THE EVOLUTION OF US OUTWARD FOREIGN DIRECT INVESTMENT IN THE PACIFIC RIM: A CROSS-TIME AND COUNTRY ANALYSIS

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Abstract

In this paper we analyse the location determinants of US FDI in the Pacific region of the OECD, i.e. Australia, New Zealand, Japan, and Korea, for 1982-1997. The data set allowed us to distinguish between two time periods i.e. the 1980s and the 1990s, and two different sub-groups, i.e. Australia and New Zealand, and Japan and Korea. Statistical evidence indicates a heterogeneous response of US FDI towards different countries and for different time periods. Factors such as market size, income level and qualified and productive labour exert a significant impact on both the timing and the locational choice of US investors in the region.

Keywords: Foreign Direct Investment, OECD, USA, Australia, Japan, Korea, N. Zealand.
JEL Classification: F21, F23, R19

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INTRODUCTION

Since the early 1950s the USA has been the largest foreign direct investor among the member-countries of the Organisation for Economic Co-operation and Development (OECD). Although, the wider OECD region itself attracts the bulk of US Foreign Direct Investment (FDI), specific geographical sub-regions seem to matter differently to US investors with the European Union (EU) holding a dominant position.

Insert table 1 here

It is not surprising then that a significant share of the empirical literature on the determining factors of US FDI is indeed focusing on the understanding of the Europe- US relation. On the other hand, other countries (individually) or regions of the OECD have not been adequately investigated. In this paper we attempt to cover this gap in the literature by analysing the location determinants of US FDI in the Pacific region of the OECD, i.e. Australia, New Zealand, Japan, and Korea.

It is obvious that this is a fairly heterogeneous group of countries, which nevertheless is located within the same geographical territory. Its complexity lies in factors such as the different individual cultural and historical backgrounds and development paths distinguishing each one of the countries in question. Moreover, different economic and political ties have been formed with the US economy. It is clear that, among the four countries, Japan is towering above in terms of Gross Domestic Product (GDP) and GDP per capita but it is also evident that we are dealing with countries, which, are increasingly dedicated to Research and

Development (R&D), have sufficiently open economies and similar levels of labour costs. Finally, with regard to the attractiveness of region to US investors, looking at table 2 we observe that Australia and Japan absorb almost 80% of the total of US FDI directed to the region.

Insert Table 2 here

This paper expands the existing literature in two ways: Firstly, it provides substantial empirical evidence on the determining location factors of US outward FDI in the in the under-investigated Pacific OECD region for the period 1982-1997. Secondly, it enriches the research by distinguishing between two time periods, i.e. the 1980s and the 1990s, and two different sub-groups, i.e. one consisting of Australia and New Zealand and the other of Japan and Korea. The main motivation for the intra-group distinction comes from the international business and management literature that acknowledges and documents the influential role of national and corporate cultural practices (Hoefstede, 1980; Franke et al., 1991).

The rest of paper is organised as follows. In section 2 a critical review is provided of the existing literature. Section 3 proceeds with the sample and variables description. Section 4 presents the econometric model formulation and our main hypotheses, estimation method is provided in section 5 and the empirical results at section 6. Finally, in section 7 we conclude.

LITERATURE REVIEW

Theoretically the analysis of the location determinants of FDI has been developed and modelled within the neo-classical and «new» trade theory framework (Krugman, 1991; Markusen and Venables, 1998; Venables, 1999). Empirically there has been a quite substantial number of studies, since the early 1950s, which has been focusing in the analysis

of mainly US outward FDI in different recipient countries. In this line of work emphasis is placed to the EU and Canada, as key host regions of US investors[1] (Scaperlanda, 1967; Scaperlanda and Mauer, 1969; Caves, 1974).

Labour costs, infrastructure quality, degree of internalisation, the existing level of foreign capital and market size seem to influence the decision of where to invest. (Papanastassiou and Pearce, 1990; Wheeler and Mody, 1992; Braunerhjelm and Svensson, 1996; Brainard, 1997)

As it has been mentioned earlier in the introduction, little evidence has been offered on the analysis of the FDI flows to the Pacific region of the OECD and more specifically of US FDI[2]. In a recent piece of work, Jeon and Stone (2000) assess the relationship between trade and FDI flows in the wider Asia- Pacific region. Using a cross-sectional model for nine countries, they show that these two modes of market penetration function complimentarily. Another paper by Goldberg and Klein (1997) investigates the different linkages of FDI, trade and real exchange rate fluctuations in the Southeast Asia and Latin America. In their results cost factors have an opposite effect on FDI flows and trade in these two regions. Finally there are other studies focusing in specific countries of the region including the one by Jeon (1992) who explores the determinants of Korean FDI in manufacturing industries. His main hypothesis is that FDI is used mostly as defensive investment and moreover as a means of tariff jumping technique. Yang et al. (2000) in a study for Australia found that FDI in that country, for the period 1985-1994, is determined by the interest rates, a measure of the openness of the economy, the rate of inflation and the level of wages.

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[1] See Dunning (1993), Caves (1996) and Amiti (1998) for an updated review of the literature on the determinants of FDI.

[2] According to Akoorie (1996) New Zealand's major investors, for the period 1987-93, are Australia, US-Canada and the UK.

Dunning (1996) suggests that FDI in Japan is low because of the difficulties in performing mergers or acquisitions, the Keiretsu influence, some government policies, the high fixed costs of land and rents and finally some hassle costs like the firm culture. Similar are the conclusions reached by Weinstein (1996)[3].

SAMPLE CHARACTERISTICS AND DESCRIPTION OF VARIABLES

Data were compiled from various issues of the OECD publications, including the «Main Economic Indicators», «Main Science and Technology Indicators», «International Investment Statistics Yearbook» and the statistical database of the «World Market Monitor».

The dependent variable, used in the analysis, is the Foreign Direct Investment Position (FDIP), as defined by the OECD in the "International Investment Statistics Yearbook" Our data allowed us to use a wide range of macro-economic factors for each country over the last two decades. Furthermore, we were able to construct and use a number of composite variables. The correlation matrix is provided in the Appendix. After cautious examination we resulted in using the variables listed in table 3. In table 4 descriptive statistics of the variables are reported for the full sample and each participant country.

Insert Table 3 here

Insert Table 4 here

We observe significant variations, as probably expected, between the different countries participating in the sample. First of all, although on average the US FDI flows towards

[3] For a more detailed analysis for FDI in Japan see Yoshitomy, M. and Graham, E., M. (1996).

Australia are the largest, the US FDI position (the cumulative FDI flows) is slightly higher in Japan. In terms of market size, as measured by GDP, Japan seems to dominate the sample, with a GDP six times greater than the other three economies in total. Regarding GDP per capita (GDPPC), the difference is much smaller although Japan still holds the first place. All four economies are exposed to trade, although Japan's trade balance has a substantial surplus compared to the other three countries. When it comes to the Research and Development (R&D) variables the variation among the four countries is not significant. Nevertheless Japan once more holds a leading position in the number of National Patent Applications (NPA). Finally, labor cost, as measured by Unit Labor Cost (ULC), does not vary significantly among the four countries under examination.

MODEL FORMULATION AND HYPOTHESES

We strongly believe that factors such as the ones described in the previous section influence the decision of a firm to invest abroad. Moreover the investment process is not a static one, but it is usually characterized by a dynamic pattern taking the form of sequential investments or disinvestments. Therefore, the dependent variable FDIP reveals the firm's decision on the optimal capital stock abroad. In this paper we evaluate the impact of host-country locational macro-economic factors on the decision to invest abroad and the variables were taken with one-year lag.

The main hypotheses developed are the following:

GDP captures the market size of an economy. Cost effectiveness of local production and the realization of economies of scale in production are closely linked with market size (Venables, 1999; Vernon, 1966). More recent studies, including Barrel and Pain (1999a,b) and Weinstein (1996), point out how the economic integration of regional markets led to a growth of multinational activity. Thus, the larger the market the more FDI attracted and therefore we

would expect a positive sign. Complimentary to the market size comes the growth potential of an economy as measured by GDPGR. Pioneering is the work of Culem (1988) who investigated the bilateral flows of FDI among six industrialized countries for the period 1969-1982. The results he obtained showed that foreign investors prefer the faster growing markets whereas on the contrary, high unit labor costs discourage inward FDI.[4] GDPGR is expected to have a positive sign. One of the main factors in the literature accounting for the demand side of the economy is the GDP per capita. Recent literature brings to the surface the well-known Linder hypothesis (Linder, 1961) according to which countries exhibiting similarities in their demand patterns will be also trading partners (McPherson et al, 2000). Here we extend this hypothesis to FDI and we would expect that US FDI would tend to be directed to countries with similar levels of income and consumption preferences.

The ratio of a country's exports over its total trade (exports plus imports) could be used as a proxy for the competitiveness of the local economy. The variable OPEN captures exactly this implication. A negative sign could suggest that the FDI is used to cater the local market while the opposite (positive sign) could indicate complimentarity between host-country exporting and FDI. This sort of FDI activity is also associated with a particular type of subsidiary namely the World Product Mandate (WPM) or the strategic leader (Bartlett and Ghoshal, 1986; Birkinshaw, 1996). These subsidiaries expand the MNEs value-chain (with new innovative goods) and they use the host-country environment as a potential entry point to other – mostly neighboring - markets.

Efficiency seeking is one of the major motives for FDI activity (Dunning, 1993). One of the key factors is the cost of labor. Wage has almost always a negative relation with FDI while

[4] Similar results are obtained also from more recent studies. (Pain, 1993; Hatzius, 2000)

the opposite holds for productivity (Cushman, 1987). Therefore high unit labor costs (ULC) is expected to influence negatively the desired FDI position.

R&D factors and the quality of labor force, constitute some of the reinforcing elements of agglomeration. In our study we use the value of R&D personnel over the total employment of the economy. A more decentralized R&D strategy, on behalf of US multinationals, in response to the commitment of the host economies to high technological industrial activities, might be reflected with a positive sign (Audretsch and Yamawaki, 1988; Goto and Suzuki, 1989; Kogut and Chang, 1991).

ESTIMATION METHOD

The use of panel data estimation techniques, in this context, offers some advantages against other estimation techniques. According to Hsiao (1985,1986), Klevmarken (1989) and Solon (1989), the use of panel estimation allows us to control for individual heterogeneity. This attribute enables us to control for country heterogeneity, which under other circumstances might cause serious misspecification problems. Eventually, we end up with more informative data, less colinearity among the variables, more degrees of freedom and of course more efficiency. Finally, panel data allows us to construct and test more complicated behavioral models than cross-section or time-series models do.

In this paper we are investigating a specific set of countries, i.e. the Pacific region of the OECD. Inference in this case is conditional on the particular countries that are observed. The fixed-effects model is therefore the most appropriate specification. Moreover, we use a one-way error component regression model which does not allow for unobservable time effects as in a later stage of this study we split the sample between the 80's and the 90's.

The general form is the following:

$$y_{it} = \alpha + \beta x_{it-1} + \mu_i + u_{it}$$

where i=1,…,4 and t=1982,…,1997

y_{it} is the vector of the dependent variable, x_{it-1} a vector of the exogenous variables, α represents the constant term, μ_i are the country specific effects and u_{it} represents the error term. The vector of coefficients is represented by β. The LSDV (Least Square Dummy Variable) estimator is the best linear unbiased estimator (BLUE) for this model, conditional on that this model is the true one (Baltagi, 1995)[5]

More precisely the model is formulated as follows:

$$FDIP_{it} = \alpha_i + \beta_1 GDP_{it-1} + \beta_2 GDPGR_{it-1} + \beta_3 GDPPC_{it-1} + \beta_4 OPEN_{it-1} + \beta_5 ULC_{it-1} + \beta_6 RDEMPL_{it-1} + u_{it}$$

Where i=1,…,4 represents country i and t=1982,…,1997 the time period.

EMPIRICAL RESULTS

In table 5 we present the results obtained for the full sample and the two different time periods, i.e. 1982-1989 and 1990-1997, while in table 6 we present the results for the two different groups of countries, i.e. Australia & N. Zealand and Japan & Korea.

a. Full Sample, 1982-1989 and 1990-1997 sub-samples.

Insert Table 5 here.

The statistically significant positive sign for GDP in the full sample shows, according to our hypothesis, that the larger the market the larger the desired FDI stock. This result is in line with the existing literature. The growth of the GDP affects, contrary to our hypothesis, US

[5] For a more detailed analysis on panel data see Baltagi (1995) and Hsiao (1986).

FDI negatively. This could imply that fast growing host economies, generate an equally dynamic micro-economic environment which deters FDI entry. The negative sign of GDPPC, although it seems to contradict Linder's hypothesis, it could well suggest the effort of US investors to penetrate countries with different consumer preferences, which will eventually converge the US consumption patterns.

The statistically significant negative sign for OPEN suggests that the main interest of US FDI is to serve the local market. ULC, on the other hand, is positive contradicting Culem's result (1988). A possible explanation could be that higher wages is an indicator of a more specialized labor force.

Finally, RDEMPL is negative and statistically significant indicating that the FDI position does not account for the countries R&D commitment. This could be an indication of a more centralized R&D strategy pursued by US firms in this region.

Things change when we split the full sample along the time dimension (supported statistically by a Chow test[6]). For the 80s the only variable that is statistically significant is OPEN, having a positive sign. This may be an evidence of the fact that FDI stock is used to serve other neighboring markets as well. As for the second period, i.e. 1990-1997 the results provided are quite interesting. GDP becomes negative but loses significance while GDP per capita seems to play a dominant role. The process of development in Australia and N. Zealand, which brought these two markets closer to the US, and the opening of the Japanese and Korean markets to "western" consumer preferences could be the reason behind the strong positive sign. Moreover, the other two factors, i.e. ULC and RDEMPL, change their signs - compared to the full sample - and are both statistically significant. ULC takes the hypothesized negative sign justifying Culem's result (1988), while RDEMPL becomes positive capturing a change in strategy of US firms towards a more decentralized process of R&D. In this case

host economies dedicated to technological development are viewed as potential sources of knowledge otherwise not accessible in the home economy of the investor (Pearce and Singh, 1992; Kuemmerle, 1997; Papanastassiou and Pearce, 1999).

b. Different Groups. Australia & N. Zealand (Group 1) and Japan & Korea (Group 2)

Insert Table 6 here.

Results for the two groups justify our initial intent to split the sample by countries (this is also supported by a Chow test)[7]. The OECD Pacific region consists of two heterogeneous groups of countries. The model performs well, although individual factors have different impact for each group. As for Group 1, we notice that GDP has a statistically significant negative sign suggesting that market size is not considered yet as an attractive factor to US investors. On the other hand, GDPPC keeps the hypothesised positive sign underlying common cultural ties and lifestyle. The cultural idiosyncrasy of Group 1 (within its geographical territory) is reinforced by the negative sign for OPEN. Finally, ULC has the suggested negative sign while RDEPML is statistically significant and positive demonstrating the intention of US FDI to take advantage of Group's well trained and qualified labour force.

Comparing Group 1 to Group 2 we clearly notice that Japan and Korea are attracting US FDI for different reasons. GDP has a statistically significant positive sign suggesting the desire of US firms to be present and active in their competitors' markets. GDPGR keeps its negative

[6] Ho: 1982-1989=1990-1997 rejected at $p<0.00$
[7] Ho: Group1=Group2 rejected at $p<0.00$

sign reinforcing our argument about the dynamic micro environment of Japan and Korea. The international business literature has predicted this sort of behaviour acknowledging the strong cultural idiosyncrasy of Japan in particularly (Bartlett and Ghoshal, 1986). A possible explanation for the negative sign for GDPPC is provided in the analysis of the full sample. Similarly to the result for OPEN for Group 1 the strong negative sign clearly demonstrates the market seeking (Dunning, 1993) behaviour of US FDI in the South Pacific region. Ultimately, the positive sign for ULC and the negative sign for RDEMPL, may suggest that US is after the Group's technical resources and capabilities but at the same time the strong R&D host-country commitment is viewed more as a deterrent than as an incentive to decentralise their technological trajectories (Hewitt, 1980; Hirschey and Caves, 1981; Murray at al., 1995).

CONCLUSIONS

The statistical results of this paper, indicate the different motivational pattern of US FDI in the OECD pacific region. Separating the data in to two time periods reveals both the changing influence of individual locational factors and the dominance of agglomerative tendencies particularly in the nineties. The difference in motives is also depicted at a cross-country level of analysis. Australia and N. Zealand clearly attract US FDI for different reasons than Japan and Korea. Prosperity, as expressed by high-income levels and technological capabilities, in the later group of countries deters US investors compared to the former group of countries thus underlying a different strategic behaviour. Future research should enrich the findings of macroeconomic analysis with the strategic aspects of investment decisions.

TABLES

Table 1. US FDI Outflows (million US $) by Geographical Area

	OECD	WORLD	PACIFIC	EU	PACIFIC/WORLD	EU/WORLD	PACIFIC/OECD	EU/OECD	OECD/WORLD
1985	8512	12720	720	6856	5.7%	53.9%	8.5%	80.5%	66.9%
1990	19741	30982	4070	4275	13.1%	13.8%	20.6%	21.7%	63.7%
1995	62108	92074	9761	37924	10.6%	41.2%	15.7%	61.1%	67.5%
1998	93285	121644	6459	66461	5.3%	54.6%	6.9%	71.2%	76.9%

Source: OECD International Investment Yearbook. (Various Issues)

Table 2. US FDI Outflows per Country (million US $, percentage per OECD Total)

	1985	1990	1995	1998
Australia	299	794	5537	3659
	3.5%	4.0%	8.9%	3.9%
Japan	333	984	2336	3844
	3.9%	4.9%	3.7%	4.1%
Korea	42	330	1107	665
	0.4%	1.6%	1.7%	0.7%
New Zealand	46	1962	787	-1699
	0.5%	9.9%	1.2%	-1.8%

Source: OECD International Investment Yearbook. (Various Issues)

Table 3. Description of Variables

Variable	Description
FDIP	Direct Investment Position by Country (year-end), bn. US$ (1990)
FDI	Direct Investment Outflows by Country, bn. US$ (1990)
GDP	GDP (1990), bn. US$
GDPGR	GDP (1990), bn. US$ Growth
GDPPC	GDP Per Capita (1990), US$
EMP	Employment Total, 1000 persons
IMP	Imports of goods and services (1990), bn. US$
EXP	Exports of goods and services (1990), bn. US$
OPEN	EXP/(IMP+EXP)
ULC	Unit Labour Cost (1990)
NPA	National Patent Applications
RDPER	Total R&D Personnel, persons
RDEFF	NPA/GDERD
GDERD	Gross Domestic Expenditure on R&D, million US$ (1990)
RDEMPL	RDPER/EMP

Source: World Market Monitor Database, OECD Main Economic Indicators, OECD Main Science and Technology Indicators. (Various Issues)

Table 4. Descriptive Statistics of the Full Sample and the Individual Countries.

Full Sample	Variable	FDI	FDIP	GDP	GDPPC	OPEN	RDEMPL	RDEFF	ULC	NPA	EXP	IMP
	Mean	666.1649	10463.94	891.3095	14599.86	0.511655	10.2933	10.14591	0.965933	108190.5	115.149	100.8342
	St.Dev.	1068.38	11509.64	1403.694	9829.449	0.033298	4.029409	11.42751	0.162582	142993.4	138.0018	112.6231
	Obs.	64	64	64	64	64	64	64	64	64	64	64
Australia												
	Mean	1404.796	15501.02	262.513	15313.41	0.48447	9.349108	7.607025	0.913714	27082.75	46.76216	49.0204
	St.Dev.	1656.897	9130.517	81.08669	3823.384	0.015619	1.337062	2.423396	0.201109	8930.72	18.48024	17.55774
	Obs	16	16	16	16	16	16	16	16	16	16	16
Japan												
	Mean	640.5781	21263.05	3005.503	25334.46	0.551952	13.72202	6.260467	1.024006	346790	321.0571	262.0716
	St.Dev.	839.8837	13330.19	1360.688	12337.94	0.026026	0.867639	1.536857	0.036045	51622.49	119.96	103.2063
	Obs	16	16	16	16	16	16	16	16	16	16	16
Korea												
	Mean	286.6177	2704.208	256.1383	5853.581	0.505982	12.38291	4.198728	0.96177	48907.45	81.4776	81.32908
	St.Dev.	374.5245	2334.414	162.0897	3467.862	0.025613	4.880993	0.757398	0.090829	35421.66	48.06267	51.71448
	Obs	16	16	16	16	16	16	16	16	16	16	16
N.Zealand												
	Mean	332.6675	2387.489	41.08402	11898.01	0.504213	5.719148	22.5174	0.964242	9981.625	11.29915	10.91573
	St.Dev.	590.0083	2146.521	14.95049	3753.137	0.021581	1.16665	17.76789	0.233445	9985.414	4.317382	3.742599
	Obs	16	16	16	16	16	16	16	16	16	16	16

Source: World Market Monitor Database, OECD Main Economic Indicators, OECD Main Science and Technology Indicators, Authors' calculations. (Various Issues)

Table 5. Econometric Results for the Full Sample, Time Period 1982-1989 and Time Period 1990-1997

Dependent Variable: US FDI Position at period t, Fixed-Effects Estimation with robust standard errors.

	Full Sample	1982-1989	1990-1997
GDP_{t-1}	0.1772***	0.0266	-0.1371**
	(4.930)	(0.770)	(-2.550)
$GDPGR_{t-1}$	-0.3007*	-0.0398	-0.9892
	(-1.850)	(-0.398)	(-1.079)
$GDPPC_{t-1}$	-1.3785***	-0.2114	3.020***
	(-2.610)	(-0.703)	(3.460)
$OPEN_{t-1}$	-0.5492**	0.5899**	0.2768
	(-2.420)	(2.478)	(0.642)
ULC_{t-1}	0.5399***	0.0436	-0.3285*
	(4.190)	(0.442)	(-1.91)
$RDEMPL_{t-1}$	-1.5287***	0.4478	3.2273**
	(-3.270)	(0.947)	(2.790)
C	6629.247	-33518.4**	33904.1
	(-0.479)	(-2.070)	(-1.537)
R-square	0.6881	0.5786	0.7635
Obs.	62	30	32
F-statistic	19.12***	4.58***	11.84***

t-statistics are in parentheses.

*** Statistically significant at the 1% level.

** Statistically significant at the 5% level.

* Statistically significant at the 10% level.

Table 6. Econometric Results for the Full Sample, Group 1 (Australia & N. Zealand) and Group 2 (Japan & Korea Republic)

Dependent Variable: US FDI Position at period t, Fixed-Effects Estimation with robust standard errors.

	Group 1	Group 2
GDP_{t-1}	-0.1794*	0.2219***
	(-1.914)	(5.578)
$GDPGR_{t-1}$	-0.2089	-0.3752**
	(-1.190)	(-2.016)
$GDPPC_{t-1}$	2.1529***	-1.9285***
	(3.360)	(-3.770)
$OPEN_{t-1}$	-1.3702**	-0.4687**
	(-2.406)	(-2.240)
ULC_{t-1}	-0.3260**	0.7403***
	(-2.416)	(3.001)
$RDEMPL_{t-1}$	6.5348***	-2.2642***
	(4.381)	(-3.890)
C	33198.8	-12905.8
	(1.499)	(-0.558)
R-square	0.8011	0.8537
Obs.	30	32
F-statistic	14.76***	23.33***

t-statistics are in parentheses.

*** Statistically significant at the 1% level.

** Statistically significant at the 5% level.

* Statistically significant at the 10% level.

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APPENDIX. Correlation Matrix

	FDIP	GDP(-1)	GDPCC(-1)	GDPGR(-1)	OPEN(-1)	ULC(-1)	RDEMPL(-1)
FDIP	**1.0000**						
GDP(-1)	0.7074	**1.0000**					
GDPCC(-1)	0.7344	0.8499	**1.0000**				
GDPGR(-1)	0.0334	0.0570	-0.0017	**1.0000**			
OPEN(-1)	0.2867	0.6044	0.4256	0.2348	**1.0000**		
ULC(-1)	0.2945	0.2475	0.3479	0.1057	0.4682	**1.0000**	
RDEMPL(-1)	0.3346	0.4765	0.1961	-0.0099	0.4603	0.4770	**1.0000**

	FDIP	GDP	GDPCC	GDPGR	OPEN	ULC	RDEMPL
FDIP	**1.0000**						
GDP	0.7731	**1.0000**					
GDPCC	0.9028	0.8435	**1.0000**				
GDPGR	-0.0219	0.0584	-0.0026	**1.0000**			
OPEN	0.3012	0.6039	0.4243	0.2350	**1.0000**		
ULC	0.3587	0.2167	0.3459	0.0961	0.4453	**1.0000**	
RDEMPL	0.3498	0.4799	0.1916	-0.0081	0.4601	0.4335	**1.0000**

Collinearity Diagnostics

Variable	VIF	SQRT VIF	Eigenvalue	Condition Index	R-Squared
GDP(-1)	11.20	3.35	2.86	1.00	0.91
GDPCC(-1)	1.12	1.06	1.09	1.62	0.10
GDPGR(-1)	8.21	2.86	0.97	1.71	0.87
OPEN(-1)	2.36	1.54	0.59	2.18	0.57
ULC(-1)	2.63	1.62	0.42	2.60	0.61
RDEMPL(-1)	2.94	1.71	0.04	7.95	0.65
Mean VIF				**Condition Number**	
	4.74			7.95	