Lender of last resort and too-big-to-fail hypothesis[1]

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Abstract
The persuasion of management of (mainly large) financial institutions that the government does not let them to fail (too-big-to-fail hypothesis) has been considered as one of the most serious reasons of recent banking (resp. financial and economic) crisis. This attitude of bank management gives rise to moral hazard as it makes banks more susceptible to risk-taking. A part of safety net protecting banks from failure is the lender of last resort. In this paper we focus on two important arguments discussed in connection with the too-big-to-fail hypothesis and lender of last resort. First, that financial institutions are very specific economic agents. Second, that there must be tailored a specific approach for the regulation and supervision over large transnational multifunctional financial conglomerates and that fine tuning of existing set of regulation instruments could prevent bankruptcies of systemically important financial institutions.

Keywords: too-big-to-fail hypothesis, lender of last resort, moral hazard, large transnational multifunctional financial conglomerates, systemically important financial institutions, regulation and supervision, financial (banking) crises, systemic risk, contagion, financial (banking) sector restructuring
JEL codes: G01, G28, L16

1. Introduction

Reasons of financial crises and regulation adequacy are discussed from many points of view. In this connection we can meet opponents of lender of last resort (LOLR) as well as supporters or even those who demand expansion of LOLR, respectively. All of them have many arguments supporting their views. The supporters of LOLR point out to particularity and vulnerability of financial industry, key position and role of financial (banking) companies in the whole economy. They recommend not only to improve but usually to enlarge functions and power of LOLR. Some of them even recommend an introduction of an international lender of last resort (ILOLR). Many others draw attention on wise and reactive interventions of the ECB and the US Federal Reserve as lenders of last resort (Larosiére, 2008, p. 48) and relatively fast recovery and stabilization of banking (financial) industry after the crisis. LOLR mitigated real impacts of financial crisis and reduced the contagion effect.

On the other side it is evident that LOLR in bank management decision process has been closely connected with too-big-to-fail (TBTF) hypothesis. Opponents of LOLR first of all point out to moral hazard and serious erosion of competition, giving some agents preferential treatment on the market. LOLR is considered to be the reason of growing frequency of systemic crisis. Just the dissatisfaction with development and solution of recent financial crisis as well as total disapproval of 2007-2009 interventions resulting in rescue of large

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financial conglomerates increased looking for a solution how to make credible the threat that next time, banks will be allowed to fail.

In this paper two key elements of TBTF hypothesis and LOLR are discussed. First, we argue that financial institutions are already not so exceptional and specific economic (financial) agents as it still and often has been asserted. Second, that existing approaches to regulation and supervision as well as perpetual fine tuning of existing rules and limits have not been able to prevent financial sector instability – therefore existing approaches to the financial (banking) sector failures must be displaced by principal structural solution. Both above mentioned elements are in close relation: restructuring of the financial (banking) industry and replacing large financial conglomerates by smaller institutions in the case of strictly regulated basic banking products supply means that large financial institutions will move closer to non-financial firms as to their character and position in the economy. They will be much more transparent and their possible failure will not be a reason of systemic risk. Deposit protection will be seriously easier and more transparent, too. In such a structure of financial system there will be no need of additional or particular government intervention or LOLR existence.

2. How much specific institutions are large transnational financial conglomerates

For many years it is discussed whether and to which extend banking is a specific industry. In most textbooks and studies we can find a chapter or at least several paragraphs explaining what those particularities are (Cecchetti-Schoentholtz, s. 389-390, Freixas-Rochet, p. 257-258). The key role of banks is usually and above all explained by the inevitability to keep liquidity and financial flows in the economy – that should be possible just because of banks. These are key reasons used by LOLR supporters justifying LOLR existence: LOLR is guarantor and prospective provider of liquidity to the financial system in the case of tensions or instability. The role of LOLR and the way of performing its policy changed over time. M. Carlson and D. Wheelock confirm (2013, p. 2) in their review of Fed's history as LOLR that the Fed "founder's conception of how the Fed would act as lender of last resort blended aspects of "banking", or credit, policy with aspects of "monetary" policy. Since Great Depression, however, Fed officials generally have drawn a sharp distinction between lender of last resort actions and monetary policy".

Despite the fact that banking still preserves some particularities (in the same way as any other industry keeps its specifics), in the course of last decades the banking industry itself as well as its position in the economy and in the financial sector, has seriously changed. The universalisation of banks and other financial institutions decreases differences among them, the dimension of liquidity and structure of liquid assets have substantially changed. The liquidity is „spread out" on a wide range of institutions and markets in which not only banks and not only financial institutions are participating. For decades very strictly regulated banking has brought itself closer to other industries, partly because of deregulation. An open space has been set for a free entry into the industry that is necessary for wider competition. On the other side any competition is seriously restricted by high concentration. Just this is a feature of financial industry that is source of TBTF problem.

Several tens of large transnational multifunctional financial conglomerates dominate the existing financial (banking) industry. But as J. Powell argues TBTF is not simply about size (2013). To end TBTF must address the causes of expectation that government will do whatever it takes to rescue that institution from failure, thus bestowing an effective risk premium subsidy. The high concentration and LOLR are also complications because in the case of large institutions failure the exit from the industry usually has serious negative economic and social impacts. J. de Larosiére, former IMF Chief, already after the financial crisis eruption at Davos Forum meditated "whether – and, if so, how – unregulated entities such as hedge funds, bank or non-bank-sponsored special vehicles ... should be regulated and subject to capital requirements” (2008, p. 48). But is the regulation, in this case the regulation of more and more types of financial institutions, solving the problem? Governor J. Powell described more than three years of TBTF reform project and new rules designed to end practice of bailing out large financial organizations with taxpayer money (2013). At the same time he recommended to thoroughly understand more intrusive reforms in case the existing reform project falters. J. Kregel (2010) argues in connection with recent financial crisis that as large banks repay their direct government support, the problem of TBTF is simply aggravated.

The fact is that the size plays an important role in economics, efficiency and profitability. Above all synergy and efficiency are presumed to justify large size. The empirical studies confirm that size growth of firms results in decrease of production costs and has many other positive consequences. The size of market itself brings advantages for large companies as well as results in positives for large as well as small financial institutions. B. Bossone a J.-K. Lee (2002) tested the *systemic scale economies* hypothesis, whereby the production efficiency of financial intermediation increases with the size of the system where it takes place. They come to the conclusion „… that intermediaries operating in systems with large markets and infrastructure have lower production costs and lower costs of risk absorption and reputation signalling than intermediaries operating in small systems“ (1, p. 38).

It is nevertheless disputable whether they are already not crossing the boundary at which economies of scale stop increasing. Neither economies of scale nor scope appear to offset the advantages of size reduction for the largest financial conglomerates. And it is disputable whether the high efficiency and profitability above all large financial conglomerates are enough strong arguments for existence of moral hazard, extremely risk behaviour of large banks management and fundamental erosion of competitive environment in financial (banking) industry. J. Kregel (2009) argues there are (at least) three separate problems associated with bank size: an inherent conflict of interest in serving the fiduciary interests of different clients, the market concentration problem that reduces the ability of market competition to ensure efficiency, and the interconnectedness problem that limits the ability of the regulatory agency to rapidly resolve an institution that is exposed to a wide range of unrelated financial institutions operating in different financial markets. Even more the management of large financial conglomerates abuses TBTF environment and forces legislators to conform rules in their benefit. Large financial conglomerates are certainly important economic and political players with contacts on legislation, regulation and supervision. Narrow linking with the political sphere creates conditions for institutionalized moral hazard.

Many studies argue TBTF problems are not considered enough in policy and praxis. M. Labonte (2013, p. 1) for instance confirms that although TBTF “has been a perennial policy issue, it was highlighted by the near-collapse of several large financial firms in 2008”. B. Shull presents (2010, p. 20-21) that no one of institutions authorizing mergers in the U.S.A. never took into account or considered TBTF problem. Up to half of 80-ies of the last century there were turned down many mergers but no one of large financial conglomerates. During the recent financial crisis many of large government supported banks have been allowed to absorb smaller banks, creating even larger banks. Mergers and acquisitions of financial institutions belong among the largest in general (Polouček, S. a kol., 2013, chapter 13). Some regulators (in the U.S.A. e.g. the governor of FRS D. K. Tarullo, 2009) even perceive TBTF problem as primary and principal for any reform of regulation.

3. Why lender of last resort is not a lasting solution of the problem

The safety net that should shield banks against bankruptcy consists besides the deposit insurance of LOLR. It is usually performed by central bank that is supplying (supplementing) liquidity to the financial institutions in the case of their troubles to get liquidity on the market. F.S. Mishkin (2007) noticed that „by lender of last resort, I mean short-term lending on good collateral to sound institutions, when financial markets temporarily seize up. I do not mean rescuing financial market participants …“. J. Sachs (1999, p. 181) argues that „… a number of arguments can be distinguished for a lender of last resort in general, although they all come to the same basic theme, which is, of course, the concept of a true liquidity crisis“. Nevertheless "a longstanding debate ... concerns how a lender of last resort should provide liquidity, and in particular whether the lender of last resort should ever lend directly to individual financial institutions (M. Carlson and D. Wheelock, 2013, p. 36).

R. Herrala (2000) focuses on LOLR as a prospective source of banking liquidity, too. He constructs a model which is an enlarged version of Holmström and Tirol model (1998). These explore a liquidity supply for firms exposed to a shock caused by lost solvency and they argue a room for moral hazard grows as the liquidity outflows. R. Herrala argues this conclusion is correct for banks, too. He points out that banks have to respond to liquidity outflow by increased monitoring of clients to save their own position. He specifies moral hazard as potential laxness during firms monitoring. J. de Larosiére points out to encouraged credit laxity stemming from lowered risk assessments, too (2008, p. 46).

There is no doubt that financial (banking) crises and their negative consequences are in close relation to liquidity troubles. To cope effectively with liquidity crises requires that economies have rapid access to sums that are sufficient to meet short-term financial obligations, e.g., debt amortisations, and avoid a major collapse in aggregate demand. Financial crisis is always joined with a credit crunch resulting in enormous restriction of credits offered to private companies. In comparison with other instruments (for instance fiscal stimulus) LOLR brings positive impacts by very fast liquidity provision. It is underlined just in connection with the last crisis that risks stemming also from the co-existence of excessive liquidity overturned very fast in the process that "practically dried out liquidity in a number of credit markets considered, most often wrongly as dangerous" (J. de Larosiére, 2008, p. 46).

The principal matter is whether financial markets are able to offer banks enough liquidity or should be supplemented by LOLR. It is always underlined that it is established to save the solvent financial institutions and that the owners must bear losses of those insolvent. The taxpayer money cannot be involved.

Many studies focus not only on justification of LOLR but on exploiting LOLR in crisis management, in prevention or mitigating crises (Ch. Goodhart and G. Illing, 2002). It is generally agreed that LOLR has a positive impact on reducing the negative impacts of crisis and helped to avoid bank panics. X. Freixas and J.-Ch. Rochet (1997, p. 208) document that several studies based on different types of analysis support this view. On the other side disputability of this positive feature of LOLR concerns an evaluation in which extension the financial crisis itself is result by LOLR existence. A free security for large multifunctional transnational financial conglomerates results in their acceptance of excess risk (moral hazard) leading as a matter of fact to bank failures, which it should prevent.

The concept of LOLR itself has many weak spots. Besides general and everywhere mentioned increase of moral hazard of large financial institutions two basic flaws are presented: banks must be able to take the advantage of the opportunity to borrow and central bank officials must be able to distinguish an illiquid from an insolvent institution (Cecchetti-Schoentholtz, p. 390-391). But it is quite difficult to judge if an illiquid institution is solvent or not (X. Freixas and J.Ch. Rochet, 1997, p. 207-208). That is the reason why the role of LOLR is closely connected to the efficient bank closure policy and, more generally, to the costs of bank failures and of the safety net.

The authorities are afraid of domino effect and systemic impact in the case of run on large financial institutions. These are reasons why large financial institution rescue is more probable. Moral hazard in large financial institutions is therefore noticeably strengthened. In such environment due to LOLR existence small banks are in huge competition disadvantage. Many real situations can be given as examples. In 2009 for instance FDIC closed 140 banks, the largest number since 1992. But there was the only one large bank (Lehman Brothers in September 2008) among them. The government support was oriented exclusively to large financial conglomerates (AIG, Citigroup, Bank of America, Bear Stearns, Fannie Mae, Freddie Mac). In Europe some of biggest recipients of state aid included Royal Bank of Scotland (RBS), ING, Fortis, Commerzbank or WestLB.

Governments generally rescue not only large financial conglomerates but other large firms, too – besides carmakers, air industry and air traffic companies, power engineering firms and so on they help non-financial conglomerates (insurance, securities industry), despite the fact these are not considered to bear any systemic risk. In this relation it is debatable what systemic risk really is and what is a systemically important institution. In reality these are TBTF institutions whose survival is in public interest because of their activities or their failure have serious influence on production, the employment, demand, export, markets and on functioning of many social as well as economic and financial relations. This is the reason why several studies were recently published trying to specify what a systemically important financial institution is. M. Labonte in his Report for the US Congress (2013) states that "financial firms are said to be TBTF when policymakers judge that their failure would cause unacceptable disruptions to the overall financial system, and they can be TBTF because of their size or interconnectedness". In the U.S.A. bank holding companies with over $50 billion in assets and other financial firms identified by the Financial Stability Oversight Council (FSOC) are considered as systemically important. Z. Komarkova, Z. Hausenblas and J. Frait (2012) focus on identification and subsequent regulation of systemically important financial institutions. There are several ways of their identification and measuring. The authors used for analysis of systemic importance in the Czech financial system the composite quantitative indicator-based approach and they ranked the 23 analysed banks in descending order from the most to the least systemically important.

The size and way of uncertainty avoidance of large firms has been discussed in an economic theory for a long time. The Galbraith-Caves hypothesis saying that uncertainty avoidance by large firms varies directly with the degree of market power that these firms possess is mentioned very often, too. It also was tested many times (Edwards-Heggestad, 1973, p. 456). In 70-ies the view prevailed that large firms are run by more risk-averse managers. Nevertheless some economists argue that large firms may simply be able to take advantage of more favourable market opportunities (Edwards-Heggestad, 1973, p. 470).

4. International lender of last resort

Already at the beginning of this century Ch. Goodhart a H. Huang (2000) gave several reasons for the international lender of last resort (ILOLR) existence. They referred (considering flexibility, possibility of contagion and vulnerability of banking sector) to limited chances of individual central banks to influence and ensure liquidity for large transnational financial conglomerates in financial and banking crises. The support is demanding not only huge financial reserves, but transnational (international) proceeding as most countries are open economies. Although central banks are able to get liquidity on international financial markets, in such a case the risk of contagion among particular countries exist. According to their view the establishment of ILOLR would have positive impact on international liquidity arrangement and reduction of international contagion. As variables there are the moral hazard and contagion risk in ILOLR model they create. They focus on an inter-bank market (basically liquidity) which collapse (according to their view) would start run on the whole banking (financial) industry.

Many transnational and international institutions are interested in being established as ILOLR. The IMF has certainly a very specific position among them. The IMF staff understandably points out to insufficient coordination of activities of particular governments and international institutions and their poor authorization to take powerful decisions. Of course the IMF is supporting views of those economists and politicians which promise more stable economies based on wider government and transnational interventions, preferably performed by the IMF. The insufficient liquidity and reserves of individual countries could be boosted by the IMF sources in case of a global crisis. The IMF could be an institution managing such reserves.

After the crisis just ILOLR should be result of cooperation of individual countries and regions as to the IMF. Recent financial crisis should clearly and unambiguously demonstrate that existing rules are too leaky and the sophisticated system of regulation and supervision is ineffective against this type of crises. Recent financial crisis not only resulted in wave of serious intervention measures in many countries and financial industry, but bolstered intentions of many governments to strengthen and precise regulation on national as well as transnational levels. A manifest truth is that despite of all effort to cooperate internationally an individual countries often took various and contrary decisions even in the EU area (Polouček, S., 2011, p. 70-114). The national regulators and supervisors have the final word in regulation and supervision in particular countries. Powerfully disputing politicians and governments have serious argument for their approach – regulation and support are financed by local sources, from budgets of individual countries.

According to the IMF several large emerging markets have accumulated non-proportional amount of monetary reserves in their effort to back their financial systems. This helped to global instability by increasing international imbalances and shifted focus from domestic demand to an export-oriented growth. As to the IMF representatives the IMF has the potential to be an effective and responsible ILOLR, nevertheless to be charged by such activity needs that international financial institutions are quickly endowed with considerably more firepower to help infected financial institutions and economies. The financial industry should contribute to cover systemic risks (to cover this type of insurance) because in this industry the essential part of systemic risk originates.

If we accept the idea of ILOLR existence, it would be evidently backed by comparatively higher liquid reserves than particular countries (individual LOLR) are able to arrange. But where this quantitative growth ends, where are its limits? The robustness is not solving the principal drawbacks of LOLR itself at all.

5. Restructuring of financial (banking) sector is the solution

The considerations and proposals of how to reduce systemic risk in the world economy is, as a matter of principle, possible to restrict to the problem of how to limit real economic, financial and vicariously also political and social power of large institutions in situation they are (they are becoming) systematically important. In most cases we talk about large transnational multifunctional corporations, above all about limited number of transnational multifunctional financial conglomerates, in which run on deposits and systemic collapse threats if depositors make decision to withdraw their money. The logical and simple thought is enough for a clear conclusion that no systemic collapses of financial institutions could happen if such institutions do not exist or do not have possibility to perform activities allowing run on them. If they exist than a principal question is if their existence will be benefit to society and economy or if their existence is necessary. The question and the solution are evidently not trivial and the answer is never completely definite. Nevertheless we can meet stronger and stronger attitude attacking large financial multifunctional conglomerates and calling their social and economic contributions into question for a long time and again very strongly after the recent financial crisis.

In several countries in media the steps of politicians were emphasized aimed at reduction of the remuneration of managers in the big financial institutions. When governments owned stakes in banks, decisions on pay were directly theirs but investments banks (Goldman Sachs) or firms making losses for shareholders (Citigroup and Bank of America) paid big bonuses (partly from subsidies) a year after they were saved. Now, after banks repaid their direct government support, these institutions are private enterprises in the industry which is very dynamic and innovative. So this bubble, similarly as the financial bubbles, flattened very soon. Despite the fact that for several years opposition is quite strong given the number of high-paying firms bailed out during the crisis. One of mentioned reasons is that large bonuses encouraged bank executives to take excessive risks, contributing greatly to the financial crisis. On the other hand it is also advertised that in some recent government rescues, management has been replaced; in others, it has not (M. Labonte, 2013, p. 6). But firms saved despite of persistently inefficient allocation of capital would not be allowed to continue making bad decisions in the future, with old management. Anyway the given steps of politicians are relatively significant, underlining that good results of banks soon after the crisis are much more results of monetary policy and central banks interventions than good management of large banks. They confirm that perhaps banks lost the support and favour of politicians and governments for a time being. The discussion concerning remuneration and bonuses in the financial sector definitely contributed to this change.

Doubts are cast upon regulation approach pushed forward by BIS and by Basel Committee, as well as by most central banks. The system of regulation stemming from indicators based on deposits, capital limits, and/or liquidity requirements, is moreover too static. Some economists (É. Tymoigne, 2009) see the fundamental weakness of the current system of regulation in the fact it is built on the capital adequacy, while in the period of crisis the expected and actual cash flows are decisive. Their regulation requires holding the Ponzi process back (Ponzi pyramid process) which to É. Tymoigne is a situation when servicing of a particular extent of unpaid debts requires increasing number of re-financing operations and/or assets liquidation with growing prices. Analogically, J. Kregel (2009) points out that the bank regulation was designed to keep banks away from run but this system appears absolutely useless in liquidity crisis. Despite the fact that the Federal Reserve responded more aggressively when it perceived threats to financial stability and ultimately to economic activity over the subsequent decades, as M. Carlson and D. Wheelock (2013) confirm in their overview of responses of the Federal Reserve to financial crises over the past 100 years. J. Sachs (1999, p. 187) argues that in terms “of preventing financial panics, I think we do very, very poorly ... I would give very low marks to the current system”.

In the U.S. Administration contemplations appeared how to reach an easier possibility to dismember systemically important firms in a crisis. This should create the environment in which the collapse relates only to a particular part of large financial conglomerate and affects the shareholders. A process called *living wills* practically means death panel which would force financial conglomerates and regulators to organise the basic split. Nevertheless it is clear that *living wills* tries to solve consequences, not reasons. At the same time *living wills* process cannot resolve moral hazard. The recent financial crisis confirms these considerations. Some parts of large financial conglomerates were sold in Europe, as well as in the USA. This happened mainly as result of rescue plans of LOLR and government participation in large financial conglomerates restructuring. In the U.S.A. there was the only one biggish dismemberment during the crisis that of Washington Mutual (M. Labonte, 2013, p. 49-51).

Some of European banks were walloped by Europe’s competition commissioner Neelie Kroes while national regulators discuss more or less national impacts and stand usually behind national financial conglomerates. EU is demanding these banks shrink their balance sheets, partly as the price for EU approval of their bail-outs. That is why the ING sold its profitable insurance unit while in Britain the RBS and Lloyds Banking Group (LBG) were forced to sell branches and customers – LBG got rid of at least 600 branches and its online business, Intelligent Finance; RBS had to shed over 300 branches, almost all of them in England. But the changes are on a smallish scale and over a longish period (RBS and LBG got four years to divest the businesses). Banking in Britain remains highly concentrated and we can hardly expect higher competition. ₤ 20 bil. of capital had been injected into RBS only in 2008 and ₤17 bil. into LBG, resulting in government stakes of 70 % and 43 % respectively.

The high concentration in financial industry has again been increasing in all industrial countries after the crisis. As the next cycle continues, the scale of the problem is getting bigger. If each cycle requires greater and greater public intervention, we will surely eventually collapse. That is why a debate in academic forums is not against containing TBTF problems by "limiting further growth through restrictions on specific activities, revisions of bank merger policy, and possibly divestiture to reduce concentration" (B. Shull, 2010).

From this perspective it would be great to have a financial sector composed of institutions which would not have a chance to limit competition and which, in case of a possible failure, would not endanger the whole economy as the present global financial conglomerates do. Then it would be possible to let such institutions fail. Smaller and thus more transparent depository institutions would certainly be an ultimate solution of TBTF problem.

Conclusion

There are many different views on reasons of recent economic and financial crisis, different recommendations to solve it and various evaluations of forms of government interventions. First of all there are disputes on long-term systemic measures that should to forestall, resp. to prevent financial crises or minimize their consequences. There are many studies coming out of absolutely opposite philosophical and methodological approaches. The basic difference is if they argue that a long-term extension, deepening and tightening of regulation and supervision is the way how to forestall or at least to prevent crises, or not. Among supporters of regulation there is a wide agreement that macroprudential policy is needed to limit systemic risk. But there has been very little detail about how it might work.

We argue that just the recent financial crisis has unambiguously confirmed doubts and controversy of any successful regulation at all or a stricter and more precise regulation respectively. Even more, as M. Labonte (2013, p. 33) confirms "the rapid shift from market discipline to government assistance during the crisis undermines the future credibility of the pre-crisis policy approach". Recent financial crisis also demonstrated the controversy of one of the basic pillars of banking regulation and supervision – the LOLR. This appeared (as a part of the whole system of regulation and supervision based on set of indicators or limits) as a very defective prevention of bank failures and bank runs. Even more, we argue that bank losses would become even more probable and the financial system more fragile than would be in the case without LOLR. In the long run firms expect that failure will be prevented, so they have an incentive to behave in a way that makes it more likely they will fail. Firms know that policymakers face short-term incentives to provide government assistance in times of crisis, then a market discipline promise would not prevent moral hazard.

A principal solution of TBTF problem certainly rests in smaller and thus more transparent depository institutions. Let (if necessary) financial conglomerates speculate on financial markets with money that do not need any safety net and do not cause run on banks. LOLR must as a matter of fact protect small depositors. But vast majority of small depositors do not need for their banking services and activities the large global multifunctional financial conglomerates. They do not need complicated financial instruments in financial markets and it is not in their interest that their deposits are guarantor of these instruments or that these instruments are financed by their deposits. They do not need big credits offered in large financial institutions. Substantially smaller financial (banking) institutions offering products used by small depositors that are not TBTF would be much more suitable for small clients than large non-transparent global financial multifunctional conglomerates.

It is the right of public to demand the acceptable structure of financial (banking) industry or to determine at which institutions (and under which conditions) it is prepared to insure deposits. If the stability of financial industry, that is the financial industry without jeopardy of bank runs, means the financial industry where deposits of small clients are the highest priority of regulation and the precondition of stability in the society, the corresponding restrictions on selected activities or transparent limits set for institutions licensed to accept deposits (for instance as the amount of assets or the amount of accepted deposits or granted credits) would be enough restrictive arrangement to obstruct the establishment of large global multifunctional financial conglomerates. Regulation and supervision could be adequate to this type and size of financial institutions. And absolutely different could be regulation and supervision of large multifunctional financial conglomerates. As their activities are not connected with small deposits the existence of LOLR is not necessary and moral hazard of management must be evaluated by owners and investors (investment funds, insurance companies, non-bank companies and other financial companies and households demanding investment services and products). They take responsibility for their investments, they accept risk and they bear potential losses. And they demand products offered on financial markets. As to me such arrangement would be uncomplicated and more transparent than for instance higher capital adequacy or/and higher deposit insurance. Higher limits could be finally considered as costs paid to the government for offering government safeguarding as TBTF to large institutions (Shull, p. 24). Even more such measure could be understood by banks clients as these banks are more secure and to handicap small banks this way.

The support of the above recommended financial sector structure evidently represents one of the possibilities of ridding large banks and big global multifunctional financial institutions of their privileged position (or substantially limiting it) and a way of boosting competition among financial institutions. Making conditions for competition and constituting such financial sector structure should be paralleled with an appropriate system of regulation and supervision on the national and EU levels as well as in a broader international context. It means to confront the moral hazard or TBTF problem consistently as they are protected by these institutions. What is inevitable, too, is to create generally less favourable conditions for concentration and centralization of financial institutions.

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