# International Economic and Financial Review 国際経済金融論考



Institute for International Monetary Affairs (IIMA)
公益財団法人 国際通貨研究所

(No.1, 2017) December 6, 2016

## Money Flow in the Emerging Countries after the Financial Crisis : Its Characteristics and Challenges

Koji Sakuma General Manager and Chief Economist

koji\_sakuma@iima.or.jp

**Economic Research Dept. and Emerging Economy Research Dept. Institute for International Monetary Affairs (IIMA)** 

#### **Summary**

The money flow in emerging economies between 2000 and 2016 can be classified into 4 periods, namely (i) a great moderation period when a bullish investment mind had been globally dominant against a backdrop of a low inflation rate (2000-2007), (ii) early financial crisis period (2007-2009), (iii) a period when the expectation for higher growth in emerging economies was heightened in contrast with advanced economies (2009-2013), and (iv) a period of failed expectation for high growth in emerging economies, triggered by a statement by the US Fed Chairman on tapering of its quantitative easing policy (after 2013).

What has been developing in the background of these financial flows was, firstly, the slowing growth potential in advanced economies. The decline of growth rate affected by aging of population came up as a rapid change owing to the inflated growth driven by housing bubbles and financial crisis that followed. Long-term interest rate fell into the negative territory,

bringing a market condition mixed with institutional investors who continue to buy government bonds to avoid risks and individual investors who show preference for emerging bonds seeking higher yields.

Second is the shrinkage of external assets held by European banks. The European sovereign crisis had deteriorated the business environment of European banks for a prolonged period, causing them to reduce their credits extended to emerging economies since 2010. This factor, coupled with the first factor, created a larger change in the cross-border extension of credits by banks to emerging countries, from a net inflow to them to a net outflow from them.

The third development is the improvement of income level in emerging economies and the transformation of their financial markets toward more matured type of advanced economies. The household income level in the emerging countries has gradually risen, bringing an expansion of consumer consumption of durable goods and a boom in construction. Reflecting such changes in quality and quantity of the real economy, the funding in local currencies increased in these countries. These changes explain why the large outflow of funds from emerging economies in recent years has not caused any currency crisis in these countries.

Looking ahead, there is a possibility that domestic bad loan problems may deteriorate in emerging economies, while a financial crisis that can be abruptly caused by a simultaneous withdrawal of foreign capitals may be averted. However, the favorable situation with positive net external assets position and high share of debts denominated in local currencies has given the emerging economies a larger room to take policy responses. Yet, there is also a risk that the good situation in emerging economies may work in an opposite way to prolong the adjustment process of debts problems, causing them to fall in a trap of slow growth with widespread expectation for a deflation.

#### **Text**

To an observer of international finance, to make prediction on when the next financial crisis may arise is a very interesting theme. To get a hint of it, he always follows an international flow of funds, and tries to prognosticate as soon as possible the place where the funds are excessively concentrated, and a place where there is a threatening outflow of funds. In the past, more studies focused on the money flows in the intra-advanced economies, but more recently the central player in the regional study has shifted to emerging economies.

In this article, the author will analyze the flow of funds centering around emerging economies using the data from the Bank of International Settlements (BIS) and discuss the possibility of a next crisis.

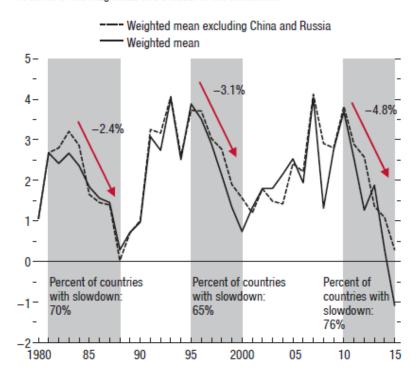
#### 1. Perspective of Analysis and Previous Studies

The perspective of this analysis is on the regional characteristics of the money flows and the characteristics of currencies used. The regional characteristics are viewed from the viewpoint of whether the credit is provided domestically in emerging economies or provided to the borrowers in emerging economies by the creditors in advanced economies. While there is some duplication, the characteristics of currencies correspond to whether the credits are provided in local currencies or in foreign currencies like the US dollar.

There are four major previous studies available. Rudolfs Bems and etc.(2016) point out that the slowdown of capital flows into emerging economies during 2010-2015 was as large as in 1995-2000. The slowdown derived from a changing differential of growth rates between advanced economies and emerging economies, but there was little possibility that it would develop into a currency crisis. They point out two factors for that, namely (i) emerging economies have more flexibility in their foreign exchange system, and (ii) more and more of the currency-denomination of debts of emerging economies has shifted from a foreign currency to a local currency. Chart 1 carried in the above study, which depicts the net capital inflows into emerging economies using the financial accounts data of the balance of payments statistics, shows there was indeed a rapid slowdown of net capital inflows into emerging economies in 2010-2015 as compared to the past.

#### Chart 1

The recent net capital inflow slowdown episode was similar to previous episodes in terms of the magnitude and breadth of the slowdown.



(Source) Figure 2.10. Three Major Net Capital Inflow Slowdown Episodes, IMF, World Economic Outlook, Chapter 2, p71, April 2016

Selim Elekdag and etc.(2015) pointed out that monetary easing in the advanced countries after the financial crisis accelerated the expansion of debts of companies in emerging economies. Nikola Tarashev and etc. (2016) tried to make new method of risk analysis for emerging markets but concluded that it was difficult to make an accurate analysis of them because of undeveloped statistics and insufficient data.

Claudio Borio and etc.(2016) raised an alarm over the situation in China. The cross-border bank credits to China decreased by US\$63 billion in the first quarter of 2016. If the pace was kept throughout the year, the total credits extended to China would drop by 27% in 2016. Using the Chart 2, they also showed that the credit to GDP ratio in China exceeded by 30% the medium-long term trend line, sounding the alarm over the increased risk of financial instability in the future when the interest rate started to rise.

Chart 2

	Credit-to-GDP gap <sup>2</sup>	Property price gap <sup>3</sup>	Debt service ratio (DSR) <sup>4</sup>	DSR if interest rates rise by 250 bp <sup>4, 5</sup>
Asia <sup>6</sup>	12.1	6.0	1.6	3.9
Australia	4.5	3.1	1.4	5.4
Brazil	4.6	-25.6	7.4	9.2
Canada	12.1	5.3	2.8	6.9
Central and eastern Europe <sup>7</sup>	-11.4	8.8	0.1	1.5
China	30.1	-1.9	5.4	8.7
France	-0.6	-11.2	1.0	4.1
Germany	-6.1	13.3	-1.8	0.0
Greece	-13.2	9.4		
India	-2.9		1.8	2.9
Italy	-13.7	-15.4	-0.1	2.0
Japan	4.1	15.6	-2.0	0.8
Korea	3.1	5.7	-0.6	3.0
Mexico	8.8	5.0	0.6	1.3
Netherlands	-20.2	-12.2	0.7	5.4
Nordic countries <sup>8</sup>	-0.8	4.1	1.0	5.0
Portugal	-40.5	12.4	-1.6	1.7
South Africa	-0.2	-9.0	-0.3	1.0
Spain	-47.6	-17.7	-3.2	-0.4
Switzerland	7.2	7.7	0.0	3.2
Turkey	9.6		5.7	7.3
United Kingdom	-27.0	-0.1	-1.7	1.0
United States	-9.9	4.7	-1.7	0.9
Legend	Credit/GDP gap>10	Property gap>10	DSR>6	DSR>6
	2≤Credit/GDP gap≤10		4≤DSR≤6	4≤DSR≤6

(Source) BIS Quarterly Review, p22, Bank for International Settlements (BIS), September 2016

#### 2. Development of International Finance since 2000

The flow of funds in international financial markets since 2000 can be roughly divided into 4 periods. The first is the period of so-called great moderation (2000-2007) when the world had a moderately high growth rate accompanied by moderately low inflation rate. The second is the period of emergence of sub-prime crisis in the US and following turbulent period (2007-2009), then, the period when advanced economies experienced slow growth affected by the financial crisis in contrast with higher growth in emerging economies (2009-2013) and finally the period

since 2013 when the robust growth of emerging economies came to an end.

Development of international financial markets since 2000 10.00 (bil.USD) Credit to private non financial sectors IIMA Global Market Volatility Index 75,000 Advanced economies 7.50 50,000 5.00 Emerging eon omies 25,000 2.50 n 0.00 2010 2000 2005 2015 2000 2005 2010 2015 150 USD barrel 7.5 Crude oil prices US policy rate 100 5 50 2.5 0 O 2000 2005 2010 2015 2000 2005 2010 2015 (Source)BIS, IMA, Datastream (2) 3 4 2 3 4 1 1

Chart 3

① Period of the great moderation, ② Financial crisis, ③ Period of optimism for the growth of emerging countries, ④ Period of receding optimism on emerging countries

#### (1) The Great Moderation Period (2000-2007)

The first period started with the policy rate cuts by many advanced countries after the burst of so-called IT bubbles. The monetary easing was intended to stimulate the capital investment by corporates but the funds were allocated to housing investment by households, instead of the corporates. The phenomena spread to most major advanced countries except for Japan and Germany, and prompted an expansion of household debts and surge in housing price.

In emerging economies, the middle class had grown, accelerating the motorization with many more individuals buying cars. Further the impact of economic boom driven by domestic demand in the Asian countries with big populations was transmitted to resource-rich countries through higher resources prices. In a global economic euphoricness, private funds in advanced economies and sovereign wealth funds of resource-rich countries intensified their bullish investment approach with strong risk appetite.

#### (2) The Second Period (2007-2009)

The second period started with the outset of a financial crisis and included such incidents as the freeze of subprime-related investment funds under a French bank, BNB Paribas, in August 2007, the bankruptcy of an American bank Bear Stearns in March 2008, and the collapse of the Lehman Brothers in September 2008. With these incidents the optimistic mood seen in the first period was wiped out. It was the first financial crisis started in advanced economies since the European currency crisis which took place in 1992-1993. The volatility in the foreign exchange market, bond and stock markets rapidly rose and oil prices plummeted. The central banks in advanced economies cut their policy rates almost simultaneously. Massive fiscal expenditures were introduced in many countries to support their economy, which were successful to halt the economic downturn in 2009 for the time being.

Regionally, the financial crisis was centered in Europe and the US, with no financial crisis occurring in Japan and Asia despite they experienced a deep recession. In Europe, the financial institutions suffered from poor business performance for a prolonged time after the Lehman bankruptcy. Even now in Italy they continue to face with poor performance causing market sentiment to often fluctuate.

#### (3) Third period (2009-2013)

In this period, outstanding was a strong economic performance in emerging economies after the end of the crisis. Since the crisis was basically originated in the financial system of countries in Europe and the US, the impact on emerging economies was rather small. So the investors' expectations for the role of engine of the world economy shifted from advanced countries to emerging economies.

Emerging economies responded to the appreciation of their currencies caused by the expectations for their high growth by intervention of purchasing foreign currencies, resulting in a large building-up of foreign exchange reserves in many countries. The capital inflow to emerging economies was not of smooth one, and with occasional adjustments, but when their currencies fell at the time of adjustment, these countries gave a high value to maintaining flexibility of their currencies and took a stance to allow them to fall to some extent depending on the market forces.

In this period, what was conspicuous in the credit markets in emerging economies was the

expansion of domestic credits rather than the inflow of funds from overseas.

#### (4) The Fourth Period (After 2013)

The latest period started with the statement by the US Fed Chairman Bernanke on the so-called tapering, i.e., on the possibility of gradually tapering its quantitative easing policy. It led to a deterioration of market sentiment in the international financial market. In the foreign exchange market the dollar basically turned to rise against emerging currencies. Almost at the same time, the growth in China began to decelerate because it tried to rebalance its high growth model that relied on high investment and accordingly optimistic expectations of investors on the global economy were largely reduced. As if symbolizing the change, crude oil prices fell to the level of \$50 in 2015, half of the level of \$100 which was recorded after the crisis.

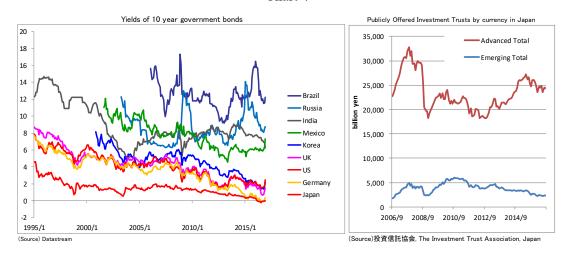
#### 3. Factors of Outflow of Funds from Emerging Economies in the Fourth Period

The factors behind the capital outflows that took place in emerging economies in 2015 and 2016 were mainly created by the gap between high expectations for emerging economies in the previous period and the disappointment of them in the fourth period.

#### (1) Magnitude of Failed Expectations

As is shown in Chart 1 above, there was a strong momentum in the inflow of money into emerging economies in the third period. This was a reasonable consequence of big yield gaps. The yields of government bonds of advanced countries tended to fall after the turn of the century, although not to as low as seen in recent years, while those in emerging economies followed relatively higher trends. This yield gaps encouraged the investors in advanced economies looking for higher profits to aggressively invest in emerging markets. In Japan too, investment trusts directed in foreign assets rose in popularity with the share of assets of emerging market gradually increasing against the dominant advanced countries. Even after 2013 when the tapering risk of the US monetary easing went up, the outstanding amounts of investment trusts have been maintained at a relatively high level despite the cautious attitude of investors toward emerging economies.

Chart 4



Before the financial crisis, the housing markets and stock markets in advanced economies were the main conduit of investment money. After the crisis, however, inflows of money into these markets seemed to have decreased while more money was intensively directed toward emerging economies. This accumulated inflow of money gave a momentum to the massive outflow of money that followed.

#### (2) Shrinking Assets of European Financial Institutions

One of the factors behind such an intensified adjustment of optimistic mood for emerging economies can be the shrinkage of external assets held by the banks in Europe that is still continuing currently. In Europe, even in the 2010s when the subprime loan problems subsided and the real economy got out of the worst period, sovereign debt crises continued in the so-called peripheral countries. Then credit risks of government bonds became a problem, with the single currency regime of euro itself coming to be questioned. In this environment, the credit stance of the European banks became more conservative than that of the banks in Japan and the United States, and their compression of assets continued.

The data from the BIS shows that the banks in Germany and the Netherlands have been reducing their claims to developing countries while in France they hit a peak. Although the Spanish banks have increased to some extent their claims mainly to Latin American countries like Brazil in an environment of poor domestic performance, the momentum is rather weak. The banks in the UK have rapidly reduced their claims since 2014. In general, the provision of credits of banks in Europe and the US lost a momentum in 2008 and turned to decrease in 2014

and after. These movements contributed to a larger outflow of money from emerging economies in the period of 2010-2015 than in the past.

Chart 5 Foreign claims of European banks in developing countries GB:United Kingdom - ES:Spain mil.USD US mil.USD mil.USD DE:Germany • FR:France - Ja pan 1,000,000 IT:Italy 1,000,000 1,000,000 NL: Netherlands 800.000 800.000 800.000 600,000 600,000 600,000 400.000 400,000 400.000 200,000 200,000 200,000 2000 2005 2015 2000 2015 2010 2015 2010 2005 2010 2000 2005 (Source) BIS

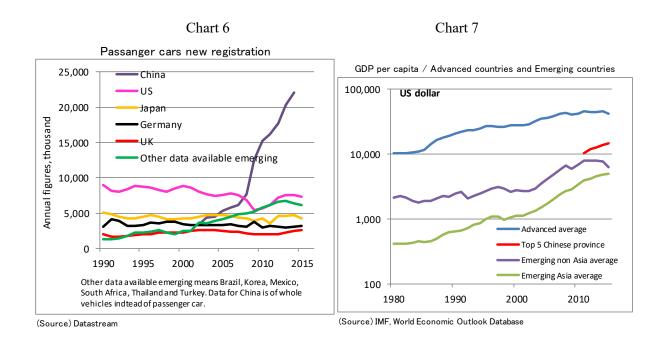
### 4. Larger Domestic Claims than Cross-border Claims

The amount of the outflow is indeed enormous, giving us some cause for concern. However, it is important to remember that in the current situation, the impact of cross-border claims on the emerging economies has become relatively smaller because the magnitude of domestic claims provided by domestic banks has been much larger.

#### (1) Rise of Income Levels in Emerging Economies

Emerging economies, especially those in Asia, have shown a prominent improvement in their income levels since around the middle of the 2000s. Motorization is often regarded as a symbol of national affluence, and an increase since 2000 in the number of their new registration in China is quite impressive. The number exceeded that of the US in 2008 and expanded to three times as large as that of the US by 2014. It is no wonder that, given its population, China will rank No.1 in whatever items. Yet the momentum of this car registration is especially striking. Looking at per capita GDP, China has only \$8,000 across the land in 2015, but the per capita

GDP of the highest 8 provinces and cities<sup>1</sup> that embrace 300 million population exceeds \$14,500. If we take up the highest ones with population of 100 million, their level will come much closer to the level of advanced countries.



#### (2) Changing Financial Market in Emerging Economies

Such a change in income environment influenced on sales destinations of companies operating in emerging countries, and then on their borrowing patterns in currency.

In the earlier days, the export-intensive manufacturers that export to advanced economies were the typical example of the Asian companies. As advanced countries constituted to be markets for these companies, their accounts receivable were naturally denominated in foreign currencies. And borrowings of their working capital were also made in foreign currencies. For this reason, banks in advanced countries had a strong showing in financing foreign exchanges since they could raise funds in the financial market of advanced countries to make cross-border lending. Of courses many of these companies were foreign affiliated companies that went into emerging economies through direct investment, and they found it more convenient, from the viewpoint of getting screening, to borrow from the banks with their head office in their home countries where their credit profile is familiar to the lenders.

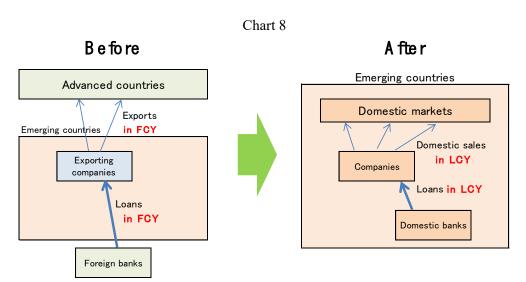
11

\_

 $<sup>^{1}\,</sup>$  They are: cities of Tianjin, Beijing, Shanghai and provinces of Chiangsu, Zejiang, Inner Mongol, Fujian, and Guangdong

As the income increases in emerging economies, local citizens have become the final consumer of many products. Naturally the sales are made in local currencies, which also require financing in local currencies. In that case, the local banks will make a strong showing as they have their branches that spread throughout the nation and fund raising ability in local currency through retail deposits.

Increase in household income also has an aspect of expansion of the middle class in urban areas. Looking from the standpoint of financial institutions, it meant an expansion of the middle class with stable monthly salary instead of a lower class with unstable income and thus brought an expansion of financial businesses geared to households. Starting with housing loan market, markets for car loans and card loans have also grown in emerging economies.



FCY: Foreign Currency denominated

LCY: Local Currency denominated

#### (3) Verification by Data

The author tried to quantify the macroeconomic change of financial business in emerging economies. The data used are two statistics (Total Credit and Foreign Claims) from the BIS.

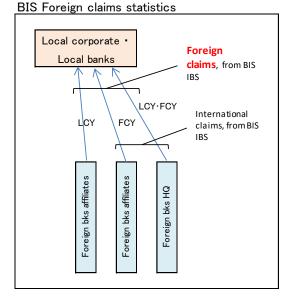
Total Credit is the aggregate debts that the domestic debtors owe to domestic banks as well as to foreign banks. Foreign claims represent total debts that domestic debtors owe to foreign banks and their affiliated companies and branches locating in that local country. Both statistics cover bank lending and securities held by banks.

The two statistics are not perfectly comparable because the coverage of debtors slightly

differs from each other. The debtors in the Total Credit statistics are those of private non-financial sector while the debtors in Foreign Claims statistics include both private non-financial sector and financial sector. Therefore, from the creditor's side, foreign claims are included as a part of the total credit but the coverage of debtors does not perfectly match up with each other. Nonetheless, when local financial institutions borrow from foreign banks, in many cases it is considered they do so to meet the demand of domestic companies for foreign currencies, and therefore this article sets aside some of the roughness of comparability and tries to analyze the relative changes that are developing in emerging economies by comparing the two statistics horizontally.

BIS Total credit statistics Local corporate from national monetary surveies from IBS LCY I CY-FCY FCY of BIS bks affiliates Foreign bks affiliates ocal banks **Total** 오 Credit bks Foreign Foreign

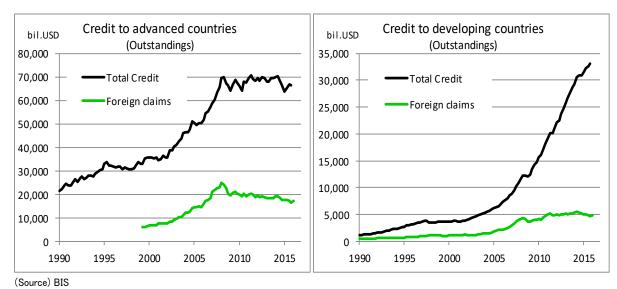
Chart 9



LCY:Local currency, FCY: Foreign currency IBS: BIS International Banking Statistics

As the right graph of Chart 10 shows, the BIS statistics reveal two characteristics of the money flow of emerging economies. Firstly, the foreign claims decreased after the financial crisis of 2008, and after a slight recovery, they again started a gradual decrease since 2014. Secondly the domestically originated credit continued to increase with little sign of influence of financial crisis. The second point represents a big difference compared to advanced economies. In advanced economies, not only foreign claims took a downward turn after the crisis but also domestic credit decelerated significantly (the left graph of Chart 10).

Chart 10

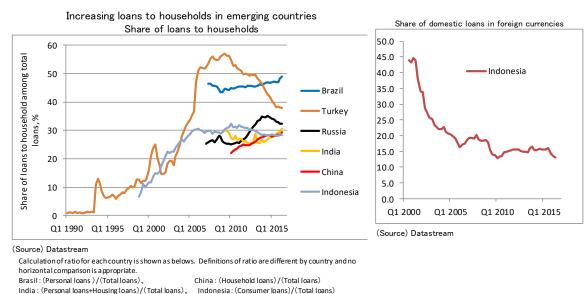


(4) Expansion of Domestically Oriented Finance

In the backdrop of this expansion of domestic credit in emerging economies, it is supposed that there was an autonomous economic expansion that was little affected by the financial crisis which took place in advanced economies together with an expansion of domestically-oriented finance to support the economy.

Although there are considerable constraints in the macro-statistics of individual countries, available data for household loans and loans denominated in local currency confirm that among Turkey, Brazil, Russia, Indonesia, India and China household loans tend to increase as a long-term trend in some countries or as a recent trend in other. In Indonesia, where statistics with breakdowns between local currency and foreign currency are available, the share of credit denominated in foreign currency is decreasing. Comprehensively taking into consideration such collateral evidences, it is considered that in these countries, with the rise of income level, domestic consumption has increased its power to serve as an engine to the economy, which enabled the financial institutions to gradually expand their credit to domestic households on the one hand and credit denominated in local currency on the other.

Chart 11



## 5. Conclusion: Financial Problems in Emerging Economies More Likened to Those in Advanced Economies

Russia: (Personal loans)/(Personal loans+Corporate loans), Turkey: (Consumer loans+Card loans+Housing

loans)/(Total loans)

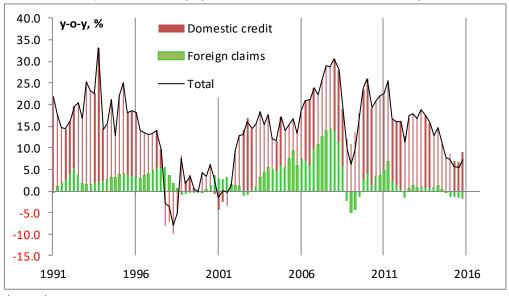
Until recently, the financial problems in emerging economies used to take a typical pattern that, whatever the cause it may be, the credit that flowed into the country from overseas began to flow out, with a sharp drop of exchange rate of its currency. In their articles noted above, Rudolfs Bems and etc. set off an alarm bell, citing the World Economic Outlook of the IMF (April, 2016), to the threatening crisis by the rapid outflow of money that was flowed in from 2010 to 2015.

However, the national income rose in emerging economies along with their economic growth since 2000, and finance pattern was changed with an increasing need for funds in local currencies. They are supplied by domestic creditors rather than by foreign lenders. Chart 12 shows the degree of its change, depicting that contribution of foreign credit change is quite small, although in recent years it has turned negative compared to a previous year.

The shrinkage of cross-border credit relative to domestic credit may suggest that the characteristic of financial problems and their ways to come out will be changed in emerging economies in the future.

Chart 12

Credit expansion of emerging countries: Domestic credit and Foreign claims



(Source)BIS

The magnitude of money inflow at a time of economic boom and outflow at a time of economic slowdown is still large in emerging economies. However, the domestic credit has been increasing more rapidly than foreign claims. Countries with the foreign exchange regime of dollar peg are not many now, and it is often the case that they intervene in the market at a time of appreciation of its currency but leave the rate to the market to a considerable degree at a time of depreciation. Financial problems in emerging economies seem to have been transformed from the old one of "to what extent the inflexible foreign exchange rate regime can endure the pressure of massive flows of cross-border money," to the similar ones seen in advanced economies such as "excess credit, excess investment, and asset bubbles."

In this context, the ways to make adjustment for excess credit problem will also take a different path. In the earlier days, the adjustment took a big bang style like a currency crisis that was compellingly triggered by a rapid outflow of foreign capitals. However, when the credit denominated in local currency comes into the center of a problem, the possibility of such a hard case of adjustment becomes small. It is a problem in the local currency which will not expand in size even the exchange of the local currency falls. The central bank can temporarily support the liquidity of financial institutions. The government, too, can take measures which prevent problems from appearing rapidly. They may control the difficulty of the non-performing loan

problem for the moment by a capital injection to problem banks.

However, the existence of handling scope of policy measures is like a double-edged sword.

As was seen in Japan and Europe, there is a risk that waiting for a better future while

implementing temporarily available monetary and fiscal policies may result in a belated

response that would create a crisis after all. These emerging economies should pay sufficient

care and attention to such a risk.

References

Rudolfs Bems and etc., "Chapter 2: Understanding the Slowdown in Capital Flows to Emerging

Market," World Economic Outlook: April 2016, International Monetary Fund, 63-99

Selim Elekdag and etc., "Chapter 3: Corporate Leverage in Emerging Markets-A Concern?,"

World Economic Outlook: October 2015, International Monetary Fund, 83-113

Nikola Tarashev, Stefan Avdjiev, and Ben Cohen, "International Capital Flows and Financial

Vulnerabilities in Emerging Market Economies: Analysis and Data Gaps," Bank for

International Settlements (BIS), September 2016

Claudio Borio, Hyun Song Shin and etc., "Highlights of global financial flows," BIS Quarterly

Review, Bank for International Settlements (BIS), September 2016

Masaharu Takenaka, "Turbulence in Emerging Economies and International Money Flow",

Monthly Capital Market No.345, 2014

This report is intended only for information purposes and shall not be construed as solicitation to take any action such as purchasing/selling/investing financial market products. In taking any action, each reader is requested to act on the basis of his or her own judgment. This report is based on information believed to be reliable, but we do not guarantee its accuracy. The contents of the report may be revised without advance notice. Also, this report is a literary work protected by the copyright act. No part of this report may be reproduced in any form without express statement of its source.

Copyright 2017 Institute for International Monetary Affairs(公益財団法人 国際通貨研究所)

All rights reserved. Except for brief quotations embodied in articles and reviews, no part of this publication may be reproduced in any form or by any means, including photocopy, without permission from the Institute for International Monetary Affairs.

Address: 3-2, Nihombashi Hongokucho 1-chome, Chuo-ku, Tokyo 103-0021, Japan

Telephone: 81-3-3245-6934, Facsimile: 81-3-3231-5422 〒103-0021 東京都中央区日本橋本石町 1-3-2

電話:03-3245-6934(代)ファックス:03-3231-5422

e-mail: <a href="mailto:admin@iima.or.jp">admin@iima.or.jp</a>
URL: <a href="http://www.iima.or.jp">http://www.iima.or.jp</a>

17