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Working Papers in Trade and Development

Malaysian Economy in Three Crises

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October 2010
Working Paper No. 2010/12

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Abstract

This paper examines macroeconomic experiences and policies of Malaysia with emphasis on the three major crisis episodes during the post independence era. It probes the nature and origin of the macroeconomic shocks and the institutional and ideological influences on policy formulation and the responses of economic agents, placing the three episodes in their historical, economic and political contexts. It is argued that fiscal profligacy was the root cause of Malaysia's vulnerability to the 'commodity shock' in the mid-1980s and the Asian Financial crisis (1997-8), and the impact of the global financial crisis of 2008 on the Malaysian economy would have been much more severe if it were not for the macroeconomic discipline *imposed* on the Malaysian authorities by the Asian financial crisis.

Key Words: Malaysia, macroeconomic policy, global financial crisis

JEL Codes: E65, F41, O53,

Malaysian Economy in Three Crises

The purpose of this paper is to analyse macroeconomic policies and experiences of post-independence Malaysia, with emphasis on three sub-periods (1985-6, 1997-8 and 2008-) during which the economy was subjected to major shocks. For each 'crisis episode', we examine sources of vulnerability to the external shock, domestic economic impact, policy responses and the recovery process. The three episodes show striking contrasts in terms of the nature and origin of the shocks, policy responses, and the global economic environment that underpinned the recovery process. Therefore, a comparative study of origins of and policy responses to these crises holds lessons which have broad relevance for macroeconomic policy making in Malaysia and other developing countries.

The first three sections of the paper examine each of the three crisis episodes in turn, focusing on the nature and origin of the shocks, the policy responses and their immediate effects. In examining policy responses, particular emphasis is placed on why those, rather than alternative policies, were adopted. This involves an analysis of political economy factors as well as an appreciation of the perceptions and expectations held by policy makers and private agents as they confronted actual and/or potential crisis situations. In the final section the key findings of the study are summarized and the policy implications are discussed.

Our findings run counter to the general inference coming from comparative country studies (which simply focused on the average picture pertaining to the entire period under study) that Malaysia had maintained a stellar record of macroeconomic management.[1] The periods leading up to both the mid-1980s crisis and the Asian financial crises (1997-8) provide evidence of a clear departure from the British tradition of fiscal prudence. Macroeconomic excesses propelled by the socio-political agenda of NEP, was a key factor in the country's vulnerability to the external shocks

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[1] See, for instance, Alisdaire Bowie and Danny Unger, *The Politics of Open Economies: Indonesia, Malaysia, the Philippines and Thailand* (Cambridge: Cambridge University Press, 1997) and W. Max Corden, *Pragmatic Orthodoxy: Macroeconomic Policies in Seven East Asian Economies* (San Francisco: International Center for Economic Growth, 1996).

in both cases. Put simply, Malaysia was not an innocent victim of external shocks. The impact of the global financial crisis of 2008 on the Malaysian economy would have been much more severe if it were not for the macroeconomic discipline *imposed* on the Malaysian authorities by the Asian financial crisis.

Commodity Shock 1985-86

Macroeconomic policy in Malaysia during the first decade after independence was a continuation of the British tradition of fiscal prudence: government expenditure was generally kept within the confines of domestic revenue expansion. However, the New Economic Policy (NEP) launched in 1971 marked the beginning of a new era of macroeconomic activism.[2] To achieve the NEP's redistributive goals, the government embarked on a wide-ranging investment campaign which involved establishing numerous new public corporations, extending the range of operations of many established in the 1960s, and launching a number of rural development schemes. Thus, in a clear departure from the macroeconomic policy orthodoxy, Malaysia rapidly became a high deficit country during the ensuing one-and-a- half decades.

The NEP-propelled economic activism entered a new phase in the early 1980s. In November 1980, the Minister of Trade and Industry Dr Mahathir Mohamad (who became Prime Minister a year later) announced a state-sponsored heavy industry project with the stated objective of 'strengthening the foundation of the manufacturing sector'.[3] In November 1980, the Heavy Industries Corporation of Malaysia (HICOM), a public-sector holding company, was incorporated to act as the apex government body for the implementation of the new policy. HICOM's mission was to establish industries in areas such as petrochemicals; iron and steel; cement; paper and paper products; machinery and equipment; general engineering; transport equipment; and building materials. It also included a number of energy-related projects including Petronas's production facilities for the processing and export of natural gas.

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[2] Bowie and Unger (n. 1 above).
[3] Government of Malaysia, *Mid-Term Review of the Forth Malaysia Plan 1981-1985* (Kuala Lumpur: National Printing Department, 1984), p. 27.

There were foreign partners in each of the HICOM projects, but, as a policy, the government provided the lion's share of capital. Consequently, government development expenditure began to increase rapidly. From 1981 to 1986 Malaysia went through a severe disequilibrium phase, reflected first is a massive current account deficit 'equal to anything that the worst cases outside the region experienced'.[4] The budget deficit as a percentage of GNP reached a historical high of 18% in 1983 and the average for the period 1981 to 1985 was three times that for the previous decade. Public debt as a percentage of GDP rose sharply from 44 in 1980 to 103.4 in 1987. The share of foreign-currency denominated debt in total outstanding public debt increased from 26.2 per cent to 62% between these two years (Table 1). Also, from 1981 to 1985 there was some real exchange rate appreciation owing to the policy of keeping the ringgit fixed to the US$. This contributed to a widening of the current account deficit given the highly-liberal import trade regime.

Crisis

The economic downturn in developed countries triggered by the US high-interest rate policy (the 'Volker shock') in the early 1980s resulted in a massive collapse of world commodity trade. Between 1984 and 1986, Malaysia's overall export price index declined by 30% reflecting a sharp decline in tin and palm oil prices. The terms of trade deteriorated by almost 20% between these two years and remained virtually at that level for the next two years (Table 1).

The economic collapse caused problems for the new industries most of which had just begun production. HICOM suffered a total operation loss of US$100 million in 1986/87, an increase of 71% over the previous year. In addition to these losses, there was also a drain on state coffers resulting from the additional debt repayment burden of these firms associated with the appreciation of the yen following the Plaza Accord in 1985. At the end of 1988, 37% (or US$6.1 billion) of total public sector debt of US$16.7 billion) was attributable to public enterprise loans.[5]

The painful adjustment to the unsustainable macroeconomic imbalance reflected in a sharp contraction in the economy: during 1980-84 the average annual

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[4] Corden (n. 1 above), p. 12.
[5] Bowie and Unger (n. 1 above), p. 85-6

growth rate was 7%, and in 1985 it was -1% and in 1986 1.2% (Table 1). On the general business front, the sharp downturn in aggregate demand created massive excess capacities and a rising number of corporate bankruptcies. The unemployment rate increased to 8% in 1986 from an average level of 4.5 during the first haft of the decade. The recession also precipitated a severe banking crisis, with non-performing loan (NPL) ratio of commercial banks reaching a historical height of 30% in 1987 and 1988.

Adjustment to the Crisis

Malaysia managed the crisis on its own, while eschewing IMF support. As in the case of the 1997-98 crisis (discussed below), the political imperatives of New Economic Policy (NEP) were the prime consideration behind this policy choice.[6] The policy package involved contractionary fiscal policy and exchange rate devaluation, coupled with a notable policy shift to favour the role of the private sector.

Government capital expenditure as a percentage of GDP declined from an average level of 23.5% during 1980-85 to 14.2% in the second half of the decade Table 1). Reflecting the combined effect of nominal depreciation and low domestic inflation, the real exchange rate depreciated continuously from 1986: the degree of depreciation between 1984 and 1990 was nearly 40%.

Table 1 about here

The government's response to the crisis also marked a significant departure from state-activism pursued over the previous one-and-a-half decades. The government abandoned its eight-year commitment to the heavy industry policy. The management of HICOM enterprises was revamped by appointing private sector managers, in most cases executives of foreign joint-venture partners, to replace the government bureaucrat who until them managed these firms.[7]

There was also a new emphasis on promoting FDI in the economy. The Investment Coordination Act, promulgated in 1975 in order to achieve the NEP objective of increased Bumiputera involvement at the enterprise level, was amended

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[6] Suresh Narayanan, 'Fiscal reform in Malaysia: Behind a Successful Experience', *Asian Survey* 36(9) (1996), pp. 869-881.
[7] However, the newly set up heavy industries continued to enjoy heavy tariff protection and other trade preferences.

in October 1986 to apply only to investments of roughly US$1 million or more (the previous threshold was US$400,000) or to plants employing more than 75 workers. The amendment also eased limitations on the number of expatriates employed in foreign affiliates. Foreign investors could own 100% of new projects that exported most of their products or sold its products to firms in FTZs that employ at least 350 full-time Malay workers. The Promotion of Investment Act (1986) strengthened incentives to foreign investors.

In response to the significant deterioration in bank balance sheets, new prudential regulations, including stringent limits on private borrowing, were introduced under the Banking and Financial Regulation Act enacted in 1989.[8] As we will see in the next section, these borrowing limits contributed significantly to limiting external debt exposure of the economy, a significant factor in providing Malaysian authorities with some autonomy in managing the next crisis.

The recovery of the economy was under way well before the commodity prices recovered to pre-crisis levels. Notwithstanding the contraction in public investment, total investment started rising from 1986 given the improved investment climate for private investment, in particular foreign direct investment. The current account went into surplus in 1987, and the budget deficit was down to about 5% by 1988, from the average level of 13% in the first half of the decade. However, the public-debt overhang continued well into the next decade.

The new reforms set the stage for Malaysia to benefit from the overseas relocation of production bases by export-oriented firms in Japan, South Korea, Taiwan and Hong Kong that began in the late 1980s. The appreciation of the Yen against the US$ (*endaka*) following the Plaza Accord was the major push factor for Japanese companies in their search for low-cost production bases in Southeast Asia. Overseas relocation of operations by firms in the other Northeast Asian countries was largely propelled by raising domestic wage levels. In addition to low wages and the new reforms which improved the investment climate, Malaysia also became a more attractive location for firms because of low political risk and relatively superior infrastructure. Net FDI inflows to Malaysia grew from less than US$500,000 in 1986

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[8] K.Sundram Jomo, 'What Can The Developing World Learn from Post-Colonial Malaysia's Development Experience?', in Radhi, Nungsari A. and Suryani S. Alian (eds.), *Readings on development: Malaysia 2057: Uncommon Voices, Common Aspirations* (Kuala Lumpur: Khazanah Nasional, 2009), pp. 215-232.

to US$1.7 billion in 1989 and US$2.3 billion in 1990. By 1988 the Malaysian economy had entered the second high growth phase in the post-independence era. Ironically, as we will see below, macroeconomic excesses propelled by the new growth euphoria were as instrumental in sowing the seeds of the economy's vulnerability to the Asian financial crisis.

Asian Financial Crisis, 1997-98

When the floating of the Thai baht sparked the financial crisis in East Asia in July 1997, a first look at the Malaysian economy would have hardly raised suspicion that it would succumb to a Thai-like financial crisis. The general performance indicators of the Malaysian economy were very favourable - high growth, low inflation, virtual full employment, and low foreign debt. However, when the Malaysian macroeconomic conditions at the time are closely examined in light of the literature on currency crises it is clear that Malaysia was not an innocent victim of the Thai contagion: it had in fact developed considerable vulnerability to a speculative attack. Malaysia had accumulated massive short-term capital inflows (mostly in the form of portfolio capital) following capital market liberalization initiatives in the early 1990s, which coincided with the rapid spread of global capital to emerging market economies. These capital flows interacted with notable slippage in domestic macroeconomic policy to make the country vulnerable to speculative attack.

Capital flows and signs of vulnerability

In general the Malaysian policy regime relating to non-FDI capital flows (that is, international flows of purely financial capital) remained liberal throughout the post-war period, compared to most other developing countries.[9] However, there were binding restrictions on short-term capital inflows, foreign share holdings in local brokerage firms, and bank lending to non-residents. In the early 1990s, these restrictions were removed and a wide-ranging package of incentives was announced to attract foreign fund

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[9] John Williamson and Molly Mahar, 'A Survey of Financial Liberalisation', *Essays in International Finance No. 211* (Princeton, NJ: International Finance Section, Princeton University, 1998).

managers and institutional investors as part of the government's move to promote Kuala Lumpur as a global financial centre.[10]

Capital market liberalization initiatives in Malaysia in the early 1990s coincided with the growing enthusiasm of hedge funds and other institutional investors for emerging-market economies. Thus, there was a significant increase in the net inflow of portfolio investment. The volume of "volatile capital", defined to cover both short-term borrowings and portfolio capital, had increased to sizable levels by the mid 1990s, resulting in an erosion of the authorities' ability to defend a speculative attack on the ringgit. The degree of reserve cover provided for mobile capital declined from over 150 percent in the early 1990s to 57 percent by mid 1997.[11]

Increased foreign equity investment fueled a massive stock market boom. By the mid 1990s, the KLSE , with a market capitalization of around US$ 200 billion, was the third largest stock market in the Asian and Pacific region after those in Tokyo and Hong Kong. At this time, market capitalization of KLSE (around US$200 billion) amounted to over 300 percent of GDP, by far the highest in the world. At the onset of the crisis, foreign investors accounted for only 30-40 percent of the activities in the market. However, the actual influence of foreign participation on the expansion and operation of the equity market was probably much greater than suggested by this figure because local investors always followed foreign investors as market leaders. The stock market boom had direct implications for the operation of the domestic banks; lending for equity market activities turned out to be a major source of bank credit expansion (discussed below).

In this context, there was a strong possibility of a reversal of capital inflows to generate economic collapse through wealth contraction and banking sector instability. However, this possibility would not have translated into a financial crisis had it not

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[10] The process of capital account opening was temporary halted in 1994 when the ringgit came under strong buying pressure. BNM imposed a number of restrictions on capital inflow during January-February 1994. As speculative pressure on the ringgit subsided, BNM gradually removed the controls and freed up capital flows, completely lifting all restrictions by August 1994 (BNM, *The Central Bank and the Financial System in Malaysia*, Kuala Lumpur, 1999, pp. 288-291).

[11] Prema-chandra Athukorala and Peter G. Warr , 'Vulnerability to a Currency Crisis: Lessons from the Asian Experience', *World Economy* 25(1) (2002), pp. 33-57.

been for some serious pitfalls on the domestic policy front. Two fundamental sources of vulnerability were particularly important in the Malaysian case: poor corporate governance, weakness in the financial sector, or financial fragility.

The expansion of the equity market was not accompanied by initiatives to redress the underlying weaknesses of corporate governance[12]. Most of the listed companies in Malaysia continued to be tightly controlled by a handful of powerful families. These families often retained majority stakes, even in public companies. Moreover, in many cases the interests of company bosses and politicians were closely interwoven. Manipulation of inter-company share transactions to augment profit in privately owned companies (at the expense of listed companies) was a common occurrence in the Malaysian corporate world. Such malpractice made share trading vulnerable to financial panic because unconnected (minority) shareholders had every reason to worry about how they would be treated during a market downturn.

In the first half of 1990s, there was a substantial accumulation of outstanding domestic credits in the banking system, with a heavy exposure to the property sector, broadly defined to include share trading and the real estate sector. The rate of growth of bank credit to the private sector rose from 12 percent per annum during 1990-94 to over 26 percent during 1994-96. Outstanding credit as a ratio of GDP increased from an average level of 85 percent during 1985-89 to 120 percent in 1994 and then to over 160 percent when the financial crisis broke in mid 1997. This was the highest credit buildup among the economies of East Asia.[13] By the end of 1996, total credit to the property sector accounted for around 40 percent of total outstanding bank credit. It is believed that this share could have been much higher (around 55 percent) if unclassified loans to conglomerates that are normally used to finance property were appropriately taken into account. The increased exposure to the property sector further weakened the financial position of the banks as this lending led to a property glut in the country.[14]

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[12] Peter Searle, *The Riddle of Malaysian Capitalism: Rent-seekers or Real Capitalists*? (Sydney: Allen & Unwin, 1999); *The Economist*, ‘Murky Corporate Governance’ (1997, December 20), p. 111.

[13] Athukorala and Warr (n. 11 above).

[14] BNM, *Annual report 1999* (Kuala Lumpur: BNM).

The equity market bubble and the credit boom were underpinned by rapid erosion in the quality of macroeconomic management in the economy. The years following Prime Minister Mahathir's Vision 2020 Statement of 1990 saw fiscal excesses of increasing intensity. As a result of the "big growth push" to propel Malaysia to developed-country status by 2020, public investment expenditure surged, pushing the ratio of total investment to GDP to 46 percent in 1997, the highest in the region at the time. Much of this expenditure went into huge infrastructure development projects contracted out to private companies in the "patronage network" that provided the political support base for the regime. These companies soon became the dominant players in the equity market. The construction boom also contributed to the credit boom because the supply of "easy" credit from politically connected banks and other "captive" financial institutions was an implicit condition built into the contractual arrangements with construction companies.

Rapid growth of government-sponsored bank lending invariably contributed to a weakening of the policy autonomy of Bank Negara Malaysia (BNM) (the Central Bank). It repeatedly pointed to the risk of rapid credit buildup with a heavy concentration in property and share trading loans in the banking system. However, in the context of a credit boom that had government backing at the highest political level, BNM had only a limited degree of freedom to take precautionary action against an impending crisis.

Crisis

When the Thai baht came under speculative attack in mid May, the ringgit also experienced heavy selling pressure. Between the first week of July 1997 and 7 January 1998 the ringgit depreciated against the dollar by almost 50 percent. Net quarterly flow of portfolio capital turned negative in the second quarter of 1997 for the first time after 1991 and total net outflow in the first three quarters of the year amounted to over US$ 11 billion. Reflecting the massive reversal of portfolio capital flows, by the end of 1997 the composite share price index of KLSE had fallen by over 50 percent from the pre-crisis level, wiping off almost $225 billion of share values. However, given the low foreign debt exposure of domestic financial institutions, for a while the Malaysian policymakers were able to 'muddle through', unlike their counterparts in Thailand and Indonesia who had to turn immediately to the IMF.

By August 1998, the economy was in recession. National account released in the last week of August revealed a contraction of output by 2.8 percent and 6.8 percent respectively in the first two quarters. The number of retrenchments in domestic manufacturing jumped from19 thousand in 1997 to over 83 thousand in 1998. The unemployment rate increased from 2.6 percent in 1996 to 3.9 percent in 1998. The inflation rate peaked at 6.2 percent in June, surpassing the previous peak of 5.3 percent recorded in 1991 (Table 2).

Table 2 about here

The combined outcome of economic collapse and property market crash was a massive increase in non-performing loans in the banking system, from about 2 percent in mid-1997 to nearly 12 percent in July 1998, according to the official (BNM) estimates.[15] Accumulation of non-performing loans, coupled with 'flight to quality' of deposits from smaller banks to large, well managed banks, resulted in a sharp increase in bank lending rates, exceeding 20 percent by mid-1998.[16]

Rapidly deteriorating investor confidence was reflected in the continued liquidation of shares by foreigners and capital flight. A striking feature of capital flights from Malaysia from about early 1998 was that they largely took the form of ringgit, rather than foreign currency, flowing into Singapore. These flows were triggered by attractive money market rates of between 20-40 percent in Singapore, which provided a hefty premium over a domestic rate of about 11%, coupled with a weakening exchange rate for the ringgit. Arbitrage between the two rates by money

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[15] The official figures presumably understated the magnitude of NPL because many companies had begun to roll over debt as part of their survival strategy; independent estimates of NPL ratio at the time ranged from 25 percent to 30 percent (Prema-chandra Athukorala, *Crisis and Recovery in Malaysia: The Role of Capital Controls*, 2nd Edition, Cheltenham: Edward Elgar, 2003).

[16] BNM (n. 10 above), p175

market dealers exerted pressure on the domestic interest rates in Malaysia, undermining the effectiveness of monetary policy.[17]

Policy response

In this volatile economic climate, the Malaysian government had to choose between two alternatives. The first was to obtain a 'good housekeeping seal' on its policies from the IMF. As in Korea and Thailand, this would have stabilized the exchange rate, setting the stage for applying the Keynesian therapy to speed up the recovery. The second option was to resort to capital controls in order to combine a fixed exchange rate with Keynesian policies, while ignoring vagaries of market sentiments.

By this time, the IMF had significantly changed its original strategy of 'confidence building through macroeconomic contraction' in favor of expansionary macroeconomic policy (Fisher 2004). The four IMF program countries in the region - Indonesia, Korea, Thailand, and the Philippines - had already reformulated their policies along these lines with the blessing of the IMF. Thus if Malaysia's reluctance to seek IMF support was purely based on differences of opinion relating to macroeconomic policy, that constraint had become less binding by this time. Therefore, if wanted, presumably Malaysia could have entered an IMF program.

This option was not politically acceptable to the Malaysian leadership. Given the intimate links developed between business and government under NEP, naturally the positive stabilizing impact of any policy move had to be weighed against its potential negative effect on socio-political stability of the country. In his presidential address to the UMNO General Assembly on 19 June 1998, Prime Minister Mahathir summed up his position on this issue as follows:

> "[I]f we have to resort to the International Monetary Fund assistance …, the conditions imposed by the IMF will require us to open up our economy to foreigners. There will not be any *Bumiputera* quota as the New Economic Policy (NEP) is an injustice, and unacceptable to their liberal democracy".[18]

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[17] (BNM (n. 10 above), p175

[18] Dato' Seri Bin Mohamad Mahathir, *Currency Turmoil: Selected Speeches and Articles by Prime Minister of Malaysia,* (Kuala Lumpur: Lomkokwing Integrated), p. 60-61.

Confronted with this policy dilemma, the Malaysian leadership opted for the second alternative. The lynchpin of this radical policy choice was capital controls, which were expected to set the stage for fixing the exchange rate and provide breathing space for vigorous pursuance of monetary and fiscal expansion to fight recession. This was the first case in the post-war economic history of an emerging market economy temporarily reversing the cause of capital account opening in a crisis context.

As a first step, on 31 August 1998 offshore trading of shares of Malaysian companies was banned with immediate effect in a move to freeze over-the-counter share trading in the Central Limit Order Book (CLOB) market in Singapore.[19] This was followed by the imposition of comprehensive controls over short-term capital flows and 12-month withholding period on repatriation of proceeds (principal and profit) from foreign portfolio investment (1 September 1998), and fixing of the exchange rate at RM 3.80 per US$ (2 September). The other capital control measure included bans on trading in ringgit instruments among offshore banks operating in Malaysia, offering domestic credit facilities to non-resident banks and stockbrokers, trading in ringgit in overseas markets (predominantly in Singapore), the use of ringgit as an invoicing currency in foreign trade, and stringent limits on the approval of foreign exchange for overseas travel and investment by Malaysian nationals.[20]

The capital controls were strong, but they were narrowly focused on short term capital flows. The aim was to make it harder for short-term portfolio investors, both foreign and local, to sell their shares and repatriate proceeds, and for offshore hedge funds to drive down the currency. There was no retreat from the country's long-standing commitment to an open trade and foreign direct investment policy: current account transaction (with the sole exception of limits on foreign exchange for

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[19] CLOB market was an informal market for shares of Malaysian companies, which operates side by side with the formal share market (Singapore Stock Exchange) in Singapore. At the time, total value of Malaysian shares traded in CLOB amounted to US$ 4.2 billion (*Far Eastern Economic Review*, 9 March, p. 56). Following the Malaysian move to ban offshore trading of Malaysian company shares, the CLOB market was closed on 15 September.

[20] For a detailed listing of the capital control measures see Athukorala (n. 14 above), Appendix A-2.

travel by Malaysian citizens), and profit remittance and repatriation of capital by foreign direct investors continued to remain free of control.

In early February 1999, the original 12-month holding restriction on portfolio investment was converted into a two-tier exit levy: 30 percent on profit made and repatriated within one year, and 10 percent on profit repatriated after one year.[21] In August 1999, the two-tier levy on profit repatriation was replaced by a unified 10 percent levy. An agreement between the KLSE and the Singapore Stock Exchange reached on 26 February 2000 provided for the transfer of the shares trapped in the CLOB market to the Malaysian stock exchange, which allowed trading to resume. The 10 percent exit levy was lifted on 1 May 2001. Most of the newly introduced capital controls were relaxed and subsequently removed at successive stages during the next two years. On 21 July 2005, the ringgit peg to the US$ was abolished in favour of a managed floating exchange rate system.

With the policy autonomy gained through the fixed exchange rate and capital controls, the government swiftly embarked on a recovery package consisting of two key elements: fiscal and monetary stimulants; and banking and corporate restructuring.

The fiscal stimulants included a total waiver of income tax in 1999, an across-the-board one percentage point reduction in income tax rates in 2000, tax breaks for industries of national and strategic importance, reduction of duties on machinery and equipment imports and some moderate increases in public investment in road and rail projects. The resultant budget deficit, which increased from 1.6 per cent to 6.6 per cent of GDP between 1998 and 2000, was financed mostly through issuing government securities, which were absorbed largely by provident, pension, and insurance funds. Only about one-third of the deficit was financed externally, mainly from concessional bilateral and multilateral sources.

To complement expansionary budgetary policy, BNM cut the statutory reserve requirement (SRR) ratio for banking institutions from the pre-crisis level of 4% to

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[21] World Bank economists worked closely with the Malaysian authorities in designing the new exit levy system (Joshep E. Stiglitz, Joseph E., *Globalization and Its Discontents*. New York: W.W. Norton, 2002), p 124.

3.5% in order to inject liquidity into the debt-ridden banking system. The 3-month inter-bank rate (BNM's policy rate), which had been raised to a historical high of 11 by February 1998 to defend the exchange rate, was reduced in a number of stages to 4 percent by early 1999. The margin that banks could charge their customers above the base lending rate (BLR) was reduced from 4 percent to 2.5 percent. The default period for reclassification of bank loans (which was reduced to 3 months from 6 months in January 1998) was changed back to 6 months, with a view to reducing the pressure on the banks to set aside capital against non-performing loans. The other expansionary monetary policy measures included relaxation of credit limits on lending by commercial banks and financial companies for purchase of property and shares, a scheme for providing soft loans for purchase of cars, a special loan scheme for assisting smaller industries and low-income groups, and relaxing credit limits on credit cards.

The new policy package placed greater emphasis on the speedy implementation of the banking and corporate restructuring program designed by the National Economic Action Council (NEAC) in July 1998. Under this program three major entities were set up during the ensuing two months for addressing the bad debt problem of the financial system and related corporate distress: an asset management company (Danaharta) to acquire and manage NPLs from banks, a banking and corporate recapitalization company (Danamodal) to recapitalize those financial institutions whose capital adequacy ratio had fallen bellow nine percent, and a Corporate Debt Restructuring Committee (CDRC, a joint public and private sector steering committee) to facilitate the restructuring of corporate debts through out-of-court settlement. But difficulties in obtaining the required funds precluded concrete policy action by these newly created institutions. A planned attempt to issue sovereign bonds in the United States and Europe to raise US$ 2 billion for implementing the program had to be shelved in late August 1998 because of poor investor response. The capital-control based policy framework enabled raising required funds from domestically.

By mid-2000 Danaharta had successfully carved out bad debts to the tune of $12 billion or 42.2 percent of total NPLs of the entire banking system. Through the operation of Danamodal, the capital base of the banking system had been raised well above the international (BIS) requirement. The Corporate Debt Restructuring Committee resolved bad debt problems of over 50 firms with loans totaling $9.1 billion. As a result of the support provided by low interest rates and rapid recovery in containing NPL growth, performance of the banking and corporate sectors improved at a faster rate than originally envisaged.

Consequently, Danamodal required considerably less funding than originally envisaged. Danaharta had ceased purchasing non-performing loans by mid 2000 and entered the workout phase of managing the acquired assets.

Recovery

The Malaysian economy experienced a 7.4 percent contraction in GDP in 1998, after 11 years of uninterrupted expansion averaging 8 percent per year. The degree of output contraction moderated to 1.3 percent (on an annual basis) in the first quarter of 1999 followed by a positive growth rate of 4.1 percent in the second quarter (Figure 1). Recovery accelerated in the next two quarters, culminating in a growth rate of 6.1 per cent for the whole year. The economy had regained the pre-crisis (1996) level of GDP by mid 2000, leaving behind almost 2 'lost' years.

In line with strong recovery in domestic production, the employment situation improved. The unemployment rate in the economy by the end of 1999 stood at 3.4 percent, only 0.9 percentage points higher than the pre-crisis level (Table 2). The recovery was underpinned by remarkably low inflation, despite the heavy emphasis on fiscal and monetary expansion as part of the recovery strategy. The annual rate of consumer price inflation increased from 2.7 percent to 5.3 percent between 1997 and 1998. The rate of inflation measured in terms of the producer price index increased from 2.7 percent to 10.7 percent between 1997 and 1998 and then declined to 3.2 percent in 1999.

Growing business confidence in the recovery process began to reflect in an impressive rebound in trading on the Kuala Lumpur Stock Exchange (KLSE) from mid 1999. The benchmark Kuala Lumpur Composite Index (KLCI) had almost regained its pre-crisis (end-June 1997) level by the end of February 2000. Market capitalization of the KLSE increased from the historical low of RM 200 billion in August 1998 to over RM 700 billion in February 2000, which was only 5 percentage points short of the pre-crisis (June 1997) level.

Public expenditure led the way to recovery. Following a 7.8 percent contraction in 1998, public consumption recorded double digit growth from the first quarter of 1999, contributing to over 70 percent of total consumption growth of 6.7 percent in that year. Public fixed investment contracted by only 10 percent in 1998 compared to 58 percent contraction in private fixed investment, and expanded by 14 percent in a context of continued contraction in private investment (though at a lower rate). Consequently, contraction in total investment slowed to 6 percent compared to 45 percent contraction in the previous year.

Private consumption stabilized in the first half of 1999 and grew strongly in the second half of the year. In the first quarter of 2000 private consumption grew by 14 percent, yielding a 12 percent expansion in total consumption despite a slowing down of public consumption to a mere 1 percent (compared to over 10 percent growth in the 4 previous quarters). Private investment continued to contract in 1999, albeit at a much slower rate (12 percent) compared to a massive contraction (57 percent) in the previous year, and began to recover from mid 2000.

On the production side, signs of recovery emerged first in the services sectors (particularly in financial services) and domestic-market oriented manufacturing. By the second quarter of 1999 recovery had become more broad-based, with export-oriented manufacturing playing a leading role. In 1999 and 2000 growth of export-oriented manufacturing was almost two times faster than domestic-oriented manufacturing. Of the total increment in GDP between these two years, 70 percent came from the manufacturing sector, with almost 47 percent coming from export-oriented manufacturing alone. Thus, the Malaysian experience through the crisis is consistent with the conventional wisdom that greater export-orientation is an important facilitator of economic rebound following a crisis.

Malaysia was able to ride the crisis without building up a massive debt overhang. The end-of-year stock public debt as a share of GDP recorded only a mild increase, from 32 per cent in 1996 to 36 per cent in 2000. Almost 85 per cent of the addition to total debt stock in between 1998 and 2000 came from domestic borrowing. The share of foreign debt in the total stock did increase from, 12 percent to 16.6 percent, but the bulk of it (over 80 percent) was long-term concessionary loans obtained from multilateral financial organizations and foreign governments. By the end of 1999 Malaysia’s foreign exchange reserves stood at US$ 31 billion, providing 300 percent cover for total outstanding short-term debts.

Crisis management behind closed doors could well have involved considerable misallocation of resources. There is indeed anecdotal evidence of some inappropriate rescue operations. There are also unexplained differences in discount rates applied by *Danaharta* to various assisted banks and the criteria used by *Danamodal* in setting priorities in injecting capital. But whether these opaque practices are unique to the capital-control based crisis management in Malaysia is a debatable issue. Similar concerns have been raised relating to banking and corporate restructuring processes in Thailand, Korea, and Indonesia – countries that are riding the crisis without capital controls. Moreover, one can reasonably argue (along the lines of Krueger and Tornell) [22] that economic gains associated with the speedy implementation of banking and corporate restructuring in Malaysia might have compensated significantly, if not totally, for these alleged costs. Notwithstanding initial grave misgivings, it is now widely acknowledged that the Malaysian authorities have successfully used the shelter provided by capital controls to implement the most effective and far-reaching financial system clean-up among the crisis countries.[23]

The Global Financial Crisis, 2008-09

The global financial crisis (GFC), triggered by the bursting of a speculative bubble in the US housing market in 2008, percolated to the rest of the world through capital flows, trade flows, and commodity prices. Different countries have been affected differently, depending on the nature of their financial/trade linkages with the rest of the world, the quality of financial institutions and polices. As we will see below, for Malaysia (and other countries in the region), the 'trade shock' was by far the most important.

Share prices in Malaysia fell sharply in the aftermath of the crisis (by 20% between 2007 and 2009), although the magnitude of the collapse was far less than in the Asian crisis (by 53 per cent between 1996 and 1998) (Table 2). There was also a massive exodus of short-term capital flows, around US$ 6 billion in 2009[24] (Table 3). These shocks were however well absorbed by the domestic financial markets, given the ample liquidity in the financial system and the sound banking system and the

[22] Anne O. Krueger and Aron Tornell. 1999. The Role of Bank Restructuring in Recovering from Crisis. NBER Working Paper no. 7042 (Cambridge, Mass.: National Bureau of Economic Research, 1999).

[23] Stanley Fisher, *IMF Essays from a Time of Crisis* (Cambridge Mass: MIT Press, 2004); Simon Ogus, 'Malaysian Twilight Zone', *The International Economy* (2000 May/June), pp. 44-47.

[24] Much of these outflows occurred in the fourth quarter of 2009, following Lehman Brothers collapse

strong reserve position of the country. In addition, the broad-based financial sector reforms and capacity building undertaken following the Asian financial crisis had increased the financial sector's resilience to the financial turmoil.[25] Moreover, Malaysia (and other Southeast Asian countries) had little exposure to collateral debt obligations that originated in the US sub-prime market.[26]

Table 3 about here

Table 4 about here

Total earnings from merchandise exports (in US$ terms) of Malaysia recorded a 9.5% contraction in 2009 compared to the previous year (Table 4). Earnings from primary products commodities fell by 33.1% in 2009 because of a sharp decline in world market process (Palm oil 29.2%, Rubber 57.0%, crude petroleum 51.0%). The relative contribution of primary products to total contraction in export earning was disproportionate to their share in total exports (20%). Manufacturing exports contracted by 19.2%, accounting for nearly 55% of the total contraction in export earnings. Clearly, compared to the mid-1980s crisis, diversification into manufacturing acted as a cushion against the impact of the collapse of primary commodity prices.

Manufacturing output contracted by -14.6% in 2009 compared to 5.5% growth in the previous year, with export-oriented manufacturing and domestic-oriented manufacturing recording -19.0% and -9.8% contractions respectively. Within export oriented manufacturing, sharpest contraction was in electrical goods and electronics and machinery and equipment.

Policy response

Malaysia was the first country in the region to respond to the crisis with monetary expansion. With low inflation, a strong balance of payments position, and healthy

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[25] BNM, *Annual report 2010* (Kuala Lumpur: BNM).

[26] Bank for International Settlements, *The International Financial Crisis: Timeline, Impact and Policy Responses in Asia and the pacific* (Hong Kong: BIS Representative Office for Asia and the pacific, 2009).

balance sheets of the commercial banks, there was ample space for expansionary monetary policy (Table 2). The BNM lowered the overnight policy rate (OPR) from 2.5 per cent in November to 2.0 per cent in February 2009 — the lowest ever in Malaysia's monetary policy history. In order to facilitate the transmission of the rate cuts to borrowers, the statutory reserve requirement (SRR) for banks was cut from 4% in December 2008 to 1% in March 2009. Monthly installment payments on floating interest rate loans were immediately reduced to ensure that interest rate cuts led to an increase in borrowers' disposable income and higher domestic consumption. In response to the drying up of US$ liquidity in the financial system following the Lehman Brothers collapse, BNM also took the initiative to ensure ready availability of foreign currency loans to exporters.

On the fiscal front, the Malaysian government implemented two stimulus packages. The first package introduced on 4 November 2008 involved a direct cash injection amounting to RM7 billion. The second stimulus of RM 60 billion was announced in February 2009; RM 15 billion of which involved direct cash injections, with the remainder taking the form of equity investment by the government investment arm, Khazanah Nasional Berhard, tax incentives, private finance initiatives and government guarantees. The two packages together amounted to 9.6%, GDP, with direct cash injections alone amounting to 3.2% of GDP. The stimulus packages were aimed mainly at developing the rural and agricultural sector, improving the transport system, enhancing public utilities and upgrading industrial infrastructure, education healthcare and housing. The first stimulus package had been fully implemented by the end of 2009, while about 64% of the allocated development expenditure in the second package had been implemented in 2009.

Recovery

Expansionary monetary policy has been instrumental in cushioning the financial system against capital outflows and share market collapse. Monetary aggregates continue to expand, though at a modest rate (real M1 by 2.3% and M2 1.6% in 2009, compared to 2.4% and 6.0% in 2008). The banking system remains resilient with strong capitalization and sustained asset quality: the risk-weighted capital ratio (RWCR) and core capital ratio (CCR) improved respectively from 12.6% and 10.6%

at the end of 2008 to 14.3% and 12.7% by July 2009; the non-performing loan ratio remained low, around 2 percent throughout.[27]

A noteworthy feature of the adjustment process was the remarkable stability of the exchange rate, following a mild depreciation in the first two quarters of 2009. A major underlying factor was the resumption of portfolio capital inflows (following the massive outflow following the collapse of Lehman Brothers in September 2009) as investors in developed countries turned to emerging market economies in search of safer investment alternatives. Swift actions taken by BNM to stabilize the domestic financial system would also have played a role in averting capital outflow. Whatever the underlying reasons, the stability of the ringgit provided a congenial setting for the implementation of expansionary monetary and fiscal measures. Therefore, unlike in the 1997-98 crisis, there was no need to resort to capital controls to achieve macroeconomic policy autonomy.

Export contraction continued well into 2010, but domestic demand conditions began to stabilize in the second quarter of 2009 due to higher public spending following the implementation of fiscal stimulus measures and expansion in private consumption. In particular, public investment expanded strongly in 2009, recording a double digit growth of 12.9% (2008: 0.7%) following the introduction of two stimulus packages. Private consumption expenditure remained remarkably resilient to economic contraction.

GDP contracted by 6.2% in the first quarter of 2009 followed by a 3.9% contraction in the second quarter. As the economy begun to recover from the second half of the year, the rate of annual contraction in 2009 tuned out to be 1.7%. The projected growth rate for 2010 is between 2.0-3.0%, almost 2.5% lower than the average annual growth in the five years leading up to the crisis.

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[27] BNM (n. 25 above).

Concluding Remarks

The purpose of this paper has been to examine macroeconomic experiences and policies of Malaysia with emphasis on the three major crisis episodes during the post independence era. We have probed the nature and origin of the macroeconomic shocks and the institutional and ideological influences on policy formulation and the responses of economic agents, placing the three episodes in their historical, economic and political contexts. The three episodes show sharp contrasts in terms the nature and origin of the shocks, and policy responses. Despite this diversity, a number of common themes have emerged from the comparative analysis.

Our findings run counter to the general inference coming from comparative country studies (which simply focused on the average picture pertaining to the entire period under study) that Malaysia had maintained a stellar record of macroeconomic management. The periods leading up to both the mid-1980s crisis and the Asian financial crises provide evidence of a clear departure from the British tradition of fiscal prudence. Macroeconomic excesses propelled by the socio-political agenda of NEP, was a key factor in the country's vulnerability to the external shocks in both cases. Put simply, Malaysia was not an innocent victim of external shocks. The impact of the global financial crisis of 2008 on the Malaysian economy would have been much more severe if it were not for the macroeconomic discipline *imposed* on the Malaysian authorities by the Asian financial crisis.

Fiscal profligacy was the prime cause of macroeconomic imbalances in the lead up to the first two crises; monetary policy remained subservient to fiscal policy. The Malaysian government financed deficits largely from domestic non-bank borrowings without relying excessively on the Central Bank. Thus, unlike what is often the case with central banks in many other developing countries, BNM did not *directly* yield control over money creation to the fiscal authorities. The major factor which deprived BNM of its policy autonomy in the lead up to both crises was massive government-sponsored bank lending, which not only resulted in a buildup of excess liquidity in the economy, fuelling the poverty boom, but also weakened bank balance sheets. In the face of a credit boom that had government backing at the highest political level, BNM turned out to be a bystander to an impending crisis. BNM's control over money supply was weakened by the government's choice to keep the exchange rate virtually fixed as an anchor to domestic inflation, thus obliging the central bank to issue money against the presentation of foreign exchange.

The experience over the past few decades clearly show that the present era of economic globalization is prone to periodic turbulence (shocks) that pose severe challenges to the sustainability of economic dynamism of open economies. A key policy challenge for these economies is therefore to design and implement, as an integral part of the overall development strategy, a macroeconomic policy framework capable of cushioning the growth dynamism against these shocks. Our analysis of the three crises episode vividly demonstrates that Malaysia's main macroeconomic policy challenge for setting the stage for speedy graduation from its middle-income status lies in the arena of fiscal policy. Malaysia need a fiscal policy framework carefully designed to ensure expenditures are consistent both with its social objectives and available financing, while providing a disciplinary framework for the spending agents. Such a policy framework is vital not only in its own right to avert fiscal profligacy but also to ensure the monetary policy autonomy of the central bank.

Table 1: Malaysia: Selected Economic Indicator, 1980-1990

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
GDP growth	7.4	6.9	5.9	6.3	7.8	-1.0	1.0	5.4	8.9	8.7	9.8
Inflation (CPI-based)	6.8	9.7	5.8	3.7	4.0	0.3	0.7	0.3	2.6	2.8	2.6
Trade prices and terms of trade											
Export price (unit value)	120	119	111	105	111	100	72	87	94	96	97
Rubber	166	137	107	131	119	100	110	132	164	139	124
Palm oil	94	92	79	83	124	100	57	65	89	77	63
Tin	120	109	101	102	98	100	52	57	62	78	55
Terms of trade	126.3	109.2	101.8	101.0	109.9	100.0	81.8	97.8	97.8	100.2	101.3
External payment position											
Current account balance (as % of GDP)	-1.2	-9.9	-13.4	-11.6	-4.9	-1.9	-0.4	8.3	5.2	-0.6	-3.9
Foreign reserves (US$ million)	4387	4098	3768	3784	3723	4912	6027	7435	6527	7783	7954
Import month equivalent	6.7	4.7	3.8	3.6	3.4	4.4	6.3	8.7	6.6	6.1	4.6
Exchange rate(period average) (US$/RM)	2.17	2.3	2.33	2.32	2.34	2.45	2.58	2.52	2.61	2.71	2.71
Real exchange rate (1980 = 100)[b]	100.0	100.2	94.2	89.9	86.6	91.1	108.5	113.9	124.7	127.0	127.9

Money supply and bank credit											
Money supply (M2)/GDP (%)	51.5	56.1	60.1	58.0	57.6	63.1	75.8	70.8	66.2	68.3	66.9
Real credit to private sector[b] (1980 = 100)	100.0	111.9	123.6	144.6	164.9	187.4	199.4	198.9	210.8	250.8	296.1
Public finance (as % of GDP)											
Budget deficit	-11.8	-17.1	-16.3	-12.6	-9.0	-7.4	-9.6	-7.5	-4.3	-5.1	-5.3
Public debt as % of GDP	44.0	54.0	66.9	73.9	72.8	82.4	103.4	103.5	98.0	88.6	87.2
Share of foreign-currency debt in total debt (%)	26.2	36.2	45.8	52.2	56.2	56.5	62.0	50.4	41.1	36.8	35.7

Notes: (b) trade-weighted producer price of the ten major trading partners expressed in ringgit relative to domestic price measure by the GDP deflator (An increase implies real depreciation) increase (a decrease) implies real depreciation (appreciation). (b) Based on GDP deflator.

Table 2: Malaysia: Selected economic indicators, 1996-2010[a]

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Growth of GDP (%)	10.0	7.3	-7.4	6.1	8.9	0.5	5.4	5.8	6.8	5.3	5.8	6.5	4.7	-1.7	5.0[g]
Growth by final demand category (%)															
Consumption	4.9	4.9	-10.3	6.7	10.5	5.4	5.5	8.2	9.4	8.5	6.4	9.7	9.0	1.2	4.4[g]
Private	6.9	4.3	-10.8	3.1	13.0	3.0	3.9	8.1	9.8	9.1	6.8	10.5	8.5	0.7	3.8[g]
Public	0.7	7.6	-7.8	16.3	1.6	1.6	15.7	11.9	8.6	7.6	6.5	5.0	6.6	10.7	3.1[g]
Gross domestic fixed investment	9.7	8.4	-44.9	-5.9	25.7	29.2	-9.3	7.9	-1.5	6.9	-2.5	18.3	4.6	-5.3	8.7[g]
Private	13.3	8.4	-57.8	-23.1	32.6	-19.9	-15.1	0.4	25.8	7.6	9.2	11.8	0.8	-21.8	0.7[g]
Public	1.1	8.6	-10	16.3	19.4	14.5	11.2	3.9	-8.7	3.0	5.8	7.1	0.7	12.9	9.3[g]
Growth of manufacturing production[b] (%)	11.1	10.6	-7.2	12.9	25	-6.6	4.6	9.3	11.3	3.6	4.8	2.3	0.5	-11.2	9.1[h]
Export oriented (weight: 0.52)	8.8	13.1	-7.7	12.8	31	-13	5.5	8.9	15.6	11.4	10.1	0.2	-0.6	-19	7.6[h]
Domestic oriented (weight: 0.48)	16.2	14.6	-13.4	15.4	18.2	1.2	3.5	12.1	9.5	7.1	7.3	4.4	3.4	-9.8	8.8[h]
Unemployment rate	2.5	2.6	3.2	3.4	3.0	3.5	3.5	3.6	3.5	3.5	3.3	3.2	3.3	3.7	---
Gross domestic saving as % of GDP	42.9	43.9	48.7	47.4	46.1	41.8	42.0	42.5	43.4	42.8	43.1	42.1	42.3	36.0	---
Inflation rate (CPI based) (%)	3.4	2.8	5.2	2.8	1.5	1.4	1.8	1.2	1.4	3.1	3.6	2.0	5.4	0.6	2.0[g]
Fiscal performance (central government)															
Budget deficit (central government)/GDP (%)	0.7	2.4	-1.8	-3.2	-6.6	-5.5	-5.8	-5.3	-4.1	-3.6	-3.3	-3.2	-4.8	-7.4	-5.6[g]
Total public debt/ GDP (%)	35.3	31.9	36.2	35.9	36.6	41.3	45.6	44.9	45.7	43.8	42.2	41.6	41.5	48.5	---
Foreign debt/ total public debt (%)	11.7	14.4	14.5	16.6	15	16.7	22	19.7	16	13.1	10.3	7.3	6.6	4.3	---
Money and credit (end of period)															
M2/GDP (percent)	93.9	103.7	104.7	112.6	100.0	103.4	100.9	102.5	113.4	118.9	126.7	124.1	121.9	145.6	---
Average bank lending rate (percent)	10.1	10.6	12.3	8.5	7.7	7.5	7.5	6.9	6	6	6.1	6.7	6.7	5.5	---
Bank credit to the private sector[c] (1996=100)	100.0	122.8	116.9	114.0	189.0	198.3	200.0	203.7	242.1	271.9	290.9	301.2	310.0	358.6	---
Non-performing loan (NPLs)[e] (%)	3.7	4.1	13.6	11	9.7	---	---	---	6.3	5.4	---	---	4.7	---	---
Share market performance															

KLSE Composite index (1977 =100)	1238	594	586	812	696	696	646	794	907	899	1096	1445	1335	1175	1283
Market capitalization/GDP (%)	318.1	133.4	132.4	183.9	129.5	131.9	133.0	119.5	118.4	120.6	117.4	109.1	97.3	120.1	---
External transactions															
Current account balance as percent of GDP)	-4.4	-5.9	13.2	15.9	9.0	7.9	8.0	12.1	12.1	15.0	16.7	15.9	17.5	16.5	14.3[h]
Foreign reserves (US$ billion)	27.1	20.9	25.7	30.6	28.6	29.8	33.7	44.1	66.2	70.2	82.4	101.3	91.5	96.7	---
Total external debt as percent GDP	38.7	43.9	42.6	42.1	46.9	48.6	52.4	51.2	46.6	44.1	39.5	36.3	33.7	35.1	---
Short term foreign debt as percent of total debt	27.9	31.6	20.0	14.3	10.9	15.0	17.3	17.8	21.9	25.3	21.4	37.5	34.5	34.2	---
Short-term foreign debt as % of foreign reserves	40.8	71.5	33.0	19.6	16.0	22.6	24.9	19.6	17.3	18.8	14.3	22.8	24.9	24.4	---
External debt service ratio	8.9	7.4	7.2	4.9	5.6	6.0	7.2	7.9	6.2	5.6	4.0	4.8	4.7	4.8	---
Average exchange rate (ringgit per US$)	2.52	2.81	3.92	3.80	3.80	3.80	3.80	3.80	3.80	3.79	3.67	3.44	3.34	3.52	3.48[h]
Real exchange rate (1996 = 100)[f]	100	103.5	129.7	128.6	127.5	126.0	122.9	127.3	133.3	127.5	126.9	131.2	137.2	126.4	---

Notes: (a) All growth rates on a yea-on-year basis; (b) Based on manufacturing production index (1993 = 100). (c) The weight attached to each category in the index is given in brackets; (d) End-of-the-year stock of outstanding loans (net of non-performing loans) deflated by the GDP deflato; (e) Non-performing loans of commercial banks only; (f) As defined in Note 2 in Table 1; (g) Estimates; (h) Relates to the first six months; --- Data not available.

Source: Compiled from Bank Negara Malaysia: *Monthly Statistical Bulletin*, Malaysian Treasury: *Economic Survey* and IMF: *International Financial Statistics* database.

Table 4: Malaysia: merchandise exports, 2007-2009

	Composition (%)		Annual change (%)		Share in export contraction (%)
	2008	2009	2008	2009	2009
Primary products	23.5	20.4	36.0	-27.6	-38.9
Minerals	13.2	10.7	41.4	-32.2	-25.6
Crude oil	6.6	4.6	33.0	-42.0	-16.6
Liquefied gas	6.1	5.6	51.2	-23.4	-8.7
Agriculture	10.3	9.7	29.7	-21.6	-13.3
Palm oil	6.9	6.6	43.5	-20.9	-8.7
Rubber	1.2	0.8	10.6	-45.0	-3.3
Manufactures	74.1	77.8	3.8	-12.5	-55.7
Electronics	29.5	32.4	-8.3	-8.6	-15.3
Electrical machinery and appliance	12.3	12.3	9.9	-16.6	-12.3
Other	2.4	1.8	-1.7	-37.2	-5.4
Total	100	100	9.8	-16.6	-100.0
US$ billion	193	157			

Source: Compiled from Bank Negara Malaysia, *Annual Report 2010*,Table A-10

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