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Capital Controls: The Case of Malaysia and Lessons for Vietnam

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Capital Controls: The Case of Malaysia and Lessons for Vietnam

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Abstract

*Since Malaysia imposed controls on capital outflows during the 1997-1998 financial crisis, the debate on capital controls has carried on. This begs the question of what Vietnam should learn from her neighbor's experience. In this paper, we present two arguments supporting capital controls for Vietnam. Our arguments can be applied for any country that has similar economic conditions to those of Vietnam. From the empirical evidence, long-run benefits of capital liberalization are not clear. Additionally, it appears that capital movements *de facto* contribute to growth, not capital liberalization *de jure*. This implies that a large country should not pressure a small one to liberalize her capital markets as a pre-condition for bilateral trade.*

Keywords: capital controls, Malaysia, Vietnam, capital movement *de facto*, capital liberalization *de jure*.

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1. Introduction

During 1997-1998, Asia went through a serious financial crisis. While Thailand, Korea and Indonesia kept their capital markets open, Malaysia imposed capital controls on September 1st, 1998. Since then, the heated debate on whether or not capital controls benefit a country in general and help a country recover from a financial crisis in particular has dragged on. In this paper, we review literature on capital controls and capital liberalization. The results show that capital controls insulate a country from speculative attacks whereas benefits of capital liberalization are not clear.

Based upon these results and empirical evidence on Vietnam's economy, we present two arguments supporting capital controls for this country. First, Vietnam's banking and financial systems are still fragile. Thus, Vietnam might not want to relax her capital controls in the near future. Second, it appears that capital movements *de facto*—the actual flows of capital—contribute to growth, not capital liberalization *de jure*—the full convertibility of capital accounts. Hence, Vietnam might not need liberalization for her sustained growth. Our arguments can be applied for any country with similar economic conditions to those of Vietnam. This implies that a large country should not pressure a small one to liberalize her capital markets as a pre-condition for bilateral trade.

Sections two and three of this paper survey theory and empirical evidence on capital controls, respectively, with an emphasis on Malaysia. Section four and five present our arguments supporting capital controls for Vietnam. The final section concludes.

2. A Survey of The Theory

Theoretically, there are disagreements on the benefits of capital controls. Researchers who support capital liberalization point out that capital-account convertibility attracts funds for investments, which are crucial to an emerging economy. Additionally, capital controls create market distortions, which inhibit efficient allocations of resources. Allen

and Gale (1998) even prove that, under certain conditions, financial crises are optimal, as they are means for markets to discipline themselves.

Other authors, who support capital controls, present three arguments. First, capital liberalization exposes a country to speculative attacks. Second, it fosters moral hazard due to easy credit expansions together with deposit or loan guarantee. Finally, in a crisis, the short-run goal is to stabilize a nation's financial market, not to worry about efficiency.

Regarding capital controls as remedies for crises, Krugman (1999) noted that Jagdish Bhagwati (1998) was the first scholar to call for this policy in *Foreign Affairs*. Krugman himself also called for capital controls, several days before Mahathir's announcement. Krugman considered capital controls a "not too good" measure, but better than other alternatives for Malaysia. The controls give governments time to adjust their policies before it becomes too late to do anything. Athukorala (2000) shares Krugman's opinion, pointing out that the capital-controls policy in 1998 was crucial for Malaysia, as it spared the authority from submitting itself to the International Monetary Fund (IMF), whose policies the Malaysia government did not trust.

Krugman (2000) also argues that the measures by IMF in Korea and Indonesia were called "prudential regulations:" limits on bank exposure, requirements for transparency, reforms of corporate governance, etc. Then why is everyone so upset about "prudential regulation" of capital flows? He concludes that capital controls should be considered as an option when a country is in a deep crisis. Even Dornbusch, who is skeptical about the recent measures in Malaysia, admits that capital controls—if imposed in the midst of a crisis, unexpected, and temporary—will reduce pressure on exchange and interest rates. This helps an economy avoid a total collapse of its financial system.

Edison and Reinhart (2001) give a summary of the supposed benefits and costs of capital controls in a crisis. There are two benefits. First, curbing capital outflow helps the central bank reduce the decline in foreign reserve and maintain a stable exchange rate. Second,

preventing capital outflow enables the government to maintain low interest rates, i. e., to regain authority in monetary policy that is important to the recovery of the economy. There are costs to the imperfect capital mobility though. The market illiquidity reduces the nation's credibility to foreign creditors. Additionally, if capital flows are restricted, then the burden of adjustment in asset markets falls more on prices. Hence, asset prices might become more volatile.

The above theoretical analysis reminds one of the so-called "tri-lemma" in macroeconomics: monetary policy, exchange-rate stability, and freely capital flows. Among the three, leaders of a nation can hope to have two. Hence, when a financial crisis is wreaking havoc on a nation, stabilizing the exchange rate and exercising monetary expansion to rescue the economy is more important than worrying about efficiency.

3. The Empirical Evidence

Dornbusch (2001) pointed out that capital controls were invented by Nazi Germany in 1930s to prevent excessive volatility in her financial market. The other industrial countries followed suit. Recently, despite the capital-liberalization consensus, capital controls were called for when moral hazards had caused excessive inflows of foreign assets into emerging markets during the first half of 1990s.

Forbes (2004) gives a broad survey of macro and micro papers on capital liberalization and capital controls. She reviews fourteen papers, which show that macroeconomic effects of capital liberalization are inconclusive. Three papers find positive effects on growth. Four find no effect. Other seven find mixed results, depending on the strength of the banking and financial institutions in a country. Hence, the overall effect is not clear. Forbes presents the ambiguous result in her figure 1, which we reproduce here. This implies that capital liberalization might not benefit developing countries, especially the ones with weak banking and financial systems.

(Figure 1 here)

Microeconomic effects of capital controls are not less controversial. Many authors believe that taxes on capital counter the increase in flows that result from moral hazards and give room for monetary policy with little costs. However, Forbes (2003) shows evidence that the tax in Chile makes it harder for small firms to raise funds. To counter, French-Davis and Tapia (2004) show that Chile's tax was successful in all three categories: it opened the door for monetary policy, moderated capital inflows, and reduced moral hazard.

Johnson and Mitton (2002) present evidence that capital controls result in cronyism in Malaysia. Li et al (2004) add that capital controls reduce the efficiency of the stock market. Forbes (2004), in concluding, argues that capital controls distort the competitive markets; liberalization enhances growth but requires strong institutions to avoid crises. However, her conclusion contradicts the result in figure 1, which shows no correlation between capital liberalization and growth.

Forbes also supports her conclusion with a chart illustrating income per capita of three countries: India, South Korea, and Thailand (Figure 2).

(Figure 2 here)

Nonetheless, if one replaces India with China and Korea with Indonesia, then the chart will look different. Observing South Korea after 2000 also gives a dissimilar picture: the CIA's *World Factbook* (1/2005) shows that after impressive high growth rates of 10.8% in 1999 and 9.2% in 2000, growth fell to an average of 3.8% for 2001-2003. Moreover, the Financial Times (1/2005) just reported that South Korea's industrial production fell by 1.9% in December 2004, which caused output to fall to the "smallest rise in 16 months."

Regarding Malaysia's capital controls as remedies to the crisis, only Dornbusch (2001) believes that the measure had no effect on the economy. Even so, Dornbusch himself emphasizes that capital controls during a crisis could stabilize the financial market if employed timely. He argues that capital controls did not help Malaysia because they were carried out when the crises in Asia had been over.

Other macroeconomists disagree with Dornbusch. Kaplan and Rodrik (2001) show that the crisis was deepening in Malaysia in August 1998 while South Korea and Thailand had started to recover. Offshore ringgit deposits were paying interest rate of 20 to 40 percent. This caused massive capital outflows, which resulted in severe credit crunch and an impending collapse of the financial market. Athukorala (2000) also points out that before implementing capital controls, the Malaysian government had followed IMF's strategy of increasing interest rates and disciplining its fiscal spending without success. The capital controls came as the last resort to save the economy from a total collapse.

Eichengreen and Leblang (2002), Goh, Alias and Olekalns (2003) all show evidence that capital controls help stabilize the market and reduce loss in GDP during the crisis. Krugman (2000, 2004) points out that on September 1st, 1998, when Mr. Mahathir implemented capital controls, analysts predicted disaster for Malaysia. Six years later, one only sees a healthy economy in recovery. Hence, one cannot rule out capital controls as a means to counter crises.

4. Should Vietnam Relax Her Capital Controls?

Based upon our observation and research on Vietnamese economy, we present our first argument in the following section: while benefits of capital liberalization are not clear, Vietnamese banking and financial institutions are also too fragile to fight against speculative attacks. Hence, Vietnam might not want to relax her capital controls in the short run.

The IMF (1996) and Do (1998) provide historical accounts of Vietnamese exchange rate reforms from 1988 to the present time. Until October 1988, Vietnam exchange rate was overvalued due to vague efforts to keep a strong Vietnamese dong (D). In 1988, the Vietnamese government started to devalue the exchange rate until it was stabilized between 10,500 D and 11,500 D per U.S. dollar from 1992 to 1997. This range was fairly close to the parallel market rate. The government also allowed private companies and individuals to open foreign-currency accounts and maintained real interest rate at positive levels at all time. These policies increased the relative attractiveness of dong deposits comparing to dollar holdings and reduced inflationary pressure.

However, the U.S. dollars still circulate widely in Vietnam due to people's lack of faith in the poorly regulated banking and financial system. Up to the present time, consumer durables and real estates are transacted in dollars. In addition, most transactions are in cash and outside of the banking system. People keep gold as store of value, then convert to U.S. dollars as medium of exchange. High-value durable goods and real estates are also transacted in gold. Inconsistent policies concerning withdrawing funds and failures of many private banks cause anxieties among private depositors.

Lack of transparency is another problem. There are widespread complaints over piles of paper works and evasive languages concerning banking formations and investment rules. The government officials at the intermediate level are corrupted. Additionally, most private banks and financial institutions still worry about nationalization. Hence, they are operating on a very small scale. Table 1 reveals shares by four state-own commercial banks (SOCBs) in comparison to all other banks (including private and state-own others).

Table 1: Selected Banking Indicators in Vietnam (in %)

Year	share in total deposits		share in total credit		share in SOE credit	
	SOCBs	others	SOCBs	others	SOCBs	others
2002	74.3	25.6	75.9	24.1	91.2	8.8

2003	73.9	26.1	75.9	21.4	91.2	8.8
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Source: Unterberdoerster, "Selected Issues: Vietnam," *IMF Country Report*, 2003

Finally, government insurance to depositors is tiny: at the present time, each depositor is insured an amount of roughly \$2,500, which is equivalent to one half of a new Honda motorcycle in Vietnam. The small insurance reduces the intermediaries' liquidity. If capital market were liberalized, debts to the foreign banks would increase. This makes the banks and financial institutions more vulnerable to bank runs, insolvency, and crises.

Vietnamese economy was not affected much by the 1997-1998 crises thanks to her tight capital controls. While most of the Asian countries suffered decreases in GDP during 1997 and 1998, Vietnam's GDP continued to increase. Table 2 lists the growth rates of real GDP in Vietnam and Malaysia. The data show that capital controls did insulate Vietnam from outside crises.

Table 2: GDP growth rates in Vietnam and Malaysia

Year	'92	'93	'94	'95	'96	'97	'98	'99	2000	'01	'02	'03
Vietnam	8.6	8.1	8.8	9.5	9.3	8.8	4.9	5.4	6.9	7.0	7.1	7.2
Malaysia	7.8	8.3	8.7	9.5	8.6	7.5	-7.5	5.4	5.7	3.9	3.8	5.2

Source: IFS CDROM 1E-009 and 1E-006 by IMF; and *Embassy of Japan in Vietnam Web Site*, 9/20/2004.

5. Does Vietnam Need Capital Liberalization?

Sine Vietnam was not affected by the Asian crisis, scholars on Vietnam's economy do not give clear advice as whether or not she needs capital liberalization. Moreno (1999) and

Turley (1999), while emphasizing that Vietnam needs to strengthen her banking systems, also say that Vietnam cannot enjoy sustained growth without capital liberalization. Nonetheless, Aizenman and Noy (2004) find that capital liberalization *de jure* does not affect capital movements *de facto* much. Based on this observation, we present our second argument: Vietnam has enjoyed high growth rates of inward FDI despite her tight capital controls *de jure*. Thus, Vietnam might not need liberalization to support her growth. To test our hypothesis, we assume an augmented Solow model in log form:

$$\ln Y_{it} = \ln A_t + \beta_1 \ln F_{it} + \beta_2 \ln L_{it} + \beta_3 \ln I_{it} + \alpha_i + u_{it},$$

where Y_{it} , F_{it} , and L_{it} are real GDP, FDI, and labor, for sector i in period t , respectively. I_{it} is domestic investment as a proxy for the service flows of physical capital; α_i is the sector-specific disturbance. A_t represents any factor productivity that is not accounted for by the above variables. Assuming that A_t is a linear function of time, the approximated growth equation with G as growth rate is

$$GY_{it} = \beta_1 + \beta_2 GF_{it} + \beta_3 GL_{it} + \beta_4 GI_{it} + \varepsilon_{it},$$

Approximating growth rates for each sector requires taking the first difference between one period and its lag. Thus, the problems of non-stationarity and sector-specific effects are controlled for. Annual growth rates of real GDP, amount of inward FDI in US dollars, and total labor participation for five economic sectors in Vietnam: industry-oil-gas, agriculture-forestry-fishery, construction, transportation, housing-tourism-hotels, are obtained from the *Statistical Yearbook* (General Statistical Office, Vietnam, 1991-2003), the IMF's *Country Reports, 1987-2003*. Data period is from 1990 to 2002. Data for the total domestic investment of five sectors are only available for 1997-2002. For 1990-1996, we use the state investment as a proxy for total investment. Following Bengoa and Sanchez-Robles (2003), we average the data by chaining them over 4-year periods to avoid business-cycle effects. Table 4 reports the results.

Table 4: Dependent variable: real GDP growth

Variable	coefficient	standard errors	t-value
FDI growth*	.1270309	.0411323	3.09
Labor growth**	.8334668	.4572807	1.82
Capital growth**	.3095685	.1765311	1.78
Constant	.0777631	2.801267	.03

Number of observations: 50
Adjusted R-squared: 0.5754
F statistics: 15.80

The asterisks, *, and **, indicate significance levels at 1 % and 10 %, respectively.

The result shows that there is a positive and significant correlation between FDI and GDP growths. Specifically, 10 % growth of FDI is associated with 1.27 % growth of real GDP. To check the robustness of the result, we also regress the above equation with data averaged over two, three, and five-year periods. We obtain similar results for all variables with the FDI coefficients ranging between 0.12 and 0.13. It appears that Vietnam has enjoyed economic growth thanks to her inward FDI and might not need capital liberalization *de jure* even in the long run.

6. Conclusion

The benefit of capital controls has been a controversial topic since the financial crises in Asia during the late 1990s. Theoretically, most researchers agree that capital controls in the middle of a crisis can help stabilize the market and decrease loss in GDP. However, they disagree on the benefit of capital controls in the normal situation. Empirically, the impact of capital liberalization on economic growth is inconclusive. Regarding Malaysia's capital controls as remedies to crises, only one author believes that the

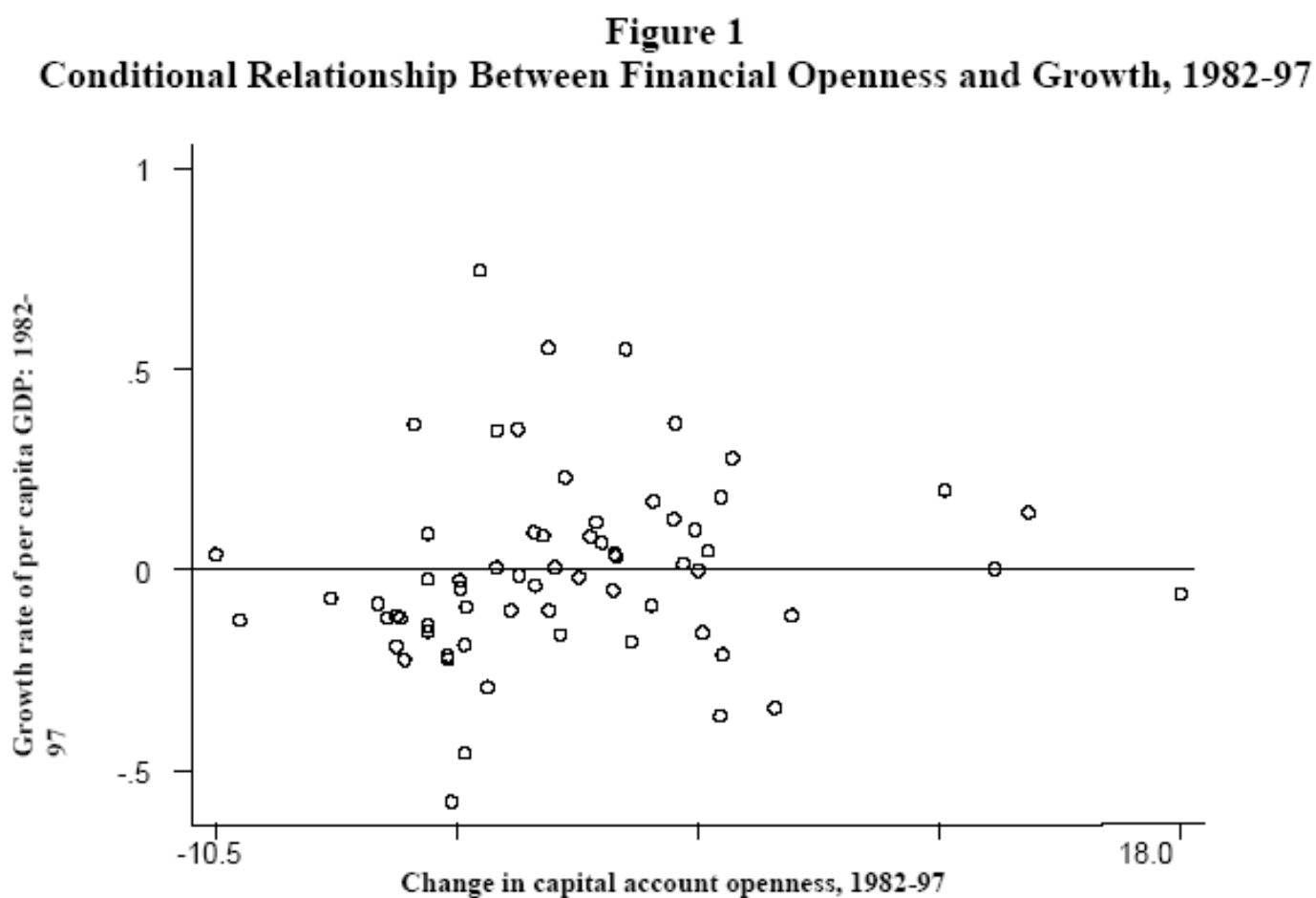
measure had no effect on the economy. Other analysts argue that the measure was effective.

The general empirical evidence and results from our regression support our arguments for capital controls in Vietnam. First, Vietnamese banking and financial system are still fragile. Hence, Vietnam might not want to relax her capital controls in the short run. Second, it appears that capital movements *de facto* contribute to growth, not capital liberalization *de jure*. Since Vietnam already has high FDI inflows, she might not need liberalization for her sustained growth even in the long run.

Our arguments can be applied for any country that has similar economic conditions to those of Vietnam. From the empirical evidence, long-run benefits of capital liberalization are not clear. Hence, a large country that deals with a small one should not pressure the latter to liberalize her capital markets as a pre-condition for bilateral trade. Since we focus on FDI, growth effects of other capital movements *de facto* such as portfolio investments and foreign loans are not addressed in this paper. Also not discussed in this paper is growth effect of FDI in combination with trade liberalization such as reducing tariffs, quotas, or export subsidies. These can and should be subjects for research in the future.

Figure 1: Empirical evidence showing that capital liberalization does not increase economic growth

From Forbes (2004), Figure 1



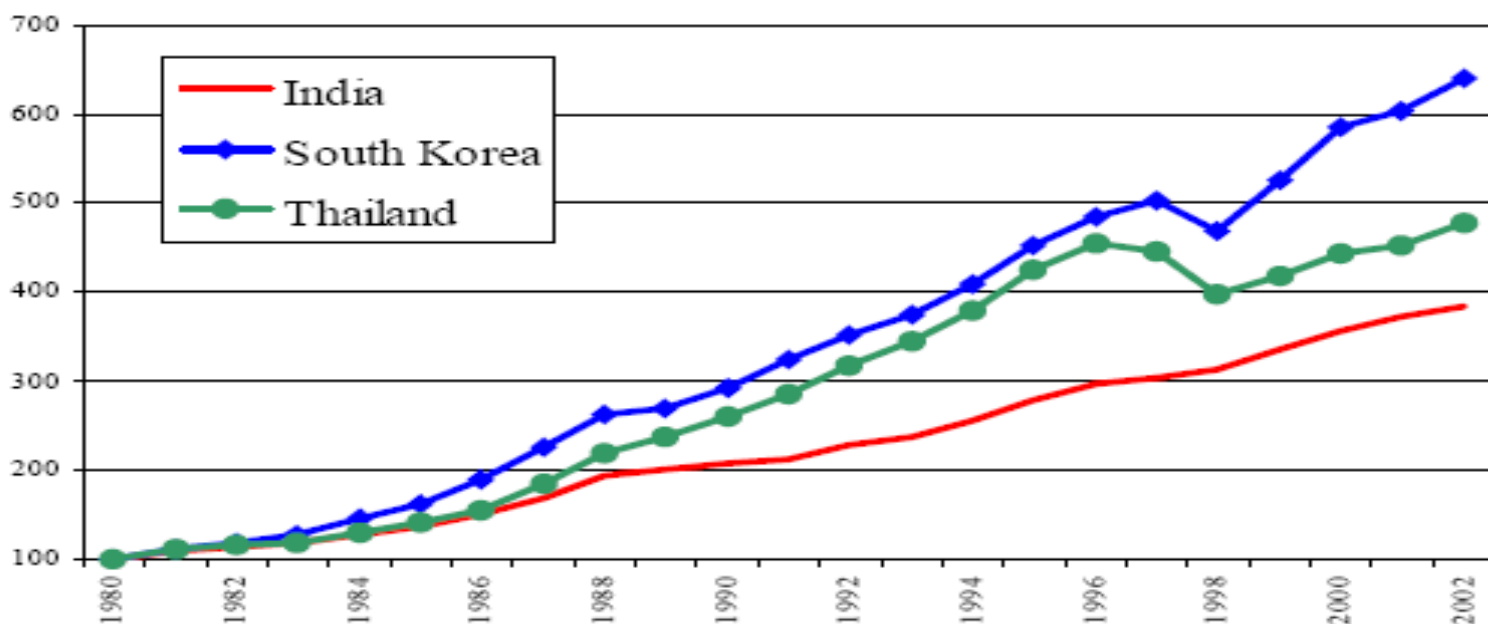
Notes: Growth is measured by growth in real per capita GDP. Conditioning variables are: initial income, initial schooling, average investment/GDP, political instability, and regional dummies

Source: Prasad et al. (2003)

Figure 2: Income per Capita in India, who has not liberalized her capital markets, in contrast to Korea and Thailand, who liberalized theirs.

From Forbes (2004), Figure 4

Figure 4
Income per Capita in Select Asian Countries
(normalized to 100 in 1980)



Note: Income per capita is GDP per capita in international dollars, adjusted for PPP.

Source: Original data from World Bank, World Development Indicators online.

References

- Allen, F., Gale, D., 1998, "Optimal Financial Crises," *Journal of Finance*, 53, 1245-1284.
- Athukorala, P., 2000, "Capital Account Regimes, Crisis, and Adjustment in Malaysia," *Asian Development review*, Vol. 18, No. 1, 17-48.
- Bengoa, M., and Sanchez-Robles, 2003, "FDI, Economic Freedom, and Growth: New Evidence from Latin America," *European Journal of Political Economy*, Vol. 19, 2003, 529-545.
- CIA, 2004, "South Korea," *The World FactBook Web Site*, 27 January 2005, 1-12.
- Do, L.D., 1998, "Monetary-Financial Crisis in Asia and Economic Renewal in Vietnam," *22nd ACAES International Conference on Asia Economies*, Bangkok, Thailand, 1998.
- Dodsworth, J. et al, 1996, *Vietnam: Transition to Market Economy*, International Monetary Fund, Washington D.C., 1996.
- Dornbusch, R., 2001, "Malaysia: Was It Different?" Working Paper 8325, *NBER*, 1-15.
- Eichengreen, B., Leblang, D., 2002, "Capital Account Liberalization and Growth: Was Mr. Mahathir Right?" From Eichengreen's Web Site, September 2002, 1-25.
- Ffrench-Davis, R., Tapia, H., "The Chilean Style of Capital Controls: an Empirical Assessment," Draft paper, ECLAC research project, 1-36.
- Financial Times, 2005, "World/Asia Pacific: South Korea," www.ft.com, 1-2.
- Forbes, K., 2004, "Capital Controls: Mud in the Wheels of Market Discipline," *NBER*, Working Paper 10284, 1-48.

General Statistical Office, Vietnam, 1992-2003, *Statistical Yearbook, 1991-2003*, Statistical Publishing House, Hanoi, Vietnam.

Goh, S., Oleyks, M., 2003, "New Evidence on financial Openness in Malaysia," *Journal of Asian Economics*, 2003, 311-325.

IMF, "International Financial Series CD-ROM," *IE-006*, 2004.

Kaplan, D., Rodrik, 2001, "Did the Malaysian Capital Controls Work?" *NBER*, Working Paper 8142, 2001, 1-46.

Krugman, P., 2004, "Capital Controls Freak: How Did Mahathir Get away with Heresy," *Krugman web site*, 10/28/2004, 1-2.

Krugman, P., 2000, "Crises: The Price of Globalization?" in *Global Economic Integration*, The Federal Reserve Bank of Kansas City, 2000, 75-106.

Krugman, P., 1999, *The Return of Depression Economics*, Norton & Company, 1999.

Moreno, R, Pasadilla, G., and R. Eli, 1999, "Asia's Financial Crisis: Lessons and Implications for Vietnam," in Leung, S. (ed.), *Vietnam and the East Asian Crisis*, Northampton Publisher, Mass., 31-54.

Nguyen, T.X., 1997, "The Attraction of FDI: Vietnam and Other ASEAN Countries," 1996, *Vietnam's Socio-Economic Development*, Vol 11, autumn 1997, 63-69.

"The Outline of the Vietnamese Economy," 2004, *Embassy of Japan in Vietnam Web Site*, 9/20/2004, 1-13.

Turley, W., 1999, "Vietnam: Ordeals of Transition," in Jackson, K. (ed.), *Asian Contagion*, Westview Press, Colorado, 269-296.

Unteroberdoerster, O. *et al*, "Vietnam: Selected Issues," *IMF Country Report No. 03/381*, 1-60.