The concept of the financial liberslisation has not been elaborated to become widely acceptable yet. For example, Palgrave financial dictionary mentions only two integral parts of financial liberalisation: deregulation of domestic stock market, and capital account liberalisation (Rancière *et al.* 2008). Nevertheless, more specific realms of investigation of financial liberslisation can be found in the literature: current account liberslisation; stock market liberslisation for foreign investors, etc.

The author proposes a structure of processes of financial liberslisation (Table 3) stemming from terminology found in the literature. Two levels of financial liberslisation could be observed: the international, and the domestic. At the international level financial liberslisation creates opportunities for the country's financial intergration to the international financial system. Financial liberslisation at this level is usually defined as current account liberslisation, capital account liberslisation, stock market liberslisation for foreign investors. At the domestic level financial liberslisation would mean creation of the appropriate legislation, reforms in the banking sector and the stock market.

The structure of financial liberalisation is presented distinguishing two types of financial system: bank-based and market-based.

Table 3. Proposed structure of processes of financial liberalisation (source: created by the author)

	Bank-based financial system	Market-based financial system
International level	Capital account liberslisation	
	Current account liberslisation	
Domestic level	Legislation	
	Supervision of the banking sector	Supervision of the stock market

As the Lithuanian financial system is of the banking type, its financial stability besides legal reforms is affected mostly by current account liberslisation, capital account liberslisation, and the level of supervision of the banking sector.

Current account liberslisation means a synonym of the trade liberalisation, to be used in the realm of finance. Trade liberslisation is demolishing barriers of foreign trade; lowering restrictions of repayment of foreign debt and on international settlements for goods and services. Threats to financial stability upon liberalising trade are quite obviuos:

- reliability of the source of remuneration for exported goods and services depends on external stability; usually increased level of specialisation after introducing trade liberslisation also increases instability of the foreign source of finance;
- Baldwin (2004) noted that positive effect of liberslisation of trade is achieved, when a prudent monetary and anti-corruption policy is undertaken in a country;
- positive effect of trade liberslisation is achieved, when institutional reforms are undertaken; institutions of financial supervision are strengthened; strict and effective control is imposed under the budget; money supply is increased; competition is fostered; strategies of development are created.

Capital account liberslisation means extinguishing tolls and duties, cancelling quotas, other restrictions for cross-country movement of investment funds, liberalisation of stock exchange for foreign investors. The requirement to liberalise capital account to every country belonging to the EU is outlined in the Rome Treaty, and the EU directive No. 88/361/EEC. This requirement fosters capital account liberslisation in transition countries, such as Lithuania. In opinion of most of researchers this process is related to increase of financial instability, even if direct and indirect benefits of capital account liberslisation could be observed.

The *direct* benefits of capital account liberslisation are diverse:

- the alternative source of financing originating from industrial countries emerges upon the liberslisation, which often decreases interest rates;
- competition in the financial sector increases as capital market becomes open for foreign investors;
- investment risk could be diversified among domestic and foreign investors thus making possible financing of large projects, developing new economic sectors, and increasing economy of scale;
- increase of portfolio investment magnifies liquidity of stock exchange and decreases operating costs of trading stocks at the stock exchange;
- significant foreign investment patterns lead to technology and management standards' transfer;
- establishment of foreign banks opens access to foreign capital and stock market, influences increasing of standards of financial sector supervision, increases variety of bank products, increases efficiency of banks, fosters competition in the banking sector;
- international financial system influences transparency and standards of adequate accounting;
- possibility of foreign borrowing at periods of economic downturns appears.

Among *indirect* benefits of capital account liberslisation the following could be noted:

- increase of specialisation magnifies the economy of scale and economic efficiency;
- government of a country can more easily adopt long-term policies of creating conditions for the foreign capital to develop certain economic sectors;
- a high level of capital account liberslisation serves as an indicator that the country is willing to sustain a long-term favourable policy of attracting foreign capital.

Preconditions of negative influences of capital account liberslisation can be already observed in the literature:

- increase of financial crises;
- economic specialisation increases the industry-related risk;

- movement of capital strongly correlates with phases of economy of industrial countries and with their interest rates;
- capital account liberslisation increases volatility of consumption;
- temporary capital is exceptionally volatile, it can be promptly repatriated upon decrease of economic performance of the recipient country;
- considerable movements of capital in countries with weak financial systems cause financial bubbles or increase their effects as it has recently happened in Lithuania (Kuodis, Ramanauskas 2009; Ramanauskas 2006);
- in countries with weak law and contract enforcement financial system becomes more fragile;
- capital account liberslisation creates a higher impetus for bank managers to undertake higher risks, increases moral hazard, which in turn increases severity of financial crises (Mishkin 1999);
- capital account liberslisation makes interbank loans more risky.

Cases of real negative or nil influences of capital account liberslisation are in abundance present in the literature, such as:

- increase of severity and frequency of financial crises is noted in many sources (Laeven, Valencia 2010, etc.);
- growth of the GDP or foreign investment turned to be insignificant;
- capital account liberslisation evoked financial crisis as it happened in Kazakhstan in 2008;
- capital account liberslisation increased instability of income and consumption;
- portfolio investment became extremely instable; volatility of portfolio investment in Lithuania based on data from Beck *et al.* (2010) can be observed in Fig. 1;
- capital account liberslisation increased poverty; poverty did not increase only in cases of efficient institutional supervision;
- capital repatriation increased at times of economic downturn;
- price instability in a country was induced by volatility of the world economy;
- oligarchs refrained from accumulating capital in their country;
- significant foreign exchange risk was observed, as it happened in East Asia during financial crisis, where commercial banks had large open foreign exchange positions.

In the banking sector financial liberslisation introduces a slack in requirements for bank managers. Commercial banks then have possibilities to:

- pay significantly larger interest rates for deposits than the interest rates prevailing in the market;
- much more extensively borrow funds from foreign private and financial entities;
- to undertake risky but profitable in the short-run strategies and actions, which may lead to futher collapse.

The above factors significantly increase moral hazard of commercial bank management operating in the liberalised financial environment (Ergungor, Thomson 2005).

Abundant literature reinforce the fact that capital account liberslisation increases financial instability. This conclusion is made in two extensive important reviews of 191 scientific papers about capital account liberslisation (Prasad *et al.* 2003), and 248 scientific publications in the same area (Kose *et al.* 2006). Nevertheless, a definite conclusion about positive or negative effects of countries' financial integration cannot be made. Of 25 scientific

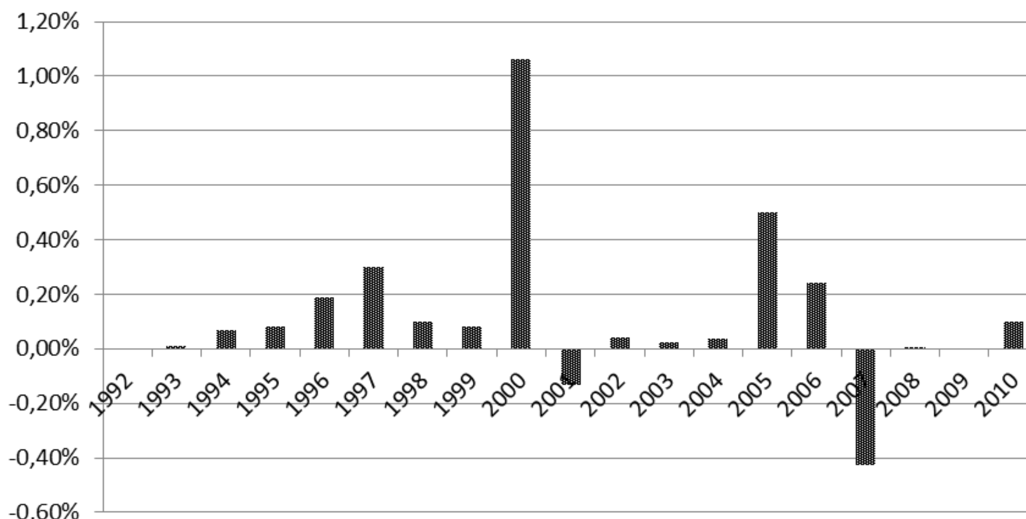

Fig. 1. Dynamics of Portfolio Investment to Lithuania, % GDP (source: author's calculations)

papers studying effects of financial integration on growth of economy encountered by the author positive influence of financial liberslisation was stated in 16 papers, in 5 papers a negative influence was determined, and in 4 papers – mixed influence. It is important to note that in the papers, where positive effect was determined, conditions for achieving positive effects were stated, as:

– effective institutional reforms;
– existence of the legal system, which effectively protects investors;
– financial system is sufficiently developed;
– stock market is sufficiently developed;
– favourable conditions for roreign investors are created.

Without fulfilment of the mentioned conditions, financial liberslisation can become a rather dangerous source of instability and consequent increase of poverty.

It is rather obvious that novel approaches of fostering financial stability should be developed. For bank-based financial system, such as Lithuania, such attempts are being made in Ginevicius, Podviezko (2011, 2013); Podviezko (2012); Podviezko, Ginevicius (2010); Brauers *et al.* (2012).

For the case of Lithuania a rather illustrative example of volatile dynamics of the GDP can be observed. On Fig. 2 a comparative graphical analysis of the GDP of Lithuania and other groups of countries in the period of 20 years from the beginning of financial liberslisation is shown. The period chosen is 1990 – 2010 as the beginning of the period marks embarkment of Lithuania into the process of financial liberslisation. To achieve precision of comparison GDP was calculated in prices of 2010, using price indexes. GDP of Poland was distinguished into the separate graph because of its exceptional growth achievements. In the goup of industrial countries the following countries' GDP averages were taken: France, Germany, Japan, The United Kingdom, The United States of America. The following transition countries were chosen to form the alternative group for comparison: Russia, Belarus, Estonia, and Latvia.

It can be noted that the highest downturns of the GDP in the chosen period are observed in transition countries. Exceptionally high volatility of the GDP in the same group of countries can be noted during the recent financial crisis. This means that the named countries must pay exceptional attention to sources of financial instability, and to scientific recommendations concering financial stability as performance of other sectors of economy are closely related to financial stability. For example, in the period of the downfall of economies of transition coutries construction sector dropped significally (Brauers *et al.* 2013; Kaklauskas *et al.* 2011). Financial crisis effects have a strong impact on a wide range of aspects, aush as social, psychological, moral, feeling of happiness by inhabitants, etc. (Visokaviciene *et al.* 2011). The amount of doubtful and non-performing loans in banks highly depends on macroeconomic state in a country (Mileris 2012).

In bank-based financial systems (as it is in Lithuania), two causes of financial crises are commonly identified as the heaviest by scientists: information asymmetry and moral hazard of bank management (Frankel, Schmukler 1996; Ergungor, Thomson 2005; Mishkin 1999). To be more precise, the first mentioned factor is certainly the primary one, while moral hazard should be treated as the secondary cause, which is emerging wherever information asymmetry level in the banking sector is high.

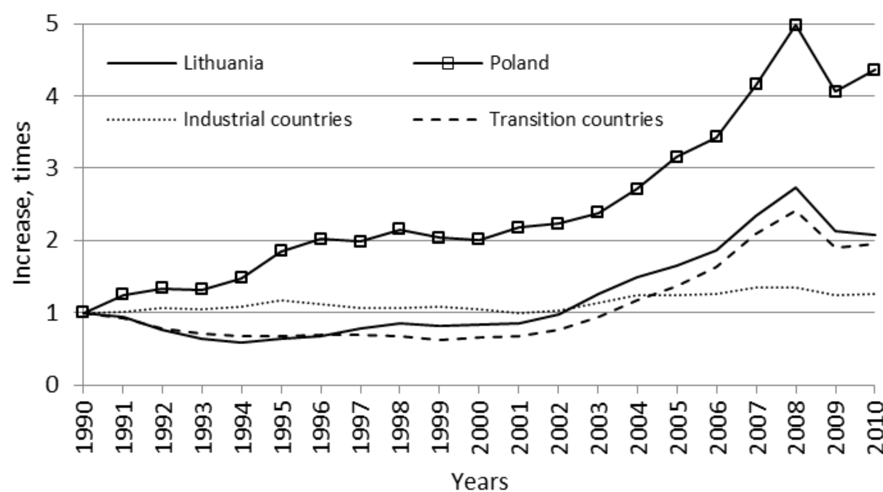

Fig. 2. Dynamics of the GDP of transition coutries, and of industrial countries (source: author's calculations, World Bank statistics)

Attempts to reduce information asymmetry being made by rating agencies do not produce desired results because of the following principles applied in methodologies of rating agencies:

- emphasise on the quantitative;
- focus on the long-term;
- application of country's ceilings independently of performance of a bank;
- reliance on few experts;
- ratings are designed for the international investors, not for the highly prevailing number of depositors or household investors.

Rating agencies' principles have the following shortcomings:

- are slow to react to market changes, are known to be worst indicators of financial crises;
- ratings prove to be vague about the exact measurement the notch of the rating, are rather nontransparent;
- informal relationship with bank managers is common;
- oligopoly of rating agencies exists;
- banks are paying to rating agencies for their ratings.

Consequently, new approaches of prompt evaluation of financial stability of commercial banks are required for the purpose of effective reducing information asymmetry in the banking sector.

Promising results in terms of increasing financial stability are obtained by employing the functional perspective approach introduced to finance by the Nobel Prize winner R. C. Merton (1995). This scientist has applied findings of sociology's approach called functionalism to finances. The choice of borrowed and applied approach is rather obvious: the major idea and goal of functionalism is stability of society, whereas the same major goal is topical in the realm of finance (Podviezko 2013).

The synergy of the functional perspective approach and of the Arrow, Debreu (1954) model of general equilibrium reveals not only the mentioned remedy of reducing information asymmetry, but also increasing competition between commercial banks in terms of financial stability (Podviezko 2013). For this purpose approaches based on multiple criteria decision-aid methods, which provide prompt quantitative, easy to comprehended results of evaluation, are the most suitable. Such methodologies are proposed and being developed (Podvezko, Podviezko 2010a,b; Ginevicius, Podviezko 2012; Ginevicius, Podvezko, Podviezko 2012).

The formulated by applying the functional perspective task of achieving financial stability by increasing competition between commercial banks now is being formulated in terms of financial stability. This approach is novel in the realm of financial stability research, where competition between commercial banks is usually understood as competition in terms of profit. Fallacy of such a prevailing approach is observed in the fact that more profitable banks could be the riskier ones.

4. Conclusions

Financial liberalisation is an integral process of economic transformation. EU transition countries are required to foster capital account liberaslisation by the Rome Treaty.

In the paper it is shown that financial liberslisation creates pre-requisites enabling financial system to make positive effect on economic growth. Nevertheless, effects of financial liberslisation are not straightforward, anticipated growth of economy is nullified by more severe and more frequent financial crises.

Analysis of positive and negative factors possibly emerging in a country after introducing financial liberslisation can help institutions, which supervise financial sector or the Government to create more effective policies depending on current economic and legal environment.

Positive effects of financial liberslisation can be achieved only in case of effective institutional reforms. Otherwise, financial liberslisation can become a rather dangerous source of instability and can cause increase of poverty.

A novel approach is suggested for increasing financial stability in bank-based financial systems, which is targeted at increasing competition among commercial banks in terms of financial stability. Such approach is suitable for such countries as Lithuania, which type of financial system is bank-based.

The task of increasing competition in terms of financial stability is proposed to be achieved by decreasing information asymmetry in the market of commercial banks by promptly communicating quantitative, easy to comprehended results of evaluation of financial stability of commercial banks.

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