Protective measures against the negative effects of foreign capital flows in developing countries

Introduction

When developing economies started to eliminate barriers to the flow of foreign capital, they did it in hope to achieve a significant growth and faster development. However, in contrast to the optimistic expectations, foreign capital inflows often caused negative effects, including financial crises of all kinds. As early as in the 1980s some Latin American countries they were no longer able to repay foreign loans, which resulted in serious debt crises. In subsequent years, financial crises hit Mexico (1994–1995), South-East Asia (1997–1998), Russia (1998) and Argentina (2001–2002). Each time the crises caused recessions, sometimes long-term ones, and also serious problems with debt service.

In contrast to earlier downturns, the most recent global financial crisis that began in mid-2007 did not begin in the developing economies and initially those countries were not significantly affected. However, a significant outflow of capital from the region began as early as the second half of 2008. Although the developing economies were affected by the outflow, the effect was much more benign than during the previous crises. The sudden halt in the influx of foreign capital did not cause significant problems with debt service or domestic financial markets (with the exception of some countries in Central and Eastern Europe).¹ Foreign capital started to return to the markets of developing countries relatively early and the economic situation improved.

Greater resistance of developing countries to the recent financial shock was due to their more prudent policy aimed at avoiding crises

similar to the previous ones. Particularly important was the accumulation of foreign exchange reserves and improved debt management.

The main aim of this article is to present threats associated with foreign capital flows to developing countries and the policies implemented to reduce the negative effects of sudden capital outflows.

1. Consequences of foreign capital flows to developing countries

The benefits associated with foreign capital are widely reported in the economic literature. According to the neoclassical theory, access to foreign savings can be an important factor in the economic growth of developing countries. Under the conditions of the capital accumulation gap, i.e. when the internal accumulation is insufficient for accelerating the economic growth, foreign capital inflow give the possibility of increasing funds for financing investment.

Therefore, in order to maintain the desired level of economic growth, it is necessary to supplement domestic savings with capital from abroad. Thus increased investment should have a positive macroeconomic effect in the form of increased production and employment, and hence the improved living conditions of the population. The influx of capital is particularly important for developing countries as their limited internal capital accumulation (due to the shortage of domestic savings) often prevents investment and as such is a significant barrier to economic growth. Other advantages of foreign capital include technology transfer that accompanies foreign direct investment and the increased efficiency of the financial market, which should also contribute to faster economic growth.

---


4 More on this issue in *Bezpośrednie inwestycje zagraniczne jako tradycyjna forma transferu technologii*, in: M. Gryczka, *Znaczenie Internetu jako otwartego*
For these reasons, many developing countries decided to introduce rapid liberalization and deregulation of financial markets. The process of liberalization was significantly influenced by the so-called Washington Consensus, based on the assumption that without rigid regulations the capital market functions effectively and has a positive impact on the economy. In practice, the rapid lifting of restrictions on the movement of capital, without the simultaneous introduction of appropriate prudential regulations and supervision, became a source of serious problems for the developing economies.

The disturbances usually resulted from the improper use of foreign savings, which led to the excessive growth of foreign debt. In many developing countries the inflow of foreign capital was not accompanied by a sustained increase in investment in export-oriented production.\(^5\) Foreign loans were not used to finance imports of capital goods and appropriate technologies, but instead financed the purchase of foreign consumer goods. The increased consumption financed by foreign loans led to an increase in foreign debt; due to the increasing difficulty with debt servicing, part of foreign capital was used to repay old foreign debt.

Since the mid-1970s, along with the growing importance of private banks as intermediate entities in the flow of foreign capital, transactions in international markets have become increasingly detached from the real economy, i.e. did not serve to finance imports of goods and services, but were purely financial.\(^6\) This meant that capital inflows increasingly resulted from the decision of foreign investors and not the real needs of developing countries.\(^7\) For example, foreign loans were used to speculate on the markets, mainly real estate, and the inflow of capital into the sector favoured the increase in prices and the formation of speculative

---

\(^5\) *Financing the Real...*, p. 103.

\(^6\) J. Dudziński, *Kryzys surowcowy, paliwowy i żywnościowy lat 70. XX wieku a boom surowcowy XXI wieku – podobieństwa i różnice*, Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania, Uniwersytet Szczeciński, Szczecin 2013, nr 33.

\(^7\) *Financing the Real...*, p. 108.
bubbles. The same was true for stock markets. The import of foreign capital which did not serve to finance the purchase of foreign goods or services led to the revaluation of currencies of developing countries, which strongly weakened the international competitiveness of domestic producers.

Strategy of accelerating the economic growth of developing countries through the use of foreign savings has proved to be risky for other reasons. With the globalization of financial markets, capital has become more mobile, which meant that countries with foreign debt became particularly vulnerable to risks associated with abrupt cessation of foreign capital inflow or its sudden outflow. Rapid changes in the directions of movement of capital bring about very serious consequences for the economy, especially the stability of the financial sector. They may cause changes in the level of foreign exchange reserves of the country, cause disruption in the process of money creation and large fluctuations in exchange rates. One of the most serious consequences of a sudden halt of capital inflows may be the financial crisis, be it currency, banking, debt or financial crisis.

Moreover, the globalization of financial markets means that the outflow of capital from one country can cause disturbances in another country, even if it has maintained stable macroeconomic policies. This situation cannot be predicted, as investors hold portfolios composed of securities purchased in different countries. They may want to offset losses incurred in one market by decommissioning investments in other countries. This is known as the “crisis contagion”.

---


The economic literature usually indicates portfolio investment as the most variable and susceptible to changes in international markets form of capital flows. In contrast, foreign direct investment is usually perceived as the most stable and secure. However, research shows that FDI in developing countries was also subject to significant fluctuations.\(^\text{12}\) This comes from the fact that this form of capital flows includes shares but also loans granted by foreign investors. This type of capital is much easier to recall than shares, while loans are often short-term.

As developing countries increasingly integrated with the global financial markets, they experienced more and more volatile capital flows. The data presented in Figure 1 shows that in the last two decades there have been two periods of intensification of foreign capital inflows, followed by rapid decreases. The first period, in the years from 1990 to 1995, the value of net capital inflows increased from about $40 billion to $193 billion (almost five times). In the late 1990s capital inflows to developing countries were much lower. This was mainly due to the 1997 crisis in South-East Asia. The outflow of capital caused a decline in foreign exchange rates, and the consequent increase in foreign debt servicing costs led to the insolvency of many companies. Large foreign debt, especially short-term debt, and low foreign exchange reserves hindered an adequate response to the crisis by the authorities. The Asian crisis showed that countries need to be properly prepared to seize the opportunities posed by the free movement of capital. Therefore, in the following years the developing countries began reforms that increased their macroeconomic and financial stability.

Another period in which developing countries experienced increased capital inflows were the years 2002–2007, when their value was several times higher than in the early 1990s. In 2007, the net balance reached a record level of more than $700 billion. The rapid capital inflows were due to expansionary monetary policy in developed countries and the rapid growth of developing economies. In most underdeveloped countries this capital was not necessary from the point of view of financing the

---

balance of payments. At the time when more and more capital flowed in from abroad, surplus on their current accounts also increased.¹³

Figure 1. Private financial flows to emerging markets and developing economies, net (in billions of U.S. dollars)


In 2008 a sharp decline in net capital inflows to emerging markets occurred in a consequence of the fast spreading of the crisis which began in the United States. Again, capital outflows caused economic problems in developing countries. This time, however, in contrast to previous crises, due to significant changes in the payment balance sheets in the period before the boom (for example changing the negative balance on the current account into surplus), but also through aid packages from developed countries, the crisis affected developing countries in a much weaker manner.¹⁴ Most countries recovered relatively quickly from the crisis and began to record growth. As early as 2009 there was a gradual increase in net capital inflows to developing countries, which continued in 2010. However, after the last crisis, capital inflows showed high


variability. In 2011–2012 there was in fact a deep fall in net capital inflows, although not as drastic as the previous one, and in 2013 the inflows started to grow again.

As already mentioned, the sharp fluctuations in the flow of foreign capital have had serious consequences for developing countries. Hence, many economists suggest that the benefits of financial liberalization for the development of developing economies have been overestimated, especially as most of empirical research does not confirm the positive relationship between openness to capital flows and economic growth of the host country.¹⁵ For this reason, since the late 1990s an increasing number of developing countries have been cautious about the mass influx of foreign capital and took measures to reduce the negative effects of its flows.

2. Selected actions taken by developing countries to reduce the negative effects of sudden capital outflows

In previous crises, developing countries were highly susceptible to the adverse effects of capital outflows and the related depreciation of the currency due to the heavy dependence on foreign debt and scarce foreign exchange reserves. In addition, those conditions prevented the effective use of counter-cyclical macroeconomic policies that would accelerate their return to the path of economic growth. Hence, in the early 2000s the developing economies took actions to improve their resistance to the crisis, such as the aforementioned increase in foreign exchange reserves and a new strategy for managing foreign debt.¹⁶

In the previous ten or so years, the central banks of developing countries increased foreign exchange reserves to unprecedented levels (Figure 2). At the end of 2013 they amounted to $7,869.2 billion, more than ten times the amount in 2000. Foreign exchange reserves increased in most regions of the developing world, but the greatest increase happened in the East Asian countries, especially China. The countries of the region collected more than half of the total reserves kept by developing

¹⁶ Financing the Real…, p. 122.
countries, with about 40% in China alone. Developing countries maintained foreign exchange reserves mainly in the form of short-term receivables in major currencies of the world, usually in the dollar.

![Figure 2. Level of Official Foreign Exchange Reserves (in billions of U.S. dollars)](chart)


Usually, researchers mention the mercantilist and precautionary reasons for rapid accumulation of foreign exchange reserves. In the former motive, an increase in reserves is a consequence of economic growth stimulated by a boost in exports, at an exchange rate maintained below the currency market level. In the precautionary rationale, authorities accumulate reserves to protect against the financial crisis, thus providing security in the event of capital outflows or suspended inflows. The reserves also provide a preventive mechanism against crises in the balance of payments and lower the risk of default. In the currency crises of 1997–1998, countries that had sufficiently high foreign exchange reserves (for example Hong Kong and Singapore) managed to defend the exchange rates of their currencies against speculative attacks.

It is worth noting that after the crises of the late 1990s, important international institutions and some well-known economists advised
developing countries to increase their foreign exchange reserves. For example, the IMF pointed to the importance of reserves as a means of preventing the next crisis and suggested new ways of measuring their optimum level.\textsuperscript{17} Feldstein suggested that underdeveloped countries should in future count more on their foreign exchange reserves as a form of insurance against the crisis than on the IMF.\textsuperscript{18} Especially if those countries wanted to avoid asking IMF for financial assistance again (i.e. after the crisis in 1997). IMF support requires the implementation of adjustment programs agreed with the institution, which – in the opinion of some Asian countries – propagate too restrictive monetary policy, excessively restricting domestic demand, and promoting the too rapid liberalization of the economy.

Along with the increase in financial integration and the frequency of crises, developing countries need to keep increasing their reserves to protect the value of the national currency against speculative attacks. However, such large foreign reserves may also become a burden for the economies. This is due to the fact that foreign currencies invested in foreign exchange reserves inhibit investment or consumption. In addition, sterilization actions meant to offset the pecuniary effect of increasing foreign exchange reserves may prove to be too costly. Investment in foreign assets, generating lower returns than the interest rate that the central bank must pay on securities, may deprive the bank a substantial part of profits.

The accumulation of reserves before the crisis significantly helped countries to tackle the outflow of capital after the collapse of Lehman Brothers. Research by M. Bussiere et al. shows that countries with a higher proportion of reserves in relation to short-term debt were less

\textsuperscript{17} R. Knap, \textit{W kwestii oceny optymalnego poziomu rezerw dewizowych}, Zeszyty Naukowe Uniwersytetu Szczecińskiego nr 756, Finanse, Rynki finansowe, Ubezpieczenia nr 57, Szczecin 2013, p. 310.

\textsuperscript{18} A. Steiner, \textit{Reserve Accumulation and Financial Crises: From Individual Protection to Systemic Risk}, Cesifo, Area Conferences, 2014, p. 3.
affected by the crisis.\textsuperscript{19} In contrast to the crisis of the late 1990s, in the recent downturn central banks in developing countries did not insist on constant parity with the use of monetary and fiscal instruments, but allowed the depreciation, making only sure that it did not happen too fast. To this end, they used currency intervention, selling some of their reserves. This gave more room for manoeuvre in tackling the crisis and allowed the use of counter-cyclical policies during the recession.\textsuperscript{20}

Greater resistance of some developing countries in the recent financial crisis was also due to a lower level of foreign debt and its favourable currency structure in comparison with the previous period.\textsuperscript{21} Since the beginning of the 21st century, under the conditions of relatively rapid economic growth, foreign debt was an increasingly lighter burden on the economies of developing countries (Table 1). The average ratio of external debt to GNI in 1996–2000 was 39.3\%, and in 2012 was almost twice lower (about 22\%). The decrease in this ratio was interrupted only in 2009 during the financial crisis and in 2012. Comparing this ratio in different regions of developing countries, the least favourable ratio was found in the countries of Europe and Central Asia. In 2012, the ratio was more than twice higher than in the early 1990s.

Developing countries also improved the ratio of foreign debt to exports. While in the early 1990s foreign debt exceeded revenues from exports (goods, services, income from capital and labour) by 72\% on average, in 2012 export revenues were almost 30\% higher. This tendency was only reversed for a short time in 2009. In 2012 the ratio was at the highest level in the countries of Europe and Central Asia, and also worth noting that this was the only region where it deteriorated in comparison with the early 1990s.\textsuperscript{22}

\textsuperscript{20} \textit{Financing the Real...}, p. 122.
\textsuperscript{21} \textit{Ibidem}.
\textsuperscript{22} Although the indices of foreign debt for European and Central Asian countries worsened in the analysed period, due to the growth of gross foreign debt being faster GNI and export, those countries managed to accumulate large foreign assets, which meant that the risk resulting from gross foreign debt was appropriately lower.
Table 1
Selected debt indicators for developing countries (%)

<table>
<thead>
<tr>
<th></th>
<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><strong>Total debt/GNI (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All countries</td>
<td>38.6</td>
<td>39.3</td>
<td>35.4</td>
<td>25.0</td>
<td>23.9</td>
<td>21.9</td>
<td>23.7</td>
<td>22.3</td>
<td>21.3</td>
<td>22.1</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia</td>
<td>28.0</td>
<td>46.6</td>
<td>48.1</td>
<td>53.5</td>
<td>56.5</td>
<td>56.9</td>
<td>72.1</td>
<td>66.1</td>
<td>61.1</td>
<td>63.8</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>37.6</td>
<td>37.6</td>
<td>41.0</td>
<td>24.2</td>
<td>23.0</td>
<td>20.9</td>
<td>23.3</td>
<td>21.7</td>
<td>21.9</td>
<td>24.4</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>37.0</td>
<td>34.2</td>
<td>24.3</td>
<td>18.4</td>
<td>16.3</td>
<td>13.3</td>
<td>14.0</td>
<td>14.4</td>
<td>14.0</td>
<td>14.9</td>
</tr>
<tr>
<td>South Asia</td>
<td>37.1</td>
<td>28.3</td>
<td>23.4</td>
<td>19.8</td>
<td>19.2</td>
<td>21.0</td>
<td>21.5</td>
<td>19.8</td>
<td>20.1</td>
<td>21.0</td>
</tr>
<tr>
<td>North Africa and Middle East</td>
<td>63.7</td>
<td>44.4</td>
<td>34.5</td>
<td>23.0</td>
<td>20.4</td>
<td>16.0</td>
<td>17.3</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>70.6</td>
<td>69.3</td>
<td>54.3</td>
<td>26.8</td>
<td>26.2</td>
<td>23.7</td>
<td>27.8</td>
<td>25.2</td>
<td>25.2</td>
<td>27.2</td>
</tr>
<tr>
<td><strong>Debt/exports (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All countries</td>
<td>172.0</td>
<td>141.9</td>
<td>103.2</td>
<td>71.8</td>
<td>69.4</td>
<td>62.9</td>
<td>83.4</td>
<td>75.4</td>
<td>69.3</td>
<td>71.9</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia</td>
<td>128.2</td>
<td>127.5</td>
<td>112.7</td>
<td>136.8</td>
<td>141.4</td>
<td>134.2</td>
<td>187.9</td>
<td>169.2</td>
<td>141.7</td>
<td>144.7</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>227.2</td>
<td>187.2</td>
<td>151.4</td>
<td>97.3</td>
<td>96.2</td>
<td>88.0</td>
<td>116.9</td>
<td>109.1</td>
<td>100.0</td>
<td>108.3</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>119.3</td>
<td>98.9</td>
<td>62.2</td>
<td>41.8</td>
<td>37.3</td>
<td>32.8</td>
<td>43.9</td>
<td>41.6</td>
<td>41.4</td>
<td>42.3</td>
</tr>
<tr>
<td>South Asia</td>
<td>271.2</td>
<td>178</td>
<td>116.9</td>
<td>94.6</td>
<td>94.8</td>
<td>84.7</td>
<td>110.2</td>
<td>95.9</td>
<td>85.8</td>
<td>93.7</td>
</tr>
<tr>
<td>North Africa and Middle East</td>
<td>159.0</td>
<td>134.4</td>
<td>86.0</td>
<td>56.9</td>
<td>52.2</td>
<td>39.2</td>
<td>51.0</td>
<td>50.7</td>
<td>42.7</td>
<td>42.1</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>250.2</td>
<td>213.3</td>
<td>143.9</td>
<td>68.2</td>
<td>64.1</td>
<td>54.3</td>
<td>81.1</td>
<td>69.0</td>
<td>63.3</td>
<td>71.5</td>
</tr>
</tbody>
</table>


In contrast to the highly developed countries, foreign liabilities of underdeveloped countries are generally denominated in foreign currencies, mainly dollars and euros. Lenders do not want to borrow money in the currencies of developing countries because they fear devaluation and high inflation which depreciate the value of the borrowed money. No possibility of borrowing in its own currency on the foreign markets by developing countries means that they are exposed to foreign exchange risk. The devaluation of the domestic currency increases the size of the debt and its servicing costs denominated in the domestic currency.
Because of the threats that accompany foreign debts, in the late 1990s the development of national debt markets became a priority task for the public authorities in many developing countries. The main advantage of borrowing in the domestic market is that the bonds are generally denominated in the domestic currency and hence the liabilities are not accompanied by the exchange rate risk. In such a situation the government can freely conduct its own exchange rate policy, because the level of the exchange rate does not affect the amount of spending on foreign debt servicing. Another important advantage of the domestic debt market is the development of domestic financial markets. Further, large and liquid market for government securities contributes to the development of securities markets by creating an appropriate infrastructure and reference base for the valuation of debt instruments. This reduces the dependence of the sector on foreign financing.

Table 2
Currency composition of foreign public debt of developing countries (%)

<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>Euros</td>
<td>...</td>
<td>15.1</td>
<td>16.4</td>
<td>17.2</td>
<td>16.0</td>
<td>16.7</td>
<td>14.5</td>
<td>13.5</td>
<td>13.0</td>
</tr>
<tr>
<td>Japanese yen</td>
<td>13.2</td>
<td>10.7</td>
<td>10.6</td>
<td>9.7</td>
<td>11.5</td>
<td>10.7</td>
<td>10.9</td>
<td>10.7</td>
<td>8.6</td>
</tr>
<tr>
<td>U.S. Dollars</td>
<td>60.9</td>
<td>62.4</td>
<td>61.4</td>
<td>61.2</td>
<td>61.5</td>
<td>60.5</td>
<td>61.4</td>
<td>62.1</td>
<td>63.2</td>
</tr>
<tr>
<td>SDR</td>
<td>0.7</td>
<td>1.5</td>
<td>1.8</td>
<td>2.4</td>
<td>2.7</td>
<td>3.5</td>
<td>4.0</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Other Currencies</td>
<td>2.9</td>
<td>3.6</td>
<td>3.8</td>
<td>4.5</td>
<td>3.9</td>
<td>4.7</td>
<td>5.8</td>
<td>6.7</td>
<td>8.7</td>
</tr>
</tbody>
</table>


Thanks to those actions, the currency structure of foreign debt of developing countries started to improve in the early 2000s (Table 2). In 2000, about 60% of the public external debt of developing countries was denominated in USD, and only less than 3% in other currencies.

---

23 According to the requirements of international organization, the division into foreign and domestic debt is based on residence and not currency. Therefore, if bonds issued on the domestic market and sold in domestic currency are bought by foreign investors, then in the light of this definition, this is going to be foreign debt.

including the currencies of developing countries. In 2012, although admittedly still at a relatively low level, the share of debt in other currencies was nearly three times higher compared to 2000 and amounted to almost 9%.

**Conclusions**

In the 1980s it was almost uncritically assumed that the inflow of foreign capital to the developing economies would have only a positive impact. This was an assumption behind the liberalization of capital movements and deregulation of the financial sector. However, it gradually became clear that the inflow of foreign capital may also have negative consequences, such as the excessive growth of foreign debt, exchange rate volatility, growth of credit booms and asset bubbles and the sudden loss of access to external sources of financing, leading to the outbreak of financial crises. Over the last twenty years, developing countries have often experienced capital inflows which ended in crises of all sorts.

For these reasons, from the beginning of the 21st century, developing countries have taken measures to limit the negative effects of the increasing mobility of capital. Among them, of particular importance was the accumulation of foreign exchange reserves, which discourage currency speculation and also protect against the sudden loss of access to foreign financing. In addition, based on previous experience, public authorities and enterprises in developing countries have tended to reduce the exchange rate risk by increasing domestic debt.

As a result of the aforementioned actions, some developing economies are becoming better managed and less prone to various kinds of disturbances in the international financial markets, as was evident during the recent global financial crisis.

---

25 The World Bank does not provide more detailed data on the currency structure of foreign debt.
Trends in the World Economy
New Phenomena in International Markets and their Implications

References


Panizza U., *Domestic and External Domestic and External Public Debt in Developing Countries*, UNCTAD „Discussion Papers” 2008, No. 188.


Ewa Bilewicz
Szczecin University