

# Yuan Devaluation: Trigger for a Crisis?

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**Abstract:** This paper discusses the possible consequences of the recent devaluation of the Chinese Renminbi by the People's Bank of China (PBOC) with reference to the Asian Financial Crisis of 1997. The Chinese dragon has emerged as the most powerful Communist Force in the Southeast Asian economy. Chinese economy has grown by leaps and bounds since 1990. Since the devaluation, markets worldwide have lost confidence with the Shanghai Stock Exchange in a frenzy downslide. With stock markets on the decline, the paper, in the wake of the Asian Financial Crisis that started around 1997, tries to establish any possible similarity to the said crisis.

**Keyword:** Yuan, Devaluation, Chinese Economy, Asian Financial Crisis.

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## 1. INTRODUCTION

China devalued the Renminbi for the first time in a decade on 11th August, 2015. It was followed by a second devaluation on the 12th. In two days, China's Yuan lost 3.5 percent to the U.S. dollar. Exporters like Caterpillar and General Electric saw their prices falling in the market. On Wednesday, Vietnam devalued its currency, the Vietnamese Dong, to weaken. The U.S. central bank is expected to raise the short-term interest rate it controls later in the year. Given that every crisis is triggered by a series of events, it is crucial to realize that the fore sequence of events have the potential to take the world economy on a landslide. Earlier studies of the Asian Financial Crisis of 1997 have shown that as the crisis spread, most of Southeast Asia and Japan suffered from slumped currencies, devalued stock markets and a loss of demand throughout the region. At present, the slowing down of Chinese economy, one of Asia's largest economies; with the U.S. Federal Reserve about to kick off an interest rate tightening cycle in the same year and China devaluing its currency, the chain of events back in 1997 recurring are high leading the world to another financial crisis. Thus, it is important to establish the similarities as well as the differences between the situations then and now. To analyse the current situation, we will be looking at the current account balances, growth rate and foreign exchange reserves of China and other large Asian economies.

## 2. THE ASIAN CRISIS, 1997 – WILL HISTORY REPEAT

The Asian Crisis, also referred to as the "Asian Contagion", was a series of currency devaluations and other economic events that affected many Asian markets beginning in the summer of 1997. Thailand's Baht crashed first as the result of Bangkok's decision to un-peg the Baht to the U.S. dollar. Currency declines spread like wildfire throughout South Asia causing stock market declines and reduced import revenues. Financial intervention from the International Monetary Fund (IMF) and the World Bank somewhat stemmed the crisis situation. Markets in the United States, Europe and Russia also declined as the Asian economies slumped. In the current scenario, the slowing Chinese economy, the U.S. Fed's inclination to increase interest rates accompanied by a Renminbi devaluation has raised fears whether this could end up as another financial crisis and an eventual economic meltdown. To this end, we will be analysing the current account deficits, growth rates and foreign reserves of certain Asian countries for which data from 1997 is available: South Korea, Malaysia, Indonesia, Philippines, China, Thailand, Singapore, Hong Kong; and comparing the values to their present counterparts.

## **2.1 CURRENT ACCOUNT TO GDP:**

Current account is the sum of the balance of trade (goods and services exports less imports), net income from abroad and net current transfers. Current account is an important indicator about an economy's health. Current account to Gross Domestic Product (GDP) is the ratio of the current account and the nation's GDP. A positive value indicates that the nation is a net lender to the rest of the world, while a negative value indicates that it is a net borrower from the rest of the world.

### **2.1.1 THAILAND:**

Thailand consistently recorded a current account deficit during the 1990-1998 period. The deficit hit a record low during the 1996-1997 period at 8.3%. Thailand has recorded a surplus since 2010 except during the 2013-2014 period. As of 2015 it is approaching a 5% surplus. The graph is as shown in Fig 1.

### **2.1.2 INDONESIA:**

Indonesia recorded a current account deficit during the 1990-1998 period. The deficit hit a record low during the 1996-1997 period at 6.8%. Indonesia recorded a surplus during the 2010-2012 period and has had a deficit ever since. As of 2015 it is approaching a 3% deficit. The graph is as shown in Fig 2.

### **2.1.3 MALAYSIA:**

Malaysia recorded a current account deficit during the 1990-1998 period. The deficit hit a record low during the 1995-1996 period at over 10%. Malaysia has recorded a surplus since 2010 and as of 2015 is approaching a 7% surplus. The graph is as shown in Fig 3.

### **2.1.4 PHILIPPINES:**

Philippines recorded a current account deficit during the 1990-1998 period. The deficit hit a record low during the 1994-1995 period at 5.8% and approached this low during 1997-1998. Philippines has consistently recorded a surplus since 2005 and as of 2015 is just over 4%. The graph is as shown in Fig 4.

### **2.1.5 SOUTH KOREA:**

South Korea recorded a current account deficit during the 1990-1998 period except during 1992-1993 when it was almost negligible. The deficit hit a record low during the 1996-1997 period when it came close to 5%. South Korea has consistently recorded a surplus since 2000 and as of 2015 is about 6%. The graph is as shown in Fig 5.

### **2.1.6 HONG KONG:**

Hong Kong recorded a current account surplus during the 1990-1995 period after which it plummeted to about a 6% deficit up till the end of 1998 after which it started recording a surplus. Hong Kong consistently recorded a surplus since 2000 and as of 2015 is about 2%. The graph is as shown in Fig 6.

### **2.1.7 SINGAPORE:**

Singapore recorded a current account surplus during the entire 1990s. The lowest surplus was recorded during the 1993-1994 period at about 7%. Singapore consistently recorded a surplus since the 1990s and as of 2015 is about 19%. The graph is as shown in Fig 7.

### **2.1.8 CHINA:**

China recorded current account surplus during the 1990s except during the 1993-1994 period when it recorded a deficit low of about 2%. China has consistently recorded a surplus since 1995 and as of 2015 is about 2%. The graph is as shown in Fig 8.

From the data recorded, the countries that came under fire in 1997 seem to have been those with large current account deficits throughout the 1990s. Countries with small deficits or actual surpluses did not suffer comparable depreciations. While Thailand, Malaysia, Philippines, South Korea and Indonesia suffered, countries like China, Hong Kong, Singapore held their own. In summary, current account deficits may not be the sole cause for a crisis but may have played a role in the dynamics in the Asian meltdown.

## **2.2 REAL ECONOMIC GROWTH RATE:**

The GDP growth rate is the rate of change of the nation's GDP from one year to another. The real economic growth is calculated by taking into account the effect of inflation on the economy and is expressed as a percentage. The rate of economic growth indicator is not as reliable because it may be distorted by effects of extreme inflation or deflation. GDP growth rate is one of the factors used to determine whether an economy is in a recession or not.

### **2.2.1 THAILAND:**

Thailand maintained an average growth rate of over 9% in the first half of the 1990s. Growth fell in 1996 and continued to fall well into the negative and recovered over two years later. The growth rate crossed negative 10% at the lowest in 1998. Thailand has been growing at a moderate rate over the past 10 years. Statistics are as shown in Table 1 and Table 2

### **2.2.2 INDONESIA:**

Indonesia maintained an average growth rate of over 7% in the first half of the 1990s. Growth fell in 1996 and continued to fall well into the negative and recovered in 1999. The growth rate crossed negative 13% at the lowest in 1998. Indonesia has been growing steadily over the past 10 years with an average growth rate of over 5%. Statistics are as shown in Table 1 and Table 2.

### **2.2.3 MALAYSIA:**

Malaysia maintained an average growth rate of over 9% in the first half of the 1990s. Growth fell at the end of 1996 and continued to fall into the negative and recovered in 1999. The growth rate crossed negative 7% at the lowest during 1998. Malaysia has been growing at a moderate rate over the past 10 years. Statistics are as shown in Table 1 and Table 2.

### **2.2.4 PHILIPPINES:**

Philippines maintained an average growth rate of over 2% in the first half of the 1990s. Growth showed slight volatility during the 1990s. Philippines has been growing at a positive rate over the past 10 years with an average rate of over 5%. Statistics are as shown in Table 1 and Table 2.

### **2.2.5 SOUTH KOREA:**

South Korea maintained an average growth rate of over 8% in the first half of the 1990s. Growth fell in 1996 and continued to fall to over negative 5% in 1998. South Korea has been growing at a slow rate over the past 10 years with an average growth rate of over 3.5%. Statistics are as shown in Table 1 and Table 2.

### **2.2.6 HONG KONG:**

Hong Kong showed an average growth rate of about 5% in the first half of the 1990s. Volatility increased during the 1997-1999 period with growth hitting almost negative 6% in 1998. Hong Kong has maintained an average growth rate of about 4% over the past 10 years. Statistics are as shown in Table 1 and Table 2.

### **2.2.7 SINGAPORE:**

Singapore showed a high average growth rate of almost 9% in the first half of the 1990s. Growth turned negative only in 1998 which otherwise remained above 5%. Singapore has maintained an average growth rate of close to 6% over the past 10 years. Statistics are as shown in Table 1 and Table 2.

### **2.2.8 CHINA:**

China maintained a high growth rate throughout the 1990s with an average growth rate of over 10% in the first half of the 1990s. China's economy has slowed down in recent years with an average growth rate of about 10.5% from 2005-2012. Reliable data of the GDP growth post 2012 is not available. Statistics are as shown in Table 1 and Table 2.

In all countries, GDP Growth rates were pretty high in the 1990s. Traditionally, a huge current account deficit is more likely to be sustained when growth is high; Asian countries did not appear to have a sustainability problem. But the question is the extent to which output growth in Asia was due to the total factor productivity growth, as opposed to growth in the availability of inputs, reflecting increasing rate of investments and labour participation in the region. Although this interpretation cannot explain the sudden crash of Asian economies, it does point out that high growth rates of the 1990s extrapolated into the future was not necessarily warranted by fundamentals.

### **2.3 FOREIGN RESERVES:**

Foreign currency reserves are crucial to a nation's economic well-being. An economy can come to a stand-still without adequate reserves. Reserves are necessary to pay for imports like crude oil or service external debts or influence their domestic exchange rate. Holding currency reserves minimizes exchange rate risks as the purchasing nation need not use their own currency in order to make the purchase.

#### **2.3.1 THAILAND:**

Thailand's reserves increased throughout the 1990s except during 1996-1997 when it dropped close to 6 billion worth of SDRs. At present, Thailand maintains more than 100 billion worth of SDRs in its reserves. Statistics are as shown in Table 3 and Table 4.

#### **2.3.2 INDONESIA:**

Indonesia's reserves increased steadily through the 1990s except a slight dip in 1996-1997. Indonesia's reserves post 2005 have remained under 100 billion mark. Statistics are as shown in Table 3 and Table 4.

#### **2.3.3 MALAYSIA:**

Malaysia's reserves grew unevenly throughout the 1990s. At present, Malaysia maintains over 50 billion worth of SDRs. Statistics are as shown in Table 3 and Table 4.

#### **2.3.4 PHILIPPINES:**

Philippines' reserves grew unevenly throughout the 1990s but remained at low levels. At present, Philippines maintains close to 50 billion worth of SDRs but is relatively low compared to other Asian countries. Statistics are as shown in Table 3 and Table 4.

#### **2.3.5 SOUTH KOREA:**

South Korea's reserves grew throughout the 1990s except a drop of 9 billion worth of SDRs during 1996-1997. At present, South Korea maintains over 200 billion worth of SDRs and is one of the Asian countries with largest foreign reserves. Statistics are as shown in Table 3 and Table 4.

#### **2.3.6 HONG KONG:**

Hong Kong's reserves grew rapidly throughout the 1990s. At present, Hong Kong maintains over 200 billion worth of SDRs and is one of the Asian countries with largest foreign reserves. Statistics are as shown in Table 3 and Table 4.

#### **2.3.7 SINGAPORE:**

Singapore's reserves grew at a steady pace throughout the 1990s. At present, Singapore maintains Close to 200 billion worth of SDRs. Statistics are as shown in Table 3 and Table 4.

#### **2.3.8 CHINA:**

China's reserves grew rapidly throughout the 1990s. China maintains over 1000 billion worth of SDRs and is Asia's largest foreign reserve. Statistics are as shown in Table 3 and Table 4.

A big war chest of foreign currency reserves is handy during a currency crisis like the "Asian Contagion" of 1997. From the available data, it can be seen that Asian countries, at present, maintain large foreign reserves and are better equipped to handle another crisis. Countries like China, Singapore and Hong Kong maintained relatively large reserves even in the 1990s and thus handled the 1997 crisis better than other countries like Philippines, Thailand, South Korea and Indonesia. While having large foreign reserves certainly helps in better tackling a crisis situation, it forms only one of the downplaying factors from a large pool of other contributing factors.

### **3. CONCLUSION**

Comparing the current economic status in Asia and the time during the Asian crisis of 1997, we find little similarity. Current account deficit, the yearly growth rate and foreign reserves form a crucial part of an economy and thus, I have used these factors for a very short comparison. At the time of the 1997 crisis, Asian countries with the exception of Singapore and China recorded a current account deficit in excess of 5%. GDP growth rate of all countries were

remarkably high. A high current account deficit can be supported by a high GDP but the Asian countries did not seem to have a sustainability problem. Regardless, the source of the high GDP may have been due to an increase in inputs and not factor productivity growth. A high foreign reserve ensures that a country can effectively tackle a currency crisis and compared to the current status most Asian countries had a low reserve which could have been one of the reasons for their situation. At present, all Asian countries with the exception of Indonesia have a current account surplus, all countries except Thailand, Hong Kong, South Korea and Singapore have a GDP growth rate of more than 5% and foreign reserves of all Asian countries are remarkably high with China in the lead. A GDP growth of around 2-3% of some Asian countries hints at a slowdown but having a current account surplus and high foreign reserve keeps them on the safe side. In conclusion, it is too early to predict what the future holds for the world economy. The devaluation does not hold as much a threat that is speculated but if the current situation is exacerbated, for example due to FII outflows from major Asian economies, then it may lead to a crisis not too different from the Asian Financial Crisis of 1997 in Asia accompanied by a world economic meltdown.

### REFERENCES

- [1] Giancarlo Corsetti, Paolo Pesenti, Nouriel Roubini (1999), What Caused the Asian Currency and Financial Crisis, Japan and World Economy, vol. 11, pp. 305–373.
- [2] Nishi Malhotra, Priya Malhotra (2015), Devaluation of Renminbi - Chinese Currency, International Journal of Management and Commerce Innovations, vol. 3, Issue 1, pp. 607–609.
- [3] Francois J Gurtner (1999), The Stability of the Renminbi in the Wake of the Asian Financial Crisis, INTERECONOMICS, May/June 1999.
- [4] Duo Qin, Xinhua He (2010), Is the Chinese Currency Substantially Misaligned to Warrant Further Appreciation, Economics E-Journal, No 2010-8, February 2010.
- [5] Frederic S. Mishkin (2000), Lessons from the Asian Crisis, Journal of International Money and Finance, vol. 18, no.4, pp. 709-723.
- [6] Robert J. Barro (2001) Economic Growth in East Asia Before and After the Financial Crisis, Korean Crisis and Recovery, International Monetary Fund, 2002.
- [7] Roberto Chang and Andres Velasco (1998), The Asian Liquidity Crisis, the National Bureau of Economic Research.
- [8] Carmen M. Reinhart and Kenneth S. Rogoff (2009), The Aftermath of Financial Crises, American Economic Review, American Economic Association, vol. 99(2), pp: 466-472.
- [9] Craig Burnside, Martin Eichenbaum and Sergio Rebelo (1998), Prospective Deficits and the Asian Currency Crisis, Journal of Political Economy, v109, pp: 1155-1197 .
- [10] Bong-Chan Kho and Rene M. Stulz (1999), Banks, the IMF, and the Asian Crisis, Pacific-Basin Finance Journal, vol. 8, no. 2, pp: 177-216.
- [11] Steven Radelet and Jeffrey Sachs (1998), The East Asian Financial Crisis: Diagnosis, Remedies, Prospects, Brookings Paper, vol. 28, no. 1, pp: 1-74.
- [12] John B. Taylor (2009), The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong, Critical Review: A Journal of Politics and Society, vol. 21, Issue 2-3, 2009 Special Issue: Causes of the Financial Crisis.
- [13] Hailong Jin and E. Kwan Choi (2014), China's Profit and Losses from Currency Intervention, 1994-2011, Pacific Economic Review, vol. 19, Issue 2, pp: 170-183.
- [14] Roberto Chang and Andres Velasco (1998), Financial Crises in Emerging Markets, FRBA, vol. 84, no. 2, pp: 4-17.
- [15] Joe McDonald and Paul Wiseman, "Australian dollar plummets after China's currency gambit", in News.com.au (2015), Retrieved from <http://www.news.com.au/finance/economy>
- [16] Lingling Wei and Anjana Trivedi, "China's Forex Reserves Fall by Record \$93.9 Billion on Yuan Intervention", in The Wall Street Journal (2015), Retrieved from <http://www.wsj.com>
- [17] "Could China's Renminbi Devaluation Spark a New Financial Crisis?" in Bloomberg (2015), Retrieved from <http://www.bloomberg.com/asia>

APPENDICES

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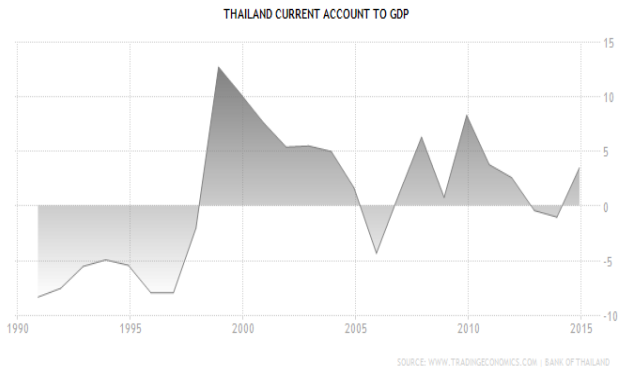


Fig. 1

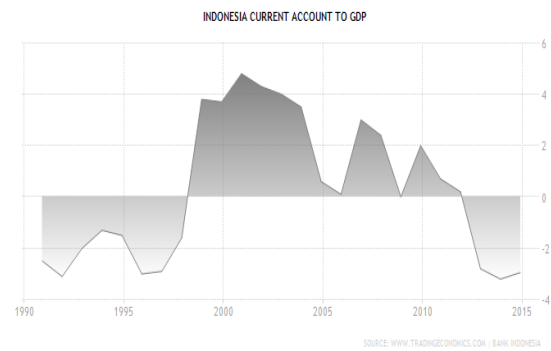


Fig. 2

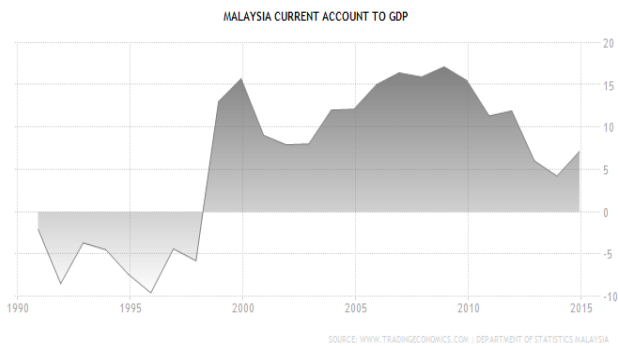


Fig. 3

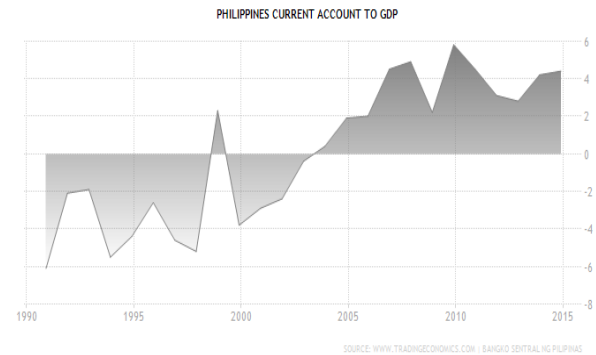


Fig. 3

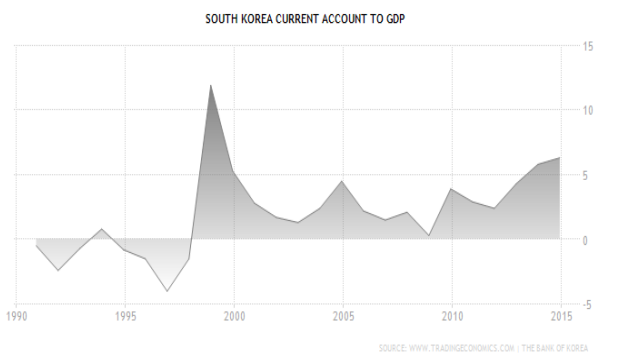


Fig. 5



Fig. 6

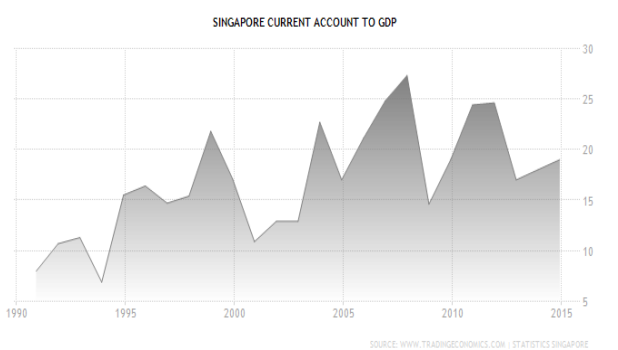


Fig. 7



Fig. N



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TABLE 1: REAL ECONOMIC GROWTH RATE 1990-1999 (IN %)

	1990	1991	1992	199	1994	1995	1996	1997	1998	1999
THAILAND	11.17	8.56	8.08	8.25	8.99	9.24	5.9	-1.37	-10.51	4.45
INDONESIA	7.24	6.95	6.46	6.50	7.54	8.22	7.82	4.7	-13.13	0.79
MALAYSIA	9.01	9.55	8.89	9.89	9.21	9.83	10.00	7.32	-7.36	6.14
PHILIPPINES	3.04	-0.58	0.34	2.12	4.39	4.68	5.85	5.19	-0.58	3.08
SOUTH KOREA	9.81	10.35	6.18	6.25	9.21	9.57	7.59	5.92	-5.47	11.31
HONG KONG	3.83	5.70	6.23	6.20	6.04	2.37	4.26	5.10	-5.88	2.51
SINGAPORE	10.03	6.69	7.09	11.54	10.93	7.03	7.53	8.29	-2.23	6.10
CHINA	3.84	9.18	14.24	13.96	13.08	10.92	10.01	9.3	7.83	7.62

TABLE 2: REAL ECONOMIC GROWTH RATE 2005-2014 (IN %)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
THAILAND	4.46	5.57	4.93	2.46	-2.25	7.81	0.05	6.52	2.87	0.73
INDONESIA	5.69	5.50	6.35	6.01	4.63	6.22	6.17	6.03	5.58	5.02
MALAYSIA	5.33	5.58	6.3	4.83	-1.51	7.42	5.29	5.47	4.71	5.99
PHILIPPINES	4.78	5.24	6.62	4.15	1.15	7.63	3.66	6.68	7.06	6.13
SOUTH KOREA	3.92	5.18	5.46	2.83	0.71	6.50	3.68	2.29	2.90	3.31
HONG KONG	7.39	7.03	6.46	2.13	-2.46	6.77	4.81	1.70	3.07	2.50
SINGAPORE	7.49	8.86	9.11	1.79	-0.60	15.24	6.21	3.41	4.44	2.92
CHINA	11.31	12.68	14.16	9.63	9.22	10.33	9.35	7.79	NR	NR

NR = NOT RELIABLE

TABLE 3: FOREIGN RESERVES 1990-1999 (IN BILLIONS OF IMF'S SPECIAL DRAWING RIGHTS)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
THAILAND	9.31	12.08	14.55	17.52	19.78	23.85	25.86	19.04	20.19	24.62
INDONESIA	5.16	6.39	7.40	7.99	8.09	8.95	12.39	11.92	15.90	19.12
MALAYSIA	6.55	7.28	12.20	19.52	17.04	15.43	18.18	14.83	17.56	21.61
PHILIPPINES	0.61	2.22	3.11	3.30	4.03	4.21	6.90	5.32	6.49	9.57
SOUTH KOREA	10.16	9.30	12.10	14.34	17.14	21.47	23.11	14.60	36.90	53.69
HONG KONG	17.26	20.13	25.58	31.29	33.73	37.26	44.37	68.78	63.63	70.11
SINGAPORE	19.38	23.75	28.88	35.03	39.73	46.06	53.27	52.61	52.95	55.74
CHINA	20.09	29.82	14.14	15.43	35.35	49.49	73.04	103.67	102.95	112.69

TABLE 4: FOREIGN RESERVES 2005-2014 (IN BILLIONS OF IMF'S SPECIAL DRAWING RIGHTS)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
THAILAND	35.33	43.30	53.85	70.32	85.22	107.56	107.60	111.33	103.26	102.88
INDONESIA	23.03	27.16	34.63	32.03	38.63	58.42	67.48	68.90	60.66	73.21
MALAYSIA	48.54	54.32	63.68	58.82	59.23	66.44	84.00	87.79	84.73	77.14
PHILIPPINES	11.05	13.22	19.02	21.45	23.92	35.05	42.79	46.62	47.91	48.49
SOUTH KOREA	146.90	158.46	165.65	130.15	169.16	186.31	194.25	206.19	217.95	244.06
HONG KONG	86.92	88.51	96.59	118.46	163.14	174.44	185.80	206.37	201.98	226.65
SINGAPORE	80.81	90.13	102.70	112.60	118.51	145.24	153.30	167.11	175.63	175.70
CHINA	572.93	708.81	967.09	1263.43	1530.37	1848.88	2072.04	2154.69	2481.37	2652.53

DATA SOURCE: IMF DATA