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Macroeconomic Determinants of Capital Flight: An Empirical Study in Malaysia

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Abstract: This study aimed to examine empirically the macroeconomic determinants of capital flight in Malaysia, namely the Foreign Direct Investment (FDI), external debt, stock market and political risk. To perform the empirical research, the Augmented Dickey-Fuller (ADF) and Phillips-Peron (PP) unit root tests as well as the Kwiatkowski-Phillips-Schmidt-Shin (KPSS) stationary test were conducted to examine the order of integration of the variables. Bounds test for cointegration and the Autoregressive-Distributed Lag (ARDL) approach were utilized to determine the factors affecting capital flight in Malaysia by employing the measure of World Bank (1985). Empirical results indicated that there is a long-run relationship among the variables under study. The findings denoted that political risk and financial crisis are positively related to capital flight in Malaysia, whereas FDI, external debt and stock market have negative impact on capital flight. In addition, the results also indicated that there is a short-run causal impact running from specific determinants towards capital flight. This study suggests that the government should implement appropriate economic policies to reduce capital flight in Malaysia. This is because the management of capital flight and macroeconomic policies has become increasingly important in an ever more integrated global economy.

Key words: Capital flight, Foreign Direct Investment (FDI), political risk, bounds test, Autoregressive Distributed Lag (ARDL)

INTRODUCTION

Since the late 1990s, private capital flows have become an increasingly important source of investment for many developing countries. This has become an essential step in facilitating economic integration and promoting a wider division of labor within the region. Consequently, strong economic growth, healthy corporate and household sectors and continue global search for yields have led to huge capital inflows into Asia region. As such, it has brought about an impressive achievement on Foreign capital flow that has eventually exposed East Asia to international economics activities (Urata, 2001). However, private capital flow tends to be volatile in which financial upshots can cause a sudden reversal of capital flows as well as deep declines in inflows. For example, the Asian financial crisis in 1997-1998 has raised arguments on the region's overdependence on foreign capital flow, most often taken as one of the development strategies (Stiglitz, 2001).

It is assumed that Foreign Direct Investment (FDI) is more stable as compared to portfolio investment in which it is less prone to volatility and brings significant development benefits to the country. Therefore, many developing countries came out with incentive packages which can trigger foreign capital inflow. According to Ghose, many economists believe that the surge in cross-border capital flows since, the early 1990s has generated unprecedented chances for developing countries, which in turn will speed up the country's economic growth.

However, such inflows of capital can also lead to rapid expansion that will sooner or later cause inflation. Thus, if a country depends heavily on foreign capital, it may, in the worst case scenario, cause the collapse in currency and stock market in which the economic activities are destroyed by a sudden and there will be huge withdrawal of capital. This happened during the 1997-1998 Asian economic crisis when many countries panicked due to sudden and large outflows of investment that worsen their already fragile macroeconomic conditions. It also sparked a chain reaction where it had caused political instability within the nation that further fuelled capital flights.

Capital flight is the shift of one's investment from one market to another in search of greater prospect or increased returns. This is sometimes stimulated by a nation's unfavourable conditions. For example, the

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country may be undergoing high inflation or political turmoil. However, it is most commonly seen at times of currency instability. Besides, capital flight is prone to investment in highly liquid short-term assets instead of private long-term investments (Adetiloye, 2011). Epstein (2005) defined capital flight as "the transfer of assets abroad to reduce loss of principal, loss of return or loss of control over one's financial wealth due to government-sanctioned activities". In short, capital flight is bad for the home country as it deters the economy and this effect is even more devastating in developing countries as most developing nations are often not strong enough to sustain large amount of capital flight. As a result, this will further increase Foreign debts, distort the base for taxation and trigger real capital outflow (Khan and Haque, 1985).

Capital flight is important because it has significant social costs and is also a barometer of the sovereignty of government policy versus that of class privilege. In addition to that, it is related to the impact of important economic policies, notably financial liberalization. According to Epstein (2005), in most developing countries, capital flight has been both sizeable and also costly in recent decades. For instance, capital flight has ranged from less than 1% of GDP in Iran to over 60% of GDP in Kuwait. Besides, capital flight occurs when capital or foreign exchange is scarce in these countries. It subsequently leads to a loss in investment that is essential to boost the countries' infrastructure, industry and human capital growth.

The adverse impact of capital flight is often associated with increase in taxation or control over private wealth. This means that it will widen wealth inequality among the people where wealthy citizens will try very hard either to escape higher taxation or go back home with lower tax returns. The poorer citizens, on the other hand, will be forced to face higher taxation and cuts in social services. In addition, when a financial crisis is coupled with capital flight, it can heighten unemployment other than causing a wide spread sluggish, zero or negative economic growth. These crises impose disproportionately high costs on poorer members of a society. Moreover, capital flight imposes two times whammy on the poor if it is the main contributor to financial crisis. In view of the importance of capital building towards economic growth of a nation, this paper is devoted to investigate the macroeconomic determinants of capital flight in Malaysia.

Capital flight in malaysia: Figure 1 presents the capital flight estimates in Malaysia from 1980-2010 according to the measure of World Bank. Figure 1 shows that capital flight decreased in 1994, possibly due to the 1994-1995 Mexican debt crisis. This crisis was triggered by a sudden devaluation of the Mexican peso in December 1994. Consequently, both investment and consumption fell sharply in Mexico and induced capital outflow from the region. Malaysia, being a fast growing developing country, had benefited considerably from the inflow of foreign capitals during the early 1990s. As such, capital flight in 1994 was tolerable. Few years later, an intense outflow of capital broke out in 1998 due to the Asian financial crisis. After Thai Baht was speculatively attacked, the Malaysian ringgit was not spared as well and came under severe selling pressure. In the end, many investors pulled out their investments and invested in other countries which were deemed more stable.

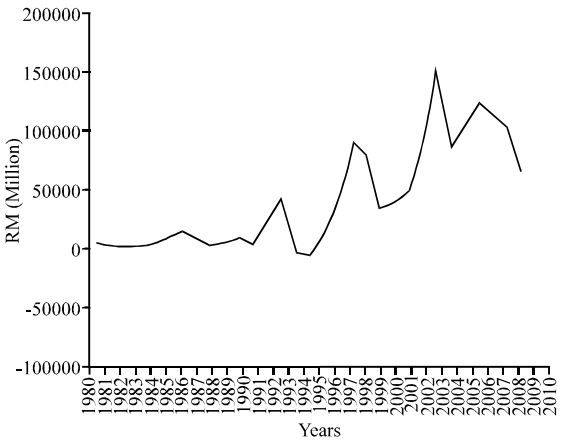

Fig. 1: Capital flight in Malaysia, 1980-2010

At its lowest point, the Malaysian ringgit depreciated against the dollar by almost 50%, hitting a high conversion rate of RM4.88 to one US dollar on January 7, 1998 (Ariff and Abubakar, 1999).

Even more drastic than the plunge in the exchange rate was the collapse of the stock market. Between July and December 1997, the KLSE composite index fell by 44.9 %. Following a slight recovery in the first quarter of 1999, the index again fell, this time to an eleven-year low of 262.70 points on September 1, 1998. On the whole, between July 1, 1997 and September 1, 1998, market capitalization in the KLSE fell about 76% to RM181.5 billion (Ariff and Abubakar, 1999). In addition, the property bubble subsequently busted and the crash was accompanied by massive capital outflows as confidence in the Malaysian economy became increasingly shaky. As such, the banking system began to experience increasing Non-Performing Loans (NPLs) which according to Bank

Negara Malaysia (BNM) data, rose from a modest 2.18% in June 1997 to 4.08% in December 1997and then to a record high of 11.55% in July 1998.

During 2004 and 2005, the world economy experienced crude oil price hike to an abnormal level with the price exceeding US$70 per barrel after the hurricanes in US (Jalil *et al*., 2009). Increase in crude oil price caused the petrol price to increase sharply in the international market as well. This directly heightened production costs and affected many countries. However, as one of the petroleum exporting countries, Malaysia was able to benefit from the high crude oil price at that time. Owing to the oil subsidy policy in Malaysia, the domestic petrol price was still relatively lower compared to most countries in the region. Therefore, this has maintained a steady economy growth and hence, reduced capital flight (Fig. 1). Unfortunately, like many other countries, Malaysia could not escape the global financial crisis in 2008. The extent of the problem was so severe that stock markets around the world fell, large financial institutions collapsed and governments in even the wealthiest nations had to come up with rescue packages to bail out their financial systems. Capital outflow in Malaysia was not as severe at that time (Fig. 1), probably due to the inflow of capitals from harshly affected countries. These countries include US and the European Union and the capitals were directed into other emerging markets that included Malaysia.

Literature review: Chunhachinda and Sirodom (2007) found that a positive relationship exists between FDI and capital flight in countries such as Thailand, the Philippines, Indonesia, Malaysia and South Korea. This was due to the discriminatory policy imposed by government to attract Foreign investors instead of domestic investors. For instance, the government in Thailand discriminately granted privilege to Foreign investors instead of their local investors. This in turn caused the domestic investors to shift their money to other countries which offer higher return. In contrast, the authors revealed that capital flight and FDI can have negative relations if considering that high FDI indicates good domestic investment prospect. This is applicable when it is considered from the investment-climate perspective. Furthermore, Chantanawan (2000) discovered that FDI are positively related to capital flight when the over-valuated local currency depreciates. As a result, it will drive local investors to move their capital to be reserved in a more stable currency. Harrigan *et al*. (2002) also pointed out that FDI yields negative influence on capital flight according to Dooley, World Bank and Private Claim measurements.

It is possible that an increase in Foreign borrowings can lead to a lower pressure for capital flight, provided that taxation on domestic assets does not increase at the same time (Mikkelsen, 1991). Capital flight can be shunned when the borrowed money is used efficiently. This can be done by allocating the money to suitable economic sectors to stimulate economic development. Under such condition, lowering down debt inflows may deteriorate local economic conditions and result in greater capital flight (Chipalkatti and Rishi, 2001; Chunhchinda and Sirodom, 2007). Nevertheless, it should be noted that Reinhart and Rogoff (2004) also argued that failure in paying back the debt or when there is a high potential of default, it will also cause capital outflows from developing countries.

Ndikumana and Boyce (2003) revealed that credit to private sectors has a negative and statistically significant effect on capital flight. They also found that an encouraging financial development can decrease capital flight because it boosts opportunities for portfolio diversification in a country. The result also showed that there is no significant relationship between liquid liabilities and capital flight. Nonetheless, the links between financial development and capital flight have put the measurement of financial intermediation into a sensitive choice. Besides, Lensink *et al*. (1998) discovered that financial liberalization leads to a reduction in capital flight. By using M2/GDP ratio to measure financial development, they found that there exists a negative and significant relationship among demands of deposits on capital flight. On the other hand, Auguste *et al*. (2002) stated that Argentine stock market was positively associated with capital flight. Also, Denis (2005) indicated that net capital outflow in Russia did not have detectable medium or long-term effect towards domestic capital market. Thus, capital flight can be redefined merely as a reconsideration to find optimal solutions for institutional deficiency problems.

A study on the relationship between political risk and capital flight based on 45 developing countries suggested that political instability is the most important factor associated with capital flight (Le and Zak, 2006). This is because violent events such as guerrilla warfare and assassinations or even political turmoil like irregular government changes managed to increase the capital flight in past events. This happened as the investors' confidence level was severely affected and many preferred to transfer their funds overseas. A recent study by Brada *et al*. (2011) that examined the relationship of political risk and capital flight in seven countries of the Commonwealth of Independent States reported that political factors affecting the expected return to domestic

investments can be captured by the country's polity score variable. A more democratic regime provides investors with protection through the rule of law and limits on predation. To sum up, as political risk is low, it helps to lessen the outflow of capital and therefore, a positive association exists between political risk and capital flight.

MATERIALS AND METHODS

This study employed the measure of World Bank in capturing the determinants of capital flight. This is termed as "residual method" or "indirect method" since it is used as a broader estimation of capital flight (Beja, 2005). The measure of World Bank compares the sources of finance (the change in external debt and net FDI) with the uses of finance (a current account deficit and the change in official reserves).

The model specification in this study can be represented by the following equation:

$$CFWBGDP = \alpha + \beta_1 FDIGDP + \beta_2 DEBTGDP + \beta_3 LKLCI + \beta_4 LPR + \beta_5 DUM98 + \epsilon_t$$

Where:

CFWBGDP	=	Ratio of capital flight to
GDP FDIGDP	=	ratio of FDI to GDP
DEBTGDP	=	ratio of external debt to GDP
LKLCI	=	log stock market
LPR	=	log political risk
DUM98	=	dummy variable and
ϵ_t	=	error term

The rationale of using the above-mentioned independent variables is that they are the important variables that can influence capital flight. Ayanwale (2007) found that adjusting FDI flows by GDP eliminates the influence of market size on the scale of FDI inflows. When an economy is performing well, it will attract investors and promote investment, thereby reduces capital flight.

Furthermore, the ratio of total external debt to GDP is used in this study because it shows the finances of the nation as a whole. The increase in external debt usually brings about inflationary financing, thus a positive linkage may exist between external debt and capital flight (Ljungwall and Zijian, 2008). It also means that when the debt level is lower, the nation is actually suffering from lesser resources and thus, this indicates that the capacity for the economy to grow has shrunk (Chipalkatti and Rishi, 2001). This will adversely affect the local economic condition and lead to greater capital flight.

Besides, the basis of using stock market is that movement in the stock market can affect consumers' decisions. For example, a rise in the stock market may be a sign of higher-than-expected current wealth and this will, in most cases, boost the confidence of consumer to make more investment. Not only that, increase in stock market may reflect good economic performance and this can further increase investors' confidence to own more stocks and hence, reduce capital flight (Lensink *et al*., 1998).

Political risk is employed as one of the determinants of capital flight in this study because it enables the socio-political instability and regime changes to be captured. According to Venieris and Gupta (1986), socio-political instability has adverse effect on the economy in which it deteriorates the physical or human capital. In addition, Alesina and Tabellini (1989) also pointed out that capital flight will arise when two important social groups in a country behave uncooperatively.

A dummy variable was added in this study to capture the crucial impact of Asian financial crisis towards capital flight in Malaysia since there was a huge capital outflow during the Asian financial crisis in 1998. Example of past studies that used dummy variable to capture events in measuring capital flight are Cheung and Qian (2010), Davies (2007) and Lan *et al*. (2010) to name few.

The time series data used in this study were collected for the period of 1975-2010 from various issues of Monthly Statistical Bulletin from BNM, World Bank and Freedom House. This study employed Augmented Dickey-Fuller (ADF), Phillips Peron (PP) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) tests to observe the stationary properties of the time series data. Meanwhile, the bounds testing approach to cointegration has been utilized to examine the long-run equilibrium relationship. The Autoregressive-Distributed Lag (ARDL) tests were performed to obtain the long-run estimates of the model. Then, Granger causality test results based on Error-Correction Model (ECM) was generated from the ARDL model. Lastly, diagnostic check was carried out to scrutinize the goodness-of-fit of the model.

RESULTS AND DISCUSSION

Prior to testing of cointegration, we have investigated the order of integration for each variable using ADF, PP and KPSS tests. The obtained result for all the three ADF, PP and KPSS tests collectively indicated that the selected variables in this study, are in a mixture of I(0) and I(1) processes. To conserve space, the results of ADF, PP and KPSS tests are not presented here but they are available upon request from the authors.

Table 1: Results of Bounds test for cointegration

Significant level (%)	Pesaran critical values I(0)	Pesaran critical values I(1)	Narayan critical values I(0)	Narayan critical values I(1)
Critical values bounds of the F-statistic: unrestricted intercept and no trend				
90	2.26	3.35	2.508	3.763
95	2.62	3.79	3.037	4.443
99	3.41	4.68	4.257	6.040
F-statistic	0.446			

Critical values are obtained from Pesaran *et al.* (2001) table Case 3 unrestricted intercept and no trend and Narayan (2005); CFWBGDP, FDIGDP, DEBTGDP, LKLCI, LPR and DUM98

In the following stage, we utilized the bounds testing approach to cointegration to study the long-run equilibrium relationship of the specified variables in the model. Critical values for the bounds test for cointegration based on Pesaran *et al.* (2001) were adopted in this study. These critical values are generated for sample sizes of 500 and 1000 observations, with 20000 and 40000 replications, respectively. However, Narayan (2004, 2005) argued that the existing Pesaran *et al.* (2001) critical values are inappropriate to be applied in small sample sizes study because they are generated based on large sample sizes. Given that our sample size was <40 observations, we also employed the critical values reported in Narayan for sample sizes of 30-80 observations. We chose the number 4 as the maximum order of lags in the ARDL Model based on Akaike Information Criteria (AIC).

The obtained *F*-statistic for cointegration test is presented in Table 1 in the estimated F-statistic (*F*-statistic = 0.446) is clearly less than the upper bound critical values tabulated in Pesaran *et al.* (2001) and Narayan (2005). Thus, the null hypothesis of no cointegration cannot be rejected and there is no cointegration between the variables for the model.

However, some past studies reported that no cointegration in bounds test estimation do not really prove that the variables are not cointegrated in the long-run. This is because there is more superior test for cointegration than the bounds test. A significant ECM is a relatively more efficient way to establish cointegration as it is more powerful compared to the F-test (Kremers *et al.*, 1992). This argument has been supported by Weliwita and Ekanayake (1998) and Bahmani (2001) in which they stated that a negative and significant Error-Correction Term (ECT) implies that there is a tendency for the variables to restore equilibrium after a short-run disturbance.

In view of this, in the next step, we obtained the ECT_{t-1} based on ARDL framework. The coefficient of ECT_{t-1} is found to be negative and highly significant at 1% level (Table 2). This demonstrated that there is a stable long-run relationship among the variables. The

Table 2: Results of ARDL Error-Correction Model

Regressor	ΔCFWBGDP (1, 3, 3, 4, 4)
ECT_{t-1}	-0.624 (0.000***)

Asterisks (***) denoted the rejection of null hypothesis at 1%; The figures in (…) refer to the selected lag length based on AIC; The figures in […] refer to the probability values

Table 3: ARDL estimation results

Regressor	CFWBGDP (1, 3, 3, 4, 4)
Constant	1.068***(0.004)
FDIGDP	-1.092**(0.033)
DEBTGDP	-0.359**(0.033)
LKLCI	-0.177***(0.002)
LPR	0.314**(0.027)
DUM98	0.325**(0.018)

Asterisks (**) and (***) denoted the rejection of null hypothesis at 5% and 1% significant levels, respectively; The figures in (…) refer to the selected lag length based on AIC; The figures in […] refer to the probability values

coefficient of ECT is-0.624, suggesting that deviation from the long-term capital flight is corrected by 62% over the following year. Hence, it further shows that there is a relatively fast adjustment process and it takes around a year and a half for the disequilibria of the previous shock to adjust back to the long-run equilibrium in the current year.

Besides, the absolute value of ECT coefficient is less than one, suggesting that the error-correction process monotonically converges to equilibrium path, rather than fluctuating around the long-run values with decreasing magnitude (Chandran and Krishnan, 2009; Shahbaz and Islam, 2011).

Next, the generated ARDL long-run estimates with respect to capital flight are presented in Table 3. The test statistics showed that FDIGDP, DEBTGDP and LKLCI are negatively related with capital flight, whereas LPR has a positive association with capital flight. As illustrated in Table 3, the coefficient of FDIGDP (-1.092) is negative and is statistically significant at the 5% level. This suggests that in the long-run, an increase of 1% in FDIGDP is associated with a decrease of 1.092 unit change in capital flight. Thus, there is a negative relationship between FDIGDP and capital flight. This is in line with the findings of Chunhachinda and Sirodom (2007) and Harrigan *et al.* (2002) in which they found that capital flight and FDI are negatively related. A higher level of FDI indicates that the country is doing well from investment-climate perspective. Thus, it means that capital flight is lessening as the investment at home offers more attractive and lucrative returns as compared to investment abroad. As such, high level of FDI will lead to a lower level of capital flight.

Meanwhile, DEBTGDP is also significant at 5% level whereby an increase of 1% in DEBTGDP is related with a decline of 0.359% change in capital flight. Past studies reported that lower debt level is a sign of a lesser amount of resources in the economy and this eventually turn out

to be a barrier to economic growth that in time would lead to huge amount of capital flight. This is because government borrowing enables the economic to benefit from growth. For example, the borrowed money can be used to run the transport infrastructure in order to improve the supply-side capacity of the economy and at the same time it is able to encourage long-run growth. Other than that, the borrowed money can be used for investment in health and education sectors which can bring positive effects on labour productivity and employment. This argument has been supported by Chipalkatti and Rishi (2001) as well as Chunhachinda and Sirodom (2007) who found that a negative correlation exists between external debt and capital flight if the borrowed money is utilized efficiently. Moreover, Mikkelsen (1991) also documented that the possibility of an increase in external debt will reduce the pressure of capital flight through relaxation of domestic assets' taxation.

The coefficient of LKLCI is -0.177 and it is statistically significant at 1% level. This implies that 1% increase in stock market will lead to a drop of 0.177% in capital flight in the long-run. Such situation was observed during the 1997-1998 Asian financial crisis whereby huge inflows of funds as equity investment in the stock market led to assets price boom in properties and stock markets. However, an expectation of a currency crisis caused the economy to slow down and resulted in a deep decline in the share market. Consequently, as a country which was highly dependent on the inflows of Foreign portfolio, Malaysia was forced into a sudden withdrawal of Foreign funds and selling of shares. Unsurprisingly, this also caused a huge outflow of capital (Hasan, 2002).

As for LPR, the estimated result showed that it has a positive and significant relationship with capital flight at 5% significance level which implies that as political risk increases, capital flight will rise too. This result is similar to the findings of Le and Zak (2006) that documented that if the economy is in an unstable political situation, the investors' confidence level will be affected by the increasingly risky political status. For example, the Barisan Nasional has experienced great lost during the general election back in 2008 which in turn lead to increasing political instability that influences investors' sentiment. Moreover, a more democratic regime provides investors with protection through the rule of law and limits on predation and hence, decreases the level of capital flight (Brada *et al*., 2011). In short, socio-political instability has adverse effect on the economy as it worsens the physical and human capital before triggering capital flight (Venieris and Gupta, 1986).

In regards to the aforementioned dummy variable incorporated in this study, it is found that the variable, termed as DUM98, is statistically significant at 5% level. This is consistent with the statement of Pastor (1990) who stated that crisis arises from the depreciation of local currency and the quick change in investment risk will escort to significant capital flight due to economic downturn. Khan (2015) and Kueh *et al.* (2014) reached the same conclusion and stated that decline in currency values during financial turmoil reduced investors' confidence, leading to more capital outflow. Besides, significant dummy showed that the 1997-1998 Asian financial crisis had left an unforgiving impact on capital flight (Chunhachinda and Sirodom, 2007). This is also in line with the study by Choong *et al.* (2010) in which they reported that the Asian financial crisis had hampered real economic activities and economic growth.

Table 4: Granger causality test results

Null hypothesis	Values
FDIGDP does not Granger cause	16.817***
CFWBGDP	(0.000)
DEBTGDP does not Granger cause	5.197**
CFWBGDP	(0.023)
LKLCI does not Granger cause	32.905***
CFWBGDP	(0.000)
LPR does not Granger cause	43.110***
CFWBGDP	(0.000)

Asterisks (**) and (***) denote the rejection of null hypothesis at 5% and 1% significant levels, respectively; The figures in […] refer to the probabilities.

Table 5: Diagnostic tests for ARDL estimation results

Tests	CFWBGDP (1,3,3,4,4)
Serial correlation	0.962 (0.992)
Functional form	3.240 (0.072)
Normality	1.315 (0.518)
Heteroskedasticity	0.368 (0.985)

The figures in (…) refer to the selected lag length based on AIC. Serial Correlation = Lagrange Multiplier (LM) test of residual serial correlation; Functional Form = Ramsey's RESET test using the square of fitted values; Normality = Based on a test of skewness and kurtosis of residuals; and Heteroskedasticity = Based on the regression of squared residuals on squared fitted values. The figures in […] refer to the probabilities.

The short-run Granger causality test results based on ECM are presented in Table 4. The test results denoted that all independent variables, namely FDIGDP, DEBTGDP, LKLCI as well as LPR have short-run causal impact towards capital flight. This means changes in the past values of these variables do have the ability to affect the movement of the current values of capital flight.

To ascertain the adequateness of the ARDL Model and to serve as robustness check purposes, the diagnostic and the stability tests were conducted. The diagnostic tests result as presented in Table 5 indicated that the model passed the tests of serial correlation, functional form, normality and heteroskedasticity. This implied that the model did not suffer from autocorrelation and mis-specification problems and the obtained parameters were normally distributed with constant variance.

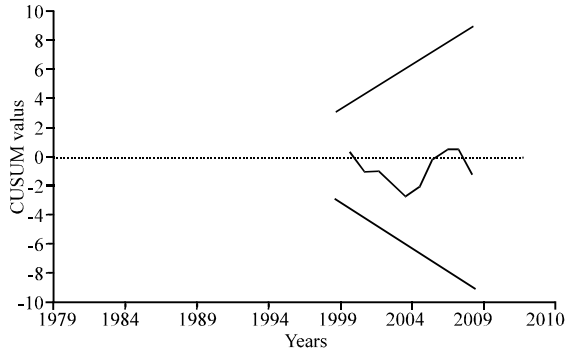

Fig. 2: CUSUM Stability test

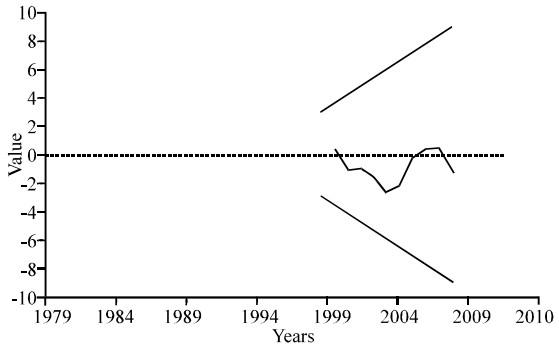

Fig. 3: CUSUM Squares Stability test

Moreover, it is clearly showed that the CUSUM and CUSUM squares statistics are laying well within the 5% critical bounds, implying that all the estimated coefficients in the ECM are structurally stable over time (Fig. 2 and 3). This finding is very important because a stable and well-fitted model is essential to generate a convincing result for policymakers.

CONCLUSION

In this study, we examined empirically the determinants of capital flight in Malaysia for the period 1975-2010 by utilizing the World Bank measurement of capital flight. The empirical results denoted that political risk and financial crisis are positively related to capital flight in Malaysia. On the other hand, FDI, external debt and stock market have negative impact on capital flight. Besides, there is an existence of short-run causality running from the specified explanatory variables towards capital flight. The diagnostic tests result further indicated that the model is well-fitted and did not suffer from any major time series estimation problem.

Given the importance of FDI in reducing capital flight, efforts to promote FDI would be more successful when the government authorities scrutinize them within the context of improving the overall investment climate. This can be achieved by upgrading the skills of the human capital base, reforming the overall tax system and retaining political and macroeconomic stability (Harrigan *et al*., 2002). Unfavourable tax structure would lead to higher operation and maintenance costs, thus, cause capital to outflow from the country. For the case of Malaysia, the corporate tax is 25% which is higher as compared to other countries in the region such as Singapore and Hong Kong. Therefore, Malaysia needs to lower its corporate tax in order to create a more competitive FDI environment. In addition, Malaysian government should further liberalize its economy by opening up more of its industry to foreign investors. This is because the country's development has been impeded by the restrictions in some sectors. As pointed out by Kueh *et al*. (2008, 2009), expansion in FDI and trade liberalization enables the Malaysian to benefit from better economic growth, standard of livings, technologies, knowledge as well as skills and ultimately reduce capital flight. Moreover, debt restructuring can be employed to create a buffer action in which the government can make efforts to stabilize their political and economic conditions during the buffer period (Choong *et al*., 2010). It is advised that the government should utilize fiscal and monetary policies in an efficient way to reduce the reliance on snowballing external debt.

It is also important to promote internal stock market development that will lead to an increasing movement towards external financial liberalization and interaction with internal reforms (Singh and Weisse, 1998). The flexibility that allows foreign investors to shift their capital in and out of stock markets, together with financial market integration with other countries can attract private capital to inflow. Apart from that, political stability is a necessity for investors as it promises a safer environment to invest. Most investors are well-aware of a country's political stability and often regard it as an important issue that can manipulate their decisions. Therefore, political stability is needed to retain capitals in an economy, otherwise investors will seek for more secure places to invest their capital other than for higher investment returns.

In view of this, a transparent and stable governmental policy is very important to sustain border security and domestic tranquility to stem capital flight (Moghadam *et al*., 2003). For example, a strong fundamental economic policy allows the country to become resilient to the external economic shocks, namely Asian financial crisis in 1997-1998, economic recession in 2001 along with global recession in 2008 (Kueh *et al*., 2014). Furthermore, there is no doubt that imposing

effective capital control can help the Malaysian economy in hauling through devastating economic upshots, as seen in the 1997-1998 Asian financial crisis. Unfortunately, such capital control incurs additional cost as it creates uncertainty and reduces the confidence of investors. Besides, capital control is only suitable to be applied in short-term situation to facilitate the recovery of economy. Therefore, capital control is not the most effective way in reducing capital flight. This is because neglecting the effect of capital controls on long-term capital flows, especially FDI, can result in policy mismanagement due to inconsistency in the attempts to simultaneously attract long-term favourable FDI flows and restrict short-term outflows.

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