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# What makes Foreign Exchange Rates Fluctuate in Emerging Economies? : Key is the net external investment position

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# 1. No correlationship between a fall of emerging currencies and their current account deficits or magnitude of external debts

Whereas attention is focused on the tapering of unwinding of the US unprecedented easy monetary policies, there has been arising a new concern for actual and possible capital outflows from emerging countries. While the exchange markets have been in a lull since the September FMOC meeting decided no change in its policy, the currencies have temporarily seen a big fall in India and Turkey which have a big current account deficit. Also in Indonesia, which has a much smaller deficit in its current accounts, its currency has been under pressure to fall as the deficit has been rapidly expanding.

Some of the countries, even though they have a big or expanding current account deficit, have not experienced a large sell-off of their currencies. Thailand and Malaysia are the case. On the other hand, despite its smaller deficit and its slower speed of change, Brazil has experienced a large depreciation of the real, albeit temporarily. As is seen above, the current account deficit by itself cannot explain the development of a country's exchange rates.

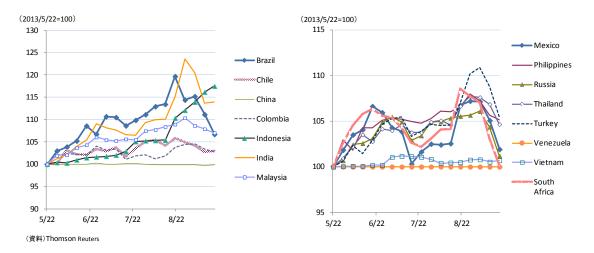


Chart 1 Exchange rates of Emerging Countries (against the US dollar)

Let's look at the ratios of their short-term external debts to foreign exchange reserves. This ratio was once believed to be a typical indicator of an early warning of a country's possible external difficulty.<sup>1</sup> Currently the ratios are generally low and the relationship with the development of exchange rates does not seem very strong. In Venezuela, the ratio shows the highest level among the countries listed but the country maintains a fixed exchange rate system. At a notable level for warning are such countries as Turkey, Venezuela, and Vietnam, but their currencies are discretely moving, showing the ratio's low capacity to explain the movement of exchange rates.

	Current acc	ount balance	(% of GDP)	Short External Debt (% of foreign reserves)			
	2009	2012	gap	2009	2011	gap	
Brazil	-1.5	-2.4	-0.9	16.8	12.0	-4.7	
Chile	2.1	-3.5	-5.6	57.6	40.9	-16.7	
China	4.9	2.4	-2.5	10.0	14.9	4.9	
Colombia	-2.1	-3.1	-1.0	16.2	34.5	18.2	
India	-2.0	-5.0	-3.0	17.6	28.8	11.2	
Indonesia	2.0	-2.8	-4.7	37.8	35.8	-2.0	
Malaysia	15.6	6.1	-9.5	24.8	33.2	8.3	
Mexico	-0.7	-0.8	-0.1	27.7	35.7	7.9	
Philippines	5.6	2.9	-2.7	10.3	10.4	0.1	
Russia	4.1	3.7	-0.4	12.7	15.4	2.7	
South Africa	-4.0	-6.3	-2.3	60.4	44.3	-16.1	
Thailand	8.3	0.8	-7.6	21.9	26.9	5.0	
Turkey	-2.0	-6.0	-4.0	70.1	107.0	36.9	
Venezuela	0.7	2.9	2.2	80.0	168.0	88.0	
Vietnam	-6.8	6.4	13.2	31.5	73.6	42.1	

 Table 1
 Current Account Balances and Short-term External Debts

(Source) Thomson Reuters

<sup>&</sup>lt;sup>1</sup> No doubt the ratio has been still often used as a warning indicator. For instance, the Economist adopts the ratio in its newly developed "Capital Freeze Index" (Economist, September 7 issue).

Exchange rates, i.e., relative values among currencies, tend to be much affected by speculation. So there will be a case where a currency is sold by an attempt of its currency being lumped together as currencies of emerging countries regardless of their fundamentals. On the other hand, there will be a possibility that market participants sense some imbalances that cannot be assessed from the scale of current account balances and short-term external debts, and make a different approach to sell the currencies.

In the below, I will try to compare the imbalances that emerging countries face, by using the method of "Macroeconomic Imbalance Procedure (MIP)", recently developed and introduced by the European Union.<sup>2</sup> Here I will take up 15 non-European countries that are Brazil, Chile, China, Colombia, India, Indonesia, Malaysia, Mexico, the Philippines, Russia, South Africa, Thailand, Turkey, Venezuela, and Vietnam.

## 2. Situations of External Imbalances

MIP addresses both external imbalances and internal imbalances. The EU adopts such indicators as current account balance, net external investment position, real effective exchange rate, export market shares, and nominal unit labor cost to assess the existence of harmful external imbalances. Among these, I omitted from my analysis the export market shares because of the difficulty of data availability. In addition, unit labor cost is not measured in many emerging countries, so I substituted productivity growth rate for it. (Table 2)

<sup>&</sup>lt;sup>2</sup> As for the Macroeconomic Imbalance Procedure the EU has adopted, please refer to our Newsletter No. 19, 2013 "Economic Development of the Euro countries—Have the periphery countries come out from the worst?" (only in Japanese, http://www.iima.or.jp/Docs/newsletter/2013/NLNo\_19\_j.pdf)

	C.A. balance (% of GDP、3-	Net IIP(% of GDP、2012)	Real Effective Exchange Rate	Productivity growth rate	
	yrs ave.)	GDF (2012)	(3year change, %)	(3year change, %)	
Brazil	-2.2	-32.3	9.1	5.9	
Chile	-1.1	-16.7	10.1	3.6	
China	2.7	21.1	8.1	27.4	
Colombia	-3.0	-24.7	18.2	7.3	
India	-3.9	-15.4	5.6	22.3	
Indonesia	-0.6	-37.7	5.9	14.5	
Malaysia	9.5	4.1	6.2	-0.7	
Mexico	-0.6	-41.8	7.6	0.8	
Philippines	3.5	-8.7	10.3	9.4	
Russia	4.4	6.6	16.2	7.4	
South Africa	-4.2	-6.8	6.9	5.8	
Thailand	1.9	-9.2	0.8	9.0	
Turkey	-7.3	-52.6	-10.9	0.4	
Venezuela	4.3	38.1	6.7	0.3	
Vietnam	0.9	#N∕A	14.2	18.5	

 Table 2
 External Imbalances of Emerging Countries

(Note) Highlighted are for 2011.

(Source) Thomson Reuters

Countries with higher real exchange rates and lower productivity growth rates are suffering from the deteriorated price competitiveness. They include Brazil, Chile, Malaysia, Mexico, South Africa and Venezuela. Turkey had a low growth rate of productivity, but its exchange rate has already fallen substantially, and therefore a certain recovery of competitiveness can be expected for Turkey.

Next, let us examine the net international investment positions (Net IIP). The net IIP refers to the external assets comprising of direct investment, portfolio investment in stocks and bonds, lending and foreign exchange reserves, subtracted by the external debts from foreign investors in the preceding categories other than reserves, and it represents the net external assets that a country has, mostly in foreign currencies. Therefore, its plus position indicates that the country has more assets than debts, having a leeway in its foreign exchange reserves, while the minus position implies a net indebtedness where the debts and interests cannot be fully served.

Table 3 shows the comparison of the ratios of net positions to GDP over the last four years. Highlighted figures indicate that they are under the threshold value of -35% which the EU has set to identify the need for in-depth investigation.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> The Crisis-stricken Ireland, Greece, Spain, and Cyprus had a worsening net investment position ratio of -96%, -86%, -92%, and -71% respectively, while Italy, with -20.6%, managed to escape the crisis.

	2009	2010	2011	2012	gap
Brazil	-36.9	-41.6	-30.9	-32.3	4.6
Chile	-13.1	-13.6	-12.6	-16.7	-3.5
China	29.9	28.5	23.1	21.1	-8.8
Colombia	-25.4	-24.1	-23.3	-24.7	0.8
India	-9.7	-12.4	-11.4	-15.4	-5.8
Indonesia	-39.6	-41.0	-37.7	#N/A	1.9
Malaysia	15.3	1.7	4.1	#N∕A	-11.2
Mexico	-38.2	-41.2	-34.6	-41.8	-3.5
Philippines	-13.7	-13.2	-8.7	#N/A	5.0
Russia	8.5	1.1	7.4	6.6	-1.9
South Africa	-14.2	-19.4	-6.8	#N/A	7.3
Thailand	-1.7	-13.1	-9.2	#N/A	-7.5
Turkey	-45.0	-49.5	-41.4	-52.6	-7.6
Venezuela	37.2	31.4	47.7	38.1	0.9
Vietnam	#N/A	#N∕A	#N/A	#N/A	#N∕A

 Table 3 Developments of Net International Investment Position

(Note) Gap between the latest value and 2009

(Source) Thomson Reuters

The table indicates that Brazil, Indonesia, Mexico and Turkey have a large negative net position, suggesting they are facing with a potential uncertainty of foreign currency shortage. Among them, Brazil surpassed the threshold value in recent years, showing an improvement in its position.

Thailand, Malaysia, and Chile had a worsening current account balance but their investment positions have been in relatively sound shape, indicating their resilience to the foreign currency shortage. Furthermore, China, Venezuela and Russia enjoy a status of net external asset countries so they can be thought to be basically free from a currency crisis.

So far we have found that the countries which suffered a large fall in their currencies had a large or worsening negative net IIP.

### 3. Internal Imbalances

Next, let us examine the internal imbalances. The EU adopts for investigation the following indicators: deflated house prices, private sector credit flow (as % of GDP), private sector debt (as % of GDP), general government debt (as % of GDP), and unemployment rate.

Again I substituted the real stock prices for deflated housing prices as the latter is not available in many emerging countries, and omitted the private sector debt as it seems largely to duplicate the private sector credit flow. The figures highlighted in yellow show the items that exceed the thresholds set by the EU.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Threshold values are 160% for private sector credit flow, 15% for its range of change, and 10% for unemployment

A glance at the table reveals that there are much fewer highlighted items than in the case of the external imbalance. This confirms that, although in some countries there is a concern for the speed of its credit expansion, internal credit situation in emerging economies is more or less controlled with fewer countries having excessive credit while government debts are also relatively well managed. As for unemployment rate, except for South Africa which has an extremely high rate, Colombia, India and Turkey have double digit rates, but they are still lower than those in the problem countries in the EU.<sup>5</sup>

Since the internal imbalance has not been much accumulated in these emerging countries, the possibility of internal occurrence of a crisis seems to be small. For this reason, it is seen it is hard to explain the recent exchange rate movements by means of internal imbalance.

	Domestic Cre	Domestic Credit to Private sector( % of GDP)			Government Debt ( % of GDP)			Jobless rate (%)
	2009	2012	gap	2009	2012	gap	3-year-chg.	3-year-ave.
Brazil	48.9	68.4	19.5	60.9	58.7	-2.2	-4.3	6.6
Chile	70.7	73.3	2.6	5.8	9.0	3.2	35.6	7.3
China	127.2	133.7	6.5	17.7	15.9	-1.8	-27.7	4.1
Colombia	40.0	48.9	8.9	36.2	32.4	-3.8	36.3	11.0
India	47.3	51.5	4.2	56.2	53.3	-2.9	-2.9	12.5
Indonesia	27.7	34.9	7.3	26.2	22.4	-3.8	79.5	7.2
Malaysia	111.6	118.2	6.6	50.8	53.3	2.5	39.2	3.1
Mexico	23.1	27.7	4.6	37.5	38.9	1.4	40.0	5.2
Philippines	29.2	33.4	4.2	54.8	51.5	-3.3	86.6	7.1
Russia	46.2	47.8	1.6	7.6	10.2	2.6	22.1	6.5
South Africa	152.1	70.8	-81.3	27.1	40.1	13.0	30.2	25.0
Thailand	116.4	147.9	31.5	28.6	30.9	2.3	87.5	0.8
Turkey	36.5	54.4	17.9	49.4	41.5	-8.0	35.0	10.3
Venezuela	23.6	25.2	1.6	-12.6	60.6	73.2	194.2	8.2
Vietnam	112.7	111.6	-1.2	51.2	52.6	1.5	-32.2	2.5

Table 4 Internal Imbalances in Emerging Economies

(Note) Vietnam's domestic credit refers to 2011

(Source) Thomson Reuters

### 4. Key is the net IIP and Turkey to be watched

Finally, I would like to look at the net IIP in more details since it seems to be the most important criterion. The net IIP includes direct investment which is to be fixed for a longer term after the plants are constructed to start production. This is an investment that is harder to be withdrawn from emerging countries, and in this sense differs from portfolio investment and lending which are easily sold or repatriated. Table 5 shows the adjusted net position (expressed in % to GDP) by excluding the direct investment.

As the emerging economies are in many cases net receivers of direct investment, in most

rate.

<sup>&</sup>lt;sup>5</sup> Newsletter No.19, p9. http://www.iima.or.jp/Docs/newsletter/2013/NLNo\_19\_j.pdf

cases their positions are to be improving. Especially, Chile's position was dramatically improved from -16.7% to +24.1%, indicating its less dependence on hot money. The positions of Colombia and the Philippines also improved to a smaller negative position. These countries are unlikely to face a foreign currency shortage.

		-			
	2009	2010	2011	2012	gap
Brazil	-22.4	-18.6	-11.1	-12.5	10.0
Chile	31.4	32.3	24.6	24.1	-7.2
China	51.3	49.6	43.3	41.2	-10.0
Colombia	-0.5	-3.7	-4.3	-3.1	-2.6
India	-3.0	-6.0	-6.2	-9.6	-6.6
Indonesia	-20.2	-19.3	-16.5	#N∕A	3.7
Malaysia	14.9	3.6	7.0	#N∕A	-7.9
Mexico	-14.5	-16.7	-12.8	-19.0	-4.5
Philippines	-3.7	-3.6	0.7	#N∕A	4.4
Russia	14.7	9.2	12.3	12.1	-2.6
South Africa	1.6	-1.8	7.1	#N∕A	5.4
Thailand	33.5	24.2	22.6	#N∕A	-11.0
Turkey	-25.2	-27.0	-26.7	-33.5	-8.2
Venezuela	45.0	37.8	55.9	45.4	0.5
Vietnam	#N/A	#N∕A	#N∕A	#N∕A	#N/A

Table 5Net IIP Adjusted for Direct Investment

(Note) Gap between the latest value and 2009

(Source) Thomson Reuters

From the above analysis of several indicators, it comes to be summed up that Brazil, Indonesia, Mexico and Turkey are the countries that may have a risk for foreign currency shortage. Highly concerned is Turkey. Turkey's position is -33.5%, even after adjustment for direct investment. It is very close to the EU threshold. It shows that Turkey is in excess of borrowing for a nation as a whole, and is susceptible to uncertainty triggered by a reverse of capital flow.

Next come Mexico, Indonesia, and Brazil which need to be closely watched. These three countries have a negative position in double digits after adjustment. Among them Mexico stands out most with a large net negative position (-19%) and a rapid speed of deterioration (-4.5%). Mexico has been attracting attention as an export base to the US centered in automobile industries but despite of its image of non-vulnerability to a currency crisis, it should be noted that even Mexico has a blind spot.

The positions in Brazil (-12.5% for 2012) and Indonesia (-16.5% for 2011) have been on an improvement. It should be watched for a while whether this trend will continue or not.

Lastly, the position in India stands at relatively small -9.6% but its gap for three years

amounts to -6.6%. The concern of foreign currency shortage in India may not be serious for the moment, but it can be assessed that it is too early to wipe out the uncertainty.<sup>6</sup>

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 $<sup>^{6}\,</sup>$  It was impossible to assess the position of Vietnam because of unavailability of the data.