



THE IMPACT OF FOREIGN CAPITAL INFLOWS ON MALAYSIA'S
GROSS NATIONAL PRODUCT AND GROSS
NATIONAL SAVINGS, 1966-1992

BY "

YUSUF ABDUL RASHID

MASTER OF ECONOMICS PROGRAMME
DEPARTMENT OF ECONOMICS
KULLIYYAH OF ECONOMICS AND MANAGEMENT



# THE IMPACT OF FOREIGN CAPITAL INFLOWS ON MALAYSIA'S GROSS NATIONAL PRODUCT AND GROSS NATIONAL SAVINGS, 1966-1992

#### BY

#### YUSUF ABDUL RASHID

### ADVISOR DR. OMAR MARASHDEH DEPARTMENT OF ECONOMICS

SUBMITTED TO THE GRADUATE COMMITTEE KULLIYYAH OF ECONOMICS AND MANAGEMENT, INTERNATIONAL ISLAMIC UNIVERSITY, MALAYSIA IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ECONOMICS

OCTOBER, 1993

DONATED TO	THE LIBRARY OF
NIERNATIONAL	ISLAMIC UNIVERSITY
	ВУ
ullugyah .	1 Conomics
llum.	,

Date Received: 12-5-94 DMB

31 7895

#### **DECLARATION OF AUTHOR'S RIGHTS**

The copyright of this thesis belongs to the author under the terms of the Copyright Act, 1967 (Act 332) Due acknowledgement must always be made of the use of any material contained in, or derived from this thesis.

INTERNATIONAL ISLANDE UNIVERSITY LIBRARY

Date: 14-5 -94 201

t HG 5760.6 A3 Y95 I

Maz

### KULLIYYAH OF ECONOMICS AND MANAGEMENT MASTER OF ECONOMICS PROGRAMME

### SUBMISSION OF THE MASTER OF ECONOMICS RESEARCH PAPER

has written the Master of Economics research paper entitled:

THE IMPACT OF FOREIGN CAPITAL INFLOWS ON

This is to certify that Bro./Sis.

YUSUF ABOUL RASHID

MALAMSIA'S GROSS NATIONAL	L PRODUCT AND GROSS
NATIONAL SAVINGS, 1966	- 1992.
The Control of the Co	
during its presentation have be version of the paper to my full	
	g that the graduate committee may alfilment of the requirements for ics.
Name of Supervisor: CMAR	
Date: 1-10-93	our Monylileh
	(Signature)

#### ACKNOWLEDGEMENT

The author wishes to express his profound gratitude to Dr. Omar Marashdeh for his invaluable supervision and to everyone who, in a way, contributed to the success of this study.

#### ABSTRACT

This paper attempts to resolve the general controversy regarding the impact of foreign capital inflows to Malaysia's real Gross National Income (GNP) and real Gross National Savings (GNS). Employing a simultaneous equations system in time series data from 1966-1992, our estimates conclude that both domestic and foreign resources in the form of real Direct Foreign Investment (DFI) and Official Long-Term Capital (OLTC), signify a positively significant relationship with GNP. Similarly, our results imply that GNP is positively and significantly related to GNS. On the other hand, the impact of DFI to GNS is neutral and that of OLTC is negatively significant. In addition, various model specifications are also used to test the model's sensitivity.

At the outset, this paper discusses the general controversy confronting foreign capital inflows in recipient countries. Attempts are also made in discussing some of the Malaysian economy's experiences with respect to its growth, savings, foreign borrowings and foreign direct investments. This paper is concluded with the analysis of the regression estimates in relation to Malaysia's experience with the issue.

#### TABLE OF CONTENTS

A C	K	N	0	W	L	E J	0 (	E	M	E	N	T	•	• •		•	٠	٠	•	•	•	•	•	į.	• )						•	•	٠	• 1	• :		31					25		•: :	. (	( i	i )	)
A B	S	T	R	A	C'	Г			•	٠		ě	•	<b>.</b>			•	٠	¥	٠	٠	•	en e	• 3	•	•	• •			٠	•	٠	•	•	• •	•	2	•		•		8	•	. (	( :	l i	i)	)
TA	В	L	E	į	0	F	(	0	N	T	E	N	T	S.			٠	•	•	•		•	•	•	•	•					•	٠	•	•	• :	• •			•		e :•	<b>1</b> 0	. (	( :	i :	i i	i )	)
LΙ	S	T	9	0	F	•	ΓΑ	В	L	E	S	ě	•	•		H 14		•	•	•	•	•	٠	•	•	•				٠	٠	•	•	•	• 0	•			•	•			• (	•	( :	iν	,	)
Α.		Ι	N '	Г	R (	) I	JC	JC	T	I	0	N	•	• :		•	٠		٠	•	*	٠	•	* :	•	•	• :	е з				•	•	• :	• 9		:::			- (10	6 0	es :		•	•::	• ::•	. 1	ı
в.		T	H	E	()	C	) (	T	R	0	V	E	R	S	Ι.		٠	•	•	•	•	•	٠		•	•			9 9	•		٠	٠	•	•		,	į		9			• 1	•	•		. 2	2
С.	9	R	E	V	I	E Y	7	0	F		R	E	L	<b>A</b> 7	r I	3 E	)	L	I	T	E	R.	A '	T	U I	R I	Ε.			0.0			;(•)	•				. 3		::	Е Э	. ,	• 6	• :	•	. 1	1 2	2
D.	1000	T	H.	E	I	4 /	٩I	Α	Y	S	I	A	N	1	3	K E	E	R	Ι	E	N	C	E	•	•	•					٠	•	•	•	•	•						•	•	•	•	. 1	1 6	5
				D	• 7	1 -	-02	P	A	T	T	E	R	N S	S	C	F	13	G	R	0	W	T I	H		•(()	<b>*</b> ()		e: 9	· 0•				•		• 1	• 6	<b>6</b> 54			E 0	<b>•</b> R 3	• =	•	•	. 1	1 7	7
				D	•	2 -	-)	F	0	R	E	Ι	G	N	E	3 0	R	R	0	W	Ι	N	G	. 9	•	•	•		•		•	٠	٠	•		•	•	i je		6		•	•	•	•	. 2	2 (	)
			į	D	•	3 -	-0	F	0	R	E	I	G	N	Ι	) ]	R	E	С	T		Ι	N	V	E	S'	r N	4 I	B N	ľ				٠	• 8	•	•11.5	- 11		61.4	<b>6</b> 39	•	•	•	•	. 2	2 !	5
				D	٠	4 -	5)	T	Ή	E		G	R	08	5 5	3	N	A	T	I	0	N.	A	L		S	A١	7 ]	I 1	1 G	S	•	•	•	ě	<b>.</b> 0	ě					•	•			. :	3 (	)
Е.	1	T	H	E (	01	R I	3 7	ľ	C	A	L		F	R A	11	1 E	W	0	R	K		•		•	•	•	•	•	•		٠	٠	•	•	•	•	•	•	• •		•	•	•	• ]	•	. :	3 :	3
			Ĩ	E	•	1 -	-2	T	Н	E	}	0	U	ΤI	PĮ	J	•	M	0	D	E	L	•	•		·	•	•	• •		٠	•	•	٠	•	• 1	•		ě	. ,	. 77		•		•	. :	3 :	3
				Ε	. :	2 -	33	T	H	E		S	A '	V ]	[ ]	10	S		M	0	D	E	L	٠		•	•	•				٠		•	٠	•	•				•	•	•	•	٠	. :	3 4	4
F.	į	D.	A'	Г.	A	1	A N	I D		M	E	T	Н	01	) (	) [	٥.	G	Y		•		٠	•		•	•	• 1	• (-)			•			•	• :	• 1		• 1	• •	• :	•	•	. :		. :	3 !	5
G.		E	s'	r	I	1 /	l A	ľ	0	N	3	R	E	s t	JI	ľ	'S	٠	•	•	•	•	•	•	•	•	•	•			٠	•	٠	٠	•	•	•	•	•	•	•)	•	•	•	•	. :	3 :	7
				G		2 -	-	T	H	E		Ι	N	C (	N	1 E	3	F	U	N	С	T	I	0	N	•		•	•						• 17	• 1		•:		• : 1			•	•		. :	3	7
			×	G		3 -	-	T	H	E		S	A'	<b>V</b> ]	[ ]	10	S		F	U	N	C	T	I	0	N	•	• 6			٠	٠	•	٠	· 1			•			•,,,,	•	•	•		. 4	4	1
н.	į	C	0	N	C I	L	JS	I	0	N		A	N I	D	E	20	L	I	С	Y		R	E	C	0	MI	M I	E I	N I	) A	T	I	0	N	•	• [	•	•	•	•	•	•	•	•		. /	4	3
REI	F	R I	R	E I	N (	2 1	2.5		145	250	2 1	121	2	ž   .	2 12		100	22	2		-2	2							21													2 /	v.			, d	۵.	7

#### LIST OF TABLES

TABI	E NUMBER TITLE
1 -	GROWTH, SAVINGS AND RESOURCE BALANCE19
2-	TRENDS IN CAPITAL INFLOWS AND OUTFLOWS22
3-	OUTSTANDING EXTERNAL DEBT BY TYPE AND COUNTRY
	OF ORIGIN23
4 –	OUTSTANDING FOREIGN DEBT BY SECTOR25
5-	DIRECT FOREIGN INVESTMENTS26
6-	PERCENTAGE OWNERSHIP OF CAPITAL IN THE
	CORPORATE SECTOR27
7 –	OWNERSHIP STRUCTURE OF MANUFACTURING PROJECTS
	GRANTED APPROVAL27
8-	APPROVED PROJECTS BY OWNERSHIP28
9-	FOREIGN INVESTMENTS IN APPROVED PROJECTS
	BY COUNTRY
10-	FOREIGN INVESTMENT IN APPROVED PROJECTS
	BY INDUSTRY29
11-	MALAYSIA: CURRENT ACCOUNT OF THE BALANCE
	OF PAYMENTS32
12-	COMPARISON: NET CAPITAL INFLOWS AND OUTFLOWS32
13-	FEDERAL GOVERNMENT SOURCES OF FINANCE40
14-	AVERAGE ANNUAL REAL GROWTH RATES (BY SECTOR)40
15-	ALTERNATIVE ESTIMATES OF THE INCOME FUNCTION43
16-	ALTERNATIVE ESTIMATES OF THE SAVINGS FUNCTION43

# THE IMPACT OF FOREIGN CAPITAL INFLOWS ON MALAYSIA'S GROSS NATIONAL PRODUCT AND GROSS NATIONAL SAVINGS, 1966-1992. An Econometric Study

#### A. INTRODUCTION

Foreign capital has played an important role in the development process of the less developed nations. Its advent became a notion when the United States in 1950's, then a capital surplus country, perhaps founded a "precedent", by doling out capital to its European counter parts with an understanding to rebuild the latter's war torn economy, and perhaps to gain momentum for a rapid economic recovery. With evident fruitful outcome, the "precedent" has taken a course in economic history. In the world of underdevelopment, on the other hand, in dire need of progress, the bulk of less developed nations have trailed their predecessors by importing capital in a hope of attaining commensurable result. This phenomenon spanned from Asia to Africa and Latin America, the nuclei of underdevelopment. Equally interesting after four decades is that only very few countries have benefited from the imported capital while quite a number of them have not performed satisfactorily. This is generally true specially in Asia, where most countries attained an averaged respectable growths and in Latin America's classic failure. This twofold consequence, has drawn considerable attention in recent literatures of development economics. Its degree of interest

has reached a considerable height when general coherence can not be established between the "precedence" and the realm of economic phenomena that beset the third world countries. This unresolved phenomenal controversy gave rise to a series of debates regarding the subject matter.

#### B. THE CONTROVERSY:

The need for foreign capital inflow is founded from the vicious cycle of underdevelopment. Countries which are characterized by deficient capital formation, low productivity, low income and low savings propensity find it difficult to attain a continuous growth because of savings deficiency. In an immediate need to break the cycle in one hand, and for economic advancement on the other, most of the less developed countries have resorted to capital imports. The role of the imported capital is to augment the savings deficiency, increase capital accumulation which inherently increases productive capacity.

The significant inflow of foreign capital to less developed nations began in 1950's and 1960's mostly in forms of aid. The thinking was that aid inflows would generate subsequent increases in income and domestic savings. The rationale is self-evident, to help out the less developed nations from impoverishment. Though the purpose of aid is straightforward

as it may seem, it has been pointed out that in general, it may rest on humanitarian, political and economic self-interests of the donor nations, or an initiative founded on moral, ethical and strategic motives.

It is note worthy to mention here that the humanitarian considerations of foreign aid depends on, firstly, compensation of past injustices. This notion implies the colonial past where most of the advanced countries have extracted all possible resources available from their colonies, which "incidentally" became the bulk of less developed countries that the world economy has. It raises significant queries as to whether the present state of economic underdevelopment is an end product of the colonial years or simply a consequence of the coexistence of rich and poor nations. Secondly, it was pointed out that aid is a move towards the distribution of uneven global natural resources. And lastly, aid is a means of extending moral obligations by donor nations towards the least advantaged economies with the proposition that the advent of international economic and political interdependence protracted the moral basis for distributive justice from the national to international grounds. Alternatively, aid's rationale with respect to the political and economic aspects stems from the notion that it will strengthen the political bond of the recipient and donor nations, mutually benefiting each other. This argument, is in fact, the heart of its controversy. It caught a considerable attention in

1980's when debt-servicing crisis besieged the borrowing countries' struggle for economic development. As a result, the blame of the crisis was pointed at different directions. Firstly, some have advanced the notion that aid is in fact a blueprint of the donor countries own economic interests. The argument comes from the actual implications of the terms and conditions of aid agreements between parties, where the donor countries extend their arms not only from their selective behavior to whom they provide assistance, but also to its purpose and to some extent, the details of its implementation. This manner deprives the recipient country's freehand of its imported capital and hence becomes at a mercy of the donor's prescription. Secondly, some raised the point that the debt crisis is partially an aftermath of externally induced phenomena. This includes the oil crisis in 1970's where the prices of oil skyrocketed at the expense of the current account deficits of the oil-importing countries. Another external shock that marred the development process of the less developed nations was the world recession in early 1980s. Whilst primary commodities is the major source of income of the underdeveloped world, the world recession further tainted their development process as their products hardly commanded a reasonable price in the world market. Another plausible reason of aid failure is through 'aidswitching.' Empirical investigations suggest that aid-switching is massive in some borrowing countries. Not optimally utilized, they imply that either aid went into unproductive and unnecessary projects or into the pockets of some government officials. The foregoing unprecedented factors have indeed slumped the development efforts of the aid-recipient countries. Its magnitude perhaps depended on the recipient-country's ability to bargain with its donors, its vigilance against external shocks and more importantly, its political discipline.

It is then apparent that the LDC's which were not in a better position to safeguard their failing economies have been badly affected by the debt crisis. This gave rise to higher levels of debt/export ratio which make debt-servicing increasingly difficult to handle. In some countries, the costs of interest and amortization have even surpassed the value of loan outstanding. This created a negative transfer which drained the borrowing country of its resources available for investment. In subsequent years, many of the less developed countries have opted for debt rescheduling. In any event, if a country is unable to expand its export earnings at a pace that allows for the reduction of debt-service ratio over time, it is equally difficult to reach at an effective solution of the problem.

L. See for example, Anisul Islam, (1992), "Foreign Aid and Economic Growth: An Econometric Study of Bangladesh," Applied Economics, 24, 541-544.

An equally appealing form of capital inflow is the direct foreign investment. The rationale of FDI is not different from that of aid in the sense that it also compensates the savings gap of a capital-deficient LDC. The proponents of DFI has advanced the notion that DFI is conducive to economic development by providing needed capital that the domestic economy is unable to produce. They advocate that inflows of such capital reduces external resource costs by helping export promotion and imports substitution. "Foreign investment thus temporarily fills these potential gaps in savings and trade and is positively related to economic growth." 2 By increasing LDC's rates of growth, and grating their economies with the world market, borrowing and larger flows of foreign investment has become a major recourse for economic development.

Recent third world economic development experience, however, suggests that this is not always the case. Consider the following: Basically, two kinds of growth experiences can be classified from the bulk of LDC's that have resorted to capital importation for the last four decades. These are

<sup>2.</sup> Simeon Hein, (1992), "Trade Strategy and the Dependency Hypothesis: A Comparison of Policy, Foreign Investment, and Economic Growth in Latin America and East Asia," Economic Development and Cultural Change, 39 No.1, p. 499.

classified into an East Asian and Latin American cases. Though one can argue that growth is not influenced by foreign capital alone, this paper has reasons to believe that the development experience of the capital-importing LDC's has mainly something to do with the presence of the imported capital relative to their development philosophies.

The Latin American experience, is well considered as a classic failure. 3 After decades of major policy shifts, the regions is still in the verge of underdevelopment. Recall that its inward-looking, protectionist policies failed to generate substantial growth . The reasons behind the failure can be summarized as follows: The excessive borrowing in 1970s to finance its ambitious development philosophy, i.e., unsuccessful vertical import-substitution industrialization, had laid down a heavy burden to the region's capital account through debt servicing because its trade balances did not contribute to the additional debt build up. In other words, Latin America's import-substitution strategy did not save enough foreign exchange or generate a rapidly rising export share, such that the income required to repay the debt did not materialize as quickly as the debt. Similarly, others have advanced the notions that Latin America's failure rests

<sup>3.</sup> For details, see James L. Diets and James H. Street, (Editors), Latin America's Economic Development, A Structuralists and Institutionalists Perspective.

on its structural barriers which given the uses to which borrowed funds were put, they have limited repayment possibilities.

The case of East Asian is different. Though most of the Asian countries have started with import-substitution strategy, there is recent evidence that most have shifted to outward-looking, export expansion strategy. The region has recognized that export promotion has to be one element of the over-all economic strategy. From a roughly comparable debt accumulation in two regions, the situation has not resulted in debt crisis in East Asia because it was accompanied by the expansion of exports, which have contributed the necessary foreign exchange to service the debt. In contrast with Latin America, direct foreign investments in East Asia frequently are in the position of providing the region access to the international market, "either to the final consumer in the developed countries or as a supplier of intermediate goods into the corporations own globalized production network." 4 The region sees that the DFIs are major source of commercial technology crucial to industrialization. Many of the East Asian countries are adopting measures that hope to attract FDIs and their technologies, specially if it helps

<sup>4.</sup> Foreign Direct Investment, The Service Sector and International Banking, '(Great Britain: UNCTC and Graham and Throtman), p. 12.

develop the export sector. This strategy is indeed necessary especially if the country suffers from indebtedness. Export promotion will create trade and foreign reserve surplus that is essentially important to handle debt-servicing. A promising economic recovery is thus possible so long as the country maintains a superior terms of trade on the average.

The basic necessary conditions for direct foreign investment includes, firstly, foreign firms shall have an ownership advantage over their rivals or potential rivals in host country. Secondly, the host country must have some locational advantage in terms of serving the market of the host country or export based. Ownership advantage covers grants of monopoly, patent and superior knowledge of the market. "Much of this investment is concentrated in as small number of countries that have large domestic markets and are rich in natural resources, or have significant advantage as a base for export-oriented production." 5 In addition, good physical and institutional infrastructure, liberal regulation and generous fiscal incentives are necessary complement factors. More importantly, host countries should promote a stable political leadership, honest, efficient and supportive public sector, peaceful industrial relations, manpower development and social discipline.

<sup>5.</sup>See for example, "Foreign Private Investment in Developing Countries," A Study by the Research Department, International Monetary Fund, Washington, D.C., January, 1985, p. 4.

There is a considerable controversy about the relative costs and benefits of foreign direct investment to developing countries. "The principal argument in its favor is that the package of capital, technological and managerial resources generally increase the real domestic income of the host country by more than the profits returned to the investor." This is possible because firstly, large organizations can maximize on economies of scale which gives them higher profits leading to a greater accumulation of funds for reinvestment. The rate of investment should also be higher for large foreign firms because their mode of production is more oriented on the use of capital-intensive machinery. It will strengthens the balance of payments of host country specially if the country is export oriented. The influx of FDI also creates a strong demand for labor which helps the government reduce unemployment. It will also have a significant impacts on long-term productivity and international competition. It will improve the level of training and experience of the labor force with the economy. Most importantly, it creates a potential channel for technological and managerial transfer brought about by the efficient firm to the advantage of host country.

<sup>6.</sup> Ibid., p.9.

On the other hand, skeptics have raised the arguments that the presence of foreign firms obstructs the development objectives and aspirations of a host country. This means losing control of local autonomy, weakening of indigenous industries, allowing growth of oligopolistic market structures, costly retention of technological advantage due to overly capital-intensive production techniques. Lastly, it will strain the balance of payments due to overly import-dependent that is not capable of expanding export and repatriation of funds.

Amidst all these controversies, it is important that a host country determines its appropriate level of foreign participation in the lights of its needs and aspiration. On the other hand, the foreign investor can also help to ensure that the direct investment process is mutually beneficial by cooperating with the host country's chosen development strategy. It should be borne in mind that many of the costs and benefits associated with direct investment can be strongly influence by the host country's economic policies, political and social stability and on the relative bargaining power of both direct investor and host country.

#### C. REVIEW OF RELATED LITERATURE:

Based on our literature review, two prominent dissenting views and empirical evidences can be found with respect to the impact of foreign capital to the savings and growth experiences of less developed countries.

Simeon Hien (1992)<sup>7</sup> investigates two opposing models of development in order to assess the recent experience of developing nations. Using Asian and Latin American countries as samples, his regression results reveal that countries, in most cases, which has an outward-oriented policy has a significant positive effect on economic growth, while inward-oriented policy dummy has an equally large negative effect. His findings reveal that outward-oriented developing nations which are more dependent on foreign capital, have faster economic growth than both neutral and inward-oriented, less developed nations. His regression further suggests that population growth rate has a smaller, significant negative effect on economic growth. Political instability also has a small, significant negative effect.

<sup>7.</sup> Simeon Hein, (1992), "Trade Strategy and the Dependency Hypothesis: A Comparison of Policy, Foreign Investment, and Economic Growth in Latin america and East Asia", Economic Development and Cultural Change, 40 No.3, pp.495-521.

Gustav F. Papanek (1973)<sup>8</sup>, in his cross-country analysis of eighty five countries came up with the findings that savings and the components of foreign inflow (aid, private investment and others flows) explain over a third of the countries' growth rates. He forwards the notion that foreign aid, which goes disproportionately to countries with low savings rates and serious balance of payments problems, has a more significant effect on growth than savings. He also cited other possibly important omitted variables such as wars, political disturbances, sudden terms-of-trade changes and natural disasters as possible variables that affects domestic savings.

Thomas E. Weisskof (1972)<sup>9</sup> on the other hand, has investigated the impact of foreign capital inflow on domestic savings in forty four underdeveloped countries and found that foreign capital inflow represents an addition to the total supply of resources available to a country.

Anisul Islam (1992)<sup>10</sup>, in his study in Bangladesh has

B.Gustav Papanek, (1973), "Aid, Foreign Private Investment, Bavings and Growth in Less Developed Countries," *Economic Journal*, No. 81, pp.120-130.

<sup>7.</sup> Thomas E. Weisskopf, (1972), "The Impact of Foreign Capital Inflow on Domestic Savings in Underdeveloped Countries," *International Economics*, 2, pp.25-38.

<sup>10.</sup>Anisul Islam, (1992), "Foreign Aid and Economic Growth: An Econometric Study of Bangladesh," Applied Economics, 24, pp.541-544.

statistically proven that foreign aid, in its aggregate form, is not statistically significant. However, as the author decomposes the aid variable into grants and loans, the author finds out that the latter is positively significant while that of the former is not. He contends that since grants are not to be repaid, it is possible that the government authorities may have allowed various administrative slacks and perhaps tolerated a greater degree of corruption on its utilization. On the aggregate, he finds out that domestic resources exert a much stronger effect on growth than foreign resources. As such, he recommends that, government policy in Bangladesh need to focus more heavily on mobilising its domestic resources rather than relying on foreign resources for its economic transformation. His study also made mention that Bangladesh's direct foreign capital investment could not be taken into the model because its presence in the country negligible. This prompted his study to focus on foreign aid alone as his major independent variable coupled with the growth in employment.

K.B. Griffin and J.L. Enos  $(1970)^{11}$ , in their cross-country study for fifteen African and Asian Countries, revealed that there is no close association between the

<sup>11.</sup>K.B. Griffin and J.L Enos, (1970), "Foreign Capital, Domestic Savings and Economic Development," Oxford University Institute of Economics and Statistics, 32, pp.99-112.

amount of aid received and the rate of growth of GNP. In other words, the correlation of foreign aid and savings across countries is negative. In Latin America, where they did a similar study, they found out that the evidence is even stronger. They found out that the average growth rates of the countries under consideration are inversely related to the ratio of foreign aid to GNP. This means that the greater the capital inflow from abroad, the lower the rate of growth experiences of the receiving countries. In conclusion, they mention that foreign assistance is not associated by progress and indeed may deter it.

D. Snyder<sup>12</sup>, on the other hand has advanced the hypothesis that the negative association between savings and aid is the spurious result of omitted variables, which might take the form of per capita income. They said that if aid were distributed according to need and per capita income were used by donors as an index of need, aid and savings would have a spurious negative correlation because low-PCI countries simultaneously experience low savings rate and large inflows based on need.

Using a fixed effects model that controls for omitted variables, Snyder (1990)<sup>13</sup> estimated 50 mostly low-and-mid-

<sup>12.</sup> Donald Snyder, (1990), "Foreign Aid and Domestic Savings: A Spurious Correlation?" The Review of Black Political Economy,pp.175-181.

<sup>13.</sup> Ibid. pp.175-181.

dle-income countries in three decades, i.e., 1960s, 1970s and 1980-1987, and found out that there may be a moderate tendency toward aid-switching but this effect is considerably overestimated if the correlation with per capita income is not taken into account.

On the other hand, K. Gupta and Islam [1983]<sup>14</sup> have suggested that the negative correlation between capital inflows and growth and savings is caused by simultaneous-equation bias estimates. Since capital inflow, growth and savings are jointly and simultaneously determined, it would be necessary to fully specify an equation system and use 2SLS or other system method for estimation purposes. At any rate, they suggest that if capital inflows are negatively correlated with savings and growth rates, simultaneity of equations safeguards the estimates from over-emphasizing the impacts of the foreign inflows.

#### D. THE MALAYSIAN EXPERIENCE.

The Malaysian economy has experienced an exceptional economic change since her independence in 1957. Over the years, the economy has turned from an overly dependent on

<sup>14.</sup>See for example, K.L. Gupta and A. Islam, (1983), "Foreign Capital, Savings and Growth: An International Cross Section Study," (Dordrecht: D. Reidel Publication Company).