ON MULTIPLE DIMENSIONS OF CRITERIA REPRESENTING FINANCIAL GLOBALISATION

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Abstract. A prevailing contemporary concept of major researchers in the field of economics suggests that financial globalisation creates positive effect on economic growth. Besides this crucial hypothesis many other related with financial liberalisation hypotheses are being tested. Financial liberalisation is an integral part of globalisation. Quantitative gauging of the level of globalisation creates opportunities for more precise identification of causes of prominence or lagging of the home country or any other country in question in comparison with its peers, and creates possibilities to analyse if the country is fully realising its economic potential. Analysis of criteria and their categories, which reflect the level of financial globalisation, is a compulsory step for any quantitative evaluation. The purpose of the study is to reveal importance of accurate evaluation of the level of financial globalisation for allowing further important research to be carried out on such prime economic processes as economic growth, corruption; income inequality; politics; financial stability; prudential policy, to provide a brief overview of the variety of existing approaches available in the literature, which attempt to quantitatively evaluate the level of financial globalisation.

Keywords: financial globalisation, economic growth, financial liberalisation, category, quantitative criteria, bank-based financial system, market-based financial system.

JEL Classification: G01; G28; H12; F15; F38; F43; F62; D31.

1. Introduction

Two historical preconditions made the topic of evaluation of the level of financial globalisation of prime importance. First, financial globalisation became a universal process rather recently, in the 1990-s. Thus, such a process is-well documented, while an opposite observation could be made that both theory and terminology are not yet established. Intense research is taking place, but there are a number of schools and approaches. Second, the topic of financial globalisation became vital after the breakup of the recent financial crisis. Major economists point out that various financial liberalisation processes, which constitute the process of financial globalisation, obstruct financial stability and deepen aftermath negative effects of crises (Kose et al. 2009). Also, majority of studies claim that financial globalisation positively effects economic growth (Podviezko 2013). Many attempts were made to quantitatively measure the level of the financial liberalisation processes. Such attempts can be treated as the first necessary step for the researchers, who attempt to find out, if financial globalisation produces negative effects on financial stability; on economic growth; if institutions may provide a synergy with the liberalising reforms thus increasing probability of economic growth; etc.

Financial globalisation is an integral process of globalisation. On the other hand, financial globalisation comprises a number of processes itself. Such a complexity can make comprehension of the topic rather vague. In addition, to be more specific now, terminology of both globalisation and financial globalisation processes is not yet established.

This results in the whole variety of different approaches to measurement of financial globalisation, and in plethora of different, often diverse, sets of criteria, which quantitatively describe and gauge the level of financial globalisation.

And the contemporary developing state of the subject is well understood. Globalisation processes commenced to expand after the end of certain landmarks of history, which happened quite recently such as the end of colonisation, the end of vitality of centralised social systems and the end of their extreme cases – dictatorships. Strategy of increasing of welfare of the people started to sub-dominate other local strategies within majority of states, which inevitably led to rationalisation of use of resources, specialisation, increased co-operation between nations, and globalisation as a consequence (Hoffmann 2002).
Lithuania as other post-Soviet countries launched to the financial globalisation process in time right after the break-up of the Soviet Union as the 1990-s are notable for global increase of financial globalisation. Global picture of dynamics of reforms towards financial liberalisation is provided in a very interesting research paper (Tressel, Detragiache 2008), in which the authors evaluated undertaken reforms in 91 countries in the period of 1974–2005. They used so-called de jure sub-criteria, 7 in total, which were comprised into a single cumulative criterion as a sum of all values of sub-criteria. Each sub-criterion can take values from 0 to 3; thus the cumulative criterion was ranging from 0 to 21. Dynamics of the value of the criterion over the period provides a clear historical vision of dynamics of financial liberalisation: sharp increase of financial liberalisation reforms in the 90-s.

In contrast, before the 1970-s most of countries pursued closed and restrictive financial policies, which were worlds away from contemporary prevailing financial globalisation policies (Shaw 1973; McKinnon 1973).

Consequently, the topic of financial globalisation became increasingly important recently. Nevertheless, yet terminology of the topic is intertwined and not fully established. The paper attempts to review different approaches to financial globalisation and to provide criteria for quantitative evaluation of the level of financial globalisation used by different authors.

Purpose of study is to reveal complexity of evaluation of financial globalisation importance of such evaluation.

Principal objectives of the study are the following. To provide a succinct description of historical landmarks, categorisation of processes of financial globalisation, outline existing approaches of the topic, to reveal importance of the topic, to highlight differences in existing terminology.

Methods employed: comparative analysis, comparative analysis, induction, deduction, synthesis.

2. Categorisation of processes of financial globalisation

Categorisation of processes of financial globalisation allows to comprehend contemporary hypotheses and research on effects of financial globalisation on financial development and economic growth in particular.

The latter example of a serious attempt to gauge financial globalisation (Abiad et al. 2008) could be used to demonstrate the variety of approaches and, more specifically, criteria of evaluation of financial globalisation used in the contemporary research. We have taken three similar studies, which evaluate the level of financial globalisation. In Table 1 comparison of sets of chosen sub-criteria

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Interest rate controls</td>
<td>Interest rate controls</td>
<td>–</td>
</tr>
<tr>
<td>Entry barriers to establish a foreign or local commercial bank</td>
<td>Entry barriers to establish a foreign or local commercial bank</td>
<td>–</td>
</tr>
<tr>
<td>Credit controls and high reserves requirements</td>
<td>Credit controls and high reserves requirements</td>
<td>–</td>
</tr>
<tr>
<td>State bank proportion in the commercial banking sector</td>
<td>State bank proportion in the commercial banking sector</td>
<td>–</td>
</tr>
<tr>
<td>Commercial bank supervision</td>
<td>Bank regulations</td>
<td>–</td>
</tr>
<tr>
<td>–</td>
<td>Constraints on capital account</td>
<td>Capital account constraints</td>
</tr>
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<td>–</td>
<td>Constraints on securities market</td>
<td>–</td>
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<td>–</td>
<td>Constraints on international transfers</td>
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</tr>
<tr>
<td>–</td>
<td>Constraints on export proceeds</td>
<td>–</td>
</tr>
<tr>
<td>–</td>
<td>Multiple foreign exchange rates</td>
<td>–</td>
</tr>
</tbody>
</table>

Notes on values of sub-criteria

- Value of each sub-criterion is assigned 1, if the condition is fulfilled; 0 if the Condition is not fulfilled. Value of each sub-criterion is assigned from 0 to 3 (3 denotes fully liberalised State; 2 – partially liberalised state; 1 – some constraints are existing; 0 – fully controlled)
of two other research papers gauging historical levels of financial liberalisation Laeven (2003) and Mody, Murshid (2002) with the ones used in Abiad et al. (2008) (located in the middle column of the Table 1), is presented.

Both terminology used in the topic and approaches in evaluation of levels of financial globalisation considerably differ, the broad categorisation of processes of financial globalisation was designed to provide a global view to the processes taking place within financial globalisation (Podviezko 2014, Table 2).

The author discerns two levels of financial liberalisation (Table 2): the international, and the domestic. Paradoxically, domestic criteria of financial liberalisation are not included into major indices of quantitative evaluation of the level of globalisation, which are listed in Section 5. Nevertheless, the following non-financial, different, sub-criteria at the domestic level can be found in such indices: Human Capital; Social & Cultural; People; etc. Financial criteria of financial liberalisation, such as legislation and supervision of both bank-based and market-based financial sub-systems are not incorporated into the indices of globalisation.

Table 2. Structure of processes of financial liberalisation (Source: Podviezko (2014))

<table>
<thead>
<tr>
<th>Input</th>
<th>Market-based financial system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic level</td>
<td>Bank-based financial system</td>
</tr>
<tr>
<td>International level</td>
<td>Capital account liberalisation</td>
</tr>
<tr>
<td></td>
<td>Current account liberalisation</td>
</tr>
<tr>
<td>Domestic level</td>
<td>Legislation</td>
</tr>
<tr>
<td></td>
<td>Supervision of the banking sector</td>
</tr>
<tr>
<td></td>
<td>Supervision of the stock market</td>
</tr>
</tbody>
</table>

The international level of financial liberalisation usually comprises such criteria as current account liberalisation, capital account liberalisation, stock market liberalisation for foreign investors, and creates opportunities for the country’s financial integration to the international financial system. At the domestic level financial liberalisation includes creation of the appropriate legislation, reforms in the banking sector and the stock market.

It is notable that an approach from a different – political – perspective also yielded a similar two-layer categorisation of processes of financial liberalisation (Burgoon et al. 2012, Table 3).

The concept of financial globalisation mainly means reducing State control over the financial sector or deregulation of the financial sector. Nevertheless, abolishment of State control is only the starting point. Remaining problems comprise the concept of the financial liberalisation, which 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). Consequently, more specific realms of investigation of financial liberalisation can be found in the literature: current account liberalisation; stock market liberalisation for foreign investors, etc.

Table 3. Sources of legitimacy of financial openness at different levels of governance (Source: Burgoon et al. 2012)

<table>
<thead>
<tr>
<th>Input legitimacy</th>
<th>Output legitimacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>International level</td>
<td>International Voter support for Non-free-market internationalisation</td>
</tr>
<tr>
<td>Domestic level</td>
<td>Δ Left government x Democracy</td>
</tr>
<tr>
<td></td>
<td>Social policy compensation (e.g. health spending)</td>
</tr>
</tbody>
</table>

3. Different approaches to gauge financial globalisation

Quinn (2003) uses a supplementary term related to financial globalisation: financial openness. The latter research is focusing primarily in capital account liberalisation as a measure of financial openness. In the paper by Arestis (2002) a clear logic was stated that a necessary but not sufficient condition for financial globalisation is financial liberalisation, while the sufficient condition is the introduction of a worldwide single currency managed by a single international monetary authority. This approach was reinforced in Pop, Valeriu (2015). We note that the latter authors expanded the concept and named sustainable development conditions as necessary for financial globalisation (economy, environment, social responsibilities) besides existence of a single currency, and quality of life tied with diminishing of inequality.

An initial approach to the categorisation of processes of financial globalisation are stated in Helleiner (1995), where its three integral processes are named: first, granting freedom to markets; second, financial crisis prevention, and third, lose or nil controls on financial movements. The list of processes of financial globalisation gradually expanded over the years. Focus on both trade liberalisation and capital account liberalisation (or opening of financial markets) as two integral processes of globalisation can
be observed in the paper by Mishkin (2009), which also suggests positive effects of globalisation on economic growth. In Campenhout and Cassimon (2012), where country risk variables were related to quality of institutional environment and effects of financial globalisation on economic growth were estimated, the following processes were named to reflect financial globalisation: capital account liberalisation; equity market liberalisation.

Baltagi et al. (2009) use two following dimensions in order to measure openness of a country: trade openness and financial openness and relate both measures to explain the pace of financial development of countries. The research is not limited to the countries with the bank-based financial system (Podviezko 2015) as they measure development of financial system using criteria, which relate both to the bank-based sub-system (private credit to GDP) and to the market-based sub-system (stock market capitalisation to GDP) of the financial system. A positive relationship between financial and economic development is often found in the literature (Deltuvaite, Sinevičienė 2014) thus making the former component important.

Some research papers concentrate specifically on measurement of capital account liberalisation as an integral part of financial globalisation (Eichengreen et al. 2011; Prasad, Rajan 2008).

4. Importance of evaluation of financial globalisation level

Plethora of studies on effects of financial globalisation on economic growth exposes the level of interest to this topic.

Financial liberalisation, a concept, 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.

The complexity of the topic is wider than terminology or variety of criteria and their quantity. There is a broad perspective of research of influence of financial liberalisation on various economic processes. A succinct overview of available directions of research of effects of financial liberalisation is presented hereafter.

- Influence of liberalisation of trade on financial liberalisation (Hauner et al. 2013; Chinn et al. 2006).
- Influence of liberalisation of trade on growth of economy (Kose et al. 2009; Razin, Rose 1992; Sachs et al. 1995).
- Effects of capital account liberalization and corruption (Kunieda et al. 2014).
- Gauging the level of financial liberalisation (Abiad et al. 2008; Abiad, Mody 2003; Laeven 2003; Mody, Murshed 2002; Kaminsky, Schmukler 2003; Demirgüç-Kunt, Detragiache 1998; Lane et al. 2007; Chinn, Ito 2007; Quinn, Toyoda 2008, Transition Reports by the IMF; World Economic Outlook by the World Bank, etc.).
- Influence of politics on financial liberalisation (Burgoon et al. 2012).
- Influence of financial liberalisation on financial stability (Podviezko 2014, 2015; Carmignani et al. 2007; Aizenman et al. 2008; Lee et al. 2016; Eichacker 2015; Hamdi, Jlassi 2014; Cubillas, González 2014; Aghion et al. 2015; Creel et al. 2015).
- Influence of financial liberalisation on prudential policy (Beju, Ciupac-Ulici 2012).
- Influence of financial liberalisation on innovation (Ang 2014).

Analysis of 441 research papers revealed full perplexity of obtained results (Bumann et al. 2013):
- only a weak effect of financial liberalisation on growth is observed;
- a broad range of additional actions are proposed to make effect of growth more predictable (fiscal, monetary policies, institutional changes focussing on regulation of financial markets);
- nevertheless, it was observed that for countries with less developed financial systems, financial liberalization has more value in terms of stimulating economic growth.

It could be observed that currently influence of financial globalisation on such prime economic processes as economic growth, corruption; income inequality; politics; financial stability; prudential policy is vaguely explained. More reliable methods
should be used along with statistical methods currently employed. Multiple criteria decision-aid methods are not only most popular and reliable for evaluation of socio-economic processes, but along with results they also provide tools for explaining causes of the effect observed (Brauers et al. 2014; Brauers et al. 2012; Ginevicius, Podviezko 2013; Krivka 2014; Podviezko 2012; Podviezko, V., Podvezko, A. 2014, 2010).

5. Financial globalisation dimension in popular available globalisation indexes

Globalisation itself is closely related to financial globalisation as various financial instruments facilitate exports and imports between countries (Wu 2012). In some studies terms of financial globalisation and financial liberalisation are used interchangeably, without making strict difference between the terms (e.g. Arin 1999). Prasad et al. (2003) explain the difference between terms of financial integration and financial globalisation. In case if integration of a country’s financial system to the world financial system is investigated, the term integration is used. On the other hand, if financial flows and relationships are investigated, the globalisation term is used.

Research papers devoted to quantitative evaluation of globalisation use different terms to describe financial globalisation component. In the description of the KOF and The Maastricht indices of globalisation the term “Economic Globalisation” is used for naming the related category of criteria. Besides the named category, the KOF index of globalisation consists of the following categories: social globalisation; and political globalisation (Dreher 2006). And The Maastricht Index of Globalisation besides Economic Globalisation category uses Political; Social & Cultural; Technological; and Environmental categories (Figge, Martens 2014). Depth index of globalization (DIG) instead of financial globalisation category uses the category “Capital”. And three other categories “Trade”; “Information”; and “People” (Ghemawat, Altman 2013). The A.T. Kearney Global Cities Index (GCI), which ranks 125 cities according to 27 metrics across five dimensions, uses “Business activity” category of criteria, which are representing Economic Globalisation. Besides this category the index uses the following categories of criteria: human capital, information exchange, cultural experience, and political engagement (Hales et al. 2014).

Categorisation of sub-criteria of popular globalisation indices is provided in Table 4.

The sub-criteria found in the economic globalisation category could be classified as is presented on Figure 1 (Žitkauskaitė 2014; World Trade Organization 2014).

As is observed in Figure 1 more trade liberalisation criteria are used for “gauging economic globalisation” compared to criteria involved in gauging financial globalisation.

Table 4. Categories of sub-criteria, used in popular indices of quantitative evaluation of the level of globalisation (Source: compiled by the author with reference to Dreher (2006); Figge, Martens (2014); Ghemawat, Altman (2013); Hales et al. (2014))

<table>
<thead>
<tr>
<th>Index</th>
<th>Economic</th>
<th>Trade</th>
<th>Social</th>
<th>Political</th>
<th>Technological</th>
<th>Information</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOF</td>
<td>x</td>
<td>x</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Maastricht</td>
<td>x</td>
<td>x</td>
<td>x³</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>DIG</td>
<td>x²</td>
<td>x</td>
<td>x³</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>A.T. Kearney</td>
<td>x⁴</td>
<td>x⁵</td>
<td>x⁶</td>
<td></td>
<td></td>
<td>x⁷</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1) Named as “Social & Cultural”;
2) Named as “Capital”;
3) Named as “People”;
4) Named as “Business activity”;
5) This category comprises two sub-categories: “Human Capital” and “Cultural Experience”;
6) Named as “Political Engagement”;
7) Named as “Information Exchange.”
Fig. 1. Categorisation of Economic Globalisation criteria.
(Source: compiled by the author with reference to Žitkauskaitė 2014)

Conclusions
We can derive principal conclusions from the paper as follows. In the topic of financial globalisation currently many dimensions are revealed; consequently, there is a broad categorisation of criteria gauging financial globalisation; as approaches considerably differ, both different incongruent terminology is used by researchers, and categorisation of criteria considerably differ. Accurate evaluation of the level of financial globalisation is crucial for allowing further important research to be carried out, which could explain often currently vaguely explained influence of financial globalisation on such prime economic processes as economic growth, corruption; income inequality; politics; financial stability; prudential policy. Investigations on globalisation in terms of economic dimension stand yet far off investigations on financial liberalisation.

Results of the study are as follows. A succinct description of historical landmarks was provided. Categorisation of processes of financial globalisation is proposed. Existing approaches of the topic were outlined. Importance of the topic was highlighted. Major differences in existing terminology were pointed out.

References


