THE DYNAMIC INTERACTIONS AMONG FOREIGN DIRECT INVESTMENT, UNEMPLOYMENT, ECONOMIC GROWTH AND EXPORTS: EVIDENCE FROM MALAYSIA

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Abstract

The dynamic relationships among foreign direct investment, unemployment, economic growth and exports are analysed using the vector autoregression (VAR) method of variance decomposition in Malaysia. The results of the analysis show that firstly, at least one unique cointegrating relationship exists for Malaysia; secondly, both models of unemployment and economic growth display a long-run causality from independent variables to dependent variables (namely unemployment and economic growth); thirdly, economic growth and exports are found to be the main determinants of unemployment in Malaysia; and finally, as the forecast horizon increases, the importance of historical shocks associated to economic growth and exports declines.

Keywords: Exports, economic growth, FDI, unemployment, and Malaysia

Introduction

The role of foreign direct investment (FDI) in economic development and employment creation of developing nations is pertinent. FDI played a major role in the initial economic development of many Southeast Asian countries. Some of these countries are Malaysia and Singapore. The role of FDI in Malaysia can be traced to two industrial strategies implemented, namely the import substitution and export orientation strategies. Import substitution policies aimed mainly at reducing imbalances in balance of trade and employment creation. Export orientation policies were aimed at generating foreign income and employment creation. The 1980s saw a high level of unemployment in Malaysia which was more than 5 percent. Conversely in the 1990s, the unemployment level in Malaysia was reduced to below 5 percent. FDI plays an important role in the determination of economic growth. FDI positively contributed towards economic growth and employment creation in many developing countries. FDI can also be used to diversify the economy thereby reducing over-dependence on a few commodity-based sectors; for example by creating new manufacturing and service sectors, particularly in exports and in services which use information and communication technologies.[1]

Economic growth also determines the unemployment rate. As economic growth increases, unemployment decreases and vice versa. Growth increased substantially in Malaysia during the 1970s, and the 1980s started off well, but a severe depression during 1985 and 1986 resulting from falling world prices for key export commodities such as petroleum, palm oil, rubber and tin halted Malaysian economic growth.[2]

In 1996 economic growth was the highest in Malaysia, while the unemployment was the lowest. One of the most prominent features of the overall Malaysian economy is that it is closely associated with the rapid growth of the manufacturing sector where this sector contributed almost 45 percent to the overall economic growth of the country from 1991 to 1995.[3]

The objectives of this paper are as follows:

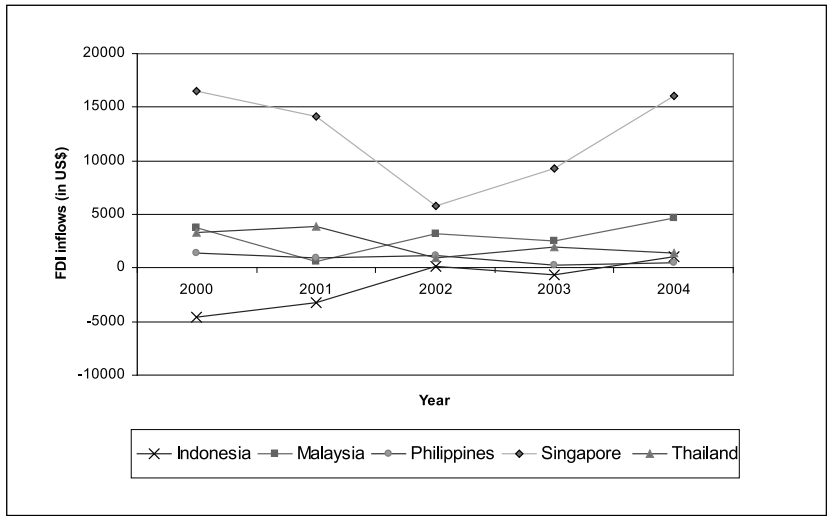
a. to determine whether there exists stationary long-run relationships among foreign direct investment, unemployment, economic growth and export in Malaysia.
b. to identify the direction of causality, if any between FDI with unemployment, economic growth and export.
c. to identify the main macroeconomic variables that determines unemployment in Malaysia
d. to analyze the dynamic interactions among FDI, unemployment, economic growth and export in Malaysia.

The organization of this paper is as follows. The second section will briefly explain the FDI in ASEAN-5 and Malaysia and the relationship of FDI with unemployment, economic growth and export. The third section will look at some literature review. The fourth section will discuss the model specification and methodology used in this study. The fifth section will discuss the empirical results and the final section will conclude.

FDI, exports, economic growth and unemployment in Malaysia

Figure 1 shows FDI inflow to ASEAN-5 countries, namely, Malaysia, Singapore, the Philippines, Thailand and Indonesia. FDI inflow to Singapore declined sharply in 2002. Singapore still maintains higher FDI inflow compared to the other four ASEAN countries. FDI inflow to Malaysia has been increasing but recorded a decline in 2003.

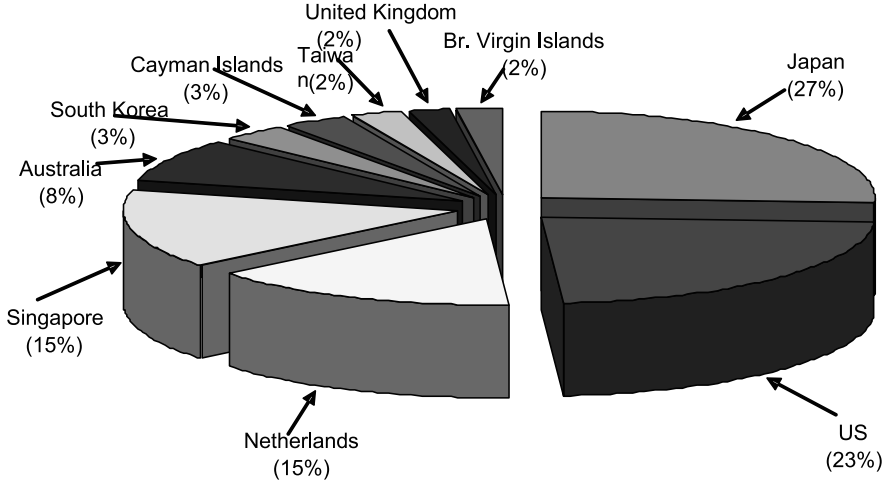
Figure 1 : FDI inflows to ASEAN-5



Source: ASEAN Statistical Yearbook, 2005

Figure 2 displays the top ten sources of FDI in Malaysia by country of origin. Most of the FDI came from Japan (27 percent), United States (23 percent), Netherlands (15 percent) and Singapore (15 percent).

Figure 2: Sources of FDI in Malaysia by country of origin, 2005-2006 (Total FDI: RM32.6 billion)



Source: Economic Report, Malaysia, 2005/2006

Figure 3 displays the relationship between FDI growth and the unemployment. During periods of high FDI growth, the unemployment rate tends to be low and during the periods of low FDI growth, the unemployment rate tends to be high.

Figure 3 : Foreign direct investment and unemployment

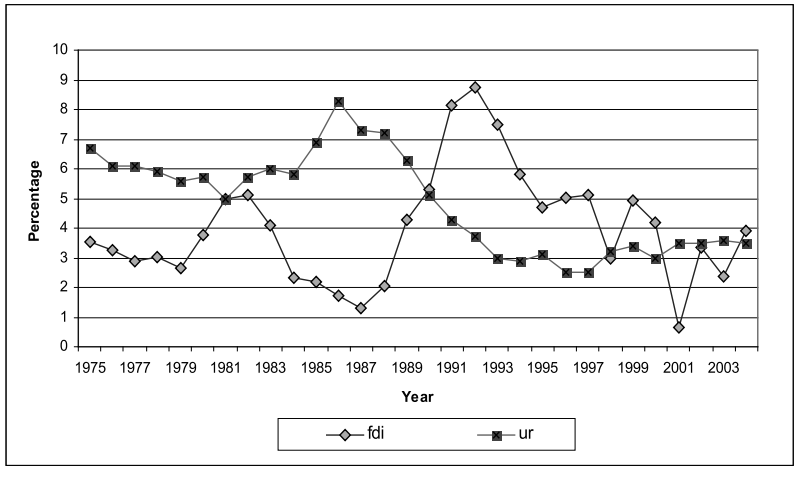


Figure 4 displays the relationship between FDI growth and economic growth. High FDI growth is associated with high economic growth and low FDI growth is associated with low economic growth. Economic growth determines the unemployment rate. As economic growth increases, the unemployment decreases and vice versa.

Figure 4 : Foreign direct investment and economic growth

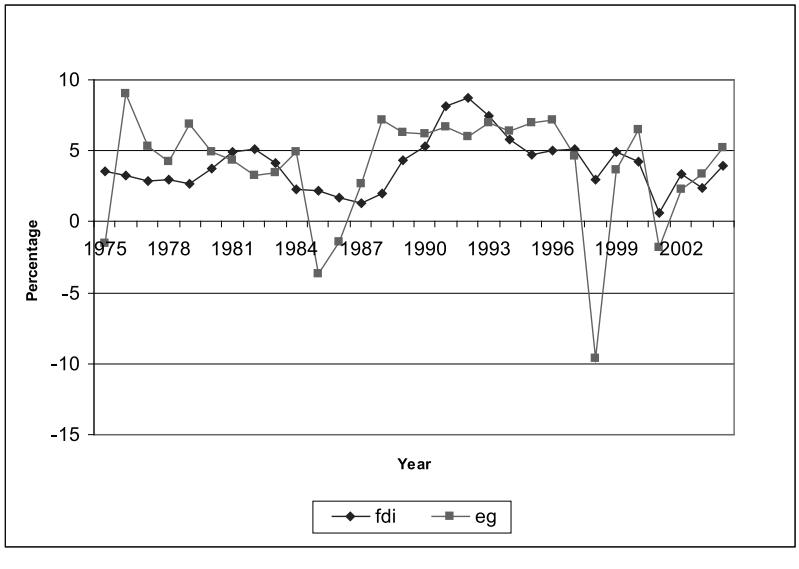
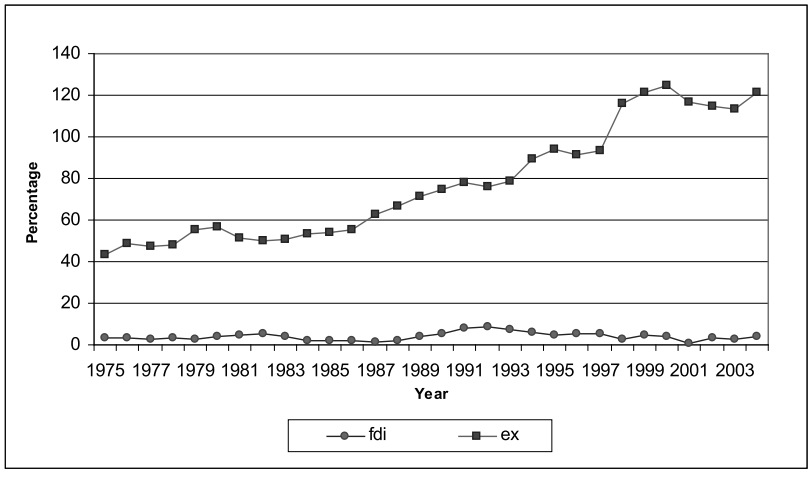


Figure 5 shows the relationship between FDI growth and export growth. High FDI growth can be observed in the early 1990s and high export growth also took place around the same time.

Figure 5 : Foreign direct investment and exports



Literature review

Foreign Direct Investment (FDI) is defined as an investment in which the investor acquires a substantial controlling interest in a foreign firm or sets up a subsidiary in a foreign country.[4] Empirical work on the role of FDI in host countries seems to suggest that FDI is an important source of capital, complements domestic private investment, usually associated with new job opportunities, in most cases is related to the enhancement of technology transfer and boosts overall economic growth in host countries.[5]

Unemployment is negatively related to FDI. When more FDI flows to a country, more employment opportunities are created thus reducing unemployment. The major industrial strategies introduced in Southeast Asian countries include import substitution and export orientation. Both strategies played a major role in creating employment opportunities and at the same time reducing unemployment. FDI can result in the generation of employment opportunities due to the substantial linkage effect, less significant crowding out and direct employment effects.[6]

In analysing the relationship between FDI and the labour market, it was found that FDI potentially increases wage inequality and uses relatively more skilled labour in domestic firms.[7] The first effect takes place when a multinational enterprise enters a country, the demand for skilled workers in an industry or region increases, thus increasing the wage inequality. The second effect is contributed by technology spillovers from foreign to domestic firms; as the relative demand for skilled workers increases in domestic firms, aggregate wage inequality and skill upgrading occur. On the other hand, it was found that FDI contributed to aggregate employment and gains in high-technology sectors.[8] Seyf in his study on the unemployment problem in the EU concluded that the same volume of FDI appears

to be creating more jobs in Germany compared to other countries. He also concluded that it is unlikely that encouraging FDI would enable European countries to reduce unemployment substantially.[9]

The role of FDI in increasing employment in the home country for both US and Sweden is also analysed.[10] In this study it was found that for US, more foreign output means fewer employees at home for a given level of home output. The reason given for this is that larger foreign affiliate production is associated with an allocation of the more labour-intensive portions of the firms's output to the foreign operations, and more capital intensive portions to home operations. Therefore, a given amount of home production will involve lower home employment, the larger is the amount of the firm's foreign output. In contrast, for Sweden it was found that production by Swedish multinational corporations (MNCs) in both developed and developing countries seems to have a positive effect on parent employment.

With respect to the relationship between FDI and economic growth, although FDI may affect growth, growth itself is also a crucial determinant of FDI.[11] Hasan found that for Malaysia, the rate of growth has a positive relationship with FDI. According to him, a 1 percent rise in the rate of growth tends to induce a capital flow about RM204 million into the Malaysian economy.[12] Many researchers also concluded that FDI and international trade can have positive contributions to economic growth.[13] A long-run relationship among FDI, exports, imports and growth is also found by some researcher.[14] Hasan contended that exports play a crucial role in attracting foreign capital to Malaysia. According to him, a 1 percent rise in exports is likely to increase inflows by around RM120 million.[15]

Econometric methodology

Short Run Dynamics with Error Correction Models

When the cointegrating vector is obtained from the Johansen-Juselius procedure, the short-run vector autoregression in the error correction model can be written as follows:

$$\Delta FDI = a_0 + \sum_{i=1}^{m} a_{1i}\Delta UR_{t-1} + \sum_{i=1}^{m} a_{2i}\Delta EG_{t-1} + \sum_{i=1}^{m} a_{3i}\Delta EX_{t-1} + \sum_{i=1}^{m} a_{4i}\Delta FDI_{t-1} + aECT_{t-1} + v_{1t}$$

$$\Delta UR = b_0 + \sum_{i=1}^{m} b_{1i}\Delta FDI_{t-1} + \sum_{i=1}^{m} b_{2i}\Delta EG_{t-1} + \sum_{i=1}^{m} b_{3i}\Delta EX_{t-1} + \sum_{i=1}^{m} b_{4i}\Delta UR_{t-1} + bECT_{t-1} + v_{2t}$$

$$\Delta EX = d_0 + \sum_{i=1}^{m} d_{1i}\Delta UR_{t-1} + \sum_{i=1}^{m} d_{2i}\Delta EG_{t-1} + \sum_{i=1}^{m} d_{3i}\Delta EX_{t-1} + \sum_{i=1}^{m} d_{4i}\Delta FDI_{t-1} + dECT_{t-1} + v_{4t}$$

$$\Delta EX = d_0 + \sum_{i=1}^{m} d_{1i}\Delta UR_{t-1} + \sum_{i=1}^{m} d_{2i}\Delta EG_{t-1} + \sum_{i=1}^{m} d_{3i}\Delta EX_{t-1} + \sum_{i=1}^{m} d_{4i}\Delta FDI_{t-1} + dECT_{t-1} + v_{4t}$$

Where UR is the unemployment rate, EG is the rate of economic growth, FDI is the ratio of FDI inflows to GDP and EX is the ratio of exports to GDP; a_0, b_0, c_0 and d_0 are constants indicating intercepts; D is a difference operator; ECT $_{t-1}$ is the error correction term obtained from the cointegration relationship that is normalized with respect to each variable ; and a , c and d are the coefficients that shows the speed of adjustment to attain long-run equilibrium. and V_{2t} are the serially uncorrelated random error terms with zero mean.

Empirical results

This sub-section will examine the existence of the unit root problem in the time series data for Malaysia by employing three distinct unit root tests namely the Augmented Dickey-Fuller(ADF) test, Phillips-Perron (PP) test and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) Test.

Unit root test

The unit root test is performed in order to differentiate stationary and non-stationary series and at the same time to determine whether the variable under investigation is of I(0) or I(1) processes. Determination of the order of integration is important to ascertain the use of appropriate cointegration techniques. The lag length selection for the ADF test is based on the Schwarz Information Criteria (SIC), whereas for PP and KPSS tests, the Newey-West bandwith is allowed to automatically choose the optimal lag-length. Table 1 summarizes the results of the unit root tests which employ ADF, PP and KPSS tests for Malaysia. All series namely UR, EG, FDI and EX are found to be I(1) for Malaysia using the PP unit root test. This provides us a good basis to employ the Johansen cointegration test. The results of KPSS unit root test suggest that the null hypothesis of non-stationary cannot be rejected. Variables UR and EX are found to be stationary at levels using the KPSS test.

Table 1 : Unit root test

Variables	ADF	PP	KPSS			
	C	C & T	C	C & T	C	C & T
Panel I: Level						
UR	-1.132	-3.424*	-1.405	-1.877	0.482**	0.085
FDI	-2.138	-2.104	-2.278	-2.255	0.126	0.096
EG	-4.627***	-4.681***	-4.637***	-4.706***	0.091	0.072
EX	-0.045	-2.719	-0.463	-1.704	0.668**	0.146**
Panel II: 1st Difference						
UR	-4.193***	-4.104**	-4.271***	-4.188**	0.082	0.082
FDI	-5.234***	-5.134***	-5.234***	-5.134***	0.063	0.059
EG	-6.618***	-6.477***	-16.120***	-15.387***	0.110	0.106
EX	-4.352***	-4.352***	-4.761***	-6.029***	0.326	0.500***

Note: Asterisks * , ** , *** denotes statistical significant at 10%, 5 % and 1% respectively

Test for Cointegration

The Johansen Cointegration test is performed to confirm the existence of a long run relationship. The results of the Johansen Cointegration test is summarized in Table 2 below. Two likelihood ratio (LR) namely the trace test and the maximal eigenvalue (l- max) test is used in Johansen procedure[16]. The results of the Johansen Cointegration test in Table 2 reject the null hypothesis of no cointegrating vectors (r=0) at 1 percent significance level for the trace test. The maximal eigenvalue (l-max) test results was found to be consistent with the trace test. The results of the Johansen test firmly proves that at least one unique cointegrating relationship exists. The analysis is further extended to obtain the error correction model.

Table 2 : Cointegration Tests

Null	Alternative	Trace		λ_{max}	
		Value	99 % C.V	Value	99 % C.V
(k=1, r=1)					
r = 0	r = 1	53.0686*	47.8561	30.3861*	27.5843
r ≤ 1	r = 2	22.6825	29.7970	14.4810	21.1316
r ≤ 2	r = 3	8.2015	15.4947	8.1851	14.2646
r ≤ 3	r = 4	0.0164	3.8414	0.0164	3.8414

Note: Asterisk * denote significant at 1% critical value, k is the lag length and r is the cointegrating vector(s).

Error Correction Model

Table 3 below shows the error correction model (ECM) results for Malaysia for two dependent variables namely, unemployment and economic growth. The Long-run Granger causality can be tested from the significance of the error correction term, λ. If the coefficient for λ_1 is found to be different from zero, the explanatory variables are said to Granger-cause unemployment (UR) and economic growth (EG) in the long-run.

In the same manner, the short-run Granger-causality, can be tested by the joint significance of the coefficients of the lagged independent variables. The short-run Granger-causality tests if parameters g are jointly different from zero. If both long-run and short-run causality is accepted, one can conclude that the dependent variable is strongly exogenous and vice versa if only the long-run test is accepted.[17] In the latter case, the dependent variable can be said to be weakly exogenous.

The first model, where the unemployment (ΔUR_t) is the dependent variable, the error correction term is found to be significant at the 5 percent level of significance. Both the short-run and long-run Granger causality is rejected, suggesting a strong exogeneity of unemployment with respect to the first model. For the second model, namely the economic growth model (ΔEG_t), the error correction term is again found to be significant at the 5 percent level of significance with the correct sign. The high ECT value of -0.89 in the second model suggests that the deviation from the long-run economic growth is corrected by 0.89 in equation 2 by the coming year. The long-run Granger causality is accepted at the 10 percent level of significance, thus supporting the hypothesis of long-run Granger-causality from the explanatory variables to economic growth. This confirms the

results obtained from cointegration analysis. Overall, economic growth is found to be endogenous in the long-run.

Table 3 : Error Correction Model Results for Malaysia (1975-2004)

Variable	Dependent Variable	
	ΔUR_t	ΔEG_t
Intercept	-0.0733 [-0.5990]	-0.6296 [-0.6957]
ΔUR_{t-1}	-0.2610 [-1.0324]	-0.2218 [-0.1187]
ΔEG_{t-1}	0.0350 [1.0183]	0.1320 [0.5192]
ΔFDI_{t-1}	-0.1141 [-1.3201]	0.4029 [0.6308]
ΔEX_{t-1}	-0.0236 [-1.1069]	0.1834 [1.1641]
F-test of short-run causality: H_0: $\gamma_1=\gamma_2=\gamma_3=0$	1.0131	0.6122
ECT	-0.1762** [-2.0396]	-0.8846** [-1.9656]
F-test of long-run causality: H_0: $\lambda=\gamma_1=\gamma_2=\gamma_3=0$	1.8338	2.2326*
R-squared	0.2823	0.3600
Adjusted R-squared	0.1192	0.2146

Note: Asterisks * , ** , *** denotes statistical significant at 10%, 5 % and 1% respectively

A battery of diagnostic checks is used to check if the models constructed have desirable statistical properties. For that purpose, the RESET (Regression Specification Test) reveals no serious omission of variables, indicating that the model is correctly specified. The ARCH (Autoregressive Conditional Heteroskedasticity) test reveals that the errors fulfill the homoskedastic condition and are independent of the regressors. The Breusch-Godfrey Serial Correlation test reveals that there is no significant serial correlation in the disturbances of the error terms. The Jarque-Bera statistic suggests that the disturbances of the regressions are normally distributed at least at 1 percent. In addition, the regression coefficients are evaluated for structural stability using the cumulative sum (CUSUM) and the cumulative sum of squares (CUSUMSQ) of the recursive residual test. Both the CUSUM and CUSUMSQ test statistics are found not to exceed the bounds of the 5 percent level of significance, thus indicating that the regression equations are stable.

One special feature of the ECM is that we can examine the short-run and long-run Granger causality relationships.[18] The null hypothesis of testing whether coefficients of the independent variables equal zero capture the short-run causality. The testing of the null hypothesis whether the coefficient of ECM equals to zero will be able to capture the long-run causality. Table 4 below shows the Standard Granger causality Test. Both models 1 and 2 display a long-run causality from independent variables to dependent variables, namely UR and EG.

Table 4: Standard Granger Causality Test (c^2 Test)

Variable	Dependent Variable	
	ΔUR_t	ΔEG_t
ECT	4.1602** (0.0414)	3.8638** (0.0493)
ΔUR_{t-1}	-	0.0141 (0.9054)
ΔEG_{t-1}	1.0371 (0.3085)	-
ΔFDI_{t-1}	1.7429 (0.1868)	0.3979 (0.5281)
ΔEX_{t-1}	1.2252 (0.2683)	1.3551 (0.2444)

Note: Asterisks * , ** , *** denotes statistical significant at 10%, 5 % and 1% respectively

Long-run equation

The empirical findings of long-run relationships are summarized in Tables 5 and 6. The results of the cointegration test indicates that long-run cointegration equilibrium relationship exists among FDI, UR, EG and EX for Malaysia (Table 6). With FDI and EX as the dependent variable, ECM turns out to be insignificant. The inverse relationship can be observed between FDI and UR, suggesting that higher FDI can to a certain extent reduce unemployment in Malaysia. The inverse relationship can also be observed between EX and UR, suggesting higher EX may reduce unemployment. This finding concurs with the findings of Rasiah that increased outward orientation and FDI-led manufactured exports essentially drove Malaysia's GDP growth during the export orientation period, which helped reduce unemployment rates and kept inflation low.[19]

Table 5: Normalized cointegrating vectors

FDI 1.0000	UR - 6.3767	EG - 4.4961	EX - 0.3969
EX 1.0000	UR -16.0657	EG -11.3277	FDI -2.5194
UR 1.0000	FDI -0.1568	EG -0.7051	EX -0.0622
EG 1.0000	FDI -0.2224	UR -1.4183	EX -0.0883

Table 6 below shows the long-run equation for Malaysia. For equation 1, with UR as the dependent variable, EG and EX are found to be significant at 1 percent level of significance. All three variables namely EG, EX and FDI have the correct expected signs, indicating inverse relationships with unemployment. Even though

FDI is found to be insignificant, FDI inflows help solve the problem of unemployment in Malaysia to a certain extent. For equation 2, with EG as the dependent variable, only UR has the expected negative sign indicating an inverse relationship between EG and UR. UR is found to be significant at 1 percent level of significance.

Table 6 : Long-run equation (1975-2004)

Variable	Dependent Variable	
	UR_t	EG_t
Intercept	+ 13.08655	+ 18.56013
UR	-	- 1.418261*** [3.22144]
EG	- 0.705089*** [6.77356]	-
FDI	- 0.156820 [1.19408]	- 0.222411 [0.89110]
EX	- 0.062244*** [7.48201]	- 0.088279*** [3.82760]

Note: Asterisks * , ** , *** denotes statistical significant at 10%, 5 % and 1% respectively

The Dynamic Analysis : Generalized Variance Decomposition

As the conventional variance decomposition based on Choleski's decomposition are sensitive to the ordering of the variables, this shortcoming can be overcomed by constructing the Generalized Variance Decomposition (GVDs).[20] The GVDs for FDI suggest that its movements at short forecasting horizons are driven mainly by the historical innovation in FDI itself. Other variables (UR, EG and EX) contributes around 6 percent of the innovation in FDI. Innovations in UR explain around 1.4 percent of Malaysia's FDI variance at the 24-month horizon.

As the forecast horizon increases, the importance of historical shocks related to changes in EG explains about 3 percent of the variation in FDI. At longer horizons, shocks to EX explain about only 2 percent of movements in FDI. Also, as the forecast horizons increases, the importance of historical shocks associated to EG and EX declines.

Table 8 : Generalized Variance Decomposition

Horizon	ΔFDI	ΔUR	ΔEG	ΔEX
Variance Decomposition of ΔFDI				
1	**100.0000**	0.0000	0.0000	0.0000
3	**92.9859**	1.7012	3.7296	1.5831
6	**93.4671**	1.5320	3.2918	1.7089
12	**93.9485**	1.4160	2.9144	1.7208
24	**94.1287**	1.3719	2.7532	1.7460
Variance Decomposition of ΔUR				
1	7.5656	**92.4343**	0.0000	0.0000
3	6.7691	**89.7445**	3.3691	0.1171
6	6.9365	**90.4709**	2.3343	0.2582
12	6.8962	**91.4642**	1.3916	0.2479
24	6.8476	**92.0574**	0.8510	0.2437
Variance Decomposition of ΔEG				
1	18.0209	27.1000	**54.8789**	0.0000
3	18.9613	24.7367	**53.3413**	2.9605
6	18.4808	26.4460	**50.9616**	4.1115
12	17.3378	27.9433	**47.8090**	6.9098
24	15.6792	30.0247	**43.3508**	10.9451
Variance Decomposition of ΔEX				
1	9.2600	0.9669	28.7513	**61.0217**
3	18.0227	2.4221	31.4298	**48.1252**
6	19.7832	2.5522	31.0498	**46.6146**
12	20.2842	2.6932	31.3950	**45.6274**
24	20.6107	2.7677	31.5665	**45.0548**

Conclusion

The role of FDI in economic development and employment creation of developing nations is important. FDI played a major role in initial economic development of many Southeast Asian countries, namely Malaysia and Singapore. The results of the analysis show that firstly, at least one unique co-integrating relationship exists for Malaysia; secondly, both models of unemployment and economic growth display a long-run causality from independent variables to dependent variables (namely unemployment and economic growth); thirdly, economic growth and exports are found to be the main determinants of unemployment in Malaysia and finally, as the forecast horizons increases, the importance of historical shocks associated to economic growth and exports declines. Thus, maintaining a high economic growth and strengthening the exports sector are crucial to ensure a low unemployment in Malaysia

Endnotes

[1] This argument is made by Addison and Mavrotas, see T Addison and G. Mavrotas, "Foreign direct investment, innovative sources of development finance and domestic resource mobilization," 2004, unpublished paper, p. 3.

[2] See for example, W. Galenson, *Labor and Economic Growth in Five Asian Countries* (New York: Praeger, 1992), p.6.

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[4] For further readings, see J.R. Markusen, J.R Melvin, W.H. Kaempfer, and K.E. Maskus, *International Trade: Theory and Evidence* (Singapore: McGraw-Hill, 1995), p. 394.

[5] See A Chowdhury and G. Mavrotas, "FDI and Growth: What causes what?" *The World Economy*, Vol. 29, No. 1 (2006), pp. 9-19.

[6] For further discussion, see J.L. Tongzon, *The Economies of Southeast Asia: before and after the Crisis,* 2nd. Ed. Cheltenham (UK: Edward Elgar, 2001), p. 142.

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[11] See T Addison and G. Mavrotas, "Foreign direct investment," p. 5.

[12] See Z. Hasan, "Determinants of FDI flows to developing economies: evidence from Malaysia." MPRA Paper No, 2822. (2004).

[13] These findings are agreed upon by Harrold, Greenaway, and Yue. see, for example, P. Harrold, "China: Foreign trade reform: now for the hard part?". *Oxford Review of Economic Policy*, 11,(1995), pp. 133-146 ; D. Greenaway, "Does trade liberalisation promote economic development?" *Scottish Journal of Political Economy*, 45, (1998), pp. 491-511; C.S. Yue, "Trade, foreign direct investment and economic development of Southeast Asia," *The Pacific Review*, 12, (1999), pp. 249-270.

[14] See, for example, X. Liu, "Comparative productivity of foreign and local firms in Chinese industry," 27th UK Chapter AIB Conference Proceedings, 2, (2000): 115-136 ; J. Shan, "A VAR Approach to the economies of FDI in China". *Applied Economics,* 34 (7), (2002), pp. 885-893.

[15] See Z. Hasan, "Determinants of FDI flows to developing economies.

[16] See, for example, S. Johansen, "Statistical analysis of cointegration vectors" *Journal of Economic Dynamics and Control,* 12 (1988), pp. 231-254; S. Johansen and K. Juselius, "Maximum Likelihood estimation and inference on cointegration with applications to the demand for money," *Oxford Bulletin of Economics and Statistics,* 52 (1990), pp. 169-210.

[17] For further discussion, see D.F. Hendry, *Dynamic Econometrics* (Oxford: Oxford University Press, 1995), pp. 170-171.

[18] Yan Ho-Don, "Causal relationship between the current account and the financial account," *International* R *Advances in Economic Research,* 11(2005), pp. 149-162.

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