

O. Bulkot, PhD in Economics

Taras Shevchenko National University of Kyiv, Ukraine

FINANCIAL RECOVERY IN THE POST CRISIS GLOBAL FINANCIAL SYSTEM

Abstract. The main financial aspects of post crisis global economy functioning are analyzed. The key areas of global financial system are examined. It is analyzed factors and conditions of financial recovery in advanced economies as well as in emerging markets. Analysis of recent trends in advanced economies showed a continued recovery ahead, supported in particular by lower oil prices, but the pace of progress varies across countries. Research of emerging markets conditions persuaded that countries have lost further momentum on the back of heightened geopolitical tensions, unfolding adjustments of domestic and external imbalances and lower oil prices which adversely affected most oil-exporting emerging economies. The trade volumes, conditions and operations in leading segments of global financial market are presented. The issues of global banking are discussed; also the problem and volumes of shadow banking in global financial system are risen. Concerning banks, they have come a long way since the global financial crisis. It was discovered that banking adjustment has proceeded at different stages, with the first stage focusing on emergency stabilization measures and the second phase, adapting the new business and regulatory realities. Since the start of the crisis, banks hold significantly more capital and have accelerated balance sheet repair. The influence of global financial centers on financial system including their representative function is analyzed.

Keywords: global financial system, financial recovery, global banking, global financial market, financial center.

Introduction. The global financial system since 1929 has never had been in such a deep crisis like in 2008. The consequences of 2008/2010 global financial crisis became very serious and significant for the global financial system. The first and the most significant occurrences happened in USA in 2008 and were connected with bankruptcy of the biggest international investment banks. The reasons for it were different: mortgage crisis, banking sector instability (connected with high risk operations and bonus system for managers' salary), issue and trade of collateralized debt obligations and other "bad debt" instruments, and as the result - lack of global financial liquidity.

The consequences of such situation were unexpected – the deepest crisis not only in the US mortgage and banking sector, but within the entire system of global finance. To stabilize the global financial system there were undertaken a lot of measures: created new regulative international financial institutions, implemented new financial rules, limitations and prohibitions, established programs and funds of international financial aid etc.

Now the global financial system is on its recovery stage but still there are some problem sectors on the levels of national economies that influence entire global economy. The most problematic of them are banking, financial markets and financial environment.

So the purpose of this article is to disclose the features and factors of environment and key elements of the modern condition of global financial system in the post-crisis period.

Results. With the advent of globalization and rapid integration of financial markets, the world is getting smaller in every aspect of life. In today's global financial environment, dominated by a dynamic, aggressive financial service industry, banks and non-banking financial institutions as major players operate with greater freedom. Market participants, however, are exposed to greater financial risks than before due to the appearance of more complex and dynamic transactions that have substantially increased uncertainties in the global financial system.

Advances in IT technology, capital movements and geographical extension of financial operations have become the new engines of global financial integration. It certainly appears to be the case that the emergence of new markets, such as highly liquid foreign exchange and derivative markets, has provided essential financial transactions and contributed to the rapid expansion of global finance. However, the speculative uses of the new

financial instruments in these markets have increased the diversity of risks. Globalization and liberalization of financial markets bring a variety of changes, presenting opportunities as well as risks both in economies and financial systems throughout the world. One fact is quite clear: the undeniable benefits of financial globalization are only available to the countries that best manage their economies.

In this research we will analyze the main areas that allow us to get exactly representative results in the measurement of entire global financial system. So, the first we would like to analyze is the general situation in the economic and financial systems of different countries all over the world. The second issue to be discussed here is referring to conditions of main segments of global financial market. The next point of research will be devoted to examination of global banking. And the last one, the fourth, will be focused at investigation of conditions of global financial centers functioning.

1. Financial recovery in economic and financial systems. The best way to safeguard financial stability and improve the balance between economic and financial risk taking is to put in place policies that enhance the transmission of monetary policy to the real economy – thus promoting economic risk taking – and address financial excesses through well-designed macroprudential measures. Thus, accommodative monetary policies face a trade-off between the upside economic benefits and the downside financial stability risks. For emerging markets, the scope for macroeconomic policies to support growth varies across countries and regions, but space remains limited in several countries with external vulnerabilities.

Advanced economies. In the United States, the economic recovery has gained traction after a weather-related weak start to 2014, supported by favorable housing and labor market developments. In the context of generally improving economic prospects, the Federal Reserve concluded its asset purchase program in October 2014, while preserving a highly accommodative monetary stance, as reflected by the low target range for the federal funds rate and the expected maintenance of its longer-term securities holdings at sizeable levels¹. At the beginning of 2015 the expansion in economic activity slowed due to temporary factors and also mostly due to the appreciation of the US dollar that is weighing on export performance and to a decline in mining and oil sector investment given the drop in oil prices. However, now economic fundamentals remain supportive and economic activity is also underpinned by benign financial conditions².

In Japan, the economy contracted strongly in the second quarter of 2014, as demand rebalanced after the VAT hike in April 2014 and the frontloaded spending in the first quarter. Despite the consumption tax rise, fiscal challenges remain and fiscal consolidation over the medium term remains a necessity to ensure long-term debt sustainability³. In 2015 the recovery in economic activity of Japan remains overall tepid. Growth is expected to continue on its moderate recovery path, partly supported by lower oil prices, a weak yen and continued accommodative monetary policies. At the same time, the government's decision to postpone the planned second VAT hike to April 2017 and to provide additional fiscal stimulus should imply a lower fiscal drag on growth in 2015-16⁴.

The United Kingdom maintained its strong growth momentum in the first half of 2014, but stressed by rising household confidence, improving labor market conditions and a buoyant housing market. Leading indicators point to a growth moderation in the short run, while structural factors, such as the need for further balance sheet repair in the private and public sectors, will weigh on economic activity over the medium term⁵.

Concerning Euro Area, the economic growth there continued to be supported by domestic demand, which benefited from favorable real income developments and financing conditions. The economic recovery has been also buttressed by further reduced macroeconomic uncertainty, with all the different types of uncertainty now below their long-run average despite some pick-up in financial market uncertainty more recently⁶.

¹ Financial Stability Review (November, 2014). ECB. <<http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201411.en.pdf??c3d9f6523b7445117fad0ef0ca4bfa5f>>.

² Financial Stability Review (May, 2015). ECB. <http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201505.en.pdf>.

³ Financial Stability Review (November, 2014). ECB. <<http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201411.en.pdf??c3d9f6523b7445117fad0ef0ca4bfa5f>>.

⁴ Financial Stability Review (May, 2015). ECB. <http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201505.en.pdf>.

⁵ Financial Stability Review (November, 2014). ECB. <<http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201411.en.pdf??c3d9f6523b7445117fad0ef0ca4bfa5f>>.

⁶ Financial Stability Review (November, 2014). ECB. <<http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201411.en.pdf??c3d9f6523b7445117fad0ef0ca4bfa5f>>.

Strengthened private consumption has benefited from further easing financing conditions that have been appeared in the 2015, while favourable real disposable income developments on the back of lower energy prices have translated into improved purchasing power, economic sentiment and confidence. The euro area recovery has, however, continued to lag developments in other major advanced economies given the ongoing process of balance sheet repair as well as continued real and financial fragmentation across countries. In particular, economic output in the euro area has, on average, remained below its pre-crisis level amid varying trends in vulnerable and other euro area countries⁷.

To sum up the above analyzed factors we can see that the economic momentum in many advanced economies continued to firm gradually as highly accommodative monetary policies continue to support favorable financial conditions, while headwinds from private sector deleveraging, slack in labor markets and fiscal consolidation have started to wane in several countries. Recent trends indicate a continued recovery ahead, supported in particular by lower oil prices, but the pace of progress varies across countries. In this context, the uncertainty about the path of monetary policies across advanced economies represents a key source of risk, as a multi-speed economic recovery translates into divergent monetary policies.

Analysis of emerging markets conditions showed that countries have lost further momentum on the back of heightened geopolitical tensions, unfolding adjustments of domestic and/or external imbalances and lower oil prices which adversely affected most oil-exporting emerging economies. Economic trends continued to diverge across the emerging market universe, with upbeat sentiment in central and Eastern Europe contrasting with relatively muted economic dynamics in emerging Asia and Latin America. Despite some positive stimuli for oil-importing emerging economies, the future growth trajectory in some countries is likely to be restrained by the limited scope for monetary and fiscal policy support as well as prevalent infrastructure bottlenecks and capacity constraints that weigh on potential output.

Also it worth to be mentioned that the impact of the Ukraine-Russia crisis on the economic and financial stability of those emerging region has remained relatively contained, despite the pronounced downturn of the Russian economy. A possible further escalation of the Ukraine-Russia conflict as well as the duration and scope of EU and US sanctions against Russia and potential retaliatory measures remain the main downside risks to the region's economic outlook.

2. Global Financial Market. One of the most important segments of financial market are capital markets, as they have become more significant providers of credit since the crisis, shifting the locus of risks to the shadow banking system. The share of credit instruments held in mutual fund portfolios has been growing, doubling since 2007, and now amounts to 27% of global high-yield debt. At the same time, the fund management industry has become more concentrated. The top 10 global asset management firms now account for more than \$19 trillion in assets under management⁸.

Global asset market volatility remained persistently at historical lows across financial asset classes and economic regions. It may in many ways reflect fundamentals, including low uncertainty regarding policies, limited surprises in economic releases and the stabilizing influence of more stringent post-crisis regulation of the financial sector. At the same time, financial stability risks may arise from investor complacency especially during periods of weak returns on financial assets when investors hunt for yield. Such periods have the potential to embed systemic risk, if they lead to an excessive build-up in leverage or maturity extension⁹.

OTC derivatives markets contracted slightly in the first half of 2014. The notional amount of outstanding contracts totaled \$691 trillion at end-June 2014, down by 3% from \$711 trillion at end-2013 and back to a level similar to that reported at end-June 2013. The gross market values of outstanding OTC derivatives continued to trend downwards in the first half of 2014. Gross market values stood at \$17 trillion at end-June 2014, down by 7% from \$19 trillion at end-2013 and 14% from \$20 trillion at end-June 2013. Whereas in 2013 the decline had been concentrated in interest rate derivatives, in the first half of 2014 the gross market value of foreign exchange derivatives also fell significantly.

In credit default swap (CDS) markets, central clearing made further inroads. Contracts with central counterparties accounted for 27% of notional CDS outstanding at end-June 2014, up from 23% one year

⁷ Financial Stability Review (May, 2015). ECB. <http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201505.en.pdf>.

⁸ Global Financial Stability Report: Risk Taking, Liquidity, and Shadow Banking. Curbing Excess while Promoting Growth (October, 2014). IMF. <http://www.imf.org/external/pubs/ft/gfsr/2014/02/pdf/text.pdf>.

⁹ Financial Stability Review (November, 2014). ECB. <http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201411.en.pdf?c3d9f6523b7445117fad0ef0ca4bfa5f>.

earlier. Bilateral netting agreements reduced the net market value of outstanding CDS contracts, which provide a measure of exposure to counterparty credit risk, to 23% of their gross market value¹⁰.

3. Global Banking. Concerning banks, they have come a long way since the global financial crisis. Adjustment has proceeded at different stages, with the first stage focusing on emergency stabilization measures. In the second phase, banks have strived to adapt to new business and regulatory realities. Since the start of the crisis, banks hold significantly more capital and have accelerated balance sheet repair. But progress has been uneven across banks and many institutions need to do more to achieve a sustainable business model.

Today, low profitability raises concerns about some banks' ability to build and maintain capital buffers and meet credit demand. Low profitability is partly the price of moving to lower-risk, lower-return activities. It also reflects cyclical factors – a sluggish economy, the burden of nonperforming loans, litigation costs from past misdeeds and low interest margins from near-zero policy rates – structural market changes resulting from regulatory reforms, and acute competition in the context of excess capacity. At the same time, investors demand high returns from banks, with the cost of equity having risen since before the crisis. Until now, banks have focused primarily on raising capital and derisking their balance sheets to meet risk-based requirements. Their focus, however, has now broadened to include other elements of the Basel III regime. New liquidity requirements, such as the liquidity coverage ratio and the net stable funding ratio will induce banks to hold more liquid (low-risk) assets and to rely more on stable funding sources¹¹.

We can highlight two main developments stand out among the changes in international banking since the global financial crisis. First, direct cross-border lending as a share of total banking assets has declined, mostly because of the retrenchment of European banks. Second, the share of local lending by foreign bank affiliates has remained steady. Global banks in particular have refocused their activities on some key markets, leaving space for other banks to expand. As a result, intraregional financial linkages have deepened, especially in Asia. Better-capitalized banks were more likely to maintain cross-border lending. Macroeconomic factors have also played a role. The relative shift on the part of foreign banks away from cross-border lending and toward more local lending through affiliates has a positive effect on the financial stability of host countries¹².

It should be emphasized that the shift from cross-border banking to multinational banking with more local and likely locally funded operations is more pronounced in some banking systems than in others. McCauley, McGuire, and von Peter (2012) show that global French and Spanish banks in particular have increased the share of their local operations whereas internationally operating Japanese banks continue to conduct mostly cross-border operations. Differences in business models can be related to differences in funding models. Multinational banks tend to rely less on wholesale funding and were thus less affected by disruptions in the wholesale funding market during the crisis¹³.

According to the BIS locational banking statistics, the cross-border claims of BIS reporting banks increased by \$755 billion between end-December 2014 and end-March 2015, lifting the annual growth rate to 6%. The global expansion during the first quarter of 2015 masked diverging trends in advanced and emerging market economies: lending to advanced economies grew by \$743 billion, pushing the annual growth rate up to 6%, whereas lending to emerging economies contracted by \$50 billion, slowing the annual growth rate to less than 1%¹⁴.

The expansion of aggregate cross-border lending between end-December and end-March 2015 was driven primarily by a \$528 billion surge in euro-denominated claims. This increase boosted the annual growth rate of euro-denominated claims to 9%. More than two thirds (70%) of the quarterly upturn in euro-denominated claims was due to a rise in loans, while the increase in debt securities accounted for only 18%. During Q1 2015, claims denominated in US dollars were up by \$58 billion. A \$156 billion increase in US dollar-denominated debt securities more than offset a \$95 billion decline in loans. Claims denominated in sterling (\$60 billion) and in Swiss francs (\$32 billion) also expanded, lifting their annual growth rates to a respective 5% and 9%.

¹⁰ OTC derivatives statistics at end-June 2014. Statistical release (November, 2014). Monetary and Economic Department. BIS. <http://www.bis.org/publ/otc_hy1411.pdf>.

¹¹ Global Financial Stability Report: Risk Taking, Liquidity, and Shadow Banking. Curbing Excess while Promoting Growth (October, 2014). IMF. <<http://www.imf.org/external/pubs/ft/gfstr/2014/02/pdf/text.pdf>>.

¹² Global Financial Stability Report: Navigating Monetary Policy Challenges And Managing Risks (April, 2015). IMF. <<http://www.yardeni.com/pub/IMFGlobalFinStab.pdf>>.

¹³ McCauley, R., McGuire, P., Gotz von, P. (2012). After the Global Financial Crisis: From International to Multinational Banking? *Journal of Economics and Business*, 64(1), 7–23.

¹⁴ Statistical Release. BIS International Banking Statistics at end-March 2015 (July, 2015). Monetary and Economic Department. BIS. <<http://www.bis.org/statistics/rppb1507.pdf>>.

A slight contraction in Japanese yen denominated cross-border lending (by \$10 billion) brought the annual growth rate to 14%. International banking activity picked up across all major instruments during the first quarter of 2015. Increases in debt securities and loans contributed almost equally to the overall expansion in crossborder claims. Between end-December 2014 and end-March 2015, the outstanding amount of loans grew by \$326 billion, while holdings of debt securities rose by \$318 billion¹⁵.

Cross-border lending compounds adverse domestic and global shocks. In contrast, foreign-owned subsidiaries, particularly those with better-capitalized parent banks, tend to behave less procyclically than domestic banks around domestic crises. In principle, international banking has benefits. For example, global banks contribute to the allocation of global savings across countries, with positive effects on investment and growth. The reduction in cross-border lending may diminish some of those benefits.

The other important issue worth to be discussed here is problem of shadow banking. First of all, it should be mentioned that the shadow banking system can broadly be described as credit intermediation involving entities and activities outside of the regular banking system¹⁶. We should admit that shadow banking can play a beneficial role as a complement to traditional banking by expanding access to credit or by supporting market liquidity, maturity transformation, and risk sharing. Intermediating credit through non-bank channels can have important advantages and contributes to the financing of the real economy, but such channels can also become a source of systemic risk.

The growth in The Monitoring Universe of Non-Bank Financial Intermediation (MUNFI) assets globally in 2013 occurred against a backdrop of roughly stable banking system assets for the second year in a row. As a result, the share of MUNFI in total financial system assets has increased slightly to 25% after hovering at around 24% for the previous five years reaching \$75.2 trillion. By contrast, the share of bank assets has declined for the second year in a row and currently stands at 46% of total financial system assets.

MUNFI assets also grew relative to the size of the economy approaching their pre-crisis peak as a percent of GDP. The MUNFI assets as a share of GDP rose by 6 percentage points to 120% of GDP in 2013, approaching the peak of 124% of GDP in 2007. The share of MUNFI assets in GDP rose for the second year in a row recovering from the post-crisis low of 112% of GDP in 2011.

The euro area and the United States (U.S.) have the largest Other Financial Intermediaries (OFI) sectors, each with just above \$25 trillion in 2013, representing a third of global MUNFI assets. The United Kingdom has the third largest OFI sector amounting to \$9.3 trillion in 2013, a 12% share of the total. Combined together, the euro area, U.S. and the United Kingdom represent 80% of total global MUNFI assets in 2013. This compares with their more modest share (53%) in terms of global bank assets¹⁷.

Also it is worth to be said that in global practice of estimation of shadow banking it is used the notion of the narrower measure of shadow banking. The determination of which entities are retained in the narrower measure is based on the entities meeting all of the following criteria: (i) The entity must be part of a credit intermediation chain; (ii) It must not be consolidated into a banking group for the purposes of prudential regulation; (iii) It must exhibit risks associated with shadow banking including but not limited to maturity and liquidity transformation, and/or leverage.

Using these criteria for the 23 jurisdictions that provided sufficiently granular data, the preliminary narrow measure excludes assets related to self-securitisation, assets of OFIs prudentially consolidated into a banking group, and entities not directly involved in credit intermediation, including Equity Investment Funds, equity REITs, and OFIs which are part of a non-financial group and are created for the sole purpose of performing intra-group activities.

So, the total financial assets of Equity Investment Funds across the 20 jurisdictions which provided relevant data amounted to \$12.4 trillion. Total assets of equity REITs in the 16 jurisdictions that provided a differentiation between equity and mortgage REITs were \$1.5 trillion in 2013. Among these jurisdictions, Japan, the United Kingdom, Germany and Australia had the largest equity Real Estate Trusts and/or Funds in 2013.

Based on the narrow measure, the U.S. had by far the largest shadow banking sector in USD terms, followed by the United Kingdom and China. On the other hand, Argentina, Singapore and Indonesia had the

¹⁵ Statistical Release. BIS International Banking Statistics at end-March 2015 (July, 2015). Monetary and Economic Department. BIS. <<http://www.bis.org/statistics/rppb1507.pdf>>.

¹⁶ Global Shadow Banking Monitoring Report 2014 (October, 2014). Financial Stability Board. BIS. <http://www.financialstabilityboard.org/wp-content/uploads/r_141030.pdf>.

¹⁷ Global Shadow Banking Monitoring Report 2014 (October, 2014). Financial Stability Board. BIS. <http://www.financialstabilityboard.org/wp-content/uploads/r_141030.pdf>.

smallest shadow banking systems among the 23 jurisdictions which provided granular enough data to allow the narrowing down¹⁸.

4. Global Financial Centers. And the last important area of our study is connected with the conditions of functioning of global financial centers. This area of research is very important as it reflects the health and soundness of entire global financial system and the financial liquidity in particular. Moreover it allows summarizing the general future vector and conditions of development not only the global financial system, but also the entire global economy.

There are two main approaches that are used for estimation of any financial center belonging to global. The first one is developed by the National Financial Information Center Index Research Institute and Standard & Poor's Dow Jones Index Co and calls Xinhua - Dow Jones International Financial Centers Development Index (IFCDI). This index is based mainly on regional competitiveness theory, ecosystem theory, systems engineering theory, theory of circular economy, and urban construction theory. The IFCD Index comprehensively assesses international financial center cities in accordance with certain conditions in the global scope, builds a systematic, all-round, and featured assessment system, uses indexation evaluation methods to conduct a quantitative evaluation and truly reflect comprehensive strength of the international financial centers in a given period. IFCD Index includes estimation of main conditions that are structured into five groups: Financial Market, Growth and Development, Industrial Support, Service Level, General Environment.

According to IFCD Index 2014 there are 45 global financial centers all over the world: 21 in Europe, 10 in America, 14 in Asia and Pacific. And to the top 10 global financial centers in 2014 belong New-York, London, Tokyo, Singapore, Hong Kong, Shanghai, Paris, Frankfurt, Beijing, and Chicago¹⁹.

The other one index is The Global Financial Centers Index (GFCI). It provides profiles, ratings and rankings for financial centers, drawing on two separate sources of data – instrumental factors and responses to an online survey. The GFCI was created in 2005 and first published by Z/Yen Group in March 2007. The GFCI is calculated through aggregating the instrumental factors of global competitiveness into five key areas: Business Environment, Financial Sector Development, Infrastructure, Human Capital, Reputational and General Factors. According to GFCI classification the financial centers are divided into three main groups: global, transnational and local. Each group has four sub-groups: leaders, diversified, specialists and contenders. In the ranking of GFCI are included 83 financial centers with top world's 10 in New-York, London, Hong Kong, Singapore, Tokyo, Zurich, Seoul, San-Francisco, Chicago and Boston²⁰.

Conclusions. The analysis presented in this research allows to make some conclusions. First, a gradual recovery in global economic activity has continued. Economic momentum in advanced economies strengthened further, albeit at an uneven pace across regions, while growth in emerging markets has also rebounded after a temporary dip in 2013. While global growth is expected to pick up gradually, risks to the global outlook remain tilted to the downside. Heightened geopolitical risks, persistent macroeconomic and/or financial imbalances, as well as a sharp repricing of risk with ensuing corrections in asset prices and a potential disorderly unwinding of capital flows, could have negative repercussions for the global economy.

Second, banking systems recover, and with risk appetites remaining strong, bank lending has strengthened as a channel for global liquidity, alongside persistently high volumes of global bond market issuance. The historical pattern where low levels of volatility coincide with a rapid growth of cross-border banking flows may be starting to reassert itself. Cross-border bank credit continues to grow especially rapidly in Asia, although claims on Chinese banks fell slightly in the third quarter of 2014 relative to the second. Within the euro area, a small increase in cross-border bank credit signals the progressive reintegration of the European banking system in the wake of the 2011–12 sovereign debt crisis.

And, at least, the analysis of global financial centers showed that: (1) In 2014, the US economy has continued recovering with persistent rise in asset prices, fall in leverage ratio and increasing strength for growth of its real economy. Moreover, the economic growth in the US has accelerated significantly. (2) The European economy has gradually bottomed out, showing signs of economic recovery. It is ascribed to the improvement in the whole financial market. Specifically, the continuous improvement in financial market environment has

¹⁸ Global Shadow Banking Monitoring Report 2014 (October, 2014). Financial Stability Board. BIS. <http://www.financialstabilityboard.org/wp-content/uploads/r_141030.pdf>.

¹⁹ Xinhua-Dow Jones International Financial Centers Development Index (2014). National Financial Information Center Index Research Institute, Standard & Poor's Dow Jones Index Co. <<http://www.sh.xinhuanet.com/shstatics/zhuanti2014/zsbj/en.pdf>>.

²⁰ Yeandle, M. (March, 2015). The Global Financial Centres Index 17. Z/Yen Group and Qatar Financial Centre Authority. <http://www.finance-montreal.com/sites/default/files/publications/gfci17_23march2015.pdf>.

driven up asset prices. The effect of wealth growth has stabilized enterprise confidence in core countries and surrounding countries, which has further pushed up investments and stimulated personal consumption. In addition, European governments have slowed the pace of deficit reduction and the deficit scale/GDP has fallen to 0.5%. (3) Financial centers in Asia-Pacific region are powerful forces in shaping the world's financial pattern. Economies in these regions are highly complementary, with underlying growth potential and broad markets. All the basic elements have supported the rapid expansion of cities here. Especially, the reform and industrial upgrade led by China has played a big role in promoting development of this region.

References

1. Global Financial Stability Report: Risk Taking, Liquidity, and Shadow Banking. Curbing Excess while Promoting Growth (October, 2014). IMF. <<http://www.imf.org/external/pubs/ft/gfsr/2014/02/pdf/text.pdf>>.
2. Financial Stability Review (November, 2014). ECB. <<http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201411.en.pdf?C3d9f6523b7445117fad0ef0ca4bfa5f>>.
3. Financial Stability Review (May, 2015). ECB. <<http://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201505.en.pdf>>.
4. OTC Derivatives Statistics at end-June 2014. Statistical Release (November, 2014). Monetary and Economic Department. BIS. <http://www.bis.org/publ/otc_hy1411.pdf>.
5. Global Financial Stability Report: Navigating Monetary Policy Challenges And Managing Risks (April, 2015). IMF. <<http://www.yardeni.com/pub/imfglobalfinstab.pdf>>.
6. McCauley, R., McGuire, P., Gotz von, P. (2012). After the Global Financial Crisis: From International to Multinational Banking? *Journal of Economics and Business*, 64(1), 7–23.
7. Statistical Release BIS International Banking Statistics At End-March 2015 (July, 2015). Monetary and Economic Department. BIS. <<http://www.bis.org/statistics/rppb1507.pdf>>.
8. Global Shadow Banking Monitoring Report 2014 (October, 2014). Financial Stability Board. BIS. <http://www.financialstabilityboard.org/wp-content/uploads/r_141030.pdf>.
9. Xinhua-Dow Jones International Financial Centers Development Index (2014). National Financial Information. Center Index Research Institute, Standard & Poor's Dow Jones Index Co. <<http://www.sh.xinhuanet.com/shstatics/zhuanti2014/zsbg/en.pdf>>.
10. Yeandle, M. (March, 2015). The Global Financial Centres Index 17. Z/Yen Group and Qatar Financial Centre Authority. <http://www.finance-montreal.com/sites/default/files/publications/gfci17_23march2015.pdf>.