CHAPTER FOUR

OTHER EFFECTS OF FCI ON THE MALAYSIAN ECONOMY

4.1. Effect on Domestic Savings

4.1.1 Malaysia's Savings and Investment Trends

With its rich resource endowment, prudent fiscal policy management, institutionalised mobilisation and channelising of savings, Malaysia has emerged as a high savings economy. Despite the nation's high gross national savings, it was still insufficient to finance the level of domestic capital formation. A large portion of the domestic savings-investment gap was financed by foreign capital inflows, particularly through borrowings and foreign investments, including FDI and portfolio investments.

As shown in Table 4.1, Malaysia's gross national savings rate (GNS/GNP) rose from an annual average of 18.1 per cent during 1966-70 to 30.4 per cent during 1976-80. Although the level of capital formation increased significantly from 16.4 per cent during 1966-70 to 28.1 per cent during 1976-80, Malaysia was able to generate and mobilise sufficient domestic and national savings to finance a very large proportion of gross capital formation without significant resort to external borrowing. Thus, there were no large and unsustainable deficits in the current account of the balance of payments in

the fifteen year period, except during 1971-75, when the account recorded a deficit of 3.7 per cent of GNP.

With greater participation of the public sector in development and pursuit of a counter-cyclical policy in the early 1980s, the current account registered an average deficit of 8.4 per cent during 1981-85. The deficit reached high of 14.1 per cent of GNP in 1982. Resort was made to external borrowing, and as a result, the nation's external debt accelerated to RM40.2 billion by the end of 1985, compared to only RM10 billion in 1980, with a debt servicing ratio of 14 per cent of GNP in 1985 as against 4 per cent in 1980.

The recession in the mid-1980s forced the Malaysian government to voluntarily undertake a structural adjustment programme, combining fiscal restructuring with depreciation of the Malaysian Ringgit, a renewed export drive, relaxation of conditions for foreign investment and many other incentives in order to reorient the economy back onto the path of sustained growth with price stability. All these actions reduced the GNS- GDI gap to -0.5 per cent of GNP in 1986 and significant surplus as of 8.9 per cent in 1987 and 5.7 per cent in 1988. Although the current account balance became negative again in 1989 and 1990, the average GNS-GDI gap for 1986-90 turned out to be positive at 2.1 per cent of GNP.

In the 1990s, structural change has continued with manufacturing accounting for a growing proportion of GDP and exports. This calls for massive investments either from

TABLE 4.1   Malaysia: Gross National Savings and   Capital Formation, 1966-96

YEAR	GNS/GNP	GDI/GNP	RESOURCE GAP
1966	16.8	16.3	0.4
1967	16.4	16.6	-0.2
1968	17.5	16.6	0.9
1969	21.0	14.3	6.7
1970	18.1	17.9	0.2
1971	18.7	21.4	-2.6
1972	17.1	22.1	-5.0
1973	25.9	24.5	1.4
1974	23.8	29.8	-6.0
1975	18.7	24.2	-5.5
1976	28.2	22.7	5.5
1977	27.9	24.4	3.5
1978	28.6	27.9	0.7
1979	34.8	30.3	4.6
1980	30.4	31.6	-1.2
1981	26.1	36.3	-10.1
1982	25.0	39.1	-14.1
1983	28.0	40.4	-12.4
1984	30.7	36.0	-5.3
1985	27.6	29.7	-2.1
1986	27.4	27.9	-0.5
1987	33.8	24.9	8.9
1988	33.4	27.6	5.7
1989	29.9	30.3	-0.4
1990	30.3	32.1	-1.8
1991	28.0	38.1	-10.1
1992	32.3	35.4	-3.1
1993	34.7	36.8	-2.1
1994	34.4	39.2	-4.8
1995	35.2	45.5	-10.3
1996	38.5	45.1	-6.6

Five Year Annual Averages

1966-70	18.1	16.4	1.7
1971-75	21.2	24.9	-3.7
1976-80	30.4	28.1	2.2
1981-85	27.7	36.1	- 8.4
1986-90	31.0	28.9	2.1
1991-96	33.9	40.0	-6.2

Source: Economic Report, 1966-96

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locally or from abroad. Guided by the "Vision 2020" which envisages Malaysia as a full-fledged developed country by the year 2020, vigorous efforts were taken by the government to promote high savings to meet the country's rising investment needs. Although the nation's gross savings rate remained high at 33.9 per cent of GNP during 1991-96, it was insufficient to finance the level of investment, which was equivalent to 40 per cent of GNP, resulting in a resource gap averaging 6.2 per cent of GNP. The resource gap is largely financed by the inflow of foreign capital, particularly FDI into the manufacturing sector.

4.1.2 Savings Hypotheses

Savings are needed to maintain capital stocks and to reduce the country's dependency on foreign capital and foreign owned assets. However, with the low incomes of LDCs, domestic savings are usually insufficient to finance capital formation, and this gap is bridged by inflows of foreign capital.

There is considerable literature on the role of foreign capital inflow in supplementing domestic savings in developing countries. Orthodox theory has treated FCI as a complement to domestic savings to finance investment which will accelerate the economic growth rate of a country.

Departing from the orthodox position, Trygve Haavelmo (1963) hypothesized that domestic savings depend directly on income and relate negatively to foreign capital inflows. His hypothesis relating investment, GNP and capital inflows can be written as :

$$I(t) = [Y(t) + H(t)] \text{-------- Eq. (1)}$$

where   I = gross investment

      Y = GNP

      H = capital inflows.

Haavelmo saw investment as a function of income, including what a country gets from abroad, and domestic savings could be negative if H or FCI is large enough.[10]

Rahman (1968) interpreted this to mean that domestic savings depend not only on income, but also, negatively on FCI, and tested this hypotheses.[11] For this purpose, he made a slight modification, postulating that:

$$I(t) = aY(t) + b H(t) \text{ and since } I(t) = S(t) + H(t)$$

where s(t) = domestic savings. The domestic savings function can be written as:

$$S(t) = aY(t) + b'H(t)$$

where b' = b - 1   Hence S(t)/Y(t) = a + b' H(t)----------- Eq. 2.

Using equation 2 to test Haavelmo's hypothesis, Rahman concluded that it was quite likely that foreign capital was used not only to augment investment, but also as a substitute for domestic savings. From this, he advanced the behaviouristic hypothesis that governments in developing countries may voluntarily relax the domestic savings effort when more foreign aid is available than might be the case otherwise.

Gupta (1983), testing equation 2 by using data for 50 developing countries, found that the coefficient for capital inflows was positive but not significantly higher than zero. He concluded that FCI had virtually no effect on domestic savings in less developed countries. [12]

More detailed analysis was carried out by Papanek (1973), who broke down foreign capital into aid, FDI, and all other inflows. His results confirmed Haavelmo's hypothesis of a negative influence of foreign capital on savings. [13]

Fry (1984), using time series data for Asian region during 1960-80, found that in all four countries in his sample (Bangladesh, Republic of Korea, Nepal and Thailand), foreign capital had a negative effect on domestic savings. A significant negative relationship between FCI and savings has been found by many other researchers such as Leff (1963),

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Griffin and Enos (1970), Areskoug (1973), Weisskopf (1972), Ahmad (1972) and many others.

Ghazali Atan (1990) tested Haavelmo's hypothesis for the Malaysian economy using data for 1961-86, confirming the negative relationship between FCI and savings. The results of some past findings can be seen in Table 4.2.

4.1.3 Definition and Model Specification

Overall savings, represented by gross domestic savings (GDS), is defined as the difference between income and consumption, i.e.:

$$S = Y - C$$

where S= gross domestic savings

Y= GDP

C= consumption

The savings rate is defined as S/Y, i.e. gross domestic savings scaled against GDP. The traditional Keynesian-type saving function is augmented by export variables, per capita income, rate of income growth, the population structure and many other variables.

According to the absolute income hypotheses, the savings rate increases with the per capita income level by assuming that the marginal propensity to save (MPS) is higher than the average propensity to save (APS). Thus, as per capita income increases, the

relatively higher marginal savings rate will pull up the average propensity. Since the average propensity is the same as the savings rate, i.e. APS = S/Y, the savings rate can thus be expected to be positively related to per capita income.

Under the "life cycle hypotheses" developed by Modigliani and Brumberg, the savings rate is a positive function of the rate of income growth. This hypothesis maintains that savings results mainly from a desire to provide for consumption in old age. A growing economy, by generating higher lifetime incomes, can therefore be expected to have positive effects on savings. This hypothesis also expected changes in the structure of the population to effect the savings rate. This effect can be tested by using either "the dependency rate" or other measurements such as the rate of population growth , the labour participation rate and others as proxies.

Export performance is also expected to have a favourable influence on the savings rate. Exports, especially of primary products, often result in highly concentrated incomes, and standard savings theory shows that the propensity to save from such income is high (Papanek 1972). Also, countries whose export performance is good tend to face fewer foreign exchange constraints on investment and therefore tend to provide more of an incentive to save.

To test the effect of FCI on domestic savings, most of the studies reviewed included FCI as an additional explanatory variable in a properly specified savings function. Any positive effect of FCI on the domestic savings rate will exert positive side effects on the

ivestment rate. If an indirect effect exists, the orthodox treatment of FCI would

xpect benefits from such inflows to the recipient country.

'he Keynesian-type saving equation can be written as:

$$S = a_0 + a_1 \ FCI/Y + a_2 \ CX + a_3 \ GR + a_4 \ GDPN + a_5 \ \Delta L/L + vt$$

$$(a_1 </> 0) \quad (a_2 > 0) \ (a_3 > 0) \quad (a_4 > 0) \quad (a_5 > 0)$$

where: S = gross domestic saving as percentage of GDP,

   FCI = inflows of foreign capital as percentage of GDP,

   CX = change in exports as percentage of GDP,

   GR = GDP growth rate,

  GDPN = GDP per capita,

   Δ L/L = labour force growth rate and

   v = stochastic error terms.

The specified model regresses domestic savings against explanatory variables, i.e. exports, FCI, per capita income, income changes and labour force growth rate as proxies for changes in the population structure. The expected signs of the parameters are given in parentheses below the equation.

4.1.4 Clarification of FCI Coefficient in the Savings Equation

Because of the failure to distinguish clearly between "rates" and "levels" of savings, there is a controversy among economists with regards to the FCI coefficient in the savings equation.

FCI received by recipients will be either wholly or only partly consumed. A portion of FCI used for consumption may substitute for domestic savings, while the remainder may augment capital formation and accelerate growth. It was argued that the portion of FCI used for consumption will reduce the savings rate of the recipient country, and not the savings level even if all the FCI is consumed. The absolute volume of savings will only be reduced if all FCI is consumed while part of the hitherto saved locally available resources is also consumed. [14]

Newlyn (1977) clarified the difference between an absolute and a relative reduction in the savings rate. He pointed out that if the FCI coefficient in the savings equation lies between 0 and -1.0, it merely indicates that only a part of the FCI has been consumed. This means that FCI has only negatively affected the savings rate, but has not reduced the absolute level of savings. Here, FCI appears to have had a substitutive effect on savings. But if the coefficient value is less than minus unity (-1.0), it means that the volume of investible resources or total savings has been reduced by the inflow of foreign capital.

This explanation can be clarified by using the following equation where:

Total investment = total savings or

$$I = S + FCI$$

where: S = domestic savings,

   FCI = foreign capital which is assumed to be equal to foreign savings.

Therefore, the total effect of FCI on investment can be shown as:

$$\partial I/\partial FCI = \partial I/\partial S . \partial S/\partial F + \partial I/\partial F$$

$$= \partial S/\partial F + 1$$

since $\partial I/\partial S = \partial I/\partial F = 1$

Thus, as long as $\partial S/\partial F$ is less than minus unity (-1.0), any inflow of foreign capital will reduce the total investible resources or total savings.

Finally, should the FCI coefficient in the savings equation be found to be significantly positive, then we can say that FCI has a catalytic effect on domestic savings. Here, FCI appears to complement domestic savings.

Table 4.2 shows the results of past studies with the FCI coefficient mostly between 0 and -1.0. This suggests that only a part of the FCI received by LDCs was consumed, resulting in a reduction of the savings rate, S/Y, but not in the absolute levels of savings.

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4.1.5 Effect of FCI on the Malaysian Domestic Savings

The saving equation specified earlier was tested using Malaysian data for the sample period. To test the effect of FCI on overall Malaysian savings, FCI was inserted as an additional explanatory variable in the specified equation. The result obtained is as follows: (see Table 4.3) [15]

$$X4 = c + a_1 \, FCI/Y + a_2 \, CX + a_3 \, \ln y + a_4 \, \Delta \, L/L$$

$$= -2.59 - 0.3046 \, FCI/Y + 0.0084 \, CX + 11.167 \, \ln y + 0.486 \, \Delta \, L/L$$

$$(-0.47) \quad (-3.78) \quad (9.57) \quad (4.79) \quad (2.59)$$

$$R^2 = 86.3\% \quad D.W. = 1.882$$

where: $X4$ = gross domestic savings as a proportion of GDP,

FCI/Y = foreign capital inflow as a proportion of GDP,

CX = change in exports as a proportion of GDP,

$\ln y$ = real GDP growth,

$\Delta L/L$ = labour force growth rate as a proxy for change in the population structure.

All explanatory variables carry expected signs. The FCI coefficient is -0.305 and is statistically significant at the one per cent level. This result shows each one per cent increase in the inflow of foreign capital will reduce the savings rate by 0.305 per cent. The value of this coefficient (-0.305) lies between 0 and -1.0. This means FCI only

negatively affected the savings rate, but did not reduce the absolute level of savings. FCI into Malaysia appears to have had a substitutive effect on domestic savings in the sample period. Any negative effect of FCI on the domestic savings rate will have negative side effects on the investment rate. Thus, the orthodox expectation of a positive contribution to growth may be exaggerated.

The analysis also disaggregated FCI into its components of DEBT/Y and FDI/Y. The result obtained is:

$$X4 = -2.244 - 0.269 \text{ DEBT/Y} - 0.249 \text{ FDI/Y} + 0.02 \text{ CX} + 10.8 \ln y + 0.424 \Delta L/L$$

$$(-0.35) \quad (-3.44) \qquad\qquad (-2.24) \qquad\quad (8.53) \qquad (4.68) \quad (2.43)$$

$$R^2 = 86.2\% \qquad\qquad\qquad D.W. = 1.833$$

This result shows each one per cent increase in the external debt will reduce the savings rate by about 0.27 per cent and each one per cent increase in FDI will reduce the savings rate by about 0.25 per cent. Both coefficients carry hypothesised negative signs and are significant at the five per cent level.

Overall, the findings support the belief that FCI has a negative effect on the savings rate of the recipient country. This is clearly contrary to the orthodox view that FCI positively influences the savings rate, thus leading to a higher economic growth rate of the recipient country.

4.2 Other FCI Shortcomings

4.2.1 Repatriation of Investment Income

Liberal regulations on income repatriation, often considered necessary as an investment incentive, may also adversely affect the balance of payments. Investment income, which consists mostly of dividends and profits has contributed significantly to the country's growing services account deficits. Total income outflows in the form of profits and dividends have steadily increased from RM466 million in 1970 to about RM11.4 billion in 1996 as shown in Table 4.4. Prior to 1991, total net dividends outflows exceeded yearly net FDI inflows. In other words, private capital inflows have not been large enough to fully offset net dividends outflows. This means the net financial contribution of FDI was negative. Such negative net financial contributions increased from about RM180 million in 1970 to a peak of RM2.2 billion in 1988. Since 1991, except in 1995, FDI's net financial contributions turned out to be positive because of the upsurge of FDI inflows which more than offset the dividends outflows. However, the investment income outflows continue to be the largest component contributing to the services account deficit.

In addition, huge inflows of foreign capital, particularly in the form of borrowings, exposes Malaysia to external shocks, which will not only threaten financial stability, but also undermine the economic growth. The huge outflows of interest payments also

contributed significantly to service account deficits, which will have negative implications for the country's macro economic stability.

4.2.2 High Import Content

The heavy influx of FDI in the country has resulted in huge imports of investment and intermediate goods which have contributed significantly to the growing import bills and declining merchandise surplus and large current account deficit. Table 4.5 shows that total investment goods as a proportion of total imports increased significantly from 25.2 per cent in 1970 to 40 per cent in 1996. Likewise, the proportion of intermediate goods has also increased from 35.3 per cent in 1970 to 45.2 per cent in 1996. The high import content of Malaysian manufactures also implies low domestic value-added and low linkages.

These results are corroborated by the findings of other studies. Ghazali Atan (1990) found that FDI causes import propensities to increase, whereby each ringgit of foreign-owned assets in the country contributed to around RM2.95 of additional imports. Edwards (1990) estimated the import content of firms operating in the export processing zones at around 70 per cent, while Flatters and Purvis (1991) estimated that, in 1988, the imported input content for the electronic components sector was 80 per cent of gross exports. Pang, in an unpublished study suggests an import content of around 43 per cent for the entire Malaysian manufacturing sector (both foreign and local owned). This lower average

figure suggests that the import content of local manufacturing firms is much lower than that of the foreign owned sector. [16]

4.2.3 "Crowding-out" Effects

The FDI activities may also have resulted in increased industry concentrations. The high degree of industrial concentration implies a high degree of market power for a few large firms, resulting in high barriers to entry for other small firms. To the extent that large firms have been foreign, a crowding-out of local firms can be assumed to have taken place.

4.2.4 Destabilising Effects

In 1993, Malaysia experienced an unprecedented surge of short-term capital inflows which were largerly temporary and speculative in nature. In the existing full employment situation, this capital put strains on the macro economy in terms of price and cost pressures and contributed to destabilising the domestic money and foreign exchange market.

With the huge inflows of short-term capital during this period, narrow money supply increased from less than 20 per cent to a peak of 48 per cent in February 1994, while broader money (M3) increased by 30 per cent. Nevertheless, while the inflows during this period contributed to an increase in reserve money, this, however was not translated into increased lending by the banking sector. This inflow created excess liquidity in the

banking system, which caused downward pressure on domestic interest rates. The monetary multiplier which generally ranged from 6.5 to 7.0 declined during this period to below 6.0. Other factors causing deceleration in loan growth included low demand for credit owing to availability of retained profits for investment, development of capital market and corresponding availability of equity financing and also relatively lower foreign interest rates. [17]

The short-term capital inflows also destabilised the asset price and stock market. In 1993, inflows of foreign capital for the purchase of stock increased by RM19 billion, twice the amount of funds in the form of foreign borrowings and deposits.

In addition to strong demand during the period of high growth, FDI inflows also contributed to pressure on the labour market, leading to pressure on costs and wages, and eventually to a more serious cost-push inflationary problem.

4.3 Conclusion

The statistical analysis in this chapter has found that FCI in aggregate and its components, i.e. external debt and FDI have had a significantly negative influence on Malaysian savings rate in the period covered by the study. The FCI coefficient in the savings equation between 0 and -1.0 shows that only a part of FCI in Malaysia was consumed, resulting in reduction of the savings rate, but not of absolute savings level. Thus, the positive FCI contributions to economic growth expected by orthodox theory

would be reduced because of FCI's effect on the domestic savings rate would decelerate, instead of accelerating the investment rates.

The findings also shows that FCI has destabilising effects, not only on the external balance, but also for macro economic stability in terms of price pressures as well as the stock market and other financial market. Thus, consideration needs to be given to balance the positive effects of FCI against the adverse effects it might have on the Malaysian economy.

NOTES

[10] Haavelmo, Trygve: Comment on Leontief, Wassily, "The Rates of Long-run Economic Growth and Capital Transfer from Developed to Underdeveloped Areas", Study Week on The Econometric Approach to Development Planning (Oct. 7-13, 1963), North Holland Publishing Company, Amsterdam, 1965.

[11] Rahman, M.A.: "Foreign Capital and Domestic Savings": A Test of Haavelmo's Hypothesis with Cross-Country Data", Review of Economics and Statistics 50 (1968), p. 137-38.

[12] Gupta, K.L.: "Foreign Capital and Domestic Savings: A Test of Haavelmo's Hypothesis with Cross-Country Data: A Comment", Review of Economics and Statistics (May 1970), p. 214-16.

[13] Papanek, G.F.: "Aid, Foreign Private Investment, Savings and Growth in Less Developed Countries", Journal of Political Economy 81 (1973), p. 120-30.

[14] This argument is made by Rottenberg (1971), and Kennedy and Thirlwall (1971), and was repeated by Newlyn (1977).

[15] Testing the hypothesis that they are significantly different from -1.0 produced the following results:

$$Ho: \quad = -1.0$$
$$Ha: \quad not\ so$$

E.g. Testing the hypothesis on the coefficient of FCI/Y in regression (1):

$$t\ value = \frac{\beta - (-1)}{se(\beta)}$$
$$= -0.305 - (-1)/\ 0.1837$$
$$= 3.78$$

t table for n= 27 at a 1% level of significance is 2.771. Since 3.78 > 2.771, thus Ho is rejected.

[16]Ghazali Atan: "Foreign Investment", Journal of Economic Cooperation Among Islamic Countries 13 (1992), p. 29-49.

[17] Zeti Akhtar Aziz:"Capital Flows and Monetary Management: The Malaysian Experience", Eleventh Pacific Basin Central Bank Conference, Oct. 31-Nov. 3 1994, Hong Kong.

Table 4.2 Past Findings Equation Showing Negative Relationships Between
Savings and Foreign Capital Inflows (t statistics given in brackets)

1. Rahman (1968), cross-section 31 LDCs:

$$S/Y = 0.1427 - 0.2473 \ FCI/Y$$
$$(-2.568)$$

2. Leff (1968), Brazalian data (1940-60):

$$S(t) = 1.78 + 0.1545 \ Y (t-1) - 0.1560 \ F (t)$$
$$(0.38) \quad (7.73) \quad\quad (-0.47)$$

$$R^2 = 0.839 \quad\quad D.W = 2.06$$

3. Griffin and Enos (1970), cross-section 32 LDCs (1962-1964)

a. Total Sample:

$$S/Y = 11.2 - 0.73 \ F/Y$$
$$(-6.64)$$

$$R^2 = 0.54$$

b. Asian sample :

$$S/Y = 16.3 - 1.14 \ F/Y$$
$$(-2.92)$$

$$R^2 = 0.90$$

4. Weisskopf (1972)-17 LDCs classified as affected by a savings constraint:

$$S = a + 0.183 \ Y - 0.227 \ F + 0.176 \ X$$
$$(65.9) \quad (-5.3) \quad (4.6)$$

$$R^2 \ (NA)$$

5. Papanek (1973), cross-section data, LDCs (1950s, 1960s):

$$S/Y = -13.3 + 3.69 \ln y + 1.60 \ln pop - 0.64 \ F/Y + 0.28 \ Xp/Y + 1.13 \ Xo/Y$$
$$(3.2) \quad (5.7) \quad\quad (4.3) \quad\quad (-7.5) \quad\quad (7.3) \quad\quad (5.7)$$

$$R^2 = 0.72$$

6. Gupta (1970) data for 50 countries of LDCs:

$$S/Y = 0.11083 + 0.0310 \ F/Y$$
$$(12.6) \quad\quad (0.39)$$

$$R^2 = 0.055$$

7. Ghazali Atan (1990): Malaysian data for 1961-86

$$S/Y = -12.95 + 5.076 \ y + 68.9 \ \ln y + 0.496 \ X/Y - 0.130 \ (I - \pi) - 0.319 \ FCI/Y$$
$$(-2.72) \quad (7.40) \quad (4.23) \quad\quad (3.91) \quad\quad (-1.09) \quad\quad (-2.41)$$

$$R^2 = 89.4 \quad\quad\quad\quad D.W. = 1.45$$

Notes on variable names:

S   = domestic savings,

F   = foreign capital inflows,

Y   = GDP,

y   = GDP per capita,

g   = GDP/GDP i.e. the rate of growth,

M   = imports,

X   = exports, subscripts "p" refers to primary and "o" to non-primary exports,

pop   = population size.

Table 4.3

Regression Results: Effect of FCI and its Component on the Malaysian Domestic Savings Rate, 1966-96 (Explained variable: S/Y)

Regr.	c	FCI/Y	DEBT/Y	FDI/Y	CX	ln y	Δ L/L	R²	D.W
4.	-2.59	-0.3046			0.0084	11.167	0.486	86.3%	1.882
t value =	(-0.47)	(-3.78)		(9.57)	(4.79)	(2.59)			
5.	-2.24		-0.269	-0.249	0.02	10.8	0.424	86.2%	1.833
t value =	(-0.35)		(-3.44)	(-2.24)	(8.53)	(4.68)	(2.43)		

Notes on variable names:

S/Y	= domestic savings rate as a proportion of GDP,
FCI/Y	= foreign capital inflow as a proportion of GDP,
DEBT/Y	= external debt as a proportion of GDP,
FDI/Y	= foreign direct investment as a proportion of GDP,
CX	= change in exports as a proportion of GDP,
ln y	= real GDP growth,
Δ L/L	= labour force growth rate as a proxy for change in the population structure.

Table 4.4 Net Financial Contribution of FDI, 1970-96 (RM million)

Year	Net FDI	Factor Payments	Estimated Dividend Outflows	Net Financial Effect
1970	287	590	466	-179
1971	306	628	492	-186
1972	320	586	433	-113
1973	420	915	742	-322
1974	1374	1386	1277	-1103
1975	837	1091	966	-127
1976	969	1531	1355	-386
1977	999	1898	1544	-545
1978	1158	2581	2240	-1082
1979	1255	3195	2774	-1519
1980	2033	3428	2910	-877
1981	2914	3661	2904	10
1982	3262	4196	3085	178
1983	2926	5513	3968	-1042
1984	1869	6693	4316	-2447
1985	1725	6901	3928	-2203
1986	1262	6012	3038	-1776
1987	1065	6837	3566	-2501
1988	1884	7594	4124	-2240
1989	4518	7901	4724	-206
1990	6309	9858	6840	-531
1991	10996	9250	6573	4423
1992	13204	9965	7641	5563
1993	12885	12900	8174	4711
1994	10798	15400	9386	1412
1995	10464	16800	10562	-98
1996	10464	17800	11430	1347

Sources: Ghazali Atan (1990); EPU; Bank Negara Annual Reports, 1988-96.

Table 4.5

Malaysia : Imports of Intermediate and Investment Goods, 1970-96 (RM million)

Year	Total investment goods	as % of imports	Total intermediate goods	as % of imports
1970	1079.2	25.2	1515.1	35.3
1971	1203.2	27.3	1596.7	36.2
1972	1383.9	30.5	1726.5	38.0
1973	1795.8	30.3	2333.6	39.3
1974	3300.9	33.4	3920.8	39.6
1975	2705.7	31.7	3527.0	41.3
1976	3061.3	31.5	4235.6	43.6
1977	3450.1	30.9	5013.1	44.9
1978	4042.8	29.6	6253.8	45.8
1979	5129.4	29.9	8252.6	48.1
1980	7030.0	30.0	11,752.0	50.1
1981	7512.7	28.2	13,569.5	51.0
1982	9038.0	31.1	14,168.1	43.6
1983	9810.2	31.9	14,919.1	48.4
1984	10,804.7	32.8	15,633.4	47.5
1985	9481.1	31.3	14,518.8	47.7
1986	8043.2	28.8	13,735.5	49.2
1987	9128.8	28.6	16,028.8	50.2
1988	12,814.3	29.6	21,568.0	49.8
1989	20,824.6	34.2	28,414.0	46.7
1990	29,658.2	37.5	35,904.0	45.4
1991	40,042.5	39.7	43,142.0	42.8
1992	42,185.9	41.6	41,388.1	40.8
1993	47,678.5	40.6	50,177.6	42.7
1994	64,488.1	41.4	67,821.9	43.5
1995	78,776.4	40.5	86,916.6	44.7
1996	78,933.0	40.0	89,163.9	45.2

Sources: Mohamed Aslam (1996), Malaysia International Trade and Industry Report 1996/97

Table 4.6 Malaysia: Shares of Exports To Gross Domestic Product, 1966-96

Year	Exports/GDP (percentage)
1966	39.68
1967	37.96
1968	38.86
1969	43.72
1970	41.27
1971	39.00
1972	34.62
1973	40.73
1974	46.69
1975	41.52
1976	47.86
1977	46.26
1978	47.07
1979	53.73
1980	52.85
1981	47.05
1982	44.92
1983	46.86
1984	48.58
1985	49.02
1986	49.24
1987	57.17
1988	60.86
1989	66.86
1990	69.40
1991	71.28
1992	68.77
1993	73.18
1994	79.97
1995	84.66
1996	77.07

Sources: Mohamed Aslam (1996), Economic Report, 1996/97.

Appendix 4.1   Regression Results: Effect of FCI on the Malaysian Domestic Savings
Rate, 1966-96

LS // Dependent Variable is X4
Date: 04/27/98   Time: 21:11
Sample: 1966 1996
Included observations: 31

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	-2.589341	3.361896	-0.770202	0.4481
X5	-0.304599	0.183659	-1.658505	0.1092
X9	0.008423	0.105317	0.079978	0.9369
X2	0.485917	0.572701	0.848465	0.4039
Y22	11.16633	2.537419	4.400665	0.0002

R-squared	0.862669	Mean dependent var	31.00323
Adjusted R-squared	0.841541	S.D. dependent var	7.114937
S.E. of regression	2.832233	Akaike info criterion	2.228821
Sum squared resid	208.5602	Schwartz criterion	2.460109
Log likelihood	-73.53382	F-statistic	40.83096
Durbin-Watson stat	1.882061	Prob(F-statistic)	0.000000

Appendix 4.2 Regression Results: Effects of External Borrowings and FDI on the Malaysian Domestic Savings Rate, 1966-96

LS // Dependent Variable is X4
Date: 04/27/98   Time: 21:13
Sample: 1966 1996
Included observations: 31

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	-2.243755	3.577774	-0.627137	0.5363
X6	-0.268863	0.212314	-1.266345	0.2171
X7	-0.248860	0.335297	-0.742208	0.4649
X9	0.019913	0.119612	0.166483	0.8691
X2	0.423803	0.585615	0.723690	0.4760
Y22	10.80678	2.519235	4.289708	0.0002

R-squared	0.862331	Mean dependent var	31.00323
Adjusted R-squared	0.834797	S.D. dependent var	7.114937
S.E. of regression	2.891879	Akaike info criterion	2.295798
Sum squared resid	209.0741	Schwartz criterion	2.573344
Log likelihood	-73.57196	F-statistic	31.31894
Durbin-Watson stat	1.832895	Prob(F-statistic)	0.000000