"Determinants of foreign direct investment: an analysis of Japanese investment in Ireland using the Kano model"

AUTHORS	Ronan Coy Kathryn Cormican			
ARTICLE INFO	Ronan Coy and Kathryn Cormican (2014). Determinants of foreign direct investment: an analysis of Japanese investment in Ireland using the Kano model <i>Investment Management and Financial Innovations</i> , <i>11</i> (1)			
RELEASED ON	Monday, 03 March 2014			
JOURNAL	"Investment Management and Financial Innovations"			
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"			
P	B			
NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES		
0	0	0		

© The author(s) 2021. This publication is an open access article.



Ronan Coy (Ireland), Kathryn Cormican (Ireland)

Determinants of foreign direct investment: an analysis of Japanese investment in Ireland using the Kano model

Abstract

Ireland has long been a prime location for foreign direct investment (FDI) by multinational corporations (MNCs). However, the literature on FDI in Ireland is dominated by foreign investment from the US and little attention is paid to other investors. With the redefinition of global economics and the increasing importance of Asian economies, there is a need to broaden Ireland's attractiveness to other global investors. Japan is the world's fourth largest economy but only 2% of foreign jobs in Ireland are in Japanese firms. This paper reports on an exploratory investigation into the locationspecific FDI factors that attract Japanese MNCs to Ireland. In the process, the study seeks to understand the salient factors for investment by Japanese firms in terms of policy, economic and business facilitation determinants so that policy makers can increase its attractiveness to Japanese MNCs. Data was collected from 11 Japanese MNCs and 2 support agencies using a structured Kano model which allows us to differentiate levels of satisfaction with, and relative importance of, 23 FDI attributes generated from the literature. Our findings reveal that Ireland's low corporate tax rate is the most important determinant for Japanese MNCs to invest in Ireland followed closely by the presence of a skilled workforce. While government's role in maintaining stability and the ability to access to large regional markets were found to be imperative, we learned that the nature of the domestic market was not important at all to Japanese investors. We also found that interconnected clusters of FDI factors are influential to Japanese investors when investing in Ireland. The research is important for many reasons. The study analyses the issues that must be addressed to attract Japanese foreign investors. The findings can inform leaders and policy makers about specific best practices that offer value to the investor. Consideration of these findings can help create a business environment that is more conducive to FDI activity.

Keywords: foreign direct investment (FDI), determinants, best practice, Kano model. **JEL Classification:** L16, L20, L22.

Introduction

Foreign direct investment (FDI) is essentially an international investment where the investor gains significant influence in the management of an entity outside the investor's home country (Solomon, 2011). Empirical evidence shows that FDI has become an important force in the internationalization of investment activities in both the global and Irish economies alike. For instance, the inflows of FDI globally were \$1,114 billion in 2009 (UNCTAD, 2010) while inflows into Ireland were \$13.1 billion in 2011 (OECD, 2012). FDI is a key component in Ireland's economic development and it has been a major part of the country's industrial policy since the 1950s. The importance of FDI to the Irish economy is highly significant. Ireland is a small open economy and it is economically dependent on external investment. FDI accounts for 1 in every 7 jobs (250,000 jobs) in the Irish economy and a €19 billion spend on Irish sourced goods and services including €6.9 billion in payroll.

Given the importance of FDI for the Irish economy it is critical that the determinants for FDI are understood. In the classic FDI literature, there have been many studies on the motivations underlying FDI engagement and the entry modes of the FDI strategy which highlight the complex mix of sociocultural, political, economic and business factors that influence FDI decisions. While these theories provide context for FDI they do little to explain why MNCs decide to invest in Ireland. They also do not determine or explain the relative inter-dependence of determinants for FDI investment. Furthermore, much of the academic literature and empirical evidence on the determinants of FDI in Ireland has focused on large US firms (Gunnigle and McGuire, 2001). This may be explained by the prevalence of US firms in Ireland and the significance of their foreign investments. While US firms have rightly received attention from academics studying the determinants and impact of FDI in Ireland, there are potential benefits from having a more diversified investment profile including a lower exposure to economic and currency fluctuations in MNCs home countries. One region that has received little attention is Japan. Although the Japanese may have quite a different culture to the Irish, their focus on high-technology activity couples well with Ireland's recent focus on building a "Smart Economy" and developing the "Innovation Island". In light of this our research aims to analyze the determinants for FDI by Japanese MNCs in Ireland. The study presented here centres on the following question: What are the location-specific factors that influence the decision by Japanese MNCs to invest in Ireland?

1. Synthesis of the literature

Although there is some consensus among scholars on the role of foreign direct investment (FDI) in fostering economic growth, there has however been

[©] Ronan Coy, Kathryn Cormican, 2014.

limited consensus on FDI determinants (Eicher et al., 2011). While locational determinants of FDI are clearly driven by government policy, economic and business facilitation factors the actual determinants depend greatly on the context and motives of the multinational corporation (MNC). Dunning (1995) highlights that the factors of FDI are complex and there is no single explanation for all FDI determinants. Thus, the attractiveness of location is strongly influenced by government within a complex web of interrelated factors.

1.1. Government policy. For countries to gain competitive advantage, evidence suggests that governments must play an active role in creating an environment that enhances competitiveness (Lall, 2002). Rios-Morales and O'Donovan (2007) argue that governments require a holistic approach to reduce barriers to foreign investors and provide incentives. The creation of government policies that deliver business-friendly fiscal and financial incentives has been shown to improve the competitive advantage of countries. Host country taxation policies are a significant determinant of FDI inflows and low tax countries attract greater proportions of FDI (Eicher et al., 2011). In contrast, Wheeler and Mody's (1992) study found that the corporate tax rate does not appear to play much of a role in attracting investors. Although empirical evidence is inconclusive, countries adopting FDI policies focus primarily on reducing corporate tax rates (UNCTAD, 2011), thus it is generally expected to have a positive effect on FDI inflows.

As with any MNC decision, risk plays an important part in the decision to invest in a country. Many studies find that political risk is a deterrent to FDI (Blonigen, 2005; Cieslik and Ryan, 2004). Wheeler and Mody (1992) found that although geo-political risk was significant, domestic socio-political risk was assigned little importance.

The quality of government institutions plays an important role in attracting FDI. For instance, poor legal protection of intellectual property decreases the possibility of firms making profits from their assets. In addition, poor quality institutions that develop standards for well-functioning markets and standards of treatment of foreign affiliates may increase the cost of business and reduce FDI investment (Blonigen, 2005).

Evidence shows that countries with competitive advantages have aggressive promotional frameworks and industrial promotion agencies influence FDI investment. It is particularly *"effective in a country with a good investment climate and a relative high level of development"* (Morisset, 2003, p. 18). The work of the industrial promotion agencies to create areas of regional specialization is crucial as these regions are positively associated with FDI (Dimitropoulou et al., 2007).

The openness of the host country is a positive factor for foreign investment and openness to trade will drive an efficient environment, which is attractive to foreign firms (Kinoshita and Campos, 2002; Piteli, 2010). By contrast, other researchers have found that openness to trade is only a significant determinant of FDI for certain sectors and certain types of FDI (Lim, 2001). Mody et al. (1998) found that the strongest disincentive to foreign investment by Japanese companies is the inability to repatriate earnings due to restrictive FDI policies.

1.2. Economic activity. Several studies have found that macroeconomic conditions including exchange rates, inflation and growth positively influence the decisions of foreign investors (Kinoshita and Campos, 2002; Piteli, 2010). Studies also find that political and economic stability (Cieslik and Ryan, 2004) and host-country financial risk ratings are important factors for investment (Razin et al., 2008). Eicher et al. (2011) found that higher taxes and financial risk increase FDI outflows from the host country, while lower taxes and financial risk have a positive effect on investment inflows. In a review of the literature, Lim (2001) found that political risk and economic instability hinder FDI to the host country. Thus, a perception of higher perceived economic and financial risk is likely to reduce FDI investment.

Ozturk (2007) carried out an extensive review of FDI literature and found evidence that financial market regulations and stable banking systems are significant determinants for FDI. The World Investment Prospects Survey 2008-2010 (UNCTAD, 2008) reported that of 226 companies surveyed, fifty per cent of respondents expressed concern about the risk of a major global economic downturn and financial instability. Thus, the health of the banking system within a stable economic platform in Ireland is seen as important for foreign investment.

Many MNCs find that the level of corruption influences the decision to invest in a host country. A survey of 191 MNCs by the World Bank found that 36% of companies cited the level of corruption as very influential in the investment decision, with this figure rising to 38% for investment in Western Europe (World Bank, 2002). Some studies have shown that corruption increases the level of risk and costs and impacts FDI flow (Wei, 2000; Rios-Morales and Brennan, 2007). However, some countries continue to attract FDI despite corruption (Kolstad and Villanger, 2004) and in the US study, Wheeler and Mody (1992) found that the level of corruption was not a deterrent to investment.

Several studies have identified the domestic market size (Wheeler and Mody, 1992; Lim, 2001) and more importantly access to a larger regional market (Lim, 2001; Cheng and Kwan, 2000) as locationspecific determinants of FDI. Some evidence suggests that although the determinants for both Japanese and the US MNCs are different, the market size is a shared determinant. Reviews of the literature have shown that the growth of the domestic economy (Groh and Wich, 2009; Wheeler and Mody, 1992) and the host country's market size (Torrisi et al., 2008) increases inward FDI. For Ireland, the size of the domestic market is of little significance to foreign investors who primarily locate there to export.

The quality of the human capital base is also an important asset in attracting high technology MNCs. Several studies have found that FDI increases with low-cost labor in the host country (Kinoshita and Mody, 1997) and a highly productive workforce (Cheng and Kwan, 2000). By contrast, other studies found that labor productivity was not consistent as a factor in FDI and its influence depended on the location and sector. Moreover, Groh and Wich (2009) argued that low-cost labor is not a primary motivator for investment and the combination of wage cost and productivity is more important.

Other studies have shown that increased levels of human capital are a good indicator of high-skilled labor and make the host country more attractive for FDI. Noorbakhsh et al. (2001) found that the access to high skilled labor is a significant determinant of a nation's location advantage and is important in attracting FDI. The importance of skilled labor can be observed in Irish foreign-dominated sectors, which employ higher proportions of skilled labor than industry on average.

The literature is extensive on the positive impact of agglomeration economies and clusters on FDI decisions (Wheeler and Mody, 1992; Kinoshita and Campos, 2002). Wheeler and Mody (1992) found clustering to be highly significant determinant of FDI in a study of US manufacturing MNCs. An important finding for Ireland by Kinoshita and Campos (2002) is that agglomeration effects reduce the importance of market size as a location determinant. Rios-Morales and Brennan (2007) find that Japanese FDI into Europe has been strongly influenced by agglomeration effects and it is a key determinant for location decisions by Japanese investors.

Cheng and Kwan (2000) found that good infrastructure had a positive effect on location attractiveness and leads to higher FDI inflows. Furthermore differences in transport and communica-tions infrastructure affect the location decisions of MNCs at both country and intra-country levels. However, Mody et al. (1998) argue that high quality infrastructure is not a necessary condition for initial investment but infrastructure improvements are required to encourage further FDI inflows. Thus, good infrastructure is a performance-related determinant for FDI and an expected feature in developed economies such as Ireland.

1.3. Business enablement. Morisset (2003) argues that promotion agencies with aggressive FDI campaigns positively influence FDI decisions, particularly where the country has a good overall investment climate. These agencies help to provide access to information, facilitate clear communication and reduce legal and bureaucratic issues. Groh and Wich (2009) found that the costs and complexity of bureaucracy influence FDI decisions and is an important determinant for FDI inflows. In contrast, Wheeler and Mody (1992) find that "red-tape" and bureaucracy risk has a very limited effect on FDI decisions by MNCs.

The maturity of the legal system also affects the host country's appeal. Several other studies have found that the quality, stability and transparency of the legal system are crucial for encouraging FDI inflows (Baniak et al., 2005; Naudé and Krugell 2007). Thus, systems of governance that promote the rule of law may be major factors in Ireland's ability to attract FDI.

Quality of life and social amenities are also significant for investment (Li and Clarke-Hill, 2004). Countries that invest in improving quality of life attract more FDI. Hornberger et al. (2011) find that quality of life and language skills were one of the top ten determinants for foreign firms investing in developing and transition economies.

The decision to invest in a particular country is influenced significantly by the public and private information available to the foreign MNC. Investors' location decisions are influenced by public information including analytical country reports by international organizations (Kinoshita and Mody, 1997). Furthermore, private information such as direct experience in the host country and previous experience is viewed as information that is more credible and a significant factor in FDI decisions (Kinoshita and Mody, 1997). In reviewing the attractors of Japanese MNCs in Asia, Mody et al. (1998) point out that although favorable FDI policies may be attractive, previous presence in the country is likely to increase Japanese FDI.

Table 1 synthesizes the broad categories, factors and associated literature relating to FDI best practice and determinants.

Category + Factor	Reference	
Government policy		
Proactive role of government	Rios-Morales and Brennan (2007), Lall (2002)	
Low corporate tax rates	Eicher et al. (2011)	
Low-risk political environment	Blonigen (2005), Cieslik and Ryan (2004)	
High-quality government institutions	Blonigen (2005), Kinoshita and Campos (2002)	
Industrial policies for knowledge clusters	Dimitropoulou et al. (2007), Morisset (2003)	
International trade agreements on FDI	Piteli (2010), Kinoshita and Campos (2002)	
Economic activity		
Strong macroeconomic conditions	Eicher et al. (2011), Piteli (2010), Razin et al. (2008), Cieslik and Ryan (2004), Kinoshita and Campos (2002)	
Access to local capital within a stable banking system	UNCTAD (2010), Piteli (2010), Ozturk (2007)	
Low levels of corruption and risk	Kolstad and Villanger (2004), Wei (2000), Wheeler and Mody (1992)	
Access to a strong export market	Cieslik and Ryan (2004)	
Growing domestic and regional markets	UNCTAD (2010), Groh and Wich (2009), Torrisi et al. (2008), Cheng and Kwan (2000), Wheeler and Mody (1992)	
Competitive labor force costs and productivity	Groh and Wich (2009), Cheng and Kwan (2000), Barrell and Pain (1996)	
Access to high-skilled labor	Dimitropoulou et al. (2007), Gilmore et al. (2003), Noorbakhsh et al. (2001)	
Clusters and agglomeration effects	Kinoshita and Campos (2002), Wheeler and Mody (1992)	
Low-cost operations and high quality infrastructure	Li and Clarke-Hill (2004), Cheng and Kwan (2000)	
Business enablement		
Access to progressive investment promotion incentives	Groh and Wich (2009), Naudé and Krugell (2007), Baniak et al. (2005), Li and Clarke-Hill (2004), Morisset (2003), Ramcharran (2000)	
Access to local amenities and high quality of life	Li and Clarke-Hill (2004), Gunnigle and McGuire (2001)	
Previous investment or knowledge of Ireland	Cieslik and Ryan (2004)	

Table 1. Synthesis of the literature relating to FDI determinants

2. Research method

We designed a structured survey to empirically capture the salient location determinants for FDI in Ireland by Japanese MNCs. Twenty three specific measures were developed based on a synthesis of the most recent literature to ensure that data reflected the most up to date research findings. The Kano model was used to classify preferences. This method was chosen as it allowed us to determine the relative interdependence and strata of determinants for FDI investment. Kano questionnaires have two questions for each determinant. The first question measures how a respondent feels using a Likert scale when a requirement is met (the functional question) and the second question measures how a respondent feels where the requirement is not met (the dysfunctional question). This approach challenges traditional customer satisfaction models that suggests that the better we perform on each service attribute the more satisfied the customers will be. Kano's model contends that performance on specific attributes is not equal in the eyes of the customers and that certain categories of attributes produces higher levels of satisfaction than others. Consequently the model determines six categories of quality attributes as shown in Table 2. This approach allows us to discern the relative importance of each of the determinants.

Using these questionnaires and associated evaluation tables, the perceptions of respondents are grouped into the Kano categories (Kano et al., 1984). The classification of a feature is determined by: Kano category = maximum (A, O, M) if (A + O + M) > (I + Q + R) or maximum (I, Q, R) if (A + O + M) \leq (I + Q + R) (Lai and Wu, 2011). The customer satisfaction coefficient can also be determined: This states whether satisfaction can be increased by meeting an FDI requirement, or whether fulfilling the FDI requirement merely prevents the customer from being dissatisfied (Berger et al., 1993). The customer satisfaction coefficient is measured using the following formulae:

- Extent of satisfaction: (A + O) / (A + O + M + I).
- Extent of dissatisfaction: $(O + M) / (A + O + M + I) \times (-1)$.

Kano category (Alternative names)	Description
Attractive (Delighter, value-add)	An Attractive (A) feature means that a feature of the country provides extra satisfaction when present but the country is still satisfactory when the feature is absent.
One-dimensional (Performance, proportional)	A One-dimensional (<i>O</i>) feature means that the more functional the feature within the country the more satisfied the investor and vice versa.

Table 2. Description of Kano categories

Kano category (Alternative names)	Description		
Must-be (Basic, expected)	The Must-be (<i>M</i>) feature indicates aspects where the investor is more dissatisfied when the country attribute is not there, but satisfaction never rises above neutral no matter how functional the attribute becomes. Extra effort spent improving such features would make little impact on satisfaction for the investor.		
Indifferent (No difference)	An Indifferent (<i>I</i>) feature means that a feature of a country does not provide either satisfaction or dissatisfaction to the investor.		
Reverse (Negative feature)	A Reverse (R) feature causes dissatisfaction. Such features should be eliminated.		
Questionable (Quality control mechanism)	A Questionable (<i>Q</i>) feature means that scores signify that the question was phrased incorrectly, or that the person misunderstood the question		

Table 2 (cont.). Description of Kano categories

Source: Adapted from Lai and Wu (2011), Yang (2005), Kano et al. (1984), Berger et al. (1993).

FDI determinants can be prioritized using the rule provided by Berger et al. (1993): Must-be > Onedimensional > Attractive > Indifferent. However, in some cases, it can be unclear as to which feature to prioritise and in these cases, the 'self-statedimportance' scores provided by respondents are used to determine the priority. In order to increase precision we used Berger's approach to specify a point in a two-dimensional coordinate system (Berger et al., 1993). Our analysis is based on 23 pairs of questions (Q = 23) where j = 1, ..., Q, and N respondents (N = 11) where i = 1, ..., N. Our research also used a self-stated importance questionnaire across the 23 areas (W = 23) in parallel with the Kano questionnaire. Thus, there are three scores for each potential FDI requirement being investigated: Functional, Dysfunctional, and Importance. These three scores are coded as follows:

- ♦ Functional: Y_{ij} = -2 (Dislike), -1 (Live with), 0 (Neutral), 2 (Must-be), 4 (Like).
- Dysfunctional: X_{ij} = -2 (Like), -1 (Must be), 0 (Neutral), 2 (Live with), 4 (Dislike).
- Importance: W_{ij} = 1 (Unimportant), 2 (of Little importance), 3 (Moderately important), 4 (Important), 5 (Very important).

The values for X and Y take on the values -2, -1, 0, 2 and 4 only. The logic for the asymmetrical scale (beginning from -2, rather than -4) is that Must-be and One-dimensional are stronger responses than Reverse or Questionable. Therefore, the scaling should give less weight to the less strong responses to diminish their influence on the average.

All 23 Japanese MNCs in Ireland were included in the sample frame to allow us to generalize findings

within the Irish context. Eleven of these companies participated in the study (cf. Table 3). In addition representatives of the Irish Development Authority (IDA) and the Japanese business forum in Ireland were also included to help obtain further insight into foreign investment by Japanese firms in Ireland.

Table 3. List of participating organizations

No	Company name	Industry sector
1	Astellas Ireland Co., Ltd.	Pharmaceuticals
2	Carten Controls Limited	Hardware ICT
3	Daiwa Europe Fund Managers Ireland Ltd.	Financial services
4	Fujitsu Ireland Ltd.	ICT
5	Neriki Europe Ltd.	Industrial products and services
6	Orix Ireland Ltd.	Financial services
7	Rexxam Electronics Irl. Ltd.	Hardware ICT
8	Sojitz Aircraft Corporation	Financial services
9	Sumitomo Mitsui Finance Dublin Limited	Financial services
10	THK Manufacturing of Ireland Ltd.	Industrial products and services
11	Mitsubishi Motors	Motor vehicles
12	IDA Ireland	Semi-state body
13	Telegael Ltd.	Information/Media group

3. Analysis of findings

92% of the respondents worked in senior management positions primarily in financial (31%) manufacturing (23%) and ICT (23%) organizations. The average tenure of key informants is 14 years. Thus, the respondents were well equipped to answer research questions regarding perceptions of managers in Japanese MNCs. Table 4 presents the consolidated survey responses from 23 measures of FDI determinants.

Table 4. Analysis of findings

Topics	Kano category	Dysfunctional (X)	Functional (Y)	Importance (W)
Policy determinants				
The Irish government plays a proactive role in foreign direct investment (FDI)	Must-be	3.4	2.8	4.2
Low-risk political environment with infrequent occurrences of social disorder	One-dimensional	3.8	3.1	4.2
High-quality government institutions promoting high standards for investment	Must-be	2.9	2.5	4.0
High quality industrial policies leading to many specialized knowledge clusters	Attractive	2.2	2.5	4.5
International trade agreements on foreign direct investment (FDI) promoting openness to trade	Must-be	3.4	2.5	4.2
Low corporate tax rates	One-dimensional	3.2	3.2	4.4

Topics	Kano category	Dysfunctional (X)	Functional (Y)	Importance (W)
Economic determinants				
Macroeconomic conditions are positive (e.g. strong growth, low inflation and favourable exchange rates	One-dimensional	3.2	3.4	3.8
Access to local capital markets within a stable banking system	Must-be	3.1	2.3	4.1
Low levels of corruption and risk when investing in FDI	One-dimensional	3.8	3.2	4.5
Access to a strong export market with an economy driven by exports	One-dimensional	2.8	2.6	3.9
A growing Irish domestic market	One-dimensional	2.5	2.3	3.6
Access to a large and growing regional market (e.g. EU)	One-dimensional	3.2	3.2	4.2
High labor productivity (Rate of output per employee and high utilization days)	One-dimensional	3.4	3.7	4.5
Access to high-skilled labor (i.e. strong knowledge, research and innovation base)	One-dimensional	3.8	3.5	4.5
Access to low-cost labor (e.g. low wages)	Attractive	1.9	2.0	3.6
Low-cost business operating environment (e.g. low-cost transport, communications, energy)	One-dimensional	3.2	3.1	4.2
Access to high-quality physical infrastructure (ports, roads, power, logistics, telecomms)	One-dimensional	3.7	2.9	4.3
Business enablement determinants	•	•	•	
Access to well-developed investment promotion incentives	Must-be	2.9	2.5	3.8
Access to a mature legal system (Independent judiciary, strong Intellectual property laws and enforcement of contracts)	Must-be	3.8	2.7	4.5
Access to a favorable, business-friendly environment (e.g. reduced bureaucracy and 'red tape')	One-dimensional	3.5	3.0	4.2
Access to local amenities and social services providing increased quality of life	One-dimensional	3.2	3.2	4.0
Access to a well-educated workforce within a well-developed educational sector	One-dimensional	3.5	3.1	4.5
Your company has previous presence and/or previous investment in Ireland	Indifferent	2.0	1.7	3.5

Table 4 (cont.). Analysis of findings

Figure 1 shows a plot of the X-Y position in terms of functional (Y) (when a determinant is present) and dysfunctional (X) (when a determinant is not present) scores with the size of the individual bubble representing its importance score (W). To define and understand the most important FDI factors for Japanese firms investing in Ireland, we determine constellations of FDI importance. This helps to

understand the relationship between FDI determinants for Japanese MNCs investing in Ireland. We propose four constellations of FDI importance. The size of each point on the map represents the average importance score. Taking the most significant determinants and linking them to related high-importance factors provides the following constellations.

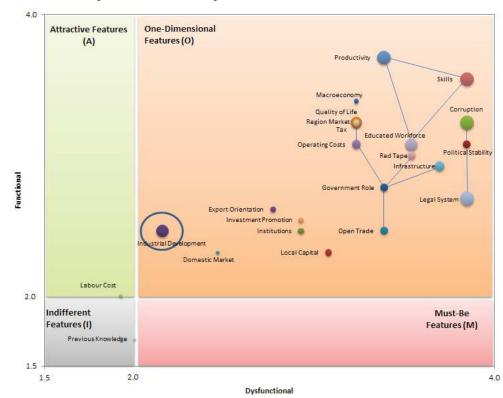


Fig. 1. Constellations of importance

3.1. The quality people triangle. Japanese firms attach significant importance to productivity, skills and an educated workforce. Increases in all these factors are seen as highly satisfying and conversely a reduction in these factors results in significant dissatisfaction. The results suggest that every effort must be made to develop the Irish workforce, as increases in these features will increase attractiveness for Japanese investors. That is, a focus on business-aligned education that delivers necessary skills and improves productivity is both satisfying and important to Japanese investors.

3.2. The risk spire. Foreign investment from Japan is risk averse and the presence of a well-functioning legal system and low levels of corruption is essential. While improvements in these factors will not result in as much satisfaction as the quality people triangle, any decline in these factors will lead to a greater overall dissatisfaction with Ireland as an investment location.

3.3. The government web. The role of Government is linked to a number of factors that respondents highlighted as relatively important. Quality infrastructure, openness to trade, access to regional markets and low levels of bureaucracy are linked to government policy and impact on doing business. Further linkages to operating costs and taxation reflect the importance of profitability for Japanese MNCs. Although each determinant has a lower importance than the previous constellations, on aggregate government role is a crucial determinant of FDI attraction.

3.4. The industrial development circle. The development of high quality industrial policies leading to many specialized knowledge clusters is ranked with high importance. Improvements in this factor will lead to moderate satisfaction while deterioration will lead to moderate dissatisfaction. This circle seems incongruous but this may highlight that industrial development is a more attractive feature and highly valued by Japanese MNCs. This may also be linked to the Japanese perspective of appreciating the 'long term' as industrial development is focused on a long-term perspective.

3.5. Top five FDI determinants. We asked respondents to rank the top five most important determinants from a predefined list of 23. The opportunity to add additional determinants was provided but no respondent added any of them. The percentage of importance scores for each FDI determinant was calculated for each rank from 1 to 5. Using the aggregate totals, the top five FDI determinants from the survey are shown in Figure 2 below. Ireland's low corporate tax rate is seen as the most important element by Japanese MNCs for investment in Ireland followed closely by the skilled workforce. The government's role in maintaining stability and access to large regional markets is also paramount importance. Interestingly, of the domestic Irish market received no importance scores from any respondent and this may reflect the export nature of Japanese MNCs in Ireland.

Top 5 FDI Determinants by Aggregate Importance

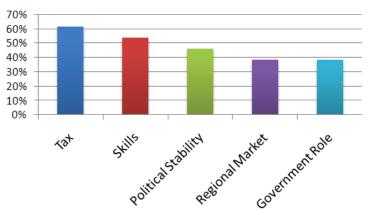


Fig. 2. Top five FDI determinants

4. Discussion

4.1. Policy determinants. The role of policy determinants in attracting investment is clear from the results. Table 4 shows that Japanese MNCs regard the proactive role of Government in attracting FDI as a basic expectation, along with high-quality institutional standards. This finding is in line with expectations as Rios-Morales and Brennan (2007) argue that governments require a

holistic approach to reduce barriers to foreign investors and provide incentives alongside more long-term development goals. There is anecdotal evidence to suggest that government restrictions on foreign ownership are strongly resented by Japanese investors and enforced export rules are a major disincentive. The respondents to this survey appear to agree and regard openness to trade as a necessary determinant for foreign investment. Previous research has failed to reach consensus on the impact of political instability and risk on foreign investment. Studies by Blonigen (2005) and Cieslik and Ryan (2004) found that political risk is a deterrent to FDI. In this study, political stability is perceived as a one-dimensional feature of FDI by the respondents meaning there is a direct correlation between level of political stability and the MNCs positive perception of the country. Thus, this study agrees with the work of the aforementioned authors. It contrasts however with the findings of Wheeler and Mody (1992) who found that although geopolitical risk was significant, domestic sociopolitical risk is assigned little importance. The contrast in results may reflect the difficulty in measuring perceived risk and the differing proxy indicators used to determine risk levels.

The final aspect of political determinants of FDI is the industrial standards. This refers to the promotion of high quality industrial policies, which drive specialized knowledge clusters in Ireland. This study shows that industrial development is seen as an attractive feature of FDI. This means that it may not be an initial consideration for foreign investors from Japanese MNCs but any improvements in industrial development will be seen as very attractive. This finding concurs with a study by Dimitropoulou et al. (2007) who argued that the quality of government policy on industrial development aimed at creating areas of regional specialisation is crucial, as these regions are positively associated with FDI. However, this study fails to determine the reason why industrial development is seen as an attractive feature of FDI and thus it is not possible to confirm whether it is a real contributory factor for Japanese investors.

4.2. Economic determinants. The decision to invest in Ireland by Japanese MNCs is highly dependent on economic factors. The results from the survey on the economic determinants of FDI highlight that the economic climate in Ireland is perceived to affect the foreign investment decision in different ways.

Our study found that access to local capital within a stable banking system is essential for Japanese investors and must be provided. A report by UNCTAD (2008) highlighted that for western countries including the EU-15, a stable banking system is crucial for investment. Other studies also point out that a functioning banking system that enables local businesses to interact with MNCs is vital for investment purposes (UNCTAD, 2011; Piteli, 2010). Based on Berger et al. (1993) interpretation, Must-be features are the most important and therefore, this study agrees with the prior research.

The one-dimensional or performance FDI features are all viewed to be contributory factors for FDI investment. The FDI features with the highest category response include skills (62%), productivity (54%), regional market (62%), corruption (54%) and macroeconomic conditions (54%). Foreign MNCs in Ireland employ higher proportions of skilled labor than industry on average and this correlates with the results of this survey. Japanese MNCs perceive the skilled workforce as a crucial economic determinant of FDI in Ireland and this agrees with the work of Noorbakhsh et al. (2001) who found that access to high skilled labor is a significant determinant of a nation's location advantage and is important in attracting FDI.

Closely related is the productivity of workers and Ireland has traditionally been viewed favorably for its labor quality and productivity (Gunnigle and McGuire, 2001). In addition, Gilmore et al. (2003) found that the availability of a skilled workforce was significantly more important in FDI decisions than low-cost labor. Our study concurs with this finding as productivity has a high one-dimensional score (i.e. the more the better) and labor cost is viewed as a lower priority attractive feature. Moreover, the results suggest that high labor costs are accepted by Japanese MNCs investing in Ireland but reductions in those costs would be very attractive for further FDI. Thus, this echoes the study by Gunnigle and McGuire (2001) that labor cost is not seen as a critical factor in MNC investment in Ireland.

4.3. Business facilitation determinants. The business environment within a host country has significant influence on investment decisions. Managers in Japanese MNCs perceive a welldeveloped investment promotion framework and a robust legal system as an expected requirement for investment. Morisset (2003) argues that promotion agencies with aggressive FDI campaigns positively influence FDI decisions, particularly where the country has a good overall investment climate. Similarly, the World Bank finds that promotion only succeeds when the country is attractive to investors. This is interesting as Must-be features will not increase investor satisfaction with further improvements but increase dissatisfaction if absent. Thus, investment promotion is a must-have but not sufficient for investment and our survey agrees with the earlier research.

FDI features that can deliver satisfaction for foreign investors are one-dimensional FDI features of improvements in workforce education (54%), improvements to quality of life (46%) and streamlining of red tape (54%). There is a consensus that countries that invest in improving quality of life attract more FDI (Peterson et al., 1999). This study on Japanese MNCs appears to agree with the work of Gunnigle and McGuire (2001) on US MNCs investing in Ireland, locating in Dublin for quality of life reasons. The importance of low levels of bureaucracy and red tape are also highlighted in the results. These findings concur with research conducted by Kinoshita and Campos (2002) who found that the degree of red tape and corruption was an important factor in investment. For Japanese MNCs, improving the bureaucracy of doing business will result in increased satisfaction.

Lastly, the prior knowledge of Ireland and the previous investment or presence in the country is perceived as indifferent. This is the lowest Kano category and suggests that Japanese MNCs attach little significance to this FDI factor. This result is in stark contrast to findings by Cieslik and Ryan (2004) who found that previous presence in the host country increased investment by Japanese MNCs in Europe. The reason for such a contrast is uncertain; however it may be the importance of such prior information is not seen as relevant until an investment is in progress and during the survey the need for such knowledge is not perceived as a major concern.

Conclusion

This study argues that the key factors for investment by Japanese MNCs are more complex than a simple ranking would suggest. We found that a new lens is required to differentiate and understand investors' perceptions of performance of FDI determinants. The method adopted in this study helps establish a prioritized constellation of groups comprising features that satisfy Japanese investors. Thus, Ireland's policymakers and industrial development agencies should now understand the nuances of investors' perceptions and be better positioned to create optimal industrial development activities.

Failing to meet minimum expectations on any mustbe feature will critically harm a country's investment profile, lead to suppressed financial outcomes, and increased investor churn. Thus, avoiding poor performance perceptions on any must-be features must become a top priority for Ireland's national policymakers and promotion agencies alike. Investing in attractive and onedimensional aspects of Ireland's locational attributes provides greater value for money than developing must-be attributes, which are already at a satisfactory level. Thus, once the must-be features are satisfactory, more funds should be invested in one-dimensional and then attractive features. This approach will delight investors, create points-ofdifference from competitors and heighten investor preference for Ireland as an investment destination.

References

- 1. Baniak A., Cukrowski, J. (2005). On the Determinants of Foreign Direct Investment in Transition Economies, *Problems of Economic Transition*, Vol. 48, No. 2, pp. 6-28.
- 2. Barrell R., Pain N. (1996). An Econometric Analysis of U.S. Foreign Direct Investment, *The Review of Economics and Statistics*, Vol. 78, No. 2, pp. 200-207.
- Berger C., Blauth R., Boger D., Bolster C., Burchill G., DuMouchel W., Pouliot F., Richter R., Rubinoff A., Shen D., Timko M., Walden D. (1993). Kano's Method for Understanding Customer-Defined Quality, *Center for Quality of Management Journal*, Vol. 2, No. 4, pp. 3-36.
- 4. Blonigen B. (2005). A review of the Empirical Literature on FDI Determinants, *Atlantic Economic Journal*, Vol. 33, pp. 383-403.
- 5. Cheng L.K., Kwan Y.K. (2000). What are The Determinants of the Location of Foreign Direct Investment? The Chinese Experience, *Journal of International Economics*, Vol. 51, No. 1, pp. 379-400.
- Cieslik A., Ryan M. (2004). Explaining Japanese Direct Investment Flows into an Enlarged Europe: A Comparison of Gravity and Economic Potential Models, *Journal of the Japanese and International Economies*, Vol. 18, No. 1, pp. 12-37.
- 7. Dimitropoulou D., Burke S., McCann P. (2007). The Determinants of the Location of Foreign Direct Investment in UK Regions, Editorial Express.
- 8. Dunning J. (1995). Re-appraising the Eclectic Paradigm in an Age of Alliance Capitalism, *Journal of International Business Studies*, Vol. 26, No. 3, p. 4.
- 9. Eicher T., Helfman L., Lenkoski A. (2011). *Robust FDI Determinants: Bayesian Model Averaging in the Presence of Selection Bias*, University of Washington, Washington.
- 10. Gilmore A., O'Donnell A., Carson D., Cummins D. (2003). Factors influencing foreign direct investment and international joint ventures, *International Marketing Review*, Vol. 20, No. 2, pp. 195-215.
- 11. Groh A., Wich M. (2009). A Composite Measure to Determine a Host Country's Attractiveness for Foreign Direct Investment, University of Navarra, Barcelona.
- Gunnigle P., McGuire P. (2001). Why Ireland? A Qualitative Review of the Factors Influencing the Location of US Multinationals in Ireland with Particular Reference to the Impact of Labour Issues, *The Economic and Social Review*, Vol. 32, No. 1, pp. 43-67.
- 13. Hornberger, K., Battat, J. and Kusek, P. (2011). *Attracting FDI: How much does Investment Climate Matter*, New York: The World Bank Group.
- 14. Kano N., Seraku N., Takahashi F., Tsuji S. (1984). Attractive Quality and Must-be Quality, *The Journal of the Japanese Society for Quality Control*, Vol. 14, No. 2, pp. 39-48.

- 15. Kinoshita Y., Campos N. (2002). *The location determinants of foreign direct investment in transition economies*, Institute of Social Science, University of Tokyo, Tokyo.
- 16. Kolstad I., Villanger E. (2004). *How does social development affect FDI and domestic investment?* Michelsen Institute CMI, Bergen.
- 17. Lai H., Wu H. (2011). A Case Study of Applying Kano's Model and ANOVA Technique in Evaluating Service Quality, *Information Technology Journal*, Vol. 10, No. 1, pp. 89-97.
- 18. Lall S. (2002). Linking FDI, technology development for capacity building and strategic competitiveness, *Transnational Corporations*, Vol. 11, No. 3, pp. 39-88.
- 19. Li H., Clarke-Hill C. (2004). Sino-British joint ventures in China: Investment patterns and host country conditions, *European Business Review*, Vol. 16, No. 1, pp. 44-63.
- 20. Lim, E.G. (2001). Determinants of, and the Relation Between, Foreign Direct Investment and Growth: A Summary of the Recent Literature, s.l.: International Monetary Fund.
- 21. Morisset, J. (2003). Does a country need a promotion agency to attract foreign direct investment? A Small Analytical Model Applied to 58 Countries, The World Bank.
- 22. Naudé W., Krugell W. (2007). Investigating geography and institutions as determinants of foreign direct investment in Africa using panel data, *Applied Economics*, Vol. 39, No. 10, pp. 1223-1233.
- 23. Noorbakhsh F., Palom A., Youssef A. (2001). Human Capital and FDI Inflows to Developing Countries: New Empirical Evidence, World Development, Vol. 29, No. 9, pp. 1593-1610.
- 24. OECD (2012). FDI in Figures, OECD Investment Division.
- Ozturk I. (2007). Foreign direct investment growth nexus: a review of the recent literature, *International Journal of Applied Econometrics and Quantitative Studies*, Vol. 4, No. 1, pp. 79-98.
- Peterson M., Malhota N., Wagner J. (1999). Country Quality of Life and Foreign Direct Investment Decisions, *Global Outlook*, Vol. 11, No. 1, pp. 51-62.
- 27. Piteli E. (2010). Determinants of foreign direct investment in developed economies: A comparison between European and non-European countries, *Contributions to Political Economy*, Vol. 29, No. 1, pp. 111-128.
- Ramcharran H. (2000). Foreign Direct Investments in Central and Eastern Europe: An Analysis of Regulatory and Country Risk Factors, *American Business Review*, Vol. 18, No. 2, pp. 1-8.
- 29. Razin A., Sadka E., Tong H. (2008). Bilateral FDI Flows: Threshold Barriers and Productivity Shocks, *CESifo Economic Studies*, Vol. 54, No. 3, pp. 452-470.
- Rios-Morales R., Brennan L. (2007). Ireland's Foreign Direct Investment Competitive Advantage and Japanese Outward Foreign Direct Investment, Asia Pacific Business Review, Vol. 13, No. 2, pp. 201-231.
- 31. Solomon E. (2011). Foreign Direct Investment, Host Country Factors and Economic Growth, *Ensayos Revista de Economía*, Vol. 30, No. 1, pp. 4-70.
- 32. Torrisi C., Delaunay C., Kocia A., Lubieniecka M. (2008). FDI in Central Europe: Determinants and Policy Implications, *Journal of International Finance and Economics*, Vol. 8, No. 4, pp. 136-147.
- 33. UNCTAD (2008). World Investment Prospects Survey 2008-2010, United Nations Conference on Trade and Development, New York.
- 34. UNCTAD (2010). World Investment Report 2010: Investing in a Low-Carbon Economy, United Nations, New York and Geneva.
- 35. UNCTAD (2011). World Investment Report 2011: Non-Equity Modes of International Production and Development, United Nations, Switzerland.
- 36. Wei S. (2000). How Taxing is Corruption on International Investors? *Review of Economics and Statistics*, Vol. 82, No. 1, pp. 1-11.
- Wheeler D., Mody A. (1992). International Investment Location Decisions: The Case of US Firms, *Journal of International Economics*, Vol. 33, pp. 57-76.
- 38. Yang C. (2005). The Refined Kano's Model and its Application, *Total Quality Management*, Vol. 16, No. 10, pp. 1127-137.