INTERNATIONAL STANDARDS OF SUSTAINABLE DEVELOPMENT OF THE BANKING SECTOR

Summary
Ensuring financial sustainability of the banking sector is connected with effective system development of crisis management and regulation at the micro-, macro- and mega-levels. The aim is to systematize the basic concepts of the provision of anti-crisis financial sustainability of banking systems in accordance with international standards. The main reasons for the development of crisis management systems for ensuring sustainable development of the banking sector are: the extreme complexity of the mechanism of the international banking system and the use of a significant number of new financial instruments; variety of operations and the movement rate of financial capital; financial globalization and integration, that enhance the effects of systemic risks on the process of extrapolation from the banking sector to capital and derivative markets; the availability of information asymmetry in the financial market; the process of introducing common standards in the field of bank management; improving the management of banking activities, particularly anti-crisis management, based on the harmonization of international and national regulatory systems. It was outlined the purpose of crisis management of financial stability of the banking sector system, which is to recognize the full extent of the impact of the crisis factors; to identify ways and methods of crisis management, measures to overcome future crisis with the least losses. The levels of crisis management of financial stability of the banking sector are: mega-level (international regulators), macro-level (national regulators) and micro-level (credit institutions). The conclusion is that the transformation of international standards for providing sustainable development of the banking sector contributes to the recognition of the scale of the impact of the
crisis factors on the solvency, liquidity and capital adequacy of banks; there were identified preventive measures to avoid crisis situations, crisis management techniques and measures to overcome the threat of a crisis with the least losses for the banking sector.

Introduction

Ensuring financial stability of the banking sector is connected with development of an effective system of crisis management and control at the micro-, macro- and mega-levels. The world central banks are responsible for the implementation of an effective monetary and credit policy, which implies the application of effective anti-crisis regulatory instruments affecting the financial stability of the banking system.

Assuming that the crisis management at the mega-level is associated with the development and transformation of international standards of banking business, besides the central banks, other state structures should be involved in these activities which have the authority to do in this sphere.


But issues of the formation of anti-crisis systems relating to the financial stability of the banking sector remain unresolved both in global and national economies. The main reasons of these issues are:

- the extreme complexity of the mechanism of the international banking system and the use of a significant number of new financial instruments;
- variety of operations and the movement rate of financial capital that increases the banking risks and the uncertainty of the impact of their implementation;
- financial globalization and integration, reinforcing the impact of systemic risks on the process of extrapolation from the banking sector to capital markets and derivatives markets;
- availability of information asymmetry on the financial market, which requires improving the explication of information processes and ensuring transparency through the use of macro-prudential indicators that reflect the
functioning of the interbank money market, repo markets, shares, bonds, derivative financial instruments;

– process of introducing common standards in sphere of bank management;

– improving supervision over the banking activities (particularly in the conditions of crisis), based on harmonization of international and national regulatory systems;

– providing technical compatibility of infrastructure, transparent price policy for the appropriate banking and financial services [9,10].

The aim of the work is to systematize the basic concepts of the provision of anti-crisis financial sustainability of banking systems in accordance with international standards.

Part 1. Formation of the principles of anti-crisis financial stability of banks management

Formation of the anti-crisis principles of financial sustainability of the banking system requires taking into account the factors which should be considered at the mega, macro and micro levels: mega-level factors (global financial imbalances, the cyclical economic development, the problem of ensuring international financial stability and liquidity); macro-level factors (disproportions in the financial market development, the formation and spread processes of systemic risk, disintermediation, financial innovations and communications, information asymmetry on the financial market); macro-level factors (systemic nature of the financial banking instability).

The purpose of crisis management of financial stability of the banking sector system is to recognize the full extent of the impact of the crisis factors; to identify ways and methods of crisis management, measures to overcome future crisis with the least losses (table 1).

There are a lot of organizations engaged in improving the regulation and supervision over financial institutions in the international area (table 2).

One of the main instruments of anti-recession regulation of financial stability in banking sector is increase of requirements to the capital of financial institutions not only depending on quality of their assets, but also the size of the company, its structure and a business model.
<table>
<thead>
<tr>
<th>Elements of level system</th>
<th>Mega-level the leading system</th>
<th>Macro-level the leading and led system</th>
<th>Micro-level the led system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing the realization process</td>
<td>stress testing; macro-prudential regulation; forecasting, corrective measures</td>
<td>monitoring, methodical approaches to the assessment and formation of financial stability reports; corrective measures</td>
<td>choice of management strategy, development and implementation of anti-crisis programs for financial stability</td>
</tr>
<tr>
<td>Agents of management</td>
<td>international regulators</td>
<td>internal system regulators</td>
<td>banks</td>
</tr>
<tr>
<td>The object of influence</td>
<td>destabilizing external environment factors</td>
<td>the formation and spread processes of systemic risk</td>
<td>internal banking risks</td>
</tr>
<tr>
<td>The aim of influence</td>
<td>recognizing the full extent of the impact of the crisis factors; identifying ways of anti-crisis regulation and levelling crisis leverages</td>
<td>timely identification and minimization of crisis factors</td>
<td>timely identification and minimization of crisis factors</td>
</tr>
<tr>
<td>Instruments of influence</td>
<td>standardization and unification of the anti-crisis laws around the world; the development of financial stability indicators; a common system of financial reporting standards and transparency of banking activities</td>
<td>the implementation of preventive measures over the bank supervision; early diagnostics of the bank financial problems; improvement of banks and deposit insurance system; setting standards of banking activity, taking into account the specifics of state</td>
<td>stress testing; establishing internal limits and regulations; reorganization of the banks on their own initiative; special measures: benchmarking, outsourcing</td>
</tr>
<tr>
<td>Anticrisis regulation at the international and regional levels</td>
<td>Institutions</td>
<td>Instruments</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>--------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td><em>International regulatory organizations:</em></td>
<td></td>
<td>- standardization and unification of anti-crisis legislation around the world;</td>
<td></td>
</tr>
<tr>
<td>- International Monetary Fund;</td>
<td></td>
<td>- the development of financial stability indicators;</td>
<td></td>
</tr>
<tr>
<td>- The World Bank;</td>
<td></td>
<td>- the allocation of general standards of financial stability in banking sector;</td>
<td></td>
</tr>
<tr>
<td>- Basel Committee on Banking Supervision;</td>
<td></td>
<td>- the financial, informational and professional assistance during the financial crisis.</td>
<td></td>
</tr>
<tr>
<td>- Financial Stability Board;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The United Nations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Regional regulatory organizations:</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- regional development banks;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- EU regulators;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- multilateral regional organizations;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Forum of Banking Supervisors SEANSA;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- GCC;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Caribbean Group;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Arabic Committee.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anticrisis regulation at the national level</th>
<th>Institutions</th>
<th>Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Central banks and national regulators:</em></td>
<td></td>
<td>- the implementation of preventive measures over the bank supervision;</td>
</tr>
<tr>
<td>- Federal Reserve System (USA);</td>
<td></td>
<td>- early diagnostics of the bank financial problems;</td>
</tr>
<tr>
<td>- Office of the Superintendent of Financial Institutions (Canada);</td>
<td></td>
<td>- cooperation with the «problem» banks;</td>
</tr>
<tr>
<td>- Financial Market Authority (Austria, the Netherlands);</td>
<td></td>
<td>- improvement of banks (provision of additional financial resources, changes in the organizational bank structure, the personnel policy optimization);</td>
</tr>
<tr>
<td>- Financial Supervisory/Services Authority (Denmark, Estonia, Hungary, Sweden);</td>
<td></td>
<td>- the formation of a deposit insurance system;</td>
</tr>
<tr>
<td>- Financial and Capital Market Commission (Latvia);</td>
<td></td>
<td>- setting standards of banking activity</td>
</tr>
<tr>
<td>- Financial Sector Supervisory Commission (Luxembourg);</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Financial Service Centre (Malta);</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Kreditinnsyn (Norway);</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The Interministerial Committee for Credit and Savings (Italy);</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>National megaregulators:</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Central Bank of Ireland (Ireland);</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Banque de France, Prudential Control Authority (France);</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bank of Greece Capital Market Commission (Greece);</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bank of Lithuania (Lithuania).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
At the end of 2010 the Basel committee on bank supervision has published the document “Basel III” in which the directions for increase of stability of banks and banking systems are defined [13]. “Basel III”, as well as “Basel II”, includes structure of three basis and makes changes in structure of the basic (the first level) and additional (the second level) bank capital. We will note that necessity of creation of opportunities for counteraction to possible negative processes and systemic bank crises is the reason for adoption of this document.

At the beginning of 2013 the Basel committee on bank supervision declared transfer of terms of introduction of the determined standards of «Basel III» from 2015 to 2019. Nongovernmental regulatory institutes recognized that credit institutions need more time for creation of reserves to meet the requirements of the introduced standards. In particular, full introduction of the rule on the indicator of short-term liquidity is postponed until 2019 (Liquidity Coverage Ratio, LCR).

The rule on LCR has to provide a sufficient stock of liquidity so that banks could endure short-term crisis, including sharp outflow of deposits or sudden inaccessibility of credits. However it can limit bank crediting and reduce profit from bank activity.

One more concession from Basel committee is weakening of the requirement to bank assets. In particular, it is authorized to banks to include less reliable tools in the structure of assets, including, mortgage securities, shares and bonds of the small companies [14].

**Part 2. Characteristics of international standards to ensure the anti-crisis financial stability of banks**

Innovation of “Basel III” is recapitalization which has to take place till 2019 and during which the sum of fixed bank capital has to increase almost three times (table 3).

Institutes of financial regulation of the European Union have defined that in case of the next bank crisis, it will be authorized to banks to use since 2016 money from their customers accounts which exceed 100 thousand euros. Creation of the all-European fund, contributions to which will be done by financial institutions, [15, p. 21] will become one more instrument of fight against consequences of possible imbalances in banking development.
Table 3
Comparative table of minimum capital requirements under “Basel II” and “Basel III” [6, p. 16]

<table>
<thead>
<tr>
<th>№</th>
<th>The indicator (as a percentage of risk-weighted assets)</th>
<th>Basel II</th>
<th>Basel III years</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Core Tier 1 Capital</td>
<td>3,5</td>
<td>4</td>
</tr>
<tr>
<td>II</td>
<td>Tier 1 Capital</td>
<td>4,5</td>
<td>5,5</td>
</tr>
<tr>
<td>III</td>
<td>Conservation Buffer</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IV</td>
<td>Total Capital</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>V</td>
<td>Result (II + III)</td>
<td>8,625</td>
<td>9,25</td>
</tr>
<tr>
<td>VI</td>
<td>Countercyclical reserve buffer</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VII</td>
<td>Result (V + VI)</td>
<td>9,25</td>
<td>10,5</td>
</tr>
</tbody>
</table>

Capitalization of banks will entail rise in price for services in the banking market, first of all, for crediting. In its turn, it will affect a possibility of real sector to receive loans from the sources of financing. According to the Organization for Economic Cooperation and Development, in connection with the introduction of the international standards of «Basel III» decline of growth rates of world GDP is possible within 0,05 – 0,15% [16]. Such consequences will test, most likely, the countries with bank-centric type of financial mediation, where the role of banks in the financial market is rather considerable; mainly these are countries of Europe, CIS. As it is market-focused model of financial mediation which is characteristic for the USA, where bank activity is a little limited (in the total amount of assets of financial intermediaries in the USA assets of banks make about 27%) changes won’t be so perceptible.

As the main advantages of Basel III it is possible to consider: improvement of quality, a harmony and transparency of bank capital on condition of strict requirements application to financial instruments entering its structure, in particular, the capital of the first level; management of risk through minimization of requirements to operations with derivatives; rationing of an indicator of leverage; reduction of pro-cyclic and introduction of the countercyclical reserves of the capital directed to covering losses in future; formation of approaches to an assessment and management of systemic risk (table 4).
### Status of implementing of Basel 3 in different countries in November 2015 [17]

<table>
<thead>
<tr>
<th>Country</th>
<th>Requirements</th>
<th>Degree of realization</th>
<th>Published date of realization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>Risk-based capital LCR</td>
<td>Realized Planning</td>
<td>March 2013, December 2016</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Risk-based capital LCR</td>
<td>Realized Planning</td>
<td>June 2013, June 2017</td>
</tr>
<tr>
<td>China</td>
<td>Risk-based capital LCR</td>
<td>Realized Planning</td>
<td>September 2017, June 2017</td>
</tr>
<tr>
<td>Canada</td>
<td>Risk-based capital LCR</td>
<td>Realized Planning</td>
<td>June 2014, September 2017</td>
</tr>
<tr>
<td>The USA</td>
<td>Risk-based capital LCR</td>
<td>Realized Planning</td>
<td>June 2014, September 2017</td>
</tr>
<tr>
<td>Russia</td>
<td>Risk-based capital LCR</td>
<td>In process</td>
<td>December 2015</td>
</tr>
<tr>
<td>Turkey</td>
<td>Risk-based capital LCR</td>
<td>In process</td>
<td>March 2016</td>
</tr>
<tr>
<td>Argentina</td>
<td>Risk-based capital LCR</td>
<td>In process</td>
<td>June 2016</td>
</tr>
<tr>
<td>Korea</td>
<td>Risk-based capital LCR</td>
<td>In process</td>
<td>June 2016</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Risk-based capital LCR</td>
<td>In process</td>
<td>September 2016</td>
</tr>
</tbody>
</table>

*Risk-based capital* - risk-oriented approach to capital; *LCR** – liquidity requirement.

Impact of Basel III requirements is a manifestation primarily on multinational banks (table 5).
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank of America</td>
<td>USA</td>
<td>195.3</td>
<td></td>
<td>Bank of America</td>
<td>USA</td>
<td>160.4</td>
<td>Industrial and Commercial Bank of China</td>
<td>China</td>
<td>248.6</td>
</tr>
<tr>
<td>HSBC</td>
<td>United Kingdom</td>
<td>176.8</td>
<td></td>
<td>J.P. Morgan &amp; Co.</td>
<td>USA</td>
<td>133.1</td>
<td>China Construction Bank</td>
<td>China</td>
<td>202.1</td>
</tr>
<tr>
<td>Citigroup</td>
<td>USA</td>
<td>140.7</td>
<td></td>
<td>Citigroup</td>
<td>USA</td>
<td>127.1</td>
<td>J.P. Morgan &amp; Co.</td>
<td>USA</td>
<td>186.6</td>
</tr>
<tr>
<td>Royal Bank of Scotland Group</td>
<td>United Kingdom</td>
<td>101.8</td>
<td></td>
<td>Royal Bank of Scotland Group</td>
<td>United Kingdom</td>
<td>123.9</td>
<td>Bank of China</td>
<td>China</td>
<td>184.2</td>
</tr>
<tr>
<td>Credit Agricole</td>
<td>France</td>
<td>81.7</td>
<td></td>
<td>HSBC</td>
<td>United Kingdom</td>
<td>122.2</td>
<td>Bank of America</td>
<td>USA</td>
<td>169</td>
</tr>
<tr>
<td>UBS</td>
<td>Switzerland</td>
<td>70.9</td>
<td></td>
<td>BNP Paribas</td>
<td>France</td>
<td>90.6</td>
<td>Agricultural Bank of China</td>
<td>China</td>
<td>167.7</td>
</tr>
<tr>
<td>BNP Paribas</td>
<td>France</td>
<td>58.7</td>
<td></td>
<td>Barclays</td>
<td>United Kingdom</td>
<td>80.6</td>
<td>Citigroup</td>
<td>USA</td>
<td>166.5</td>
</tr>
<tr>
<td>Barclays</td>
<td>United Kingdom</td>
<td>54.3</td>
<td></td>
<td>Mitsubishi UFJ</td>
<td>Japan</td>
<td>77.2</td>
<td>Wells Fargo &amp; Co.</td>
<td>USA</td>
<td>154.7</td>
</tr>
<tr>
<td>Deutsche Bank</td>
<td>Germany</td>
<td>43.3</td>
<td></td>
<td>Credit Agricole</td>
<td>France</td>
<td>75.5</td>
<td>HSBC Holdings</td>
<td>United Kingdom</td>
<td>152.7</td>
</tr>
<tr>
<td>Societe Generale</td>
<td>France</td>
<td>42.2</td>
<td></td>
<td>Deutsche Bank</td>
<td>Germany</td>
<td>49.6</td>
<td>Mitsubishi UFJ</td>
<td>Japan</td>
<td>117.6</td>
</tr>
</tbody>
</table>
Bank of China is led by ten largest banks in the world. The profitability of the banking of China business has a level higher than in the US and Eurozone. Chinese banks occupy first place in the ranking of Top 1000 World Banks first time. The activities of multinational banks are risky and therefore it can be analyzed, which banks in 2015 were robust. The study analyzed the performance of 500 largest banks in the world, as well as their long-term foreign currency rating according rating agencies Fitch, S & P's and Moody's (table 6).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KfW</td>
<td>Germany</td>
<td>AAA</td>
<td>Aaa</td>
<td>AAA</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>Zürcher Kantonalbank</td>
<td>Switzerland</td>
<td>AAA</td>
<td>Aaa</td>
<td>AAA</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Landwirtschaftliche Rentenbank</td>
<td>Germany</td>
<td>AAA</td>
<td>Aaa</td>
<td>AAA</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>L-Bank</td>
<td>Germany</td>
<td>AAA</td>
<td>Aaa</td>
<td>AA+</td>
<td>29</td>
</tr>
<tr>
<td>5</td>
<td>Raiffeisen Bank International</td>
<td>Austria</td>
<td>AAA</td>
<td>Aaa</td>
<td>AA+</td>
<td>29</td>
</tr>
<tr>
<td>6</td>
<td>Nederlandsche Waterschapsbank</td>
<td>Netherlands</td>
<td>X</td>
<td>Aaa</td>
<td>AA+</td>
<td>27</td>
</tr>
<tr>
<td>7</td>
<td>NRW.BAN</td>
<td>Germany</td>
<td>AAA</td>
<td>Aa1</td>
<td>AA-</td>
<td>26</td>
</tr>
<tr>
<td>8</td>
<td>BNP Paribas</td>
<td>France</td>
<td>AA+</td>
<td>Aa1</td>
<td>AA</td>
<td>26</td>
</tr>
<tr>
<td>9</td>
<td>TD Bank Group</td>
<td>Canada</td>
<td>AA-</td>
<td>Aa1</td>
<td>AA-</td>
<td>23</td>
</tr>
<tr>
<td>10</td>
<td>CityGroup</td>
<td>USA</td>
<td>AA-</td>
<td>Aa1</td>
<td>AA-</td>
<td>23</td>
</tr>
</tbody>
</table>

World's safest banks are mostly banks from Europe. There is a risk rating of companies and organizations. Able to create systemic risks have been recognized by banks Goldman Sachs, JPMorgan Chase, Morgan Stanley, Bank of America, Merrill Lynch, Citigroup, UBS, Credit Suisse, HSBC, Barclays, Royal Bank of Scotland, Deutsche Bank, Societe Generale. They are subject to international supervision of regulators, to develop action plans in case of personal bankruptcy. The scale of the bank is not the main indicator of potential risk during the financial crisis, so regulators should be careful implementing rules aimed at the scale of the bank.
### Requirements LCR [20, p. 224-229]

<table>
<thead>
<tr>
<th>Description of key changes</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The 30-day rate Liquidity Coverage Ratio (LCR) aimed at providing short-term resilience to potential liquidity gaps. LCR determining a sufficient number of high-quality liquid assets of international banks, they are able to withstand a stress scenario funding, defined by regulatory authorities.</td>
<td>• The risk of withdrawal of deposits should were lowered, which in turn will improve the stability of the financial sector.</td>
</tr>
<tr>
<td>• The value of high-quality liquid assets compared with expected cash expenditures during the 30-day stress scenario. Expected cash outflows must be covered liquid, high-quality assets.</td>
<td>• LCR introduction requires banks to maintain more liquid low-earning assets for to cover the requirements of liquidity, which will the negative impact on profitability.</td>
</tr>
<tr>
<td>• Assets have weight depending on liquidity, which range from 100% to government bonds and cash, 0-50% for corporate bonds.</td>
<td>• Banks change their funding profile, which will lead to increased demand for long-term financing. Adding such financing may be not available from institutional investors. Investors are trying to reduce investments in the financial sector.</td>
</tr>
<tr>
<td></td>
<td>• Interpretation of “right” run-off rates national regulators can lead to many discussions.</td>
</tr>
</tbody>
</table>

### Increasing sustainable long-term funding (NSFR) [20, p. 224-229]

<table>
<thead>
<tr>
<th>Description of key changes</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>• NSFR compared to available sources of funding financing needs of the balance sheet assets.</td>
<td>• NSFR encourages banks to reduce their dependence on short-term funding and increase the stability of mixed financing.</td>
</tr>
<tr>
<td>• It is available stable funding.</td>
<td>• Banks will need to increase the proportion of interbank deposits and corporate with a term of more than 1 year.</td>
</tr>
<tr>
<td>• Financing amounts are based on weighted factors that reflect the «stability» of available funding and duration of the asset.</td>
<td>• Most banks will be difficult to increase the share of interbank deposits with a term of more than 1 year, which will lead to higher financing costs.</td>
</tr>
<tr>
<td>• Weighing factors are characteristics for assets: between 0% and 5% in cash and government bonds, 65% for mortgage loans, 85% for retail loans and 100% for other assets.</td>
<td>• Management NSFR by changing the composition of assets will increase the share till short-term assets and reduced profitability.</td>
</tr>
<tr>
<td>• Affordable sustainable funding obligations determined by weighing factors: 100% of Tier 1 capital, 90% of retail deposits and 50% for secured funding. Funding from the European Central Bank weighted at 0%.</td>
<td>• Stronger banks with high NSFR will be able to influence then market pricing of assets. The competitiveness of weaker banks decrease</td>
</tr>
</tbody>
</table>
Basel III sets new requirements for bank liquidity. Short-term liquidity (LCR) were calculated as the ratio of the value of liquid assets and the net value of the expected cash outflow on all bank transactions over the next 30 calendar days from the settlement date LCR. Table 6 will describe key changes and the impact of higher short-term liquidity coverage.

Net Stable Funding Ratio designed to increase flexibility in the long term by creating additional incentives for banks. Monitoring liquidity carried out terms agreed the concentration of funding and liquidity is not encumbered assets (table 8).

Part 3. Place of macro-prudential regulation to ensure financial stability of the banking sector

It is necessary to refer to the implementation of the concept of macroprudential policy to measures for ensuring financial stability to the banking sector. The main features of macroprudential regulation are the following:

– macroprudential regulation – a complex of the preventive measures directed to minimization of systemic financial crisis;

– the purpose – management of systemic risk, that is the risk connected with the terms of providing financial services caused by the deterioration in terms of all financial system or its part having potentially negative consequences on real economy;

– objects of regulation – relationship between financial intermediaries, the markets, infrastructure of the financial market, and also between a financial system and real sector of economy;

– problems of regulation – support of resistance of the financial system to aggregate shocks; restriction of excessive financial risks which are assumed by a financial system in general; smoothing of a financial cycle [21; 22].

Macroprudential regulation is concentrated on systemic stability of financial sector, but not on insolvency of separate banks. At the same time special attention is paid to systemically important banks and their interrelations in the financial market as the risk of systemic stability depends on collective behaviour of participants of the financial market therefore risks in a financial system for regulation will gain endogenous character.

Thus, process of transformation of the international standards to ensure financial stability in banking system is directed, first of all, to development of crisis responding measures of systemic risk, involving sharp growth of
interest rates, increase of banks problem and debts, essential reduction of crediting, chain bankruptcies, transition to unprofitable model of banking activity, a prevalence of speculative activity over investment financial activity, large-scale fall of price of securities, a delay of calculations, bank panic.

Macroprudential tools are a wide range of tools that are used to prevent the occurrence and spread of systemic risk in the financial sector in order to minimize losses from irregularities in financial services.

<table>
<thead>
<tr>
<th>№</th>
<th>Problem</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Macroeconomic risk and risk of «financial bubbles»</td>
<td>• taxes on consumer crediting (tax on the main amount of debt)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• reserve requirements;</td>
</tr>
<tr>
<td>2</td>
<td>Credit risk and market risk</td>
<td>• limits of crediting volumes;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• standards of a ratio of credit volume and cost of pledge (loan-to-value ratio – LTV ratio);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• standards of a ratio of the sum of debt and the income (debt-to-income ratio – DTI ratio);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• creation of counter cyclic/dynamic reserves (countercyclical/dynamic provisioning), formation of reserves for possible losses according to loans;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• change of coefficients of risk on different types of crediting;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• restrictions for «short sales»;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• restrictions for operations with CDS (credit default swap).</td>
</tr>
<tr>
<td>3</td>
<td>Currency risk and risk of flows of the capital</td>
<td>• taxes on operations with the capital;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• restrictions for open currency positions of banks;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• restrictions for investments of assets in foreign currency;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• restrictions for loans in foreign currency;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• restrictions for investments for non-residents in national assets;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• special requirements for licensing;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• administrative measures;</td>
</tr>
<tr>
<td>4</td>
<td>Documents BKBN; realization of banks monitoring by «Basel III», realization of Basel reforms in member countries of BKBN; stress testing</td>
<td></td>
</tr>
<tr>
<td>№</td>
<td>Tools</td>
<td>Coverage</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>1.</td>
<td>Conditional Value at Risk, CoVaR</td>
<td>+</td>
</tr>
<tr>
<td>2.</td>
<td>Joint Distress Indicators</td>
<td>+</td>
</tr>
<tr>
<td>3.</td>
<td>Returns Spillovers</td>
<td>+</td>
</tr>
<tr>
<td>4.</td>
<td>Distress Spillovers</td>
<td>+</td>
</tr>
<tr>
<td>5.</td>
<td>Market-Based Probability of Default</td>
<td>+</td>
</tr>
<tr>
<td>6.</td>
<td>Debt Sustainability Analysis</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Indicators of Fiscal Stress</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Sovereign Funding Shock Scenarios</td>
<td>+</td>
</tr>
<tr>
<td>9.</td>
<td>Asset Price Models</td>
<td>+</td>
</tr>
<tr>
<td>10.</td>
<td>Balance Sheet Approach</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Systemic Contingent Claims Analysis</td>
<td>+</td>
</tr>
<tr>
<td>12.</td>
<td>Cross-Border Interconnectedness</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Type</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>13</td>
<td>Cross-Border Network Contagion</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Systemic Liquidity Risk Indicator</td>
<td>+</td>
</tr>
<tr>
<td>15</td>
<td>Regime Switching</td>
<td>+</td>
</tr>
<tr>
<td>16</td>
<td>Financial Soundness Indicators</td>
<td>+</td>
</tr>
<tr>
<td>17</td>
<td>Bank Health Assessment Tool, HEAT</td>
<td>+</td>
</tr>
<tr>
<td>18</td>
<td>Thresholds Model</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Macro Stress Tests</td>
<td>+</td>
</tr>
<tr>
<td>20</td>
<td>GDP at Risk</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Credit to GDP Based Crisis Prediction Model</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Crisis Prediction Model</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>DSGE Model</td>
<td></td>
</tr>
</tbody>
</table>
The global financial crisis led to review approaches to supervision of systemic their relationships and their regulation, and the need for introduction, sophisticated tools of identification and limiting systemic distribution:

First, provide to regulators and oversight a special mandate to monitor systemic risk;

Second, the nomination additional requirements for financial institutions with regard to their “contribution” in the generation of systemic risk [23].

International regulatory practices identified tools for identifying systemic risk (table 9).

Conclusions

Transformation of the international standards of a sustainable development of the banking sector are possible through formation of system of anti-recession financial stability which main goal is recognition of influence of crisis factors on solvency, liquidity and capital adequacy of banks; definition of preventive measures for prevention of crisis situations, methods of crisis management and measures for overcoming the threat of crisis with the minimum losses for banks.

The main requirement to a banking capital is its use for compensation of financial losses. «Basel III» provides an exceptional structure of own capital with not enough liquid assets which can't be used for covering losses.

According to the results of empirical researches which are carried out by western experts, measures for increase of standards of banking capital, introduction of coefficients of liquidity, adoption of more tough standards of the capital provided by the Basel III program for large international banks will lead to decrease in growth rates of GDP. But at the same time new rules can promote increase of stability in world economy and decrease in probability of bank crises.

At the present stage of development of the financial market great attention is paid to the question of development and realization of the macroprudential policy providing stability of development in banking sector. In this regard special attention deserves identification of tools of macroprudential policy, in particular, defined by «Basel III» as creation of the buffer and countercyclical capitals.

Realization of macroprudential policy provides the solution of the following tasks.

First, definition of institutional bases of macroprudential regulation.
Secondly, measurement of systemic risk. For measurement of systemic risk the macroprudential body traces credit risks, risks of liquidity, market risks, and also concentration of these risks with the purpose of making decisions on the most effective measures for their overcoming.

Thirdly, in terms of globalization of the financial market it is necessary to coordinate macroprudential regulation that can be promoted by universal tools and the international agreements on uniform use of such tools.

In our opinion, each commercial bank needs to develop organizational and economic mechanism of the analysis and an assessment of future tendencies of capital sufficiency while introducing new regulatory requirements according to requirements of «Basel II» and «Basel III». The algorithm of the similar mechanism can include four main stages: choice of scenarios of testing, payment under this scenario, analysis of results of calculation, development of recommendations taking into account the received results.

References:
