ISSN: 1839 - 0846

Determinants of Foreign Direct Investment in Australia

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ABSTRACT

Determinants of Foreign Direct Investment (FDI) in Australia were analyzed from 1986 to 2011, based on data availability. The determinants considered FDI inflows according to aggregate FDI inflows and FDI inflows by the top three source countries (USA, UK and Japan). Empirical studies identified four results. (1) For the determinants of FDI in Australia, a larger market size will attract more FDI, whereas more openness and a higher corporate tax rate will discourage FDI inflows into Australia. Lower customs duty and lower interest and depreciation of exchange rates will attract more FDI. The relationship between FDI inflows into Australia and wages was not significant. (2) For the determinants of US inward FDI in Australia, a larger market size will attract more US inward FDI in Australia, whereas more openness and an appreciation of the exchange rate will discourage US inward FDI in Australia. A negative and significant relationship was obtained between customs duty and US inward FDI in Australia. There were positive and significant relationships between US inward FDI in Australia and both the interest and corporate tax rates. (3) For the determinants of UK inward FDI in Australia, greater research and development in Australia will attract more UK inward FDI in Australia, whereas a higher corporate tax rate will discourage UK inward FDI in Australia. The positive relationship between market size and UK inward FDI in Australia was not significant. Openness, customs duty and inflation did not have significant relationships with UK inward FDI in Australia. (4) For the determinants of Japanese inward FDI in Australia, higher wages and greater research and development will attract more Japanese inward FDI in Australia, whereas higher customs duty and a higher corporate tax rate will discourage Japanese inward FDI in Australia. There was no significant relationship between Japanese inward FDI in Australia and either the interest or exchange rates.

Keywords: *Foreign Direct Investment, Australia*

JEL Classification: *F43, O11*

I. INTRODUCTION

Foreign Direct Investment (FDI) is one of the indicators of the increased interdependence among economies. Since the mid-1980s, the world economy has experienced a rapid increase of FDI even faster than for world output or world trade. Lower trade barriers, liberalization of foreign investment regimes and advanced technology have helped to promote globalization, including the increase of Multinational Corporations (MNCs). Changes in the world economy and the rapid increase of FDI especially during the 1990s, have led to major revisions in investment regimes in most countries that earlier had maintained restrictions on FDI. The strong growth of FDI has led to extensive research on its determinants in both developed and developing countries.

The Asia Pacific region remains the top destination for investors, attracting about one-fifth of global FDI in 2010 (A.T. Kearney, 2012). Australia was ranked sixth in 2012 according to the FDI confidence index having moved up one place from seventh in 2010 as investors seem to remain confident about future prospects for the Australian economy and the business environment (A.T. Kearney, 2012). Australia now attracts a high level of FDI compared to other developed economies. The ratio of FDI to GDP is almost 36 percent which is well above the average for comparable developed economies of 25 percent (www.austrade.gov.au). Australia was ranked eighth worldwide in terms of the most attractive investment destination (Top 10 investment destinations in the world, 2012) and in terms of the top 10 largest FDI recipients in the world (UNCTAD, 2012). Its importance for the Australian economy is increasing. Australian inward FDI stock accounted for less than 10 per cent of the nation's GDP in 1986, but this had increased to almost 60 per cent in 2011. Australia received large FDI flows compared to the size of its economy; therefore, the fluctuation of FDI inflows may have an impact on its economy. Invest Australia (2012), a national inward investment agency, promoted Australia as a location of FDI and indicated that FDI contributes to Australian economic growth. The key issue arises—what causes the FDI inflows, that is, what are the determinants of FDI?

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II . STOCK OF INWARD FDI IN AUSTRALIA

Both FDI inflows of the world and in developed countries fluctuated in the same pattern from 1985 to 2011 (Figure 1). From 1985 until 1997, the upward trend of FDI inflows into Australia continued (Figure 2). The 1990s was a slower period of FDI inflows into Australia. The increase of FDI in the late 1980s and early 1990s was due to a large number of privatizations conducted by the State and Federal governments. The Victoria and South Australian State governments sold electricity enterprises to private foreign owners from the USA, UK and Southeast Asia. FDI inflows in the 2000s were larger. Australia's stock of inward FDI increased each year except in 2005 (Figure 2). FDI inflows decreased 14.74 per cent from US$ 284,951 million in 2004 to US$ 242,167 million in 2005 due to the relocation of the News Corp headquarters to the USA. The stock of inward FDI surged from US$ 242,167 million in 2005 to US$ 386,252 million in 2007 an increase of 59.50 per cent. Due to the global financial crisis, the stock of inward FDI in Australia dropped by 20.74 per cent from US$ 386,252 million in 2007 to US$ 306,174 million in 2008 (Figure 2). The major factors driving the decline of FDI inflows in 2008 were the financial sector problems in the USA and the liquidity crisis in the money and debt markets (UNCTAD, 2010). After the decline of inward FDI in Australia in 2008, it recovered rapidly from 2009 until 2011 (Figure 2).

II .1 Stock of Inward FDI by the Top Three Source Countries

The motivation for investing in Australia may vary depending on the source countries. MNCs from the USA, UK and Japan are major foreign investors. From 1986 to 2000, the combined contribution by MNCs from the USA and UK accounted for around 50 per cent of Australia's inward FDI stock, which made Australia dependent on the investment from these two countries. However, the shares of FDI from the top-three countries decreased from 73.16 per cent in 1986 to 49.72 per cent in 2011 (Figure 3). Since 1992, the USA has dominated Australia's inward stock of FDI. At the end of 2011, the proportion of USA, UK and Japanese total stock of inward FDI in Australia was only 24.89 per cent, 14.19 per cent and 10.64 per cent, respectively (Figure 3). Several countries have had strong trends in growth of FDI in Australia but still have only a small share. For example, Chinese FDI in Australia had an annual growth rate of 90 per cent in the five years to 2011 but accounted for only 3 per cent of total FDI in Australia and Singapore's FDI in Australia had an annual growth rate of 29 per cent since 2006 and made up only 4 per cent of total Australia's FDI (Stock of Foreign Direct Investment in Australia by Country, 2011). The global financial crisis resulted in a decline of the total stock of inward FDI in Australia by 20.74 per cent in 2008 and the stock of inward FDI from the USA, UK and Japan also reduced 24.98 percent, 21.78 per cent and 7.30 per cent, respectively (Figure 3). The FDI inflows from the top-three source countries fluctuated substantially as did the total FDI inflows into Australia. Therefore, it might be possible to explain part of the total FDI inflows by factors related to the source of investment.

III . REVIEW OF LITERATURE

In the empirical literature, there does not yet appear to be consensus on the important determinants of FDI. There are different FDI theories that use several variables and concepts because there are different types of FDI affected by different factors.

Azam (2010) investigated the effects of different economic determinants on FDI for three countries selected from Central Asia (Armenia, the Kyrgyz Republic and Turkmenistan) using secondary data from 1991 to 2009. A simple econometric model in log form was developed using the least squares techniques. The study found that market size and official development assistance had positive effects on FDI while inflation had a negative effect. In the case of Armenia, the effect of official development assistance on FDI was not significant. In the Kyrgyz Republic, the effect of inflation on FDI was not significant and had an expected negative sign. This study suggested that market size and official development assistance need to be encouraged and inflation needs to be managed to achieve a higher level of FDI.

Azam and Lukman (2010) examined the effect of various economic factors on FDI inflows into Pakistan, India and Indonesia from 1971 to 2005. The results revealed that market size, external debt, trade openness, physical infrastructure and domestic investment were the important economic determinants of FDI. The study suggested that to enhance FDI into Pakistan, India and Indonesia, the management authorities needed: to ensure economic and political stability; to secure the provision of infrastructure, peace and security and the rule of law; to encourage domestic investment; to curtail external debt; and to apply equal importance to appropriate monetary and fiscal policy.

Mohamed and Sidiropoulos (2010) analyzed the main determinants of FDI in the MENA countries (Algeria, Egypt, Jordan, Morocco, Syria, Tunisia, Bahrain, Kuwait, Oman, Qatar, Saudi Arab and the UAE) over the period 1975 to 2006. The study revealed the key determinants of FDI inflows there were the size of the host country, natural resources, the government size and the institutional variables. The external factors represented by global liquidity and trade variables both had a significant effect on the determinants of FDI in the MENA countries. The

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authors suggested that policy makers in the MENA countries should remove all barriers of trade, build appropriate institutions and develop their financial system.

Aw and Tang (2009) explored the determinants of Malaysian inward FDI. The study suggested that FDI and the major determinants were co-integrated, with these determinants being openness, the interest rate, the inflation rate, China joining the WTO and the level of corruption.

Mottaleb (2007) identified the influential factors that determine FDI inflow in developing countries by using panel data from 60 low-income and lower-middle income countries. He found that countries with a larger GDP, a high GDP growth rate and a business-friendly environment with abundant modern infrastructural facilities such as the Internet can successfully attract FDI.

Liang (2006) examined the market size of the host country based on the export- platform FDI in a three-country model. He used US data of foreign affiliate export sales from 1984 to 2000. He found that the affiliate activities in the export-platform FDI strongly depended on the market size of the host country.

Sahoo (2006) examined the impact and determinants of FDI in South Asian countries (India, Pakistan, Bangladesh, Sri Lanka and Nepal). The results from the panel co-integration showed that all potential determinants (market size, growth prospects and positive country conditions, labor cost and availability of skilled labor, infrastructure facilities, openness and export promotion, human capital, policy measures and the rate of return on investment) had a long-run equilibrium relationship. The major determinants of FDI in South Asia were labor force growth, market size, infrastructure index and openness. The most significant factors were market size and labor force growth.

Ali and Guo (2005) analyzed the determinants of FDI in China, a major emerging market attracting significant FDI inflows. They analyzed responses from 22 firms operating in China. The study showed that market size was a major factor for FDI especially for US firms. For local firms, the main factors were low labor costs, dealing with Asian firms and being export-oriented.

Braconier *et al.*(2005) used US and Swedish data to examine the effects of wages as a motivator of FDI. They found that wage levels had an important effect on the types of activities of affiliates in the host countries. The affiliate activities in production-factor-seeking MNCs were more sensitive to wage levels than for local-market-targeted MNCs.

Ha (2004) analyzed the actual management conditions of Korean investors overseas by using survey analysis with 1,503 Korean foreign affiliates. He found that the primary motive for investment was to reduce cost and the second was to gain market access.

Determinants of FDI: Australian Empirical Evidence

Kirchner (2012) found that FDI was positively related to economic and productivity growth but negatively related to foreign portfolio investment, trade openness, foreign real interest rate and the exchange rate. FDI was found to be a substitute for both portfolio investment and trade in goods and services. The exchange rate and the US bond rate affected FDI through the relative attractiveness of domestic assets. Actual FDI outperformed a model-derived forecast, consistent with the liberalization of foreign investment screening rules following the Australia-US Free Trade Agreement.

Yang *et al.* (2000) analyzed the determinants of Australian FDI using quarterly FDI inflows. They found that changes of the Australian interest rate, the level of Australian real wages and of industrial disputes increased FDI. However, Australian inflation and openness had negative effects on FDI. Exchange rate appreciation and a change in the Australian GDP were not significant relative to labor disputes (host/home), while a change in openness and in the level of Australian real wages and Australian industrial disputes had unexpected signs.

Tcha (1999) used a combination of aggregate quarterly and country-specific annual pooled data of six developed countries (Japan, US, New Zealand, Canada, UK and Germany). In the quarterly FDI model, the explanatory variables were only labor disputes and real exchange rate (plus four time lags of each variable). In the country-specific FDI model, the home current account balance, exchange rate volatility and the dummy for investment from Canada were significantly negative, while the dummy for Japan was significantly positive. The real exchange rate, the ratio of real wages, the ratio of real GDP per capita (host relative to home), the ratio of labor disputes, Australian real GDP and the dummy for UK, Germany and New Zealand were not significant.

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IV. METHODOLOGY AND DATA

IV.1 Data Source

Data prior to 1985 could not be used because the Australian Bureau of Statistics (ABS) changed the definition of FDI on June 30, 1985. This limits the number of observations. Using different sources to collect the data, a sample period of 26 years was selected from 1986 to 2011 with annual time series. The FDI inflows, Australian customs duty, Australian corporate tax rate and Australian government expenditure on R&D were obtained from the OECD. The data for trade openness, Australian real interest rate and Australian inflation rate were obtained from the World Bank while the data for exchange rate was obtained from UNCTAD**.**

IV.2 Methodology

There is no well developed comprehensive theory of FDI. Different variables are used to reflect a range of factors potentially affect FDI according to theoretical models and previous empirical studies.

The explanatory variables used in explaining the determinants of Australian FDI and country-specific (the top-three source countries) FDI in Australia are market size (measured by Australian GDP), factor cost (measured by annual minimum wage), protection (measured by customs duty), risk factors (measured by real interest rate, exchange rate and inflation), policy factors (measured by corporate tax rate and trade openness) and research and development.

To analyze the determinants of FDI in Australia, we build a model based on the theoretical and empirical studies to examine the important characteristics of the FDI inflows in Australia. The model is specified as a function in the following equation.

FDI = f (market size, wage, openness, customs duty, interest rate, exchange rate, inflation rate, corporate tax, RD)

The estimated model is represented by the following equation:

$$FDI_j = a + b_1S + b_2W + b_3O + b_4d + b_5i + b_6e + b_7inf + b_8ct + b_9RD + \varepsilon$$

Where:

FDI_j = FDI inflows into Australia (j =AUS represents total FDI inflows in Australia,
j = US, UK and Japanese represent US inward FDI in Australia, UK inward FDI in Australia and Japanese inward FDI in Australia, respectively
S = market size
W = wage
O = trade openness of the economy
d = Australian customs duty
i = interest rate
e = exchange rate
inf = inflation rate
ct = Australian corporate tax rate
RD = research and development expenditures
ε = error term

Simple linear regression model in log form is used and the ordinary least squares is applied for investigating the impacts of determinants on FDI. The data are converted into log form to overcome the non-linearity of the data.

Hypotheses

1) $\frac{\partial FDI}{\partial S} > 0$ Market size of the host country is usually measured by GDP or per capita income.

This study uses GDP as a proxy for market size. The size of the market is the indicator of the potential domestic demand and the host country's economic condition. A larger host country reduces the cost of supplying the market because of economies of scale and lower average fixed cost. A larger host market should attract more market-oriented FDI because it provides more opportunity for local sales and greater profitability of local sales to export sales (Pfefferman and Madarassy, 1992). The market size of the host countries is important even for the nonmarket-oriented FDI because larger economies can provide larger economies of scale (OECD, 2000).

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2) $\frac{\partial FDI}{\partial W} < 0$ Labor cost is usually considered an important factor to attract FDI. Labor cost has always been included in the empirical literature. This is true especially for labor-intensive production. However, for the market-oriented FDI, labor cost may not have any influence on FDI. Labor cost may also be high because of high local inflows of FDI. This study uses annual minimum wage as a proxy for labor cost. Higher labor cost is expected to decrease FDI because it makes production in the domestic country more costly relative to trading. It is expected to have a negative coefficient.

3) $\frac{\partial FDI}{\partial O} > 0$ Openness is one of the traditional variables used to explain FDI. Openness is defined as the ratio of total trade (imports plus exports) to GDP and is also interpreted as a measure of trade restriction. MNCs always invest in countries they already trade with. The more open the economy, the more attractive it is for FDI. This variable is important for foreign investors who are motivated by the export market. MNCs associated with export-oriented investment prefer to invest in a more open economy since decreased imperfections generally imply lower transaction costs associated with exporting. However, the expected effect of openness on FDI is ambiguous since the openness is not only attracting more FDI to the host country but also increasing the competition between the foreign and domestic firms. The expected effect of trade openness on FDI also differs according to the type of FDI. FDI inflows will be lower in the highly restrictive (high tariff) countries while not necessarily so for a vertical FDI. However, if there is less restriction to export or to re-export to the home country or third countries, vertical FDI could also be high. Nevertheless, openness is generally hypothesized as having a positive association with FDI.

4) $\frac{\partial FDI}{\partial d} > 0$ MNCs might prefer to invest and supply the foreign market directly rather than to export their goods if trade costs are higher. Thus, customs duty should encourage FDI.

5) $\frac{\partial FDI}{\partial i} < 0$ Higher interest rate could reflect higher market risk, thus reducing FDI. The higher the interest rate, the less FDI is likely to be received. Therefore, a negative relationship between FDI inflows and inflation is hypothesized.

6) $\frac{\partial FDI}{\partial e} < 0$ Nominal exchange rate, given as A$/US$, is measured for the competition. An appreciation of the Australian dollar increases the cost of investing in Australia, thus reducing FDI. On the other hand, MNCs will be able to invest more in a host country when its domestic currency is weaker. A depreciation of the A$ favors price competitiveness of Australian exports and attracts foreign investors using Australia as the export base.

7) $\frac{\partial FDI}{\partial inf} < 0$ Inflation rate is one indicator reflecting the stability of the economy. Usually, a high inflation rate could reduce the return on investment and is an indicator of instability of the economy. Investors have to spend more money in a host country with a high inflation rate. A lower inflation rate (more stable environment) will encourage more FDI. This study expects a negative effect of inflation on FDI.

8) $\frac{\partial FDI}{\partial ct} < 0$ The corporate tax rate of the host country is another factor that foreign investors would consider. A lower corporate tax rate makes investing more attractive for MNCs. MNCs minimize their tax burden through oversea operations.

9) $\frac{\partial FDI}{\partial RD} > 0$ The more research and development in the host country, the more attractive it is for MNCs to invest, so MNCs are expected to locate in an innovative and R&D-intensive environment.

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V. EMPIRICAL RESULTS

V. 1 Determinants of FDI Inflows in Australia

The estimated regression model explaining the determinants of FDI inflows in Australia is shown in equation (1).

$$\log FDI_{AUS} = -10.41 + 3.48 \log S - 1.92 \log W - 2.36 \log O - 0.60 \log d - 0.19 \log i$$
$$(-2.79)^{**} \quad (5.77)^{***} \quad (-1.59) \quad (-2.99)^{***} \quad (-2.55)^{**} \quad (-2.58)^{**}$$

$$- 3.16 \log e - 1.31 \log ct \qquad (1)$$
$$(-2.61)^{**} \quad (-4.50)^{***}$$

R-squared	0.9883	Sum squared residual	0.1648
Adjusted R-squared	0.9838	Durbin – Watson stat	2.3142
S.E. of regression	0.0957	F-statistic	217.3324

Note: (1) Values in parentheses are t-statistics.
(2) Asterisk ** and *** denote significant level at 5% and 1% respectively.

From equation (1), the impact of market size on FDI is positive and significant at the 99% confidence level. The impact of openness and corporate tax rate on FDI are negative and significant at the 99% confidence level. Customs duty, interest rate and exchange rate have negative and significant relationships with FDI. A negative and not significant relationship is obtained between wage and FDI.

V.2 Determinants of FDI Inflows into Australia by Major Source Countries

V.2.1 Determinants of US Inward FDI in Australia

The estimated regression model explaining the determinants of US inward FDI in Australia is shown in equation (2).

$$\log FDI_{US} = -19.97 + 3.81 \log S - 3.07 \log O - 0.75 \log d - 0.13 \log i - 0.89 \log e$$
$$(-3.22)^{***} \ (5.36)^{***} \quad (-2.46)^{**} \quad (-2.01)^{*} \quad (-1.04) \quad (-2.33)^{**}$$

$$- 0.67 \log ct \qquad (2)$$
$$(-1.36)$$

R-squared	0.9587	Sum squared residual	0.5123
Adjusted R-squared	0.9456	Durbin – Watson stat	2.1756
S.E. of regression	0.1642	F-statistic	73.4371

Note: (1) Values in parentheses are t-statistics.
(2) Asterisk *, ** and *** denote significant level at 10%, 5% and 1% respectively.

From equation (2), the impact of market size on US inward FDI in Australia is positive and significant at the 99% confidence level. The effects of openness and exchange rate on US inward FDI in Australia are negative and significant at the 95% confidence level. A negative and significant relationship is obtained between customs duty and US inward FDI in Australia. Interest rate and corporate tax rate have negative but not significant relationships with US inward FDI in Australia.

V.2.2 Determinants of UK Inward FDI in Australia

The estimated regression model explaining the determinants of UK inward FDI in Australia is shown in equation (3).

$$\log FDI_{UK} = 7.27 + 0.37 \log S - 0.79 \log O - 0.06 \log d - 0.09 \log i - 0.89 \log ct$$
$$(1.18) \quad (0.52) \quad (-0.72) \quad (-0.19) \quad (-0.84) \quad (-2.04)^{**}$$

$$+ 0.59 \log RD \qquad (3)$$
$$(2.70)^{***}$$

R-squared	0.9307	Sum squared residual	0.4115
Adjusted R-squared	0.9088	Durbin – Watson stat	1.3541
S.E. of regression	0.1472	F-statistic	42.5543

Note: (1) Values in parentheses are t-statistics.
(2) Asterisk ** and *** denote significant level at 5% and 1% respectively.

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From equation (3), the effect of corporate tax rate on UK inward FDI in Australia is negative and significant at the 95% confidence level. The effect of research and development on UK inward FDI in Australia is positive and significant at the 95% confidence level. Market size has a positive but not significant relationship with UK inward FDI in Australia. Openness, customs duty and inflation have negative and not significant relationships with UK inward FDI in Australia.

V.2.3 Determinants of Japanese Inward FDI in Australia

The estimated regression model explaining the determinants of Japan inward FDI in Australia obtain in equation (4).

$$\log FDI_{JAP} = \underset{(2.02)^*}{8.41} + \underset{(2.67)^{**}}{1.83} \log W - \underset{(-1.76)^*}{0.68} \log d - \underset{(-0.96)}{0.12} \log i - \underset{(-0.31)}{0.16} \log e_{JAP} - \underset{(-1.95)^*}{1.36} \log ct + \underset{(2.21)^{**}}{0.83} \log RD \quad (4)$$

R-squared	0.9342	Sum squared residual	0.7911
Adjusted R-squared	0.9134	Durbin – Watson stat	0.8464
S.E. of regression	0.2040	F-statistic	44.9552

Note: (1) Values in parentheses are t-statistics.
(2) Asterisk * and ** denote significant level at 10% and 5% respectively.

From equation (4), wage and research and development have positive relationships with Japanese inward FDI in Australia and are significant at the 95% confidence level. The effects of customs duty and corporate tax rate on Japanese inward FDI in Australia are negative and significant at the 90% confidence level. Interest rate and exchange rate have negative but not significant relationships with Japanese inward FDI in Australia.

VI. CONCLUSIONS

A comparison of the expected signs and the estimated signs on Australian FDI and on FDI inflows into Australia by Major Source Countries is shown in Table 1. For market size, both the expected sign and estimated sign are positive. This indicates that higher market size will attract more Australian FDI and US inward FDI in Australia.

For the wage variable, both the expected sign and estimated sign are negative in the Australian FDI model but not significant. However, in the model of Japanese inward FDI in Australia, the estimated sign contradicts the expected sign because MNCs from Japan required a high quality of labor.

For the trade openness variable, the estimated sign contradicts the expected sign in the Australian FDI model, and the models of US inward FDI in Australia and of UK inward FDI in Australia. For the customs duty variable, the estimated sign contradicts the expected sign in the Australian FDI model and the models of US inward FDI in Australia, of UK inward FDI in Australia and of Japanese inward FDI in Australia. According to the results from these two variables, government should focus on attracting exported-oriented or import-substituting FDI rather than FDI in general.

For the interest rate variable, both the expected and estimated signs are negative in the Australian FDI model and in the models of US inward FDI in Australia and of Japanese inward FDI in Australia. This indicates that a higher interest rate discourages FDI.

For the exchange rate variable, both the expected sign and estimated sign are negative in the Australian FDI model and in the model of US inward FDI in Australia whereas both the expected sign and estimated sign are negative in the model of Japanese inward FDI in Australia but this variable was not significant in any of the models. The results indicate that a depreciation of the A$ favors the price competitiveness of Australian exports and attracts foreign investors using Australia as their export base. This is consistent with the results from trade openness and customs duty.

For the inflation variable, both the expected sign and estimated sign are negative in the model of UK inward FDI in Australia but are not significant. The results indicate inflation is not a determinant of Australian FDI, US inward FDI in Australia, and Japanese inward FDI in Australia because in our model, we use the real interest rate, so inflation is already taken into account.

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For the corporate tax rate variable, both the expected sign and estimated sign are negative in the Australian FDI model and in the model of UK inward FDI in Australia and of Japanese inward FDI in Australia, while both the expected sign and estimated sign of the corporate tax rate are negative in the model of US inward FDI in Australia but none were significant.

For the research and development variable, both the expected sign and estimated sign are positive in the models of UK inward FDI in Australia and of Japanese inward FDI in Australia. This result is consistent with the market size variable, that is, inward FDI from US is market-oriented FDI.

Table 1 Comparison of the Expected Signs and the Estimated Signs

Variables	Expected Signs	Estimated Signs			
		FDI_{AUS}	FDI_{US}	FDI_{UK}	FDI_{JAP}
S	+	+	+	+ (ns)	X
W	-	- (ns)	X	X	+
O	+	-	-	- (ns)	X
d	+	-	-	- (ns)	-
i	-	-	- (ns)	X	- (ns)
e	-	-	-	X	- (ns)
inf	-	X	X	- (ns)	X
ct	-	-	- (ns)	-	-
RD	+	X	X	+	+

Note: 1. ns indicates not significant
2. X indicates not included

VII. ACKNOWLEDGMENT
The author thanks the Department of Economics, Kasetsart University for funding support for this paper.

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ISSN: 1839 - 0846

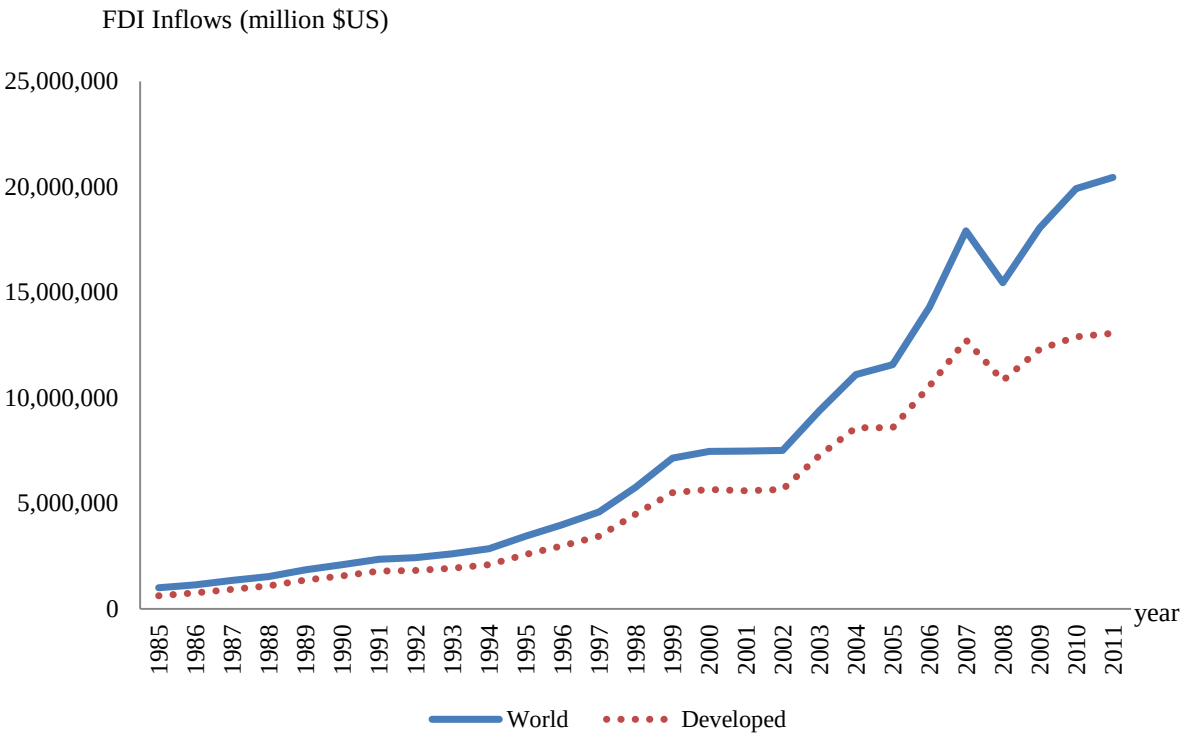

Figure 1: Trends of FDI Inflows from 1985 to 2011
Source: UNCTAD. World Investment Report

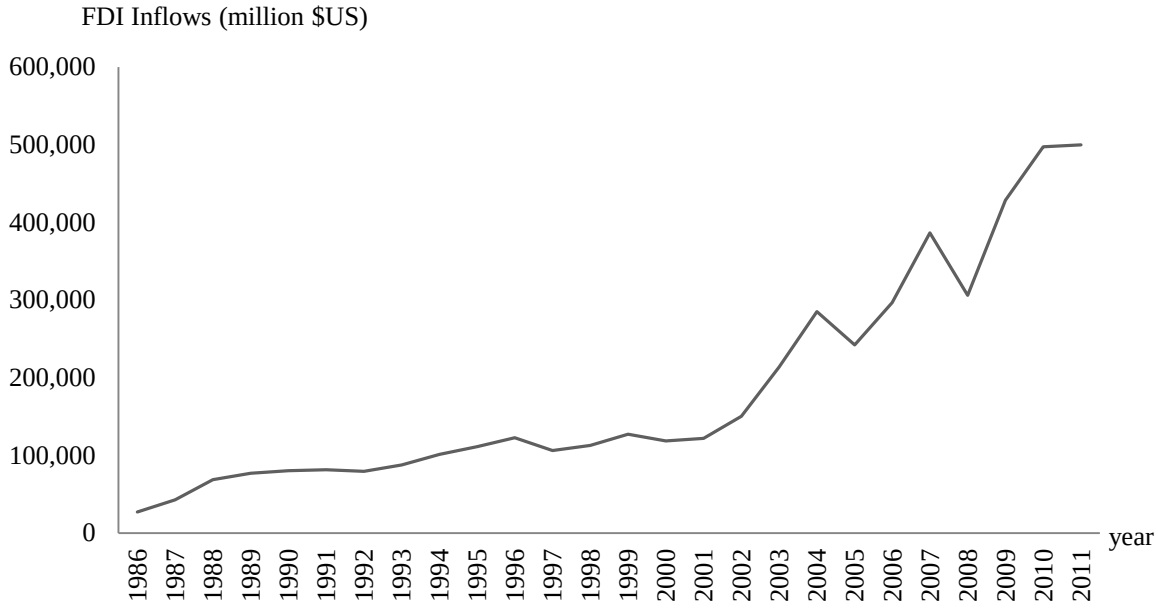

Figure 2: FDI Inflows into Australia
Source: UNCTAD. World Investment Report

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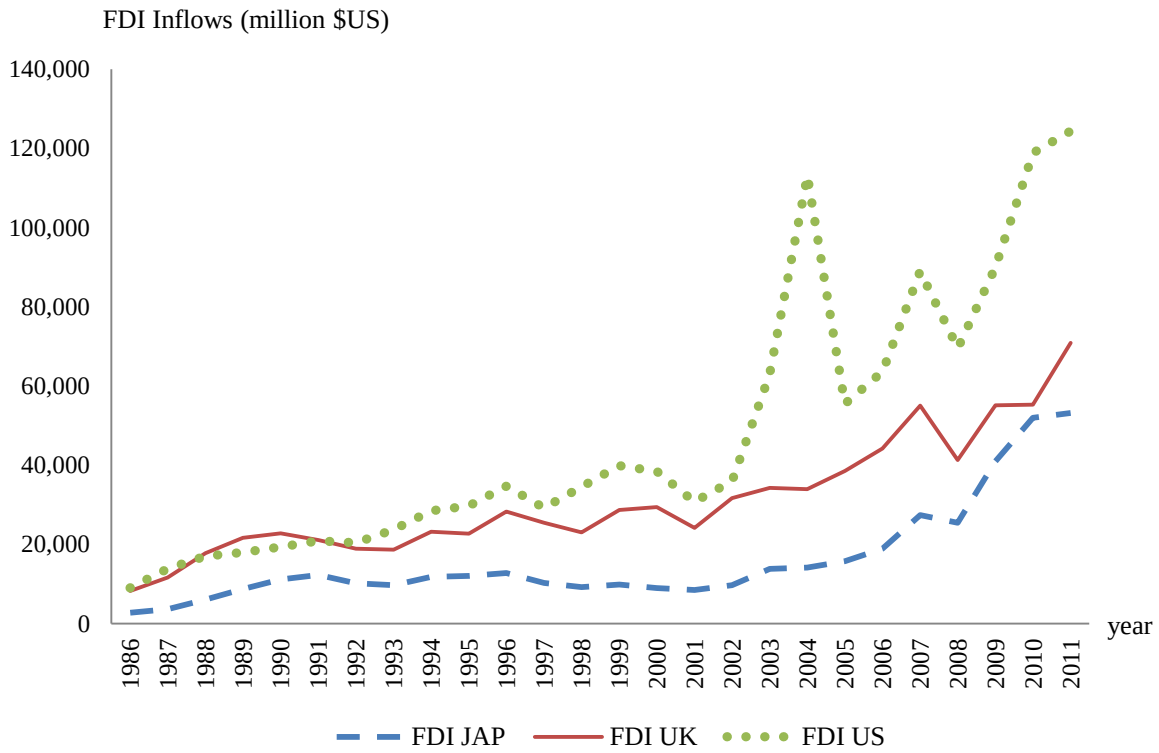

Figure 3: FDI Inflows by Top Three Source Countries
Source: OECD