

This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: Capital Controls and Capital Flows in Emerging Economies: Policies, Practices and Consequences

Volume Author/Editor: Sebastian Edwards, editor

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-18497-8

Volume URL: <http://www.nber.org/books/edwa06-1>

Conference Date: December 16-18, 2004

Publication Date: May 2007

Title: Malaysian Capital Controls: Macroeconomics and Institutions

Author: Simon Johnson, Kalpana Kochhar, Todd Mitton, Natalia Tamirisa

URL: <http://www.nber.org/chapters/c0159>

Malaysian Capital Controls

Macroeconomics and Institutions

Simon Johnson, Kalpana Kochhar, Todd Mitton, and
Natalia Tamirisa

11.1 Introduction

Until the late 1970s, capital controls were widely used to prevent the free flow of funds between countries. A cautious relaxation of such controls during the 1980s proved consistent with greater economic integration among advanced countries and strengthened the case for capital market opening more generally. By the early 1990s, capital controls appeared to be finished as a serious policy tool for relatively open economies (Bhagwati 1998a). Today, however, in the aftermath of the Asian crisis, the role of capital controls is being reconsidered.

In this reassessment of capital controls, recent experience in Malaysia—which reimposed capital controls in September 1998—has been central to the two main views on capital controls. The more established view emphasizes macroeconomics. If a country faces a severe external crisis, particularly one caused by pure panic, and if orthodox macroeconomic policies have failed to restore confidence, Krugman (1998) argues that imposing capital controls may be an effective way to stabilize the economy.¹ More

Simon Johnson is the Ronald A. Kurtz Professor at the Sloan School of Management, Massachusetts Institute of Technology, and a research associate of the National Bureau of Economic Research (NBER). Kalpana Kochhar is a senior advisor in the research department of the International Monetary Fund. Todd Mitton is an assistant professor of business management at Brigham Young University. Natalia Tamirisa is a senior economist at the International Monetary Fund (IMF).

For helpful comments we thank Sebastian Edwards, Peter Henry, participants at the NBER preconference and conference on international capital flows, and colleagues at the IMF. Ioannis Tokatlidis provided outstanding assistance. All the information used in this paper is from publicly available sources.

1. Krugman was making policy recommendations for some Asian countries, including Malaysia.

generally, Bhagwati (1998a, 1998b) and Rodrik (2000) oppose the conventional wisdom that free capital flows help countries benefit from trade liberalization, and argue instead that capital market liberalization invites speculative attacks. In this context, Malaysia's experience has been interpreted as demonstrating that capital controls can have positive macroeconomic effects (Kaplan and Rodrik 2001), but this claim is controversial and has been forcefully opposed by Dornbusch (2001).²

The second view of capital controls puts greater emphasis on institutions (i.e., the rules, practices, and organizations that govern an economy). Specifically, Rajan and Zingales (1998) argue that capital controls are an essential part of the package of policies that allows "relationship-based" capitalism to function. In this system, informal relationships between politicians and banks channel lending toward approved firms, and this is easier to sustain when a country is relatively isolated from international capital flows. If capital controls are relaxed, as in some parts of Asia in the early 1990s, the result may be overborrowing and financial collapse (Rajan and Zingales 1998).³ In this context, Rajan and Zingales (2003) suggest that reimposing capital controls may be attractive if it enables politicians to support the financing of particular firms. If this view is correct, we should expect capital controls to be associated with more resources for favored firms. In the context of economic crises, there are two testable implications at the firm level. Firms with stronger political connections should (a) suffer more when a macroeconomic shock reduces the government's ability to provide advantages and (b) benefit more when the imposition of capital controls allows a higher level of support for particular firms.

For the macroeconomic debate, the Malaysian experience is inconclusive. The capital controls worked in the sense that they were not circumvented on a large scale. However, they also never came under serious pressure. Controls might have played a preventive role—that is, to guard against risks to financial stability—but they were never tested in this role. At the same time, there is no convincing evidence of adverse macroeconomic consequences from the controls.

In contrast, the firm-level evidence lends support to the Rajan and Zingales view of capital controls. Our estimates indicate that in the initial phase of the crisis, from July 1997 to August 1998, roughly 9 percent of the estimated US\$60 billion loss in market value for politically connected firms may be attributed to the fall in the expected value of their connections.

2. See also Perkins and Woo (2000) and Hutchison (2003).

3. Theoretically, relaxing capital controls can lead to financial distress in at least three ways. First, local financial institutions respond by taking on more risk. Second, local firms borrow directly from international lenders, who are either unable to assess risks appropriately or believe that there is an implicit sovereign guarantee. Third, after they lose their monopolies, local banks are less willing to bail out firms that encounter problems, as in Petersen and Rajan (1995).

With the imposition of capital controls in September 1998, up to 32 percent of the estimated \$5 billion gain in market value for firms connected to the prime minister may be attributed to the increase in the value of their connections. For connected firms, the value of political connections was in the range of 12–23 percent of their total market value at the end of September 1998.

The paper closest to our firm-level analysis is Fisman (2001), who estimates the value of political connections in Indonesia by looking at how stock prices moved when former president Suharto's health was reported to change. Fisman measures the direct effect of health shocks to a dictator, which is presumably quite specific to authoritarian systems, during a period of relative economic stability. The Malaysian experience lets us examine the interaction of connections and capital controls in a democracy. In addition, we are able to use variation between firms connected to politicians who continue in power and those who lose out. This helps ensure that political connections rather than some other unobservable characteristics of firms drive our results.

Our paper is part of a growing literature that examines the performance of relatively privileged firms. La Porta, Lopez de Silanes, and Zamarippa (2003) show that well-connected Mexican banks engaged in a considerable amount of irresponsible lending before the 1995 crisis, and this presumably contributed to the severity of the crisis when it came. To our knowledge, no previous papers have tried to measure the combined effects of connections and capital controls.

Our work is also related to the recent literature that shows important links between institutions, firm-level governance, and macroeconomic outcomes. Johnson et al. (2000) present evidence that the Asian financial crisis had more severe effects in countries with weaker institutions in general and weaker investor protection in particular (as measured by La Porta et al. 1997, 1998). Mitton (2002) finds firm-level evidence that weaker corporate governance was associated with worse stock price performance in the Asian crisis, and Lemmon and Lins (2003) confirm these results using different definitions of governance and outcomes. More broadly, Morck, Yeung, and Yu (2000) argue that in countries with weak property rights protection, stock price movements are predominantly driven by political shocks.

The paper is organized as follows. Section 11.2 summarizes the history of Malaysian capital controls.⁴ Section 11.3 reviews the macroeconomic

4. Sections 11.2 and 11.3 draw on publicly available data and documents, in particular, press releases, exchange notices, and annual reports of Bank Negara Malaysia (available at <http://www.bnm.gov.my>) as well as the IMF's *Annual Report on Exchange Arrangements and Exchange Restrictions*. For more details on the chronology of crisis in Malaysia and the authorities' response, see Meesook et al. (2001) and Tamirisa (2006). Section 11.4 draws on Johnson and Mitton (2003).

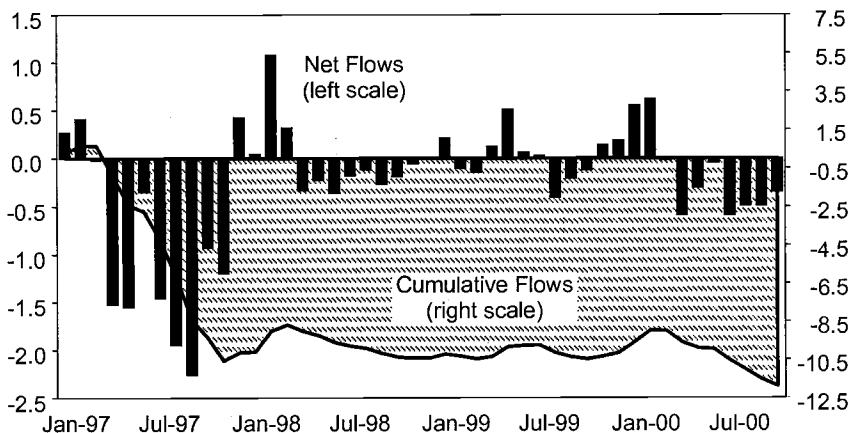


Fig. 11.1 Malaysia: Cumulative and net portfolio flows, 1997–2000 (in billions of U.S. dollars)

Source: Meesook et al. (2001).

evidence. Section 11.4 assesses the firm-level evidence. Section 11.5 concludes.

11.2 Brief Chronology of Capital Controls and Macroeconomic Policies

In 1968 Malaysia removed restrictions on payments and transfers for current international transactions, accepting the obligations of the IMF's Article VIII. Exchange and capital account regulations were relaxed further in 1973, and Malaysia moved from a fixed to a floating exchange rate. Subsequently the authorities gradually liberalized capital controls, particularly in 1986–87.⁵

Appendix A reports the details of Malaysian capital controls since 1992. At the time of the Asian crisis, portfolio flows were generally free of restrictions. Domestic and international credit transactions in foreign currency were carefully controlled, but international trade and financial transactions denominated in ringgit were allowed and perhaps even promoted. As a result, an active and largely unregulated offshore market in ringgit developed.

After Thailand devalued in July 1997, the Malaysian ringgit came under severe pressure. Portfolio outflows intensified (figure 11.1), and foreign exchange reserves plummeted (figure 11.2). As currency traders took speculative positions against the ringgit in the offshore market, offshore ringgit

5. In 1994, Malaysia temporarily reintroduced some controls to stem inflows of short-term capital.

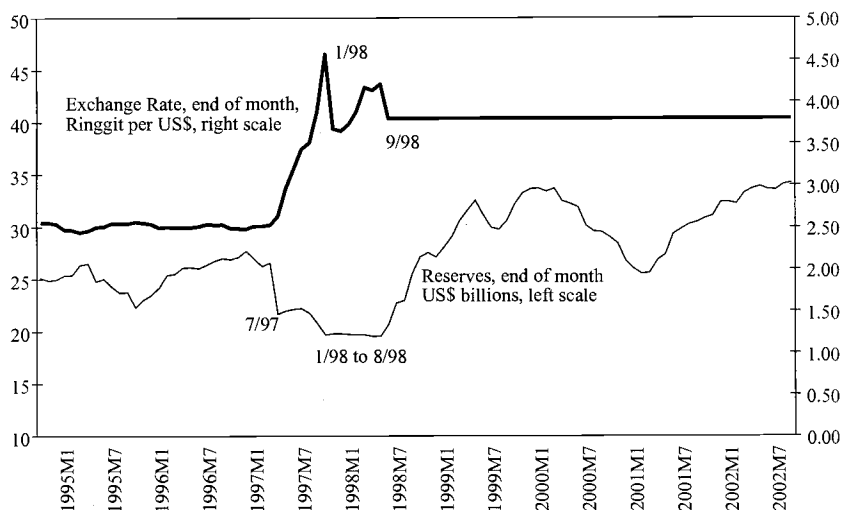


Fig. 11.2 Malaysia: International reserves and exchange rate, 1995–2000

Source: IMF, *International Financial Statistics*.

interest rates rose markedly relative to onshore rates (figure 11.3). This further intensified the movement of ringgit funds offshore.

The initial response of the authorities was to tighten macroeconomic policies.⁶ Spending cuts were introduced in 1997, and the 1998 budget was drafted to target a surplus of 2.5 percent of gross domestic product (GDP). Base lending rates were allowed to rise somewhat in response to higher interbank interest rates (figure 11.4), and lending targets were adjusted to reduce growth of credit for financing purchases of real estate and securities. These measures had little stabilizing impact on financial markets as crisis continued to spread in the region. When the extent of the output collapse became clearer, by early 1998, fiscal policy became more expansionary. The target for the 1998 budget was relaxed to a surplus of 0.5 percent of GDP in March 1998. A package of measures to strengthen the financial sector was also introduced at the same time.

In early September 1998, arguing that the measures and reforms that had been put in place by all countries affected by the Asian crisis did not appear to be returning stability to financial markets, the Malaysian authorities imposed capital controls and pegged the ringgit to the U.S. dollar.⁷

6. The Malaysian authorities intervened heavily in the foreign exchange market and sharply raised interest rates in July 1997. These measures were abandoned after a few days. In August 1997, the authorities introduced limits on ringgit swap transactions with nonresidents to stabilize the offshore market. They also restricted trading in blue chip stocks on the Kuala Lumpur Stock Exchange. For more details, see Meesook et al. (2001).

7. See appendix A and Bank Negara Malaysia (1998).

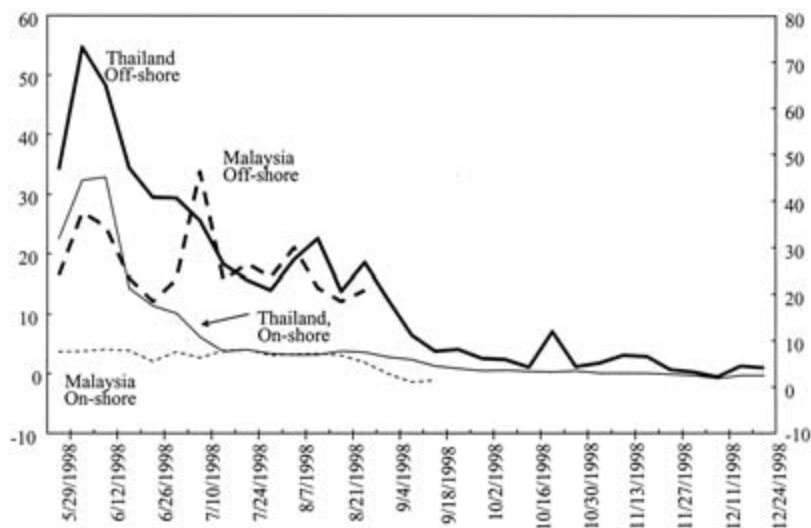


Fig. 11.3 Malaysia and Thailand: Swap differentials, May–December 1998 (swap premia, one month forward)

Sources: Data provided by Malaysian authorities; Consensus Economics, Inc.; Asia Pacific Consensus Forecasts; and IMF staff estimates.

To close the offshore market in ringgit and ringgit assets, investors were required to repatriate all ringgit held offshore back to Malaysia, licensed offshore banks were prohibited from trading in ringgit assets, and residents were prohibited from granting or receiving ringgit credit vis-à-vis nonresidents. Among supporting measures, the authorities prohibited offshore trading of ringgit assets and brought to a halt long-standing trading in Malaysian shares in Singapore.⁸ In addition to controls on international transactions in the ringgit, the authorities imposed controls on portfolio outflows, particularly a one-year holding period on nonresidents' repatriating proceeds from the sale of Malaysian securities and a prior approval requirement—above a certain limit—for residents to transfer capital abroad.

The controls were carefully designed to withstand pressure—that is, to close all known channels and loopholes for the supply of the ringgit to the offshore market and major portfolio outflows—while attempting not to affect foreign direct investment and current account convertibility (see appendix A). The authorities also stressed the temporary nature of the controls. Furthermore, a number of preconditions facilitated the implementation of capital controls—a history of using some controls, effective state

8. The controls were gradually relaxed, beginning in December 1998. See appendix A for more details.

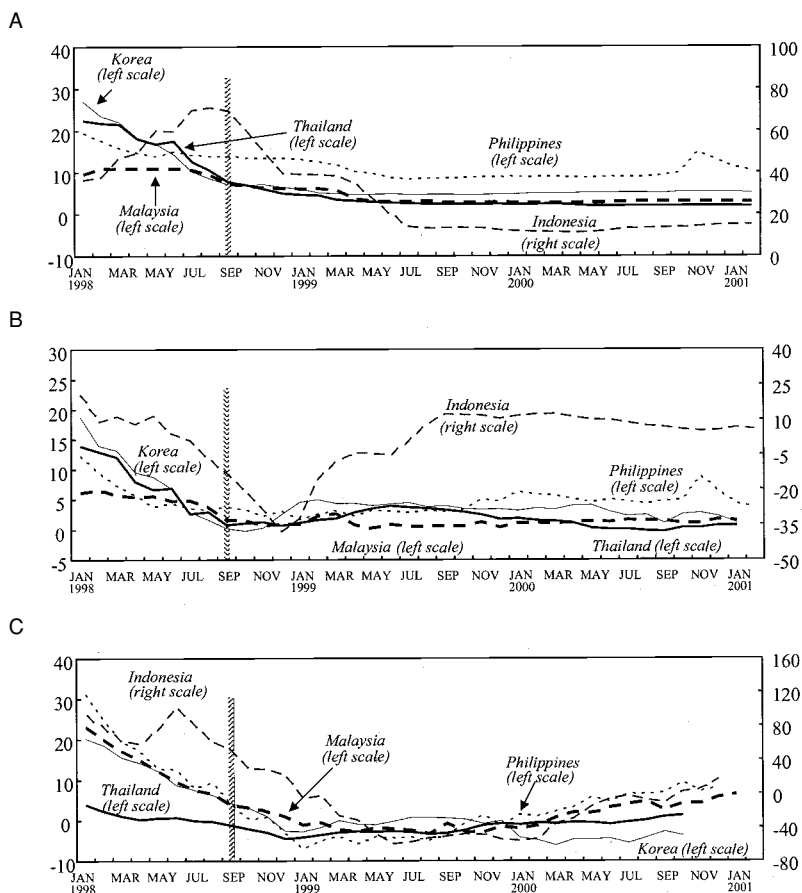


Fig. 11.4 Selected Asian countries: Monetary indicators, 1998–2001: A, nominal interest rates (percent per annum, end of period); B, real interest rate (percent per annum, end of period); C, private-sector credit growth (twelve-month percent change)

Sources: IMF’s *International Financial Statistics* and Asia Pacific department databases.

capacity, and generally strong bank supervision and regulation (Meesook et al. 2001; Latifah 2002).

11.3 Macroeconomic Issues

11.3.1 Understanding the Motivation for the Controls

The authorities emphasized financial stability as the primary motivation for these controls. The official press releases that accompanied the introduction of capital controls underscored the following objectives: “(i) to

limit the contagion effects of external developments on the Malaysian economy; (ii) to preserve the recent gains made in terms of the policy measures to stabilize the domestic economy; and (iii) to ensure stability in domestic prices and the ringgit exchange rate and create an environment that is conducive for a revival in investor and consumer confidence and facilitate economic recovery.”⁹

Although interpreting data in real time is more difficult than it is *ex post*, it is now clear that the risks to financial stability in Asia had diminished by the summer of 1998. A significant portion of capital had already flowed out by the time the controls were imposed (figure 11.1). The ringgit had already depreciated by 70 percent, and pressure on the currency was letting up by the summer of 1998 (figure 11.2). Offshore swap differentials for Malaysia (as for Thailand) were trending down (figure 11.3). And quarterly GDP growth data showed that the crisis had bottomed out in the first quarter of 1998 (figure 11.5).

The Malaysian authorities acknowledged that the political and social fallout from the crisis in other countries did weigh in their decision to impose controls (Latifah 2002). The authorities were concerned about political and social stability, “which defined the country even more than the deterioration in the level of wealth” (Meesook et al. 2001). These concerns were consistent with a worsening of political risk indicators during the summer of 1998 (figure 11.6, where a lower score indicates higher perceived risk), particularly following the political turmoil in Indonesia. Theoretically, in September 1998 there was a worst-case scenario of domestic capital flight and increased offshore speculation against the ringgit that would have entailed significant economic and political costs for the country. Seen in this light, the controls played a role in guarding against the eventuality of this scenario.

The worst-case scenario did not come to pass in September 1998.¹⁰ To a large extent, this reflected increased incentives for holding the ringgit, given the improvement in market sentiment about the region as signs of an economic turnaround became clearer, and also the increase in global liquidity following cuts in U.S. interest rates. Several observers have also noted that the *ex post* undervaluation of the ringgit made avoiding the capital controls unappealing (see, for example, IMF 1999; Meesook et al. 2001; World Bank 2000; and Jeong and Mazier 2003).¹¹

9. See Bank Negara Malaysia (1998). The authorities considered the capital controls as complementing the introduction of the peg, which in turn was seen as an appropriate “strategic response to the unique circumstances at the time” and a way “to introduce a large degree of stability and predictability to mitigate the impact of market volatility on the real economy” (Latifah 2002).

10. Malaysia has turned out to be the only Asian-crisis country that did not have a government change during 1997–98.

11. Capital controls and other measures aimed at closing the offshore market prompted an influx of ringgit funds into the stock market, causing it to rally.

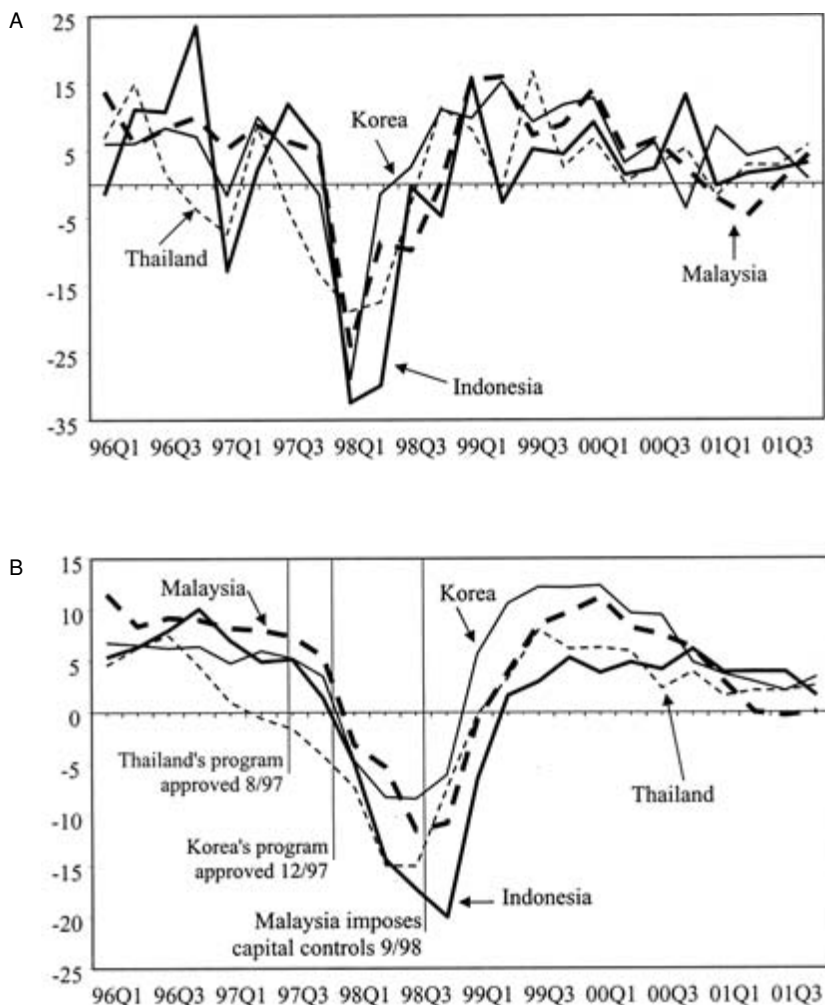


Fig. 11.5 Selected Asian countries: Real GDP growth, 1996–2001: A, quarter-on-quarter (annualized and seasonally adjusted); B, year-on-year

Sources: IMF’s Asia Pacific department databases for Indonesia, Korea, and Thailand; Haver Analytics for Malaysia; and IMF’s *International Financial Statistics*.

11.3.2 Macroeconomic Impact

Kaplan and Rodrik (2001) argue that the capital controls enabled a faster and less painful recovery in Malaysia compared with the experience in Korea and Thailand. But their argument is based on the assumption that Malaysia in September 1998 should be compared with other countries

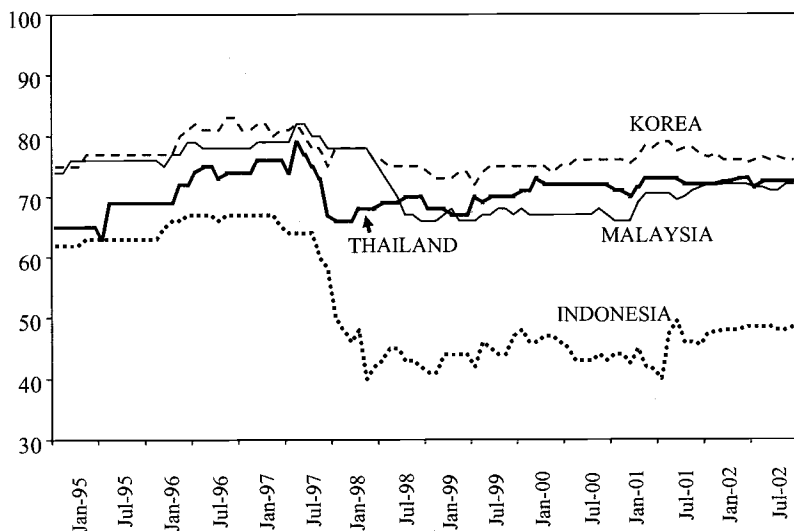


Fig. 11.6 Selected Asian countries: Political risk index, 1995–2002

Source: International Country Risk Guide (<http://www.icrgonline.com>).

when they adopted IMF programs (six to twelve months earlier). It is hard to make this position persuasive.

Independent of capital controls, Malaysia was well placed to experience a shallower downturn and a faster recovery than other countries. As emphasized by Dornbusch (2001), initial conditions, particularly the “burden” of short-term corporate debt, were more favorable in Malaysia than in other Asian crisis countries.¹² In terms of institutional indicators, Malaysia also stands out among its regional peers, with higher rankings of government effectiveness, regulatory quality, rule of law, and control of corruption (figure 11.7).

In the event, the timing and magnitude of the output decline were similar in the four countries most seriously affected by the Asia-wide crisis (Indonesia, Korea, Malaysia, and Thailand, hereinafter referred to as crisis countries). Hutchison’s (2003) empirical assessment leads to a similar conclusion. Hutchison also points out that Kaplan and Rodrik’s analysis does not take into account the fact that the Malaysian currency crisis might not

12. Malaysia has had a long-standing policy of controlling external borrowing by the domestic private sector. Besides prudential controls on external borrowing by banks and their domestic lending in foreign currency, external borrowing by domestic corporations above a certain limit required approval, which reportedly was given for projects that generated or saved foreign currency. The authorities see this measure as helping promote “natural hedging” of private debt service payments, whereby residents borrowing externally could meet their external (non-ringgit) obligations through their own foreign currency earnings (Latifah 2002).

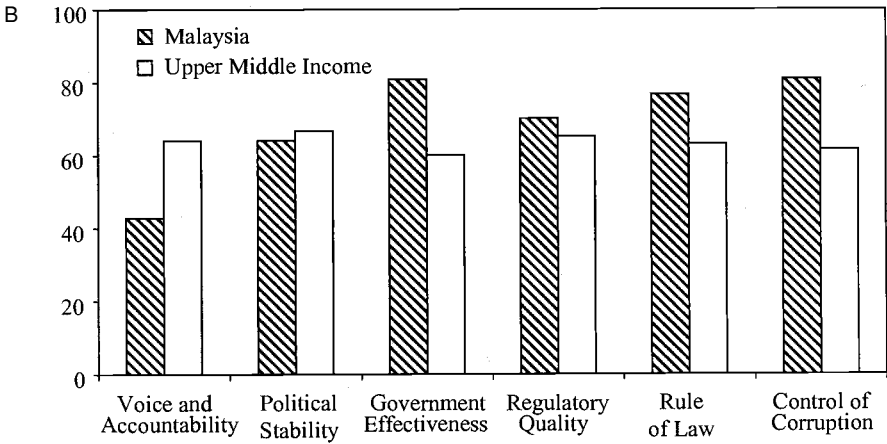
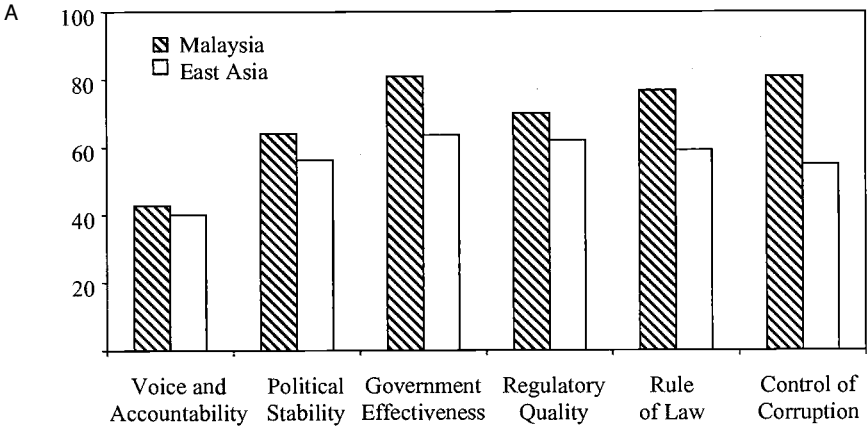


Fig. 11.7 Governance indicators in percentile rankings, 1998: A, Malaysia and East Asia; B, Malaysia and upper middle-income countries

Source: Kaufmann, Kraay, and Mastruzzi (2005).

Note: The upper middle-income countries, according to World Bank's classification, is represented by the average value of the following group: Argentina, Belize, Botswana, Chile, Costa Rica, Croatia, Czech Republic, Dominica, Estonia, Gabon, Grenada, Hungary, Latvia, Lebanon, Lithuania, Mauritius, Mexico, Oman, Panama, Poland, Saudi Arabia, Seychelles, Slovak Republic, Saint Kitts–Nevis, Saint Lucia, Trinidad and Tobago, Uruguay, and Venezuela.

have lasted until September 1998 if an IMF program had been in place from 1997.

Likewise, the timing and strength of the recovery of the Malaysian economy were similar to those of the other Asian crisis countries. By the summer of 1998, all the crisis-affected countries had begun to show recovery (figure 11.5), and Malaysia recovered at about the same rate as Korea and Thailand (the momentum of recovery in Indonesia was weaker than in the other countries). There is thus no evidence to suggest that the Malaysian economy performed better than the others following the imposition of the controls. This is not surprising, given that Malaysia's macroeconomic policies were broadly similar to those in other crisis countries.

Some commentators argued that the controls could be used to allow the government to undertake expansionary fiscal and monetary policy without fear of worsening external imbalances (e.g., Perkins and Woo 2000). However, the evidence shows that the Malaysian authorities did not use controls to pursue heterodox policies such as a substantial lowering of interest rates or providing a particularly aggressive fiscal stimulus. In the event, the timing and pace of interest rate reductions in Malaysia were not out of line with those in the other crisis countries, where there were no capital controls (figure 11.4). A comparison with Korea is particularly instructive in this context. In nominal terms, interest rates in Korea and Malaysia were similar during the period in question. But in real terms, interest rates were brought down earlier and more aggressively in Korea: by the summer of 1998, they were already below those in Malaysia, and remained below after the controls were imposed. Moreover, the fiscal impulse provided in Malaysia was smaller than in other crisis countries in 1998 and broadly similar in 1999 (figure 11.8 and Meesook et al. 2001).¹³ The current account surplus and increases in reserves during the recovery stage were larger in Malaysia than in other countries, in part reflecting the undervaluation of the ringgit. Throughout the crisis and into the capital control period the authorities pursued what are generally considered to be orthodox macroeconomic and structural policies.

All in all, there is no evidence in the data to suggest that capital controls made a visible difference in Malaysia's recovery process. Responsible macroeconomic policies and commitment to financial- and corporate-sector reforms, together with strong initial conditions and institutional capacity, should receive the main credit for the recovery in Malaysia.¹⁴ As the experience of other crisis countries shows, these policies were possible without capital controls.

13. The fiscal impulse was larger in 2000, but by this time controls had been significantly relaxed.

14. See Lindgren et al. (1999), Meesook et al. (2001), and Latifah (2002) for a detailed discussion of structural reforms in Malaysia during and after the crisis.

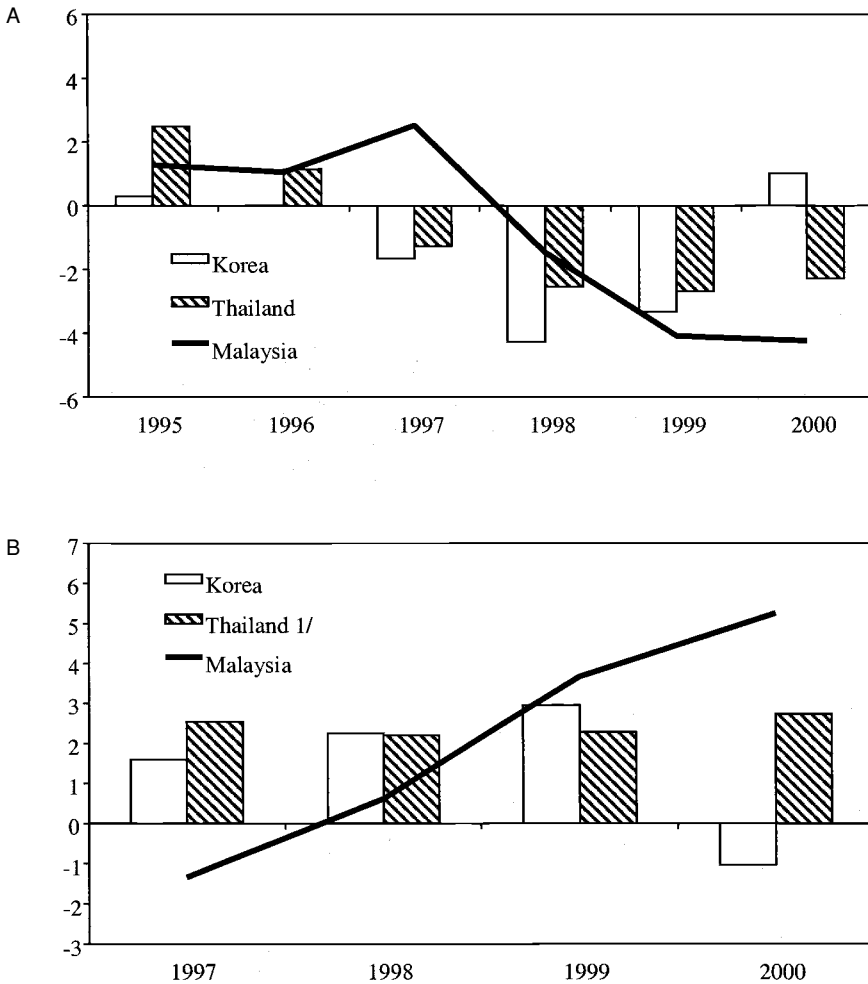


Fig. 11.8 Asian countries: Fiscal indicators, 1995–2000 (percent of GDP):
A, overall fiscal balance; *B*, cumulative fiscal impulse

Source: Meesook et al. (2001).

Note: In panel B, Thailand is on a fiscal-year basis, where the fiscal year ends in September.

At the same time, there is no evidence that controls had lasting costs by affecting Malaysia’s access to international portfolio capital. While Thailand, Korea, and Indonesia also suffered lower investor ratings after the crisis hit, Malaysia suffered a particularly steep fall from 1998 to 1999. But by 2003, all four countries had regained their previous relative rankings. Three of the countries had slightly lower absolute rankings than before—only Indonesia was much lower. Malaysia’s spreads widened by more than

those of other countries after capital controls were introduced, but these effects unwound relatively rapidly.

One open question is whether there is any evidence that, after the capital controls, investors perceived Malaysia as a less desirable destination for foreign direct investment (FDI). According to the 2004 United Nations Conference on Trade and Development (UNCTAD) annual report on FDI, Malaysia has maintained a steady ranking (around 33rd–34th in the world) in terms of FDI “potential” (measured on the basis of “structural factors” such as physical infrastructure, GDP per capita, total exports and imports of natural resources, education, energy use, and the stock of FDI), but in terms of capital attracted it has slipped from around 5th–10th in the world before the crisis to 70th–75th after the crisis. Other Asian countries affected by the crisis—with the exception of Indonesia—did not experience similarly sharp falls in actual inward FDI performance, as assessed by UNCTAD.

In addition, the recovery in Malaysia’s private fixed investment has been slower than in other crisis countries (figure 11.9). The decline from high precrisis levels is consistent with the view that these countries were investing too much in the early and mid-1990s. While we do not yet have enough data to draw definite conclusions, it is striking that Korea, Thailand, and Indonesia have all shown a stronger recovery in private investment than

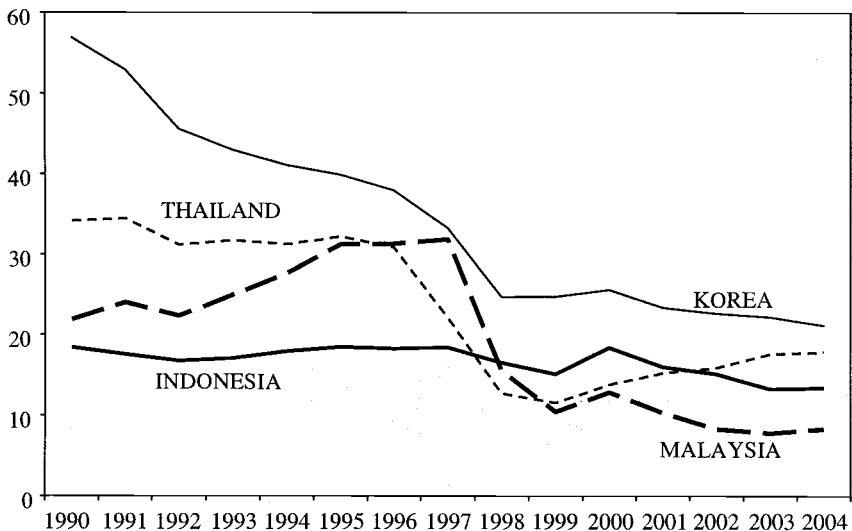


Fig. 11.9 Selected Asian countries: Private fixed investment, 1990–2004 (private gross fixed capital formation as percent of GDP)

Sources: IMF World Economic Outlook Database; for Korea, OECD database.

Note: Observations for Indonesia before 1999 are estimated on the assumption that the ratio of private to public fixed investment is constant and equal to its average for the period 1999–2004.

has Malaysia. Private investment, as a percent of GDP, has recently been remarkably low—under 10 percent—in Malaysia, and only about half the regional average.

11.4 Firm-Level Evidence

11.4.1 Political Connections in Malaysia

Gomez and Jomo (1997) suggest there were two forms of political connections in Malaysia prior to 1997. The first is the official status awarded to firms that are run by ethnic Malays. The second consists of much more informal ties that exist between leading politicians and firms that are run by both Malay and Chinese businesspeople.

Although ethnic Malays (known as Bumiputras, literally “sons of the soil”) account for some 60 percent of the population, business in Malaysia has historically been dominated by ethnic Chinese. With an eye toward correcting this imbalance, and partly in response to ethnic rioting in 1969, the government instituted the New Economic Policy (NEP) in 1970. Since that time, Bumiputras have been given, among other privileges, priority for government contracts, increased access to capital, opportunities to buy assets that are privatized, and other subsidies. The ruling coalition in Malaysia for over three decades has been the Barisan Nasional, which is dominated by the United Malays’ National Organisation (UMNO). Dr. Mahathir bin Mohamad, president of UMNO and prime minister of Malaysia from 1981 to 2003, consistently promoted Bumiputra capitalism (Gomez and Jomo 1997).

The increased state intervention required for implementation of the NEP opened the door to greater political involvement in the financing of firms in Malaysia. During the 1990s, two government officials were most influential in promoting firms in Malaysia. The first was the prime minister. The second was Anwar Ibrahim, finance minister during the Asian crisis.¹⁵ Below we denote the first type of firm as PMC (prime minister connected) and the second type as FMC (finance minister connected).

11.4.2 Identifying Firm-Level Political Connections

To identify which firms have political connections with government officials, we rely on the analysis of Gomez and Jomo (1997). This analysis has

15. Before moving on to the coding of political connections, it is important to note that there is no evidence suggesting that any unobserved characteristics of these firms determined their political affiliations. Before the Asian financial crisis, the evidence suggests that affiliations to either the finance minister or the prime minister were close substitutes. Indeed, there is no evidence that the alliances between firms and specific politicians were the result of anything other than chance personal relationships (Gomez and Jomo 1997, pp. 126, 148–49). Any systematic differences in the performance of these firms should therefore be due to the changing relative value of their political connections.

been used extensively to identify political connections in Malaysia in previous work, including Johnson and Mitton (2003), Faccio (2006), Faccio, Masulis, and McConnell (2006), and Chong, Liu, and Tan (2005).

Using the analysis of Gomez and Jomo (1997) to identify connections creates some limitations. First, these authors do not claim to have exhaustively identified every firm with political connections in Malaysia. Second, although all connections identified by Gomez and Jomo (1997) are from before the Asian crisis, some are identified from earlier in the 1990s, creating the possibility that a connection could have disappeared prior to the beginning of the crisis.¹⁶ However, given the relative stability of the government over this period, it seems unlikely that changes in political connections would be prevalent during this period. Many political connections identified by Gomez and Jomo are unofficial and have not been verified by other sources. Finally, the coding of political connections does not measure the strength of these connections. Nevertheless, Gomez and Jomo offer an extensive analysis, and we take a systematic approach to identifying connections based on their work. Consequently, our coding of connections likely presents a fairly clear picture of investors' perceptions of political connections during this time period. See appendix B for more details and examples of our coding.

11.4.3 Sample and Descriptive Statistics

Our sample is taken from the set of Malaysian firms in the *Worldscope* database. *Worldscope* maintains data on active and inactive firms, so there is no sample selection bias due to firms dropping out of the data set. The firms in our sample are representative of the firms listed on the main board of the Kuala Lumpur Stock Exchange. Firms not included in our sample include smaller unlisted Malaysian firms and multinationals with no local listing.

Table 11.1 reports the basic descriptive data for these firms. In this table we compare the performance of politically connected firms to that of unconnected firms prior to the crisis. We define political connections for each firm in our sample as outlined in the previous section. Table 11.1 also compares the performance of PMC firms to FMC firms, and shows the performance of nonfinancial firms separately. Row 1 reports the number of firms in each category of our sample; the total number of firms with available precrisis data is 424, of which 67 had identifiable political connections.

Row 2 of table 11.1 shows that politically connected firms had significantly worse returns (compared with unconnected firms) during the crisis

16. In the second edition of their book, which was prepared in late 1997 and appeared in 1998, Gomez and Jomo (1998) updated their list of political connections. We have used this revised list as a robustness check and find that it does not affect any of our main results. However, we prefer to use their precrisis list, as this was complete before there was any sign of economic trouble.

Table 11.1 Summary statistics of firm-level sample

	All Worldwide firms						Nonfinancial firms only				
	Politically connected			PM connected			FM connected		Politically connected		p-value
	All	connected	Unconnected	Unconnected	p-value	connected	connected	All	Unconnected		
1. Number of firms	424	67	357	53	14	312	50	262			
<i>Stock returns</i>											
2. July 1997 to August 1998	-78.5%	-83.0%	-77.7%	0.010	-83.4%	-81.3%	0.529	-78.1%	-82.1%	0.065	
3. September 1998	39.7%	53.2%	37.1%	0.000	61.7%	31.3%	0.021	38.7%	50.5%	0.007	
4. October 1998 to September 2000	81.9%	83.5%	81.7%	0.897	69.8%	132.2%	0.036	81.6%	94.8%	0.348	
<i>Precrisis performance measures</i>											
5. Size (total assets in \$000)	986,606	1,845,217	820,423	0.012	1,799,914	2,013,485	0.816	599,554	1,299,733	0.000	
6. Growth (in assets, one year)	50.3%	67.3%	46.8%	0.301	81.7%	20.3%	0.376	42.3%	39.3%	0.834	
7. Profitability (return on assets)	4.0%	-1.2%	4.9%	0.041	-3.0%	5.2%	0.604	3.7%	-2.7%	0.062	
8. Liquidity (current ratio)	1.77	1.53	1.82	0.432	1.52	1.61	0.846	1.69	1.54	0.516	
9. Efficiency (asset turnover)	0.55	0.47	0.56	0.147	0.44	0.55	0.421	0.65	0.56	0.170	
10. Valuation (book-market ratio)	0.45	0.47	0.45	0.568	0.50	0.36	0.105	0.42	0.45	0.450	
<i>Precrisis leverage</i>											
11. Leverage (total debt/total assets)	23.7%	33.7%	21.9%	0.000	36.0%	24.6%	0.298	26.1%	36.9%	0.000	
12. Precrisis increase in leverage (one year)	2.7%	6.3%	2.0%	0.062	8.4%	-70.0%	0.334	3.2%	7.7%	0.046	
13. Maturity (short-term debt/total debt)	61.8%	57.1%	62.8%	0.216	56.8%	58.5%	0.869	61.7%	59.3%	0.573	
14. Precrisis increase (one year)	-2.2%	-7.7%	-1.1%	0.088	-7.6%	-7.9%	0.975	-1.9%	-8.9%	0.062	

Notes: The table presents summary statistics of Malaysian firms in the Worldwide database. The numbers reported are simple averages except as noted. Listed *p*-values are from *t*-tests of differences of means. "Politically connected" refers to a firm with identifiable political connections from Gomez and Jomo (1997). A financial firm is defined as one with primary SIC in the range 6000–6999. Financial figures are based on the last reported financial statements prior to July 1997. Data points are missing for some items; thus, the number of observations included for each average may vary. PM = prime minister; FM = financial minister.

period of July 1997 to August 1998, although there was no significant difference between PMC and FMC firms. Row 3 shows that politically connected firms had significantly better returns (compared with unconnected firms) after the imposition of capital controls in September 1998, and that PMC firms performed much better than FMC firms during this period. Row 4 shows no significant differences between politically connected and unconnected firms in returns after September 1998.

Row 5 of table 11.1 shows that, in terms of total assets, politically connected firms were significantly larger than unconnected firms (about twice the size on average), although asset growth immediately before the crisis was not significantly greater in connected firms (row 6). There is no evidence that PMC firms had larger size on average than FMC firms.

Row 7 of table 11.1 suggests that politically connected firms were less profitable than unconnected firms (in terms of return on assets) before the crisis.¹⁷ However, in regression analysis (not reported here but available on request) we control for other firm characteristics, such as firm size and industry, and find no evidence that politically connected firms had lower profitability before the crisis (Johnson and Mitton 2003).¹⁸ Rows 8 and 9 show no differences in the liquidity (current ratio) and efficiency (asset turnover ratio), respectively, across the dimensions of political connections (in terms of *t*-tests of the means). The book-market ratio is one way to examine whether investors perceive that there is expropriation of assets by managers or controlling shareholders. Row 10 shows that these ratios are not significantly different for any group of firms before the crisis.

In the next section of table 11.1 we examine the financial leverage of firms prior to the crisis period. If politically connected firms had greater leverage prior to the crisis, then this could explain some or all of the performance differences in stock price performance. A firm with higher debt would naturally be expected to perform worse in a crisis (compared to a firm with less debt) both because of the effect of leverage on a firm's covariation with the market and also because the depreciation of the local currency hurts a firm if any of its debt is denominated in foreign currency. In addition, if the government responds to the crisis by raising interest rates—as in Malaysia early in the crisis—this raises the cost of servicing corporate debt. The data on leverage in table 11.1 show that firms with political connections had debt-asset ratios more than 11 percentage points higher, on average, than unconnected firms prior to the crisis (row 11). In addition, leverage was rising significantly faster for connected firms prior

17. This is consistent with the notion that politically connected firms were not well run, at least with respect to performance reported in audited statements (as opposed to private benefits).

18. Using data through 1995, fewer firms, and a different specification, Samad (n.d.) finds that politically connected firms have higher profitability but no difference in investment behavior.

to the crisis (row 12). However, politically connected firms had less short-term debt (maturity less than one year) as a percentage of total debt (row 13), and connected firms had a lower percentage increase in short-term debt prior to the crisis (row 14). These apparent differences in leverage between connected and unconnected firms are only rough measures, of course, in that they do not account for differences in industry or other firm characteristics.

In further regression analysis (not reported here but available on request) we control for other factors, and we still find that politically connected firms had more debt before the crisis (see Johnson and Mitton 2003). Controlling for standard determinants of leverage—size, profitability, growth, and industry—accounts for some, but not all, of the difference in leverage between favored and other firms.¹⁹ After controlling for all these factors, among nonfinancial firms politically connected firms still had debt ratios 5 percentage points higher (with the coefficient significant at the 10 percent level).

Overall, the evidence in table 11.1 does not suggest that favored firms performed differently during the crisis primarily because they were operated any better or worse (than unconnected firms) before the crisis. However, size and leverage stand out as the primary characteristics that differ between connected and unconnected firms, and we will control for these characteristics in subsequent regression analysis.

11.4.4 Hypotheses and Regression Specification

We now turn to analysis of firm-level performance of connected firms relative to unconnected firms during the crisis period and imposition of capital controls. Note that the nature of the data does not let us distinguish the market perception of the capital controls separately from other events that took place at the same time and were associated with the imposition of these controls.

If political connections mattered in Malaysia, then the Rajan and Zingales view suggests three specific hypotheses:

- The stock price of politically connected firms should have fallen more in the early crisis period.
- When capital controls were imposed, the stock price of politically connected firms should have risen (relative to unconnected firms). Within the set of politically connected firms, the benefits of capital controls should be concentrated in PMC firms rather than FMC firms in September 1998.

19. Specifically, larger firms had higher debt ratios, as predicted by Titman and Wessels (1988); more-profitable firms had lower debt ratios, as suggested by Myers (1977); and firms with higher growth had higher debt ratios.

- After the imposition of capital controls, PMC firms should have shown some evidence of having received advantages.

We examine the evidence for each of these hypotheses in turn. We begin by assessing the impact of political connections on stock price performance during the crisis period and after the imposition of capital controls. Because we use monthly stock return data, we define the “crisis period” as July 1997 through August 1998.²⁰

Other studies have focused on September 1998 as a key date in the Malaysian crisis.²¹ The most detailed account of Malaysia’s economic crisis, by Jomo (2001, chap. 7), also identifies the beginning of September 1998 as the critical turning point. Returns for the month of September 1998 are used to assess the stock price impact of capital controls.

To study stock price performance, we estimate the following cross-sectional return model:

$$(1) \quad \text{Stock return}_i = \alpha + \text{Political connection}_i + \text{Size}_i + \text{Leverage}_i \\ + \text{Industry}_i + \varepsilon_i,$$

where the stock return for firm i is measured over a specified period. Stock returns are dividend inclusive and expressed in ringgit.²² The political connection variables change according to the specification. Equation (1) also shows that we control for other factors that may influence returns; in particular, we control for those factors for which differences were demonstrated between connected and unconnected firms in table 11.1. Size $_i$ and Leverage $_i$ for each firm i are as defined in table 11.1, and Industry $_i$ corresponds to a set of dummy variables corresponding to the primary industry of firm i , where industries are defined broadly, as in Campbell (1996).

11.4.5 The Crisis Period: July 1997–August 1998

Table 11.2 presents the results from these regressions for the period from July 1997 to August 1998. In the first three columns, the politically connected dummy variable is included. For nonfinancial firms, the coefficient on the politically connected dummy is -0.075 , indicating that a political connection is associated with a greater stock price decline of 7.5 percent-

20. The beginning of the crisis period corresponds to the devaluation of the Thai baht on July 2, 1997, a date generally considered to be the starting point of the Asian financial crisis. The end of the crisis period and start of the “rebound period” corresponds to the imposition of capital controls on September 2, 1998, when the stock index began a sustained upward trend.

21. Capital controls were announced on September 1, and the ringgit-dollar rate was fixed in the early afternoon of September 2, 1998.

22. We do not calculate abnormal returns using historical betas because data limitations prevent calculation of precrisis betas for many of the firms in the sample. Even requiring a price history of just twenty-four months, we can calculate betas for only 65 percent of the firms in our sample. In this subsample, all of our key results are robust to including beta in the regressions.

Table 11.2 Political connections and crisis-period stock returns (dependent variables: stock return from July 1997 to August 1998)

	Political connections			PM and FM connections		
	Nonfinancial firms	Financial firms	All firms	Nonfinancial firms	Financial firms	All firms
Politically connected	-0.075*** (-2.97)	-0.077*** (-3.42)	-0.077*** (-3.88)			
PM connected			(-2.78)	-0.079*** (-3.58)	-0.091*** (-3.64)	-0.083***
FM connected				-0.059 (-1.61)	-0.046 (-1.34)	-0.056** (-2.06)
Firm size	0.074*** (5.19)	0.041* (1.71)	0.070*** (5.56)	0.074*** (5.19)	0.042* (1.75)	0.070*** (5.56)
Debt ratio	-0.0014* (-1.87)	-0.0011 (-1.65)	-0.0014** (-2.10)	-0.0014* (-1.85)	-0.0010 (-1.53)	-0.0014** (-2.07)
No. of observations	312	112	424	312	112	424
R-squared	0.269	0.095	0.236	0.269	0.099	0.237

Notes: The table reports coefficient estimates from regressions of stock returns on political connection variables and control variables over the Asian crisis period of July 1997 to August 1998. All Malaysian firms with available data in the *Worldscope* database are included. Also estimated but not reported are a constant term and industry dummy variables. "Politically connected" means the firm has an identifiable connection with key government officials from Gomez and Jomo (1997). "PM connected" and "FM connected" indicate the source of the political connection to prime minister and finance minister, respectively, as in Gomez and Jomo (1997). Firm size is measured as the log of total assets; the debt ratio is measured as total debt over total assets. Numbers in parentheses are heteroskedasticity-robust *t*-statistics.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

age points, on average, during the crisis period of July 1997 through August 1998.²³ For financial firms, the coefficient is similar, at -0.077. These coefficients are significant at the 1 percent level of confidence. The control variables for size and leverage are also significant in these regressions, with larger size being associated with higher returns during the crisis, and higher leverage with lower returns.

In the last three columns, we include separate dummies for PMC and FMC. Both types of politically connected firms had worse stock price performance than did unconnected firms, but the difference in performance between PMC and FMC firms is small in this time period. Among nonfinancial firms, PMC firms had a greater decline of 7.9 percentage points, and FMC firms had a greater decline of 5.9 percentage points.

Note that, depending on the precise specification, as many as six of the

23. See table 11.1 for average declines in stock price: 83 percent for connected firms and 77.7 percent for unconnected firms in this first phase of the crisis.

twelve industry dummies are significant in our crisis-period regressions.²⁴ However, including industry dummies does not weaken the coefficients on the political connection variables.

In the first phase of the financial crisis, therefore, political connections were associated with a significant negative effect on the stock price performance of Malaysian firms (although the total decline in all stock prices was larger than the connection-specific effect). This is broadly consistent with the Rajan and Zingales (1998) view that firms with strong political connections suffer more in a financial crisis, presumably because the expected value of government support declines. It is hard to know exactly what the Malaysian government was doing with regard to such support in 1997–98, but the finance minister’s stated policy was to follow tight budget discipline along the lines of a *de facto* IMF program (although Malaysia did not sign up for official IMF conditionality). There was also a certain amount of political rhetoric regarding the need to reduce cronyism (and various statements from both the finance minister and the prime minister about who was or was not a “crony”). Our results indicate that the market interpreted the policies of July 1997 to August 1998 as squeezing politically connected firms.²⁵

11.4.6 The Effects of Capital Controls: September 1998

If politically connected firms performed poorly during the first phase of the crisis because the connections themselves decreased in value, then connected firms should rebound more than unconnected firms when capital controls were imposed. (Again, we are measuring not the effects of the controls alone, but rather the market’s view—which may have been incorrect—of all the events associated with the controls.)

In general, it could be difficult to differentiate a rebound based on political connections from a rebound based on operating characteristics of firms. But Malaysian political events allow for a cleaner test. September 1998 marked both the imposition of capital controls and also the downfall of the finance minister. Once considered the prime minister’s certain successor, the finance minister was fired on September 2, 1998, and then jailed on charges of corruption on September 20, 1998. Over the course of September 1998, investors’ perceptions were that these events reduced the value of political connections for firms with strong ties to the finance minister. To the extent that politically connected firms enjoyed a rebound in September due to the increased value of their connections, investors would not expect the same increase in value to be enjoyed by FMC firms.

Table 11.3 presents the results of regressions of stock returns for Sep-

24. Following Campbell (1996, table 1) the industries are petroleum, finance/real estate, consumer durables, basic industry, food/tobacco, construction, capital goods, transportation, utilities, textiles/trade, services, and leisure.

25. We have performed a number of robustness tests on these results that are not reported here but are discussed in Johnson and Mitton (2003). In particular, the regression results are robust to controlling for political favoritism of Bumiputra firms.

Table 11.3 Political connections and stock returns following the imposition of capital controls (dependent variable: stock return for September 1998)

	Political connections			PM and FM connections		
	Nonfinancial firms	Financial firms	All firms	Nonfinancial firms	Financial firms	All firms
Politically connected	0.081 (1.23)	0.285*** (2.69)	0.138** (2.42)			
PM connected				0.130* (1.76)	0.403*** (3.02)	0.199*** (2.98)
FM connected				-0.116 (-1.11)	0.027 (0.24)	-0.063 (-0.81)
Firm size	0.014 (0.42)	-0.038 (-0.50)	0.001 (0.04)	0.015 (0.43)	-0.043 (-0.58)	0.000 (0.01)
Debt ratio	0.0036*** (3.48)	0.0018 (0.89)	0.0032*** (3.53)	0.0035*** (3.40)	0.0012 (0.58)	0.0031*** (3.35)
No. of observations	302	111	413	302	111	413
R-squared	0.142	0.115	0.128	0.154	0.153	0.143

Notes: The table reports coefficient estimates from regressions of stock returns on political connection variables and control variables for September 1998. All Malaysian firms with available data in the Worldscope database are included. Also estimated but not reported are a constant term and industry dummy variables. "Politically connected" means the firm has an identifiable connection with key government officials from Gomez and Jomo (1997). "PM connected" and "FM connected" indicate the source of the political connection to prime minister and finance minister, respectively, as in Gomez and Jomo (1997). Firm size is measured as the log of total assets; the debt ratio is measured as total debt over total assets. Numbers in parentheses are heteroskedasticity-robust *t*-statistics.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

tember 1998 on the same variables as in table 11.2. The first three columns present results for the political connections indicator. Politically connected firms as a whole enjoyed a rebound in September 1998 (their total increase in average stock price was 53.2 percent, compared with 37.1 percent for unconnected firms; see table 11.1). Among nonfinancial firms, a higher return of 8.1 percentage points, not significant at standard levels, may be attributed to political connections. The effect appears to be stronger among financial firms, where connected firms on average had a higher return of 28.5 percentage points, which is significant at the 1 percent level. For all firms combined, the political connections coefficient shows a higher return of 13.8 percentage points, and is significant at the 5 percent level.

The final three columns of table 11.3 present results for the differences in PMC and FMC firms. Among nonfinancial firms, PMC firms on average experienced higher returns of 13 percentage points, significant at the 10 percent level, while the dummy on FMC firms is -11.6 percentage points (but is not statistically significant), for a total net difference of 24.6 percentage points (13 plus 11.6) between PMC and FMC firms. The effect

seems even stronger among financial firms, where PMC firms had higher returns of 40.3 percentage points, significant at the 1 percent level. Among all firms combined, PMC firms on average had higher returns of 19.9 percentage points, significant at the 1 percent level, while FMC firms on average had lower returns of 6.3 percentage points (not statistically significant). This result suggests that the value of political connections themselves was an important determinant of the fortunes of Malaysian firms when capital controls were imposed.

As a further test of whether the observed differences are due to the effects of capital controls, we examine cross-sectional differences in stock price gains following the imposition of capital controls. If capital controls constrain financial flows across borders, we would expect to see smaller gains for connected firms having access to international capital markets compared to connected firms without such access. In additional regressions (not reported here, but see Johnson and Mitton 2003) we compare gains for connected firms that had foreign capital access (defined as having international stock listings or bond placements) with connected firms that did not have foreign capital access. While the evidence is mixed at times, on balance the results show that politically connected firms without foreign capital access performed better than connected firms with foreign capital access when capital controls were imposed (Johnson and Mitton 2003).²⁶ The results are consistent with the idea that capital controls affected Malaysian firms' access to foreign finance.

11.4.7 Economic Significance of Political Connections

For a measure of economic significance, we use our regression coefficients to estimate the impact of connections on the total market value of firms. We find that during the crisis period, roughly \$5.7 billion of the total market value lost by connected firms is attributable to their political connections. When capital controls were imposed in September 1998, although market valuations were then on a smaller scale, political connections are estimated to have accounted for an incremental gain of roughly \$1.3 billion in market value for connected firms.²⁷

By looking at the outcomes for connected firms in September 1998, we can obtain an estimate of the perceived value of political connections as a percentage of total firm value after capital controls were imposed. If we as-

26. Our results are weakest when we limit the sample to just firms that were included in the International Finance Corporation's investable index (i.e., those regarded as being more liquid). In this case, the coefficient on prime minister connections falls to 0.129, with a *t*-statistic of 1.1. However, this sample is only 109 firms, which is about one-quarter of our main sample, so the loss of significance is not surprising.

27. The estimates of the effects of political connections on market value are based on our estimated regression coefficients, monthly stock prices, and available data on the number of shares outstanding for each firm. Because the number of shares outstanding is not known for every month and is missing for three of the connected firms, the estimated figures are not exact calculations but reasonable estimates.

sume that the events of September 1998 restored the full value of connections to the prime minister, then the estimated gain attributable to prime minister connections in September 1998 should give an indication of the percentage of firm value attributable to political connections. Our regression coefficients show that prime minister connections account for about a 20 percent increase in firm value in September 1998. In terms of (higher) valuations at the end of September 1998, this increase would be 12 percent of firm value. This would suggest that 12 percent is a low estimate of investors' perceptions of the percentage of firm value attributable to connections, with the actual percentage being higher to the extent that connections still accounted for some value prior to September 1998. While this is clearly only a rough estimate, the estimated proportion of value attributable to connections seems to be within the 12–23 percent range estimated by Fisman (2001) for connected firms in Indonesia.

Regarding the effect of political connections in relation to the total variation in returns, we note that in regressions with September 1998 returns, the *R*-squared of the regression rises incrementally from 0.109 to 0.143 when the political connection variables are added. This suggests that roughly 3.4 percent of the total variation in returns is explained by differences in political connections (alternatively, about one-quarter of the systematic, explainable variation in stock prices is due to political connections). For regressions of returns for the initial crisis period, adding political connection variables increases the *R*-squared from 0.210 to 0.237, suggesting that 2.7 percent of the total variation in returns is explained by differences in political connections.

11.4.8 After the Imposition of Capital Controls: 1999–2003

What did the Malaysian government do once capital controls were imposed? Some general reflationary measures were taken, including cutting interest rates and making credit more readily available to consumers and firms (Kaplan and Rodrik 2001; Mahathir 2000, chap. 8). A new expansionary budget was introduced in October 1998 (Perkins and Woo 2000). Overall, however, as discussed above, macroeconomic policy remained cautious and responsible after the controls were imposed.

At the firm level, evidence from the public record suggests that the government may have used the economy's isolation from short-term capital flows to restore advantages for some favored firms. The precise distribution of these advantages is hard to measure, as they are usually not reported publicly. However, high-profile incidents that have been reported in the international media suggest three types of benefits for favored firms.²⁸

28. These three forms of advantages for favored firms could benefit minority shareholders, in part because they put the supported firms on a stronger financial basis and reduce the incentives to transfer resources out of the firms (Johnson et al. 2000). In other cases, however, the government has permitted companies to carry out actions that might be detrimental to minority shareholders (see, e.g., Restall 2000b; Perkins and Woo 2000; Jayasankaran 2000).

First, the state-owned oil company was called upon to provide bailouts to particular distressed firms (see, e.g., Jayasankaran 1999b; Restall 2000a; Lopez 2001).²⁹ Second, some companies with perceived political connections appeared to receive advantageous deals directly from the government (see, e.g., Prystay 2000).³⁰ Third, in the banking sector, the government introduced a consolidation plan that appeared beneficial to connected firms, and some large companies were allowed to repeatedly roll over their debts (see, e.g., Jayasankaran 1999a; Dhume et al. 2001).³¹

While these extracts from the public record provide anecdotal evidence that certain firms were favored after the imposition of capital controls, it is impossible to directly measure the extent to which connected firms received benefits. In order to address the issue more systematically, we turn again to the firm-level data. Specifically, we examine the operating performance of all Malaysian firms in *Worldscope* over the period 1990–2003. We study four firm-level measures of operating performance: investment, growth, profitability, and leverage. Here we define investment as the ratio of capital expenditures to gross fixed assets, growth as the log annual growth rate in sales, profitability as the return on assets, and leverage as the ratio of total debt to total assets.

In table 11.4, we show the median firm-level operating performance for each of these measures for each year from 1990 to 2003. To assess the effect of having political connections in each year, we also show the results of regressing these performance measures on a full set of two-digit standard industrial classification (SIC) sector dummy variables, a control for firm size, and a dummy for whether a firm was, according to Gomez and Jomo (1997), connected to the prime minister. Each year is covered in a separate regression.

The results in table 11.4 indicate that PMC firms showed higher investment, higher growth, higher leverage, and lower profitability in most pre-crisis years (compared with non-PMC firms). However, in the years following the crisis, the differences in investment and growth were largely

29. “Since the Asian financial crisis hit, Petronas has helped buy debt-burdened shipping assets controlled by Mahathir’s eldest son; now it’s preparing to buy control of the national car maker, Proton. Looking ahead, Mahathir told the *Review* in June that he didn’t see why Petronas should not take over the ailing national carrier, Malaysian Airlines, although Petronas itself says it has no such plan” (Jayasankaran 1999b).

30. “On Friday, the government announced it will raise six billion ringgit [\$1.58 billion] in a bond issue to buy back the assets of two unprofitable privatized light-rail projects in Kuala Lumpur. Two key beneficiaries of the bailout: debt-laden conglomerate Renong Bhd., which owns one of the rail projects, and Renong’s controlling shareholder, Halim Saad. The move comes days after the Finance Ministry agreed to repurchase a 29 percent interest in ailing Malaysian Airlines System from businessman Tajudin Ramli for 1.79 billion ringgit—the same price he paid the government for the MAS stake in 1994” (Prystay 2000).

31. “A major worry is that the government seems to have weighed political ties in choosing some of the leader banks. . . . Just as there are losers in the merger stakes, so are there winners. One of them is Multipurpose Bank, a small institution controlled by businessmen widely viewed by analysts as being close to Finance Minister Daim” (Jayasankaran 1999a).

Table 11.4 Political connections and median operating performance

Year	Investment			Growth		Leverage		Profitability	
	Median, all firms	Compare: Thailand	Compare: Korea	PM effect	Median, all firms	PM effect	Median, all firms	PM effect	PM effect
1990	0.079	0.288	0.156	-0.014	0.206	0.259	0.126	0.049	-0.006
1991	0.126	0.267	0.133	0.005	0.135	0.498***	0.105	0.046	-0.011
1992	0.124	0.170	0.120	0.025	0.081	0.381	0.088	0.053	-0.088
1993	0.118	0.155	0.102	0.130**	0.058	0.277**	0.101	0.048	0.001
1994	0.121	0.147	0.102	0.094*	0.101	0.170	0.153	0.046	-0.011
1995	0.127	0.137	0.144	0.042	0.145	0.170	0.187	0.051	-0.018
1996	0.126	0.116	0.142	0.073*	0.139	0.301*	0.228	0.044	-0.012
1997	0.114	0.076	0.124	0.060*	0.090	0.015	0.259	0.033	-0.082*
1998	0.079	0.029	0.060	0.052	-0.082	0.067	0.290	0.005	-0.223
1999	0.044	0.030	0.061	0.017	-0.088	-0.188	0.253	0.019	-0.026
2000	0.042	0.032	0.071	-0.003	0.010	-0.098	0.232	0.021	-0.096
2001	0.041	0.037	0.069	0.023	-0.018	-0.171	0.223	0.016	-0.014
2002	0.038	0.045	0.056	-0.011	0.005	-0.019	0.223	0.018	0.003
2003	0.041	0.057	0.058	-0.015	0.059	-0.020	0.210	0.025	-0.010

Notes: The table reports median operating performance for Malaysian firms for the years 1990 to 2003. For investment, comparative figures are given for Thailand and Korea. "PM effect" refers to coefficient estimates for a "PM connected" indicator from regressions of performance measures on a PM indicator for each year 1990 to 2003. Included, but not reported, in each regression is a full set of two-digit SIC dummy variables and a control for firm size. All Malaysian firms with available data in the Worldscope database are included. "PM connected" means the firm has an identifiable connection with key government officials from Gomez and Jomo (1997). Investment is capital expenditure/gross fixed assets, growth is the log annual real growth rate in sales, leverage is total debt/total assets, and profitability is return on assets.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

reversed: the PMC firms had lower investment and growth. In addition, in the years following the crisis, PMC firms appear to have had even higher leverage than other firms compared with the years before the crisis. On balance, the results show that the effects of being connected to the prime minister, in terms of firm operating performance, were very different after the imposition of capital controls from what they were prior to the crisis.

To further assess the operating performance of connected firms, in panel A of table 11.5, we estimate the following panel regression:

$$(2) \text{Performance}_{it} = \alpha + \text{Firm}_i + \text{PMC}_i \times \text{Crisis}_t + \text{PMC}_i \times \text{Postcrisis}_t \\ + \text{Year}_t + \varepsilon_{it},$$

where Performance_{it} is one of the four measures of operating performance for firm i in year t . Firm_i represents firm fixed effects. PMC_i is a dummy variable indicating whether firm i is connected to the prime minister. As we have a full set of firm fixed effects, we cannot estimate the direct PMC effect, but this framework allows us to look at how the effects of connections varied over time. Crisis_t is a dummy variable set to 1 for years 1997–98, and Postcrisis_t is a dummy variable set to 1 for years 1999–2003. Year_t represents a full set of year-specific dummy variables.

These results show that, compared with unconnected firms, PMC firms suffered a large drop in relative investment and growth from the precrisis to postcrisis period. They also had less growth and higher leverage, relative to unconnected firms, in the crisis period compared with the precrisis period. The effects in question are large and consistent with the data shown in table 11.4.³²

However, it is possible that the standard errors in panel A of table 11.5 are too low—for example, if there is serial correlation in the error term. As a more conservative approach, in panels B, C, and D we estimate the following cross-sectional regression:

$$(3) \quad \text{AvgPerformance}_i = \alpha + \text{PMC}_i + \text{Industry}_i + \varepsilon_i,$$

where AvgPerformance_i is the average of one of the four performance measures over all years in the precrisis period (panel B), the crisis period (panel C), or the postcrisis period (panel D). PMC_i is a dummy variable indicating whether firm i is connected to the prime minister. Industry_i represents a full set of industry dummy variables.³³

In addition, panel A of table 11.5 shows the value of prime minister connections after the crisis relative to before (or during) the crisis. Panels B, C,

32. We obtain similar results for investment, leverage, and profitability using Arellano-Bond generalized method of moments (GMM). A balanced panel also gives similar results, although the standard errors are higher because the sample is much smaller (about 20 percent of the full sample).

33. The only difference between the regression in table 11.4 and the one in panels B, C, and D of table 11.5 is that table 11.4 also includes a control for firm size.

Table 11.5 Political connections and operating performance: Regression analysis

	Investment	Growth	Leverage	Profitability
<i>A. 1990–2003 (dependent variable: the performance measure indicated)</i>				
PM connected × crisis	0.001 (0.02)	-0.128* (-1.67)	0.232* (1.92)	-0.075 (-1.04)
PM connected × postcrisis	-0.050* (-1.93)	-0.213*** (-2.91)	0.210 (1.46)	-0.003 (-0.11)
No. of observations	3,035	3,557	3,786	3,792
R-squared	0.312	0.196	0.538	0.176
<i>B. Precrisis period (dependent variable: the average performance measure over period)</i>				
PM connected	0.048 (1.27)	0.264** (2.50)	0.049 (1.62)	-0.009 (-0.74)
No. of observations	279	263	324	324
R-squared	0.174	0.680	0.244	0.195
<i>C. Crisis period (dependent variable: the average performance measure over period)</i>				
PM connected	0.053 (1.49)	0.022 (0.38)	0.287** (2.27)	-0.131* (-1.70)
No. of observations	283	347	355	355
R-squared	0.173	0.258	0.195	0.123
<i>D. Postcrisis period (dependent variable: the average performance measure over period)</i>				
PM connected	0.008 (0.74)	-0.013 (-0.16)	0.241 (1.38)	0.012 (0.33)
No. of observations	287	354	355	355
R-squared	0.162	0.149	0.166	0.155

Notes: Panel A reports coefficient estimates from panel regressions of performance measures on a political connection indicator over the period 1990 to 2003. Panel A includes firm fixed effects and a full set of year-specific dummies are included. Panels B, C, and D regress average performance measures over the given time period on the political connections indicator. Panels B, C, and D include a full set of industry dummies. “PM connected” means the firm has an identifiable connection with key government officials from Gomez and Jomo (1997). The precrisis period refers to 1990–96, the crisis period refers to 1997–98, and postcrisis to the period 1999–2003. Investment is capital expenditures/gross fixed assets, growth is the log annual real growth rate in sales, leverage is total debt/total assets, and profitability is return on assets. Numbers in parentheses are heteroskedasticity-robust *t*-statistics (adjusted for firm-level clustering in panel A).

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

and D show the PMC versus unconnected (non-PMC) comparison within each time period, which enables us also to check the absolute value of these connections. PMC firms had a growth advantage in the precrisis period, and this disappeared after the crisis.³⁴ These connected firms also had more leverage and less profitability during the crisis. Taken with the rest of table

34. In panels B, C, and D, the results are very similar if we use the same set of firms in each.

11.5 and table 11.4, these results suggest that PMC firms' advantages were not manifested in better performance after the resolution of the crisis.³⁵

11.5 Conclusion

We do not find evidence that Malaysia's September 1998 controls were essential for recovery or structural reforms. Our analysis of the key macroeconomic and financial indicators confirms the empirical findings of Hutchison (2003) that Malaysia's macroeconomic performance after the imposition of capital controls was comparable to that of other countries recovering from the Asian financial crisis. The controls were imposed late, after a big depreciation and after a large amount of capital had already left the country, and this limited the potential macroeconomic benefits. At best, the controls played a preventive role in guarding against perceived risks to financial stability, but in this role they were not tested by any observable pressure. As far as we can determine, Malaysia's successful recovery resulted from the country's strong fundamentals, sound policies, and effective institutions, rather than from the capital controls. It would thus be misleading to draw any general lessons applicable to other countries based on Malaysia's experience with capital controls during the Asian crisis.

However, the firm-level evidence from Malaysia supports the idea that the stock market interpreted the events of September 1998 as helping politically connected firms (relative to unconnected firms). Firms with political connections were expected by the stock market to lose benefits in the first phase of the Asian crisis. Conversely, firms connected to the prime minister were expected to gain benefits when capital controls were imposed in September 1998.

The presence of political connections in East Asian economies does not mean that these connections caused the crisis or even that relationship-based capitalism was necessarily a suboptimal system for these countries. While politically connected firms were hit harder during the crisis, the data do not indicate that this was a punishment for past misdeeds and deficiencies. The evidence suggests rather that investors interpreted the crisis as indicating that previously favored firms would lose valuable advantages, while the imposition of capital controls indicated—at least initially—that these advantages would be restored for some firms.

Based on the actual financial performance of firms after the crisis, it is hard to discern the extent to which firms actually received special advantages. This could be because financial- and corporate-sector reforms resulted in fewer advantages for connected firms or because connected firms did not end up making good use of their privileges.

35. Tables 11.4 and 11.5 include both financial and nonfinancial firms. We ran the same regressions separately for nonfinancial firms only, without finding any significant differences.

Appendix A

Table A.1 Malaysian Capital Controls (1992–2004)

Date	Measure	Category
1991	No changes	
4/20/1992	Total borrowing by residents in foreign currency from domestic commercial and merchant banks to finance imports of goods and services is restricted to the equivalent of 1 million ringgit (RM; previously there were no limits).	Borrowing in foreign currency domestically and abroad
7/9/1992	Borrowing under the Export Credit Refinance Facilities (both pre- and postshipment financing) by nonresident-controlled companies will be considered domestic borrowing.	Borrowing in foreign currency domestically and abroad
10/24/1992	Offshore guarantees obtained by residents to secure domestic borrowing, except offshore guarantees (whether denominated in ringgit or foreign currency) without resource to Malaysian residents and obtained from the licensed offshore banks in Labuan to secure domestic borrowing, are deemed foreign borrowing. In cases where an offshore guarantee is denominated in ringgit, it is subject to the condition that, in the event the guarantee is called on, the licensed offshore banks in Labuan must make payments in foreign currency (with some exceptions), not in ringgit.	Borrowing in foreign currency domestically and abroad
11/1/1992	The guidelines on foreign equity capital ownership are liberalized. Companies exporting at least 80 percent of their production are no longer subject to any equity requirements, whereas companies exporting between 50 percent and 79 percent of their production were permitted to hold 100 percent equity, provided that they have invested \$50 million or more in fixed assets or completed projects with at least 50 percent local value added and that the company's products do not compete with those produced by domestic firms. These guidelines are not to apply to sectors in which limits on foreign equity participation have been established.	Foreign direct investment
12/14/1992	Residents and the offshore companies in Labuan are prohibited from transacting with the residents of dealing in the currency of Yugoslavia (Serbia and Montenegro) without specific prior approval from the Controller of Foreign Exchange (COFE).	Currency requirements
12/22/1993	Nonresident-controlled companies involved in manufacturing and tourism-related activities are freely allowed to obtain domestic credit facilities to finance the acquisition and/or the development of immovable property required for their own business activities.	International transactions in ringgit
1/17/1994	A ceiling is placed on the net external liability position of domestic banks (excluding trade-related and direct investment inflows); removed on January 20, 1995.	Bank and foreign exchange transactions
1/24/1994	Residents are prohibited from selling the following Malaysian securities to nonresidents: banker's acceptances; negotiable instruments of deposit; Bank Negara bills; treasury bills; government securities (including Islamic securities) with a remaining maturity of one year or less.	Inflows of portfolio and other capital

(continued)

Table A.1 (continued)

Date	Measure	Category
2/7/1994	Residents are prohibited from selling to nonresidents all forms of private debt securities (including commercial papers, but excluding securities convertible into ordinary shares) with a remaining maturity of one year or less.	Inflows of portfolio and other capital
2/7/1994	The restriction on the sale of Malaysian securities to nonresidents is extended to both the initial issue of the relevant security and the subsequent secondary market trade.	Inflows of portfolio and other capital
2/23/1994	Prohibition of forward transactions (on bid side) and nontrade-related swaps by commercial banks with foreign customers to curtail the speculative activities of offshore agents seeking long positions in ringgit (lifted on August 16, 1994).	Bank and foreign exchange transactions
8/12/1994	Residents are permitted to sell to nonresidents any Malaysian securities.	Inflows of portfolio and other capital
12/1/1994	Residents may borrow in foreign currency up to a total of the equivalent of RM5 million from nonresidents and from commercial and merchant banks in Malaysia.	Borrowing in foreign currency domestically and abroad
12/1/1994	Nonresident-controlled companies are allowed to obtain credit facilities, including immovable property loans, up to RM10 million without specific approval, provided that at least 60 percent of their total credit facilities from banking institutions are obtained from Malaysian-owned financial institutions.	International transactions in ringgit
12/1/1994	Nonresidents with valid work permits may obtain domestic borrowing to finance up to 60 percent of the purchase price of residential property for their own accommodation.	International transactions in ringgit
6/27/1995	Corporate residents with a domestic credit facility are allowed to remit funds up to the equivalent of RM10 million for overseas investment purposes each calendar year.	Outflows of portfolio and other capital
2/1/1996	The threshold for the completion of the statistical forms for each remittance to, or receipt of funds from, nonresidents is raised from RM50,000 to RM100,000 or its equivalent in foreign currency.	Payments for invisible transactions
8/4/1997	Controls are imposed on banks to limit outstanding noncommercial-related ringgit offer-side swap transactions (i.e., forward order/spot purchases of ringgit by foreign customers) to \$2 million per foreign customer or its equivalent. Hedging requirements of foreigners for trade-related and genuine portfolio and foreign direct investment investments are excluded.	Bank and foreign exchange transactions
8/4/1997	Residents are allowed to enter into non-commercial-related swap transactions up to a limit (no limits existed previously).	Bank and foreign exchange transactions
8/28/1997	A ban on short-selling of the listed securities on the Kuala Lumpur Stock Exchange (KLSE) is introduced to limit speculative pressures on stock prices and exchange rates.	Stock market transactions

Table A.1 (continued)

Date	Measure	Category
9/1/1998	A requirement is introduced to repatriate all ringgit held offshore (including ringgit deposits in overseas banks) by October 1, 1998 (Bank Negara approval thereafter).	International transactions in ringgit
9/1/1998	Approval requirement is imposed to transfer funds between external accounts (freely allowed previously) and for the use of funds other than permitted purposes (i.e., purchase of RM assets).	International transactions in ringgit
9/1/1998	Licensed offshore banks are prohibited from trading in ringgit assets (allowed up to permitted limits previously).	International transactions in ringgit
9/1/1998	A limit is introduced on exports and imports of ringgit by residents and nonresident travelers, effective September 1, 1998 (no limits existed previously).	International transactions in ringgit
9/1/1998	Residents are prohibited from granting ringgit credit facilities to nonresident corresponding banks and stockbroking companies (subject to a limit previously).	International transactions in ringgit
9/1/1998	Residents are prohibited from obtaining ringgit credit facilities from nonresidents (subject to a limit previously).	International transactions in ringgit
9/1/1998	All imports and exports are required to be settled in foreign currency.	International transactions in ringgit
9/1/1998	All purchases and sales of ringgit facilities can only be transacted through authorized depository institutions.	International transactions in ringgit
9/1/1998	Approval requirement for nonresidents to convert ringgit in external accounts into foreign currency, except for purchases of ringgit assets, conversion of profits, dividends, interest, and other permitted purposes (no such restrictions previously).	Outflows of portfolio and other capital
9/1/1998	No restriction on conversion of ringgit funds in external accounts of nonresidents with work permits, embassies, high commissions, central banks, international organizations, and missions of foreign countries in Malaysia.	Outflows of portfolio and other capital
9/1/1998	A twelve-month waiting period for nonresidents to convert ringgit proceeds from the sale of Malaysian securities held in external accounts (excluding FDI, repatriation of interest, dividends, fees, commissions, and rental income from portfolio investment). No such restrictions previously.	Outflows of portfolio and other capital
9/1/1998	A prior approval requirement beyond a certain limit for all residents to invest abroad in any form (previously applied only to corporate residents with domestic borrowing).	Outflows of portfolio and other capital
9/1/1998	Trading in Malaysian shares on Singapore's Central Limit Order Bank (CLOB) over-the-counter market becomes de facto prohibited as a result of strict enforcement of the existing law requiring Malaysian shares to be registered in KLSE prior to trade.	Stock market transactions

(continued)

Table A.1 (continued)

Date	Measure	Category
9/1/1998	A specific limit on exports of foreign currency by residents and up to the amount brought into Malaysia for nonresidents (previously, no restriction on export of foreign currency on person or in baggage of a traveler; export by other means required approval, regardless of amount).	Export and import of currency
9/1/1998	No restriction on conversion of ringgit funds in external accounts of nonresidents with work permits, embassies, high commissions, central banks, international organizations, and missions of foreign countries in Malaysia.	Controls on portfolio outflows
9/1/1998	A specific limit on exports of foreign currency by residents and the amount brought into Malaysia for nonresidents (previously, no restriction on export of foreign currency on person or in baggage of a traveler; export by other means required approval, regardless of amount).	Export of foreign currency
12/12/1998	Residents are allowed to grant loans to nonresidents for purchases of immovable properties from December 12, 1998, to January 12, 1999.	International transactions in ringgit
1/13/1999	Designated nonresident accounts for futures trading are allowed and exempt from the twelve-month holding period.	Derivatives
1/13/1999	Capital flows for the purpose of trading derivatives on the commodity and monetary exchange of Malaysia and the Kuala Lumpur options and financial futures exchange are permitted for nonresidents, without being subject to the rules governing external accounts, when transactions are conducted through "designated external accounts" that can be created with tier 1 commercial banks in Malaysia. (From September 1999, the classification of tier 1 and tier 2 banks became no longer applicable: all commercial banks were allowed to open designated accounts for nonresidents.)	Derivatives
2/15/1999	The twelve-month waiting period is replaced with a graduated system of exit levies on the repatriation of the principal of capital investments (in shares, bonds, and other financial instruments, except for property investments) made prior to February 15, 1999. The levy decreases over the duration of the investment, and thus penalizes earlier repatriations; the levy is 30 percent if repatriated less than seven months after entry, 20 percent if repatriated in seven to nine months; and 10 percent if nine to twelve months. No levy on principal if repatriated after twelve months.	Outflows of portfolio and other capital
2/18/1999	Repatriation of funds relating to investments in immovable property is exempted from the exit levy regulations.	Outflows of portfolio and other capital
3/1/1999	The ceiling on the import and export of ringgit for border trade with Thailand is raised.	International transactions in ringgit
4/5/1999	Investors in the Malaysian Exchange of Securities Dealing and Automated Quotation (MESDAQ) are exempted from the exit levy introduced on February 15, 1999.	Outflows of portfolio and other capital

Table A.1 (continued)

Date	Measure	Category
7/8/1999	Residents are allowed to grant overdraft facility in aggregate not exceeding RM200 million for intraday and not exceeding RM5 million for overnight to a foreign stockbroking company, subject to certain conditions.	International transactions in ringgit
9/21/1999	Commercial banks are allowed to enter into short-term currency swap arrangement with nonresident stockbrokers to cover for payment for purchases of shares on the KLSE and in outright ringgit forward sale contract with nonresidents who have firm commitment to purchase shares on the KLSE, for maturity period not exceeding five working days and with no rollover option.	Bank and foreign exchange transactions
10/4/1999	Residents are allowed to grant ringgit loans to nonresidents for purchases of immovable properties from October 29, 1999, to December 7, 1999.	International transactions in ringgit
3/14/2000	Funds arising from sale of securities purchased by nonresidents on the CLOB can be repatriated without payment of exit levy.	Outflows of portfolio and other capital
4/24/2000	Nonresident-controlled companies raising domestic credit through private debt securities are exempted from RM19 million limit and the 50:50 requirement for issuance of private debt securities on tender basis through the fully automated system for tendering, to develop domestic bond market.	International transactions in ringgit
6/29/2000	Administrative procedures issued to facilitate classification of proceeds from the sale of CLOB securities as being free from levy.	Outflows of portfolio and other capital
7/27/2000	Residents and nonresidents are no longer required to make a declaration in the traveler's declaration form as long as they carry currency notes and/or traveler's checks within the permissible limits. For nonresidents, the declaration is incorporated into the embarkation card issued by the immigration department.	Export and import of currency
9/30/2000	Licensed offshore banks in the Labuan international offshore finance center are allowed to invest in ringgit assets and instruments in Malaysia for their own accounts only and not on behalf of clients. The investments cannot be financed by ringgit borrowing.	International transactions in ringgit
12/1/2000	Foreign-owned banks in Malaysia are allowed to extend up to 50 percent (previously 40 percent) of the total domestic credit facilities to nonresident-controlled companies, in case of credit facilities extended by resident banks. This is to fulfill Malaysia's commitment under the General Agreement on Trade in Services.	Domestic lending by foreign-owned banks
12/10/2000	Licensed commercial banks are allowed to extend intraday overdraft facilities not exceeding RM200 million in aggregate and overnight facilities not exceeding RM10 million (previously 5 million) to foreign stockbroking companies and foreign global custodian banks.	International transactions in ringgit
2/1/2001	The exit levy on profits repatriated after one year from the month the profits are realized is abolished. Portfolio profits repatriated within one year remain subject to the 10 percent levy.	Outflows of portfolio and other capital

(continued)

Table A.1 (continued)

Date	Measure	Category
5/1/2001	The 10 percent exit levy imposed on profits arising from portfolio investments repatriated within one year of realization is abolished.	Outflows of portfolio and other capital
6/1/2001	All controls on the trading of futures and options by nonresidents on the Malaysian Derivatives Exchange (MDEX) are eliminated. The Commodity and Monetary Exchange of Malaysia and the KLSE merge to form the MDEX.	Derivatives
6/13/2001	Resident insurance companies are allowed to extend ringgit policy loans to nonresident policy holders with the terms and conditions of the policies. The amount of ringgit loans extended may not exceed the policy's attained cash surrender value and may be for the duration of the policies.	International transactions in ringgit
7/10/2001	Resident financial institutions are allowed to extend ringgit loans to nonresidents to finance the purchase or construction of any immovable property in Malaysia (excluding financing for purchases of land only) up to a maximum of three property loans in aggregate.	International transactions in ringgit
11/21/2002	Banks are allowed to extend additional ringgit credit facilities to nonresidents up to an aggregate of RM5 million per nonresident to finance projects undertaken in Malaysia. Prior to this, credit facilities in ringgit to nonresidents for purposes other than purchases of three immovable properties or a vehicle were limited to RM2000,000.	International transactions in ringgit
12/3/2002	In addition to obtaining property loans to finance new purchases or construction of any property in Malaysia, nonresidents may also refinance their ringgit domestic property loans. The above is subject to a maximum of three property loans.	International transactions in ringgit
12/3/2002	The limit of RM10,000 equivalent in foreign currency for investment abroad by residents under the Employee Share Option/Purchase Scheme is removed. Effective this date, general permission is granted for overseas investment for this purpose.	Outflows of portfolio and other capital
12/3/2002	Payments between residents and nonresidents as well as between nonresidents for ringgit assets are liberalized to allow payments to be made in either ringgit or foreign currency (previously, only in ringgit).	Settlement
3/7/2003	Banking institutions as a group are permitted to extend ringgit overdraft facilities, not exceeding RM500,000 in aggregate, to a nonresident customer, if the credit facilities are fully covered at all times by fixed deposits placed by the nonresident customer with the banking institutions extending the credit facilities.	International transactions in ringgit
4/1/2003	Exporters are allowed to retain a portion of their export proceeds in foreign currency accounts with onshore licensed banks in Malaysia with overnight limits ranging between the equivalent of US\$1 million and US\$70 million, or any other amount that has been approved (previously, the limit was between US\$1 million and US\$10 million).	Export proceeds

Table A.1 (continued)

Date	Measure	Category
4/1/2003	Residents are allowed to sell up to twelve months forward foreign currency receivables for ringgit to an authorized dealer for any purpose, if the transaction is supported by a firm underlying commitment to receive such currency.	Bank and foreign exchange transactions
4/1/2003	The overnight limit on foreign currency export proceeds that may be retained by resident exporters in foreign currency accounts with designated banks in Malaysia is raised to a range between the equivalent of US\$1 million and US\$70 million, from overnight limits of between US\$1 and US\$10 million.	Export proceeds
4/1/2003	The maximum amount of payment of profits, dividends, rental income, and interest to a nonresident on all bona fide investments that may be remitted without prior approval, but upon completion of statistical forms, is increased from RM10,000 to RM50,000, or its equivalent in foreign currency, per transaction.	Outflows of portfolio and other capital
5/21/2003	The threshold level for acquisition by foreign and Malaysian interests exempted from Foreign Investment Committee (FIC) approval is raised from RM5 million to RM10 million. Acquisition proposals by licensed manufacturing companies are centralized at the Ministry of International Trade and Industry (MITI), while corporate proposals are centralized at the Securities Commission. These proposals no longer require FIC consideration.	Foreign direct investment
6/17/2003	Foreign equity holding in manufacturing projects is allowed up to 100 percent for all types of investment.	Foreign direct investment
4/1/2004	Residents are allowed to sell forward nonexport foreign currency receivables for ringgit or another foreign currency to an authorized dealer or an approved merchant bank for any purpose, provided the transaction is supported by an underlying commitment to receive currency.	Bank and foreign exchange transactions
4/1/2004	Residents with permitted foreign currency borrowing are allowed to enter into interest rate swaps with onshore licensed banks, approved merchant banks, or licensed offshore banks in Labuan, provided that the transaction is supported by a firm underlying commitment.	Bank and foreign exchange transactions
4/1/2004	Resident individuals with funds abroad (not converted from ringgit) are allowed to maintain nonexport foreign currency accounts offshore without any limit imposed on overnight balances.	Outflows of portfolio and other capital
4/1/2004	Resident companies with domestic borrowing are allowed to open nonexport foreign currency accounts with licensed onshore banks in Malaysia to retain foreign currency receivables other than export proceeds with no limit on the overnight balances. Resident companies without domestic borrowing are allowed to open nonexport foreign currency accounts in licensed offshore banks in Labuan up to an overnight limit of \$500,000 or its equivalent.	Bank and foreign exchange transactions

(continued)

Table A.1 (continued)

Date	Measure	Category
4/1/2004	Resident individuals are permitted to open foreign currency accounts to facilitate payments for education and employment overseas, with an aggregate overnight limit equivalent to \$150,000 with Labuan offshore banks. Previously, the limit was \$100,000 (\$50,000 for overseas banks).	Bank and foreign exchange transactions
4/1/2004	Resident individuals who have foreign currency funds are allowed to invest freely in any foreign currency products offered by onshore licensed banks.	Bank and foreign exchange transactions
4/1/2004	The amount of export proceeds that residents may retain in foreign currency accounts with licensed onshore banks is increased from the range of \$1 million to \$70 million to the range of \$30 million to \$70 million.	Export proceeds
4/1/2004	COFE approval is required for the issuance of ringgit bonds in Malaysia by multinational development institutions and foreign multinational corporations.	International transactions in ringgit
4/1/2004	Resident banks and nonbanks are permitted to extend ringgit loans to finance or refinance the purchase or construction of any immovable property in Malaysia (excluding financing for purchases of land only) up to a maximum of three property loans in aggregate.	International transactions in ringgit
4/1/2004	The limit for banking institutions on loans to nonresidents (excluding stockbroking companies, custodian banks and correspondent banks) is raised from RM200,000 to RM10,000,000.	International transactions in ringgit
4/1/2004	Licensed insurers and takaful operators (Islamic insurance) are allowed to invest abroad up to 5 percent of their margins of solvency and total assets. These entities are also allowed to invest up to 10 percent of net asset value in their own investment-linked funds.	Outflows of portfolio and other capital
4/1/2004	Unit trust management companies are allowed to invest abroad the full amount of net asset value attributed to nonresidents, and up to 10 percent of net asset value attributed to residents, without prior COFE approval. In addition, fund/asset managers are allowed to invest abroad up to the full amount of investments of nonresident clients and up to 10 percent of investments of their resident clients.	Outflows of portfolio and other capital
4/1/2004	Bank Negara Malaysia liberalizes its foreign exchange administration rules to facilitate multilateral development banks (MDBs) or multilateral financial institutions (MFIs) to raise ringgit-denominated bonds in the Malaysian capital market. The size of the bond to be issued by MDBs or MFIs should be large enough to contribute to the development of the domestic bond market, and the minimum tenure of the bonds should be three years. Ringgit funds raised from the issuance of ringgit-denominated bonds can be used either in Malaysia or overseas. There will be no restriction for MDB or MFI issuers and nonresident investors of ringgit-denominated bonds to maintain foreign currency accounts, or ringgit accounts as external accounts with onshore licensed banks in Malaysia. MDBs, MFIs, or nonresident investors can enter into forward foreign exchange contracts or swap arrangements to hedge ringgit exposure, and MDB or MFI issuers can enter into interest rate swap arrangements with onshore banks.	International transactions in ringgit

Table A.1 (continued)

Date	Measure	Category
4/1/2004	Bank Negara Malaysia liberalizes rules to facilitate foreign multinational corporations (MNCs) to raise ringgit-denominated bonds in the Malaysian capital market. The ringgit funds raised from such issues can be used in Malaysia or overseas.	International transactions in ringgit
	MNC issuers and nonresident investors of ringgit-denominated bonds can maintain, without restrictions, foreign currency accounts or ringgit accounts as external accounts with any onshore licensed bank. MNC issuers or nonresident investors will be allowed forward exchange contracts of swap arrangements to hedge ringgit exposures, and MNC issuers will be allowed interest rate swap arrangements with onshore banks.	Bank and foreign exchange transactions

Sources: IMF, *Annual Report on Exchange Arrangements and Exchange Restrictions*, and Bank Negara Malaysia, *Annual Report and Exchange Notices*, various years.

Appendix B

Coding of Firms

We code as “politically connected” any firm that Gomez and Jomo (1997) identify as having officers or major shareholders with close relationships with key government officials—primarily the prime minister and the finance minister (and their allies). For example, Gomez and Jomo (1997) state that a firm we will call Firm A is “controlled by [Person X], who is closely linked to [an ally of the Prime Minister]” (p. 103), so Firm A is coded as politically connected, with the prime minister as the primary connection (Gomez and Jomo reveal actual names; we have dropped these here). As another example, Gomez and Jomo (1997) state, “The chairman of [Firm B] was [Person Y] of the [Group J], a close friend of [the] Prime Minister” (p. 59). Thus, Firm B is coded as politically connected, with its primary connection listed as the prime minister. As a final example, Gomez and Jomo (1997) state that “[Person Z], probably [the Finance Minister’s] closest confidant, has an interest” in Firm C (p. 57). This results in Firm C being coded as politically connected, with the finance minister as the primary connection. We search the entire text of Gomez and Jomo (1997) for all such indications of connections and code them accordingly.³⁶

36. The detailed coding is available from the authors upon request.

References

- Bank Negara Malaysia. 1998. Measures to regain monetary independence. Press release, 1 September.
- Bhagwati, J. 1998a. The capital myth. *Foreign Affairs* 77 (May/June): 7–12.
- . 1998b. Why free capital mobility may be hazardous to your health: Lessons from the latest financial crisis. Paper presented at NBER Conference on Capital Controls, 7 November, Cambridge, Massachusetts.
- Campbell, J. 1996. Understanding risk and return. *Journal of Political Economy* 104:298–345.
- Chong, B., M.-H. Liu, and K. Tan. 2005. The wealth effect of forced bank mergers and cronyism. Nanyang Technological University Working Paper.
- Dhume, S., S. Crispin, S. Jayasankaran, and J. Larkin. 2001. Economic reform: Running out of steam. *Far Eastern Economic Review* 164 (2): 44–47.
- Dornbusch, R. 2001. Malaysia: Was it different? NBER Working Paper no. 8325. Cambridge, MA: National Bureau of Economic Research.
- Faccio, M. 2006. Politically connected firms. *American Economic Review* 96 (1): 369–86.
- Faccio, M., R. Masulis, and J. McConnell. 2006. Political connections and corporate bailouts. *Journal of Finance*, forthcoming.
- Fisman, R. 2001. It's not what you know: Estimating the value of political connections. *American Economic Review* 91:1095–1102.
- Gomez, E. T., and K. S. Jomo. 1997. *Malaysia's political economy: Politics, patronage and profits*. Cambridge: Cambridge University Press.
- . 1998. *Malaysia's political economy: Politics, patronage and profits*. 2nd ed. Cambridge: Cambridge University Press.
- Hutchison, M. M. 2003. A cure worse than the disease? Currency crises and the output costs of IMF-supported programs. Chap. 10 in *Managing currency crises in emerging markets*, ed. M. Dooley and J. A. Frankel. Chicago: University of Chicago Press.
- International Monetary Fund (IMF). 1999. IMF concludes Article IV consultation with Malaysia. Public Information Notice no. 99/88. Washington, DC: International Monetary Fund, September 8.
- Jayasankaran, S. 1999a. Merger by decree. *Far Eastern Economic Review* 162 (36): 10–14.
- . 1999b. Saviour complex. *Far Eastern Economic Review* 162 (32): 10–13.
- . 2000. Entrepreneurs—a question of honour: Renong Group Chairman Halim Saad wins a postponement of a purchase of shares he is committed to buy; the markets are appalled. *Far Eastern Economic Review* 163 (51): 60–62.
- Jeong, S., and J. Mazier. 2003. Equilibrium exchange rates of eight East Asian currencies: A fundamental equilibrium exchange rate (FEER) approach. CEPN Working Paper no. 09. Paris: Centre d'Economie de l'Université Paris Nord.
- Johnson, S., P. Boone, A. Breach, and E. Friedman. 2000. Corporate governance in the Asian financial crisis, 1997–98. *Journal of Financial Economics* 58:141–86.
- Johnson, S., and T. Mitton. 2003. Cronyism and capital controls: Evidence from Malaysia. *Journal of Financial Economics* 67 (2): 351–82.
- Jomo, K. S. 2001. *Malaysian eclipse: Economic crisis and recovery*. London: Zed Books.
- Kaplan, E., and D. Rodrik. 2001. Did the Malaysian capital controls work? NBER Working Paper no. 8142. Cambridge, MA: National Bureau of Economic Research.
- Kaufmann, D., A. Kraay, and M. Mastruzzi. 2005. Governance matters IV: Gov-

- ernance indicators for 1996–2004. World Bank Policy Research Working Paper no. 3630. Washington, DC: World Bank, May.
- Krugman, P. 1998. Saving Asia: It's time to get radical. *Fortune*. September 7.
- La Porta, R., F. Lopez de Silanes, A. Shleifer, and R. Vishny. 1997. Legal determinants of external finance. *Journal of Finance* 52:1131–50.
- . 1998. Law and finance. *Journal of Political Economy* 106:1115–55.
- La Porta, R., F. Lopez de Silanes, and G. Zamarippa. 2003. Related lending. *Quarterly Journal of Economics* 118:231–68.
- Latifah, M. C. 2002. Capital flows and capital controls: The Malaysian experience. Chap. 7 in *Globalization and the Asian Pacific economy*, ed. Kyung Tae Lee. London: Routledge.
- Lemmon, M., and K. Lins. 2003. Ownership structure, corporate governance, and firm value: Evidence from the East Asian financial crisis. *Journal of Finance* 58:1445–68.
- Lindgren, C., T. Balino, C. Enoch, A.-M. Gulde, M. Quintyn, and L. Teo. 1999. Financial sector crisis and restructuring: Lessons from Asia. IMF Occasional Paper no. 188. Washington, DC: International Monetary Fund.
- Lopez, L. 2001. Mokhzani Mahathir exits two firms: Prime minister's son says he wants to put to rest accusations of nepotism. *Asian Wall Street Journal*. April 30.
- Meesook, K., I. H. Lee, O. Liu, Y. Khatri, and N. Tamirisa. 2001. Malaysia: From crisis to recovery. IMF Occasional Paper no. 207. Washington, DC: International Monetary Fund.
- Mitton, T. 2002. Across-firm analysis of the impact of corporate governance on the East Asian financial crisis. *Journal of Financial Economics* 64:215–41.
- Mohamad, M. bin. 2000. *The Malaysian currency crisis: How and why it happened*. Kuala Lumpur, Malaysia: Pelanduk Publications.
- Morck, R., B. Yeung, and W. Yu. 2000. The information content of stock markets: Why do emerging markets have synchronous stock price movements? *Journal of Financial Economics* 58:215–60.
- Myers, S. 1977. The determinants of corporate borrowing. *Journal of Financial Economics* 5:147–75.
- Perkins, D. H., and W. T. Woo. 2000. Malaysia: Adjusting to deep integration with the world economy. In *The Asian financial crisis: Lessons for a resilient Asia*, ed. W. T. Woo, J. Sachs, and K. Schwab, 227–55. Cambridge, MA: MIT Press.
- Petersen, M., and R. Rajan. 1995. The effect of credit market competition on lending relationships. *Quarterly Journal of Economics* 110:407–43.
- Prystay, C. 2000. Malaysia reverses course in privatization program: Government nationalizes two light-rail projects. *Asian Wall Street Journal*. December 27.
- Rajan, R., and L. Zingales. 1998. Which capitalism? Lessons from the East Asian crisis. *Journal of Applied Corporate Finance* 11:40–48.
- . 2003. The great reversals: The politics of financial development in the 20th century. *Journal of Financial Economics* 69:5–50.
- Restall, H. 2000a. Malaysia's national car hurts Malaysians. *Asian Wall Street Journal* (weekly edition). August 28–September 3.
- . 2000b. Reading Malaysia's Rorschach test. *Asian Wall Street Journal* (weekly edition). December 11–17.
- Rodrik, D. 2000. Exchange rate regimes and institutional arrangements in the shadow of capital flows. Harvard University, John F. Kennedy School of Government. Working paper.
- Samad, M. F. B. A. n.d. Performance of politically-affiliated businesses in Malaysia: A summary of principal findings. University of Malaya. Working Paper.
- Tamirisa, N. 2006. Do macroeconomic effects of capital controls vary by their type? Evidence from Malaysia. *ASEAN Economic Bulletin*, forthcoming.

Titman, S., and R. Wessels. 1988. The determinants of capital structure choice. *Journal of Finance* 43:1–19.

World Bank. 2000. Malaysia: Social and structural review update. [http://site/resources.worldbank.org/INTMALAYSIA/Resources/malaysia_STR_update.pdf](http://site.resources.worldbank.org/INTMALAYSIA/Resources/malaysia_STR_update.pdf).

Comment Peter Blair Henry

I like this paper a lot. Discussions of capital controls can be highly ideological and strangely unencumbered by the facts. In contrast, this paper takes a sensible look at the data and does not force them to tell a story that is not really there.

The paper focuses on two central questions, one macroeconomic in nature and the other microeconomic. The macro question is the obvious one: did the Malaysian capital controls ease the impact of the Asian crisis on the Malaysian economy? Since GDP plummeted in 1998 and bounced back in 1999, it is tempting to conclude that the controls had a positive effect. However, the paper argues that the data are actually inconclusive. The problem is that we observe a similar V-shaped pattern in the GDP of two East Asian economies that did not impose capital controls: Korea and Thailand.

Furthermore, capital controls in Malaysia were imposed at the depth of the crisis—too late for any reasonable analysis to conclude that the controls had an effect, for good or ill. In the ideal real-world experiment, Malaysia would have imposed capital controls at the same time that Korea and Thailand signed agreements with the International Monetary Fund (IMF). But Malaysia did not impose capital controls until several months after the Korea and Thailand IMF agreements. Therefore, a comparison of Malaysia versus Korea and Thailand is legitimate only if you assume that in September of 1998 Malaysia was in the same place that Korea and Thailand were when they signed their agreements. The authors do not think that this is a legitimate assumption. I agree.

Overall, the paper argues that Malaysia weathered the crisis by following sound macroeconomic policy. The authors declare: “We should emphasize that throughout the crisis and the capital control period the authorities pursued good macroeconomic and structural policies.” This observation notwithstanding, the paper also notes a slightly worrisome macro fact: private investment in Malaysia has fallen from an average of 25 percent of GDP before the crisis to less than 15 percent of GDP

Peter Blair Henry is an associate professor of economics and the John and Cynthia Fry Gunn Faculty Scholar in the Graduate School of Business at Stanford University, and a faculty research fellow of the National Bureau of Economic Research.

after the crisis. The paper argues that a deterioration of institutions stemming from the imposition of capital controls may explain the fall in private investment. Toward the end of my comments I will suggest a more pedestrian explanation that also questions the assertion that Malaysia pursued “good” macro policy.

The paper also asks a microeconomic question: did firms with political connections benefit from the imposition of capital controls? In the aftermath of the Asian crisis, Malaysia was one of a number of countries accused of crony capitalism: firms with connections to the government enjoyed subsidies and benefits that unconnected firms did not. The onset of the crisis provides an opportunity to use the stock market to examine the validity of such assertions. If politically connected firms benefited from crony capitalism and the onset of a financial crisis signaled the end of that arrangement, then we would expect the stock prices of connected firms to be affected more adversely by the onset of a financial crisis than the prices of unconnected firms.

This is exactly what the paper shows. While the aggregate value of the Malaysian stock market declined from July 1997 through August 1998 (the period of the crisis), the stock price decline of firms with political connections to Prime Minister Mahathir was 8 percentage points larger than that of unconnected firms. Similarly, when capital controls were imposed on September 1, 1998, stock prices rose, but the average stock price increase of firms with connections to Mahathir was 19.9 percentage points greater than that of the typical unconnected firm. Furthermore, firms with connections to Anwar, the former minister of finance (he was fired on September 2, 1998) experienced a stock price increase that was 6.3 percentage points less than that of the unconnected firms. In other words, from July 1997 to August 1998, the market considered political connections a liability. Once controls were imposed, connections with Mahathir became an asset, while connections with Anwar were a liability (more on this later).

While the firm-level results support the paper’s central thesis that political connections affect corporate valuation, they also raise two important issues of interpretation. First, why did the market interpret the onset of the crisis in July 1997 as the imminent end of crony capitalism, and why was the imposition of capital controls in September 1998 viewed in exactly the opposite fashion? The paper argues that relationships between politicians, banks, and firms are easier to maintain when the economy is isolated from international capital flows (Rajan and Zingales 2003). The problem with this argument is that it does not explain how government-firm relationships persisted in the face of free capital flows before the crisis. Moreover, I think there is a simpler story that relates to the second point of interpretation I want to raise.

The paper shows that the overall value of the stock market (both connected and unconnected firms) rose by 40 percent in September of 1998. If

the capital controls had no macroeconomic impact, then why did the stock prices of unconnected firms rebound at all? It is true that the stock price increase may have been driven by news that the economy was recovering. But if the economy seemed to be recovering, then why did the government impose capital controls? One answer to this question is that Mahathir wanted to undermine his political opponent, Anwar, the minister of finance (and deputy prime minister). The chronology of events in Malaysia justifies this assertion and provides a more direct explanation for why the stock market reacted so differently to the onset of the crisis in 1997 and the imposition of capital controls in 1998.

Remember, while Prime Minister Mahathir was famously blaming George Soros and hedge fund managers for Malaysia's economic and financial woes, Anwar was trying to reassure investors that Malaysia would not adopt economic policies to match Mahathir's populist, anti-western-capitalist rhetoric. So there was a battle of ideas, as it were. The following exchange between Mahathir and Anwar at a press conference in October 1997 best illustrates the mounting tension between the two men (Freedman 2004):

Mahathir: "The press is asking questions. I'm answering and tomorrow the currency traders will push the Ringgit down because I opened my mouth."

Anwar (laughing): "Then I will clarify and the press will say we are quarreling." (Jayasankaran 1997)

Two months after that exchange, in December 1997, Anwar announced a series of austerity measures that were seen as an attempt to reverse Mahathir's long-standing policy of subsidizing favored corporations. In the months following the exchange, Mahathir became even more aggressive about bailing out high-profile companies (Freedman 2004).

The political events in Indonesia during early 1998 provide important additional context for understanding the link between Mahathir and Anwar's political struggle, capital controls, and the stock market. In April of 1998, President Suharto of Indonesia agreed to adopt a number of economic reform measures in return for financial assistance from the IMF. One month later, amid protests sparked (in part) by the hardships caused by the reforms, Suharto was forced to resign after thirty-two years as Indonesian head of state.

I am not suggesting that Indonesia's signing of an IMF agreement was responsible for Suharto's downfall, but Mahathir clearly seemed to link the two events in his mind. Following Suharto's resignation, Mahathir began moving more aggressively to bring down Anwar. On June 24, 1998, Mahathir placed Daim Zainuddin in charge of economic policy. On September 1, 1998, Mahathir imposed capital controls. The next day he fired Anwar.

The implementation of capital controls and the sacking of his finance minister gave the clearest possible indication that Mahathir had no intention of taking the economy in the direction of economic reforms and fiscal austerity. In other words, what this sequence of events reveals is not that capital controls per se make it easier to maintain subsidies, but rather that the imposition of capital controls was an unambiguous signal that Mahathir had no intention of signing an IMF agreement that would bring an end to subsidies.

Now we see why prices fell more for connected firms during the period prior to the imposition of capital controls. In addition to the macroeconomic shock of the Asian financial crisis, there was concern that the end of politically driven subsidies was nigh. Reserves were falling because the central bank was defending the currency, the fall in reserves might force the government to borrow money from the IMF, and IMF conditionality would likely put a stop to the gravy train for politically connected firms.

The sacking of Anwar paved the way for expansionary fiscal policy that allowed the government to maintain corporate subsidies even in the face of a contracting economy—this is where the macro and micro stories converge. To illustrate the point more clearly, I present table 11C.1. It shows that Malaysia's overall fiscal balance went from five straight years of surplus, including a surplus of 2.4 percent of GDP in 1997, to five straight years of deficits. The interesting point is that in the aftermath of capital controls, Malaysia followed a policy in diametric opposition to the one that would have been required under an IMF agreement.

Does this table reveal a pattern of reckless spending, or Keynesian fiscal stimulus of a distinctly East Asian variety? Apparently, the definition of “good” macroeconomic policy depends on whether you are sitting in Kuala Lumpur or at the corner of 19th and H! Irrespective of the stance you take on the soundness of Malaysia's fiscal response to the crisis, one has to wonder whether an old-fashioned crowding-out story lies behind the

Table 11C.1 Malaysia's deteriorating fiscal balance following the imposition of capital controls

1993	0.2
1994	2.3
1995	0.8
1996	0.7
1997	2.4
1998	-1.8
1999	-3.2
2000	-5.8
2001	-5.5
2002	-5.6
2003	-5.4

subsequent fall in private investment to which the authors allude. This seems like an issue worthy of further investigation.

References

- Freedman, Amy L. 2004. Economic crises and political change: Indonesia, South Korea, and Malaysia. *World Affairs* 166 (4): 185–96.
- Jayasankaran, S. 1997. High wire act. *Far Eastern Economic Review*, October 9, 1997, 12.
- Rajan, Raghuram, and Luigi Zingales. 2003. The great reversals: The politics of financial development in the 20th century. *Journal of Financial Economics* 69 (1): 5–50.