Risks and Foreign Direct Investment Inflows: Evidence from Yemen

(Risiko dan Pelaburan Langsung Asing: Bukti dari Yaman)

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ABSTRACT

This study aims to find the relationship between the political, exchange rate and inflation risk factors with the yearly foreign direct investment (YFDI) in Yemen, over the period between 1990 to 2010. Secondary data results showed that political risk and exchange rate risk have an inverse relationship with YFDI, while inflation risk has a significant positive relationship. Further analysis on a survey collected from 62 multinational enterprises (MNEs) operating in Yemen showed an insignificant relationship between the perceived political, exchange rate and inflation risk factors and corporate foreign direct investment (CFDI). The conflicting results possibly imply that the MNEs' subsequent capital investments may not be affected by the perceived political, exchange rate and inflation risks that would nonetheless have been considered during the initial business plan. It is likely that MNEs that were already operating in Yemen may have developed capabilities in terms of knowledge, bargaining and lobbying skills. Therefore, perceived risks are no longer seem to influence their investment decisions.

Keywords: Foreign direct investment; political risk; exchange rate risk; inflation risk; multinational enterprises

ABSTRAK

Kajian ini bertujuan mengenal pasti hubungan di antara faktor-faktor risiko politik, tukaran asing, dan inflasi dengan pelaburan langsung asing tahunan (YFDI) di Yaman sepanjang tempoh 1990 hingga 2010. Dapatan data sekunder menunjukkan bahawa risiko politik dan risiko tukaran asing mempunyai hubungan songsang dengan YFDI, manakala risiko inflasi mempunyai hubungan positif yang signifikan. Analisis selanjutnya terhadap data soal selidik yang dikutip daripada 62 syarikat multinasional (MNEs) yang beroperasi di Yaman, menunjukkan hubungan tidak signifikan antara faktor tanggapan risiko politik, tukaran asing dan inflasi dengan pelaburan langsung asing korporat (CFDI). Keputusan yang bertentangan ini memberi implikasi bahawa pelaburan modal syarikat multinasional yang berikutnya mungkin tidak dipengaruhi oleh faktor-faktor tanggapan risiko politik, tukaran asing dan inflasi, walaupun faktor-faktor ini seharusnya telah diambil kira pada peringkat awal rancangan perniagaan. Ada kemungkinan juga bahawa syarikat multinasional yang telah beroperasi di Yaman telah membangunkan keupayaan dari segi pengetahuan, tawar-menawar dan kemahiran melobi. Oleh itu, tanggapan risiko tidak lagi mempengaruhi keputusan pelaburan mereka.

Kata kunci: Pelaburan langsung asing; risiko politik; risiko tukaran asing; risiko inflasi; syarikat multinasional

INTRODUCTION

Globalization has brought the integration of the financial and economic systems to most countries. It has raised the opportunities for success, but also had increased risks inherent with globalization. Foreign direct investment (FDI) is closely linked to globalization and the world economy (Anyanwu 2012). According to United Nations Conference on Trade and Development (UNCTAD), the FDI expansion around the world has been driven by the multinational enterprises (MNEs), which are the dominant players in the global economy. These MNEs do not make investment decisions autonomously as their decisions rely on the economic and political environment of the host countries. MNEs are risk-sensitive when they commit to undertake an investment.

All countries strive to seek more FDI inflows because of the expected beneficial effects on income generation from the capital inflows, technology advancement, management expertise, and market know-how (Gökmen & Temiz 2014). A group of studies showed that a combination of political and economic variables works best in explaining FDI decisions (Asiedu 2002; Musonera 2008; Schneider & Frey 1985; Solomon & Ruiz 2012). Countries that have high political risk such as having a history of expropriating FDI, weak institutions, endemic corruption and autocratic governments tend to receive relatively lower FDI flows (Moosa 2002). As for exchange rate, it was found that when host country's currency appreciates, FDI inflows increase as investors see it as a good sign for the host economy and expect high returns. Others used inflation rate as an indicator of macroeconomic instability (Bouoiyour 2007; Solomon & Ruiz 2012; Zaman, Hashim & Awan 2006). A high inflation rate could be a sign of internal economic instability and a country's inability to keep a stable monetary policy.

In the FDI literature, the impact of political and macroeconomic uncertainties is far from settled for

both the developed and developing countries. In a least developed country such as Yemen that had experienced low levels of FDI inflows and was ranked as one of the countries with the least amount of FDI inflows in the Middle East, empirical work on FDI is still limited. FDI inflows into Yemen declined to USD129 million in 2009, then to -USD329 million in 2010 from a high of USD1555 million in 2008. Between 1990 to 2007, the inflows of FDI into Yemen fluctuated heavily which affected Yemen's economy as a whole.

Yemen not only has a low level of FDI inflows, but the country's FDI inflow has declined sharply and appeared negative for some years[1], indicating repatriations of investments by foreign investors. Yemen, also experienced volatile rates of inflation and exchange rate shocks (Almounsor 2010), due to political risks, and historically has been plagued by internal conflicts and political instability. Almounsor (2010) mentioned that Yemen is one of the countries that recorded the strongest price increase in the region in 2008. It has a high and volatile inflation rate from 2002 until 2007. UNCTAD (2006) claimed that in 2005, Yemen failed to attract more inflows than in previous years and this could be due to increasing geopolitical uncertainty. The United Nations Economic and Social Commission for Western Asia (UN-ESCWA) (2008) mentioned that Arab investment in Yemen fell sharply in 2007 possibly as a result of the political situation in the country. Thus, the author has not found any study so far that has investigated issues related to the FDI inflows in Yemen. This study examines and provides empirical evidence about FDI inflows in this country and the influence of inflation risk, exchange rate risk, and political risk on the FDI inflows. In addition, the findings would contribute to the understanding of factors that are essential to attract FDIs in a least developed country. This would help foreign investors and local players, which include the regulators as well as investors, to better understand the market.

This paper is organized into five sections. Section one provides the introduction, which is followed by a review of previous studies in Section two. Section three describes the research methodology and Section four analyses the results. Section five concludes the paper.

REVIEW OF LITERATURE

Eclectic theory (also called OLI paradigm) integrates most aspects of FDI determinants. This theory describes three different types of factors or advantages namely, ownership-specific advantages (O), location-specific variables (L), and internalization incentive advantages (I). Several studies have addressed the question of whether or not location factors such as political and economic variables determine the inflow of FDI. Dunning (1998) suggested that some countries may be more successful in attracting FDI than others. Hence, the abilities to stimulate further FDI inflows are closely correlated with political

and economic policies pursued by host governments. MNEs generally choose certain locations according to the expected profits, as more risk leads to more uncertainty with regard to expected profit. Therefore, countries that have high political risks, tend to receive less FDI inflows. Moreover, characteristics of a country's economy are also important in determining the FDI location. Countries that have exchange rate instability or high rates of inflation may have difficulty attracting FDI. Thus, a country that is stable in its macroeconomic environment is expected to have high FDI inflows compared with those that have a more volatile economy (Vijayakumar, Sridharan & Rao 2010). Generally, investors have preference to invest in more stable countries that reflect a lesser degree of uncertainty.

It is widely believed that political risk hampers corporate investment. Without a stable political environment, it is difficult to predict the sustainable long-term growth prospect of FDIs. Previous findings looking into the relationship between political risks with FDI inflows are inconclusive. Findings from Solomon and Ruiz (2012) supported a negative relationship between political risk and FDI inflows in their study of 28 developing countries. They also found that political risk affects FDI into Africa more severely than in other developing regions. Asiedu (2002) revealed that this may be partly attributed to lack of knowledge about African countries. Similar results supported by Luiz and Charalambous (2009) and Iloiu and Iloiu (2008) that found political risk as an important factor when considering FDI. Clare and Gang (2010) found that political stability has a positive effect on FDI for 53 developed and developing countries, but is only significant for developing countries. This reveals a greater concern of political risk in the developing countries as compared to developed countries. This is further supported by Krifa-Schneider and Matei (2010) in their study of 116 countries (22 industrialized countries and 94 developing countries). They found a negative relationship between political risk and FDI inflows among 33 developing and transition countries. A negative relationship is also found by Vadlamannati (2012) between political risk in 101 developing countries and the US firms' investment activities.

Despite the fact that one might expect FDI inflow to fall as a consequence of political risk, Jiménez, de la Fuente and Durán (2011) pointed out that in certain regions, MNEs are prepared to undergo greater political risk in exchange for other advantages such as physical and cultural proximity. In an early study, Jiménez (2010) revealed that Spanish MNEs, especially young firms, invested in countries where political risk levels are very high, aiming to maximize the opportunities of acquiring knowledge and to access managerial talent. Jiménez (2011) further demonstrates that FDI inflows come from firms that are searching for a market niche where they can take advantage of their political capabilities. More support is provided in a study by Asiedu (2002) that shows FDI to

Angola which is a highly unstable country, ranked first among Sub-Saharan African (SSA) countries in providing substantial risk adjusted returns.

In contrast, some studies found that political risks play an insignificant role in firms' decision to invest abroad. For example, Bitzenis (2007) found that managers of MNEs in Bulgaria considered political instability as the least important obstacle. Similarly, Olibe and Crumbly (1997) showed that political risk was insignificant to influence the US FDI flows. Li and Resnick (2003), using a pooled analysis of 52 developing countries from 1982 to 1995, also showed similar findings. This is consistent with Chandprapalert (2000), where political instability in the host country, Thailand, was not one of the factors that affected US firms' investment in Thailand. In summary, the findings of previous studies about the relationship between political risk and FDI in the developed or developing countries are inconclusive. Thus, this paper aims to address the political risk issue at country level (Yearly FDI) and corporate level (Corporate FDI) in Yemen, a least developed country.

Previous studies have also examined exchange rate risk as one of the macroeconomic uncertainties in the host countries. However, the direction of the effects of exchange rate risk on FDI flows still remains unclear. It has been argued that the impact of exchange rate on investment decision in a particular economy depends on the overvaluation of the currency of the host country as compared with that of the investing country's currency. While appreciation of the host country currency could raise FDI inflows due to higher purchasing power of local consumers, it is also found that depreciation of the currency could also increase FDI inflows due to the rise in the relative wealth of MNEs, and this in turn increases their capacity to invest through reduced cost of capital (Ruiz 2005).

Depreciation of the host currency could imply that MNEs would be able to purchase assets and technology in the host country with a lower cost, thus increasing FDI. It could also lead to capital inflows as MNEs try to take advantage of relatively cheaper domestic labor (Anyanwu 2012). In contrast, appreciation of the currency would imply more foreign currency earnings for the MNEs and hence could increase FDI inflow. It could reduce import costs, which in turn could stimulate additional investments (Gorg & Wakelin 2002). In addition, exchange rate could also affect the profitability and debt burden of firms and this might therefore influence investment decisions (Luiz & Charalambous 2009). UNCTAD (1998) noted that exchange rate policy is related to the stability of the macroeconomic environment and could influence FDI decision by impacting the price of assets, the value of transferred profits, and the competitiveness of foreign affiliate exports.

Furthermore, increased host country currency stability should be able to attract more FDI inflows. Pain and Welsum (2003) found that exchange rate volatility had a significant positive impact on the FDI inflows in the UK in the short run and the long run, while for Germany and Canada, positive impact was found only in the long run, but in the short term for the US and Italy. However, exchange rate volatility had no significant effect on FDI in France. In an early study, Froot and Stein (1991) found that currency depreciation in the US is associated with higher FDI inflows. Further evidence has been reported by Vijayakumar et al. (2010). They examined using an ordinary least square (OLS) pooled regression, from 1975 to 2007, for Brazil, Russia, India, China, and South Africa and found a significant negative relationship between FDI and exchange rate.

In a developing country, namely Ghana, Adam and Tweneboah (2009) found that macroeconomic stability measured by exchange rate is positively related to FDI. This is consistent to Khrawish and Siam (2010) who examined the determinants of FDI in Jordan from 1997 to 2007, and found that exchange rate stability has a significant positive relationship with FDI. Luiz and Charalambous (2009) found that South African financial services firms considered the exchange rate as an important factor before investing in Sub-Saharan African (SSA) markets. They explained that the exchange rate influences the company's profit and may therefore affect the investment decisions.

Similarly, Osinubi and Amaghionyeodiwe (2009) found a significant positive relationship between exchange rate and FDI in Nigeria. This implied that the depreciation of the Nigerian currency leads to an increase in FDI inflows. This is further supported by Nurudeen and Wafure (2010) who examined the determinants of FDI in Nigeria over the period from 1970 to 2008, by using the OLS and error correction techniques. They found that exchange rate has a significant positive effect on FDI inflows. When the exchange rate of the host country depreciated, the dollar price of its domestic industries fell. Thus, foreign investors would be attracted to take advantage of the lower price, particularly in merger and/or acquisition activities.

Mughal and Akram (2011) found that exchange rate is significant and inversely related to FDI in Pakistan. This means that currencies that are proned to higher depreciation are a threat to foreign investors. A study by Chandprapalert (2000) also found a strong negative relationship between exchange rate fluctuation, and the US FDI inflows to Thailand. This is consistent with Clare and Gang (2010) who revealed that exchange rate risk has a negative impact on FDI of American MNEs. Brzozowski (2006) found that the uncertainty and volatility of exchange rate influence the investment decision negatively in emerging markets and transition countries. In contrast to the findings reported thus far, a group of studies found that the exchange rate has a statistically insignificant effect on FDI inflows (Amal, Tomio & Raboch 2010; Bissoon 2012; Djokoto 2012; De Vita & Abbott 2007; Yang, Groenewold & Tcha 2000). Anyanwu (2012) and Srinivasan (2011) also showed an insignificant relationship between exchange rate and FDI inflows in Africa.

There appears to be inconclusive evidence on whether or not exchange rate could influence the inflow of FDI.

Some studies have found a reduction in FDI due to the exchange rate risk. This implies that MNEs are concerned with future expected profits, thus they will postpone their decision to invest if the exchange rate becomes more volatile. Other researchers have found that an increase in exchange rate risk increases FDI. FDI is treated as substitutes for export. An increase in the exchange rate volatility between the headquarters and the host country induces a multinational to serve the host country by selling its product locally instead of exporting it. Other studies have revealed an insignificant relationship between FDI inflows and exchange rate. Inconclusive findings of the exchange rate on FDI from different countries influence us to examine this issue as there is no study that has looked especially into Yemen.

Inflation rate is another factor that has been associated to FDI. High inflation could show the inability of the government of the host country to balance its budget, and represent the failure of the central bank to carry out proper monetary policy. Inflation rate is usually used as an indicator of macroeconomic instability, reflecting the presence of internal economic pressure or inability to restrict money supply. Moreover, inflation fluctuation has a great influence on assets valuation, profits and credit availability. Unpredictable and volatile inflation rates in a host economy could obstruct FDI because this creates uncertainty and renders problems in long-term corporate planning. A high and unpredictable inflation distorts the information content of the market prices.

Bouoiyour (2007) and Djokoto (2012) revealed that inflation volatility hinders FDI inflows in Morocco and Ghana respectively; whereas Yang et al. (2000) found that inflation rate is significant and negatively related with FDI inflows. They stated that inflation rate captured the stability of the domestic macroeconomic environment. By examining 45 developing countries in the African, Latin American, and Asian regions, Bissoon (2012) supported the negative relationship as high rate of inflation indicates internal economic instability. MNEs may avoid or reduce investments in such countries. Similar results have been found for 24 developing countries in a study done by Kok and Ersoy (2009). Other evidences showed that MNEs invest in the Latin American countries when such markets present a positive scenario for macroeconomic stability (Amal et al. 2010; Nunes, Oscategui & Peschiera 2006). Asiedu (2002) analyzed Sub-Saharan African countries over the period of 1984 to 2000. He found that inflation rate has a significant negative relationship with FDI. As for Srinivasan (2011), he suggested that inflation is the most significant factor in determining FDI for countries in the South Asian Association for Regional Cooperation (SAARC).

Another strand of the literature focuses on the positive relationship between inflation and FDI inflows. Leitao and Faustino (2010) in Portugal observed that a higher inflation rate attracts more FDI inflows from the European Union (EU) in the period of 1996 to 2005. Azam and Lukman (2010) examined the economic factor effects on FDI inflows into Pakistan, India, and Indonesia from 1971 to 2005. Pakistan and Indonesia showed an insignificant relationship between FDI inflows and inflation rate, but positively significant for India. The finding on Pakistan is in contrast with Zaman et al. (2006) where they found a significant positive relationship between FDI inflows and inflation rate where rising price levels encourage the foreign investors to sell their products at higher prices. A positive relationship between FDI inflows and inflation rate is also observed in Jordan (Khrawish & Siam 2010). In contrast, empirical works by Anyanwu (2012), Busse and Hefeker (2007), Obwona (2001), and Vijayakumar et al. (2010) argued that the relationship between inflation and FDI is not significant. Nurudeen, Wafure and Auta (2011) also found a similar result in Nigeria.

Generally, empirical findings on political risk and macroeconomic uncertainties influences on FDI show inconclusive results, whether or not the research is conducted in the developed, developing, or least developed countries. There is an avenue for us to provide new evidence from a least developed country, with an aim to provide insights into this issue in the case of Yemen.

METHODOLOGY

The data is taken from secondary sources from 1990 to 2010. The availability of data constrains the time frame of the study. The starting year is 1990 due to the fact that before that period, Yemen was divided into two different countries. The data ends in 2010 because starting 2011, the country is involved in a political upheaval. The source of FDI data is from United Nations Conference on Trade and Development (UNCTAD). Political risk variable data is obtained from the Political Risk Services (PRS) group's database. The indices for the month of June in each year over the period of this study are taken because in this particular month, data is available throughout the period of the study. If we choose other months, the data is not complete. The index score ranges from zero to one hundred. A low score by a country means it has high political risk vice-versa. For ease of interpretation, the score is adjusted to one hundred minus the score, so that a high number implies high risk while a low number implies a low risk.

Primary data was also collected using questionnaires that were distributed by hand to the MNEs that have undertaken FDI in Yemen, with subsequent investments within the three year period, i.e., 2008, 2009 and 2010. The questionnaire is divided into four parts: Part I and II provide background information on certain issues considered important for characterizing the respondents. Part III is about the degrees of concern of MNEs regarding the political, exchange rate, and inflation risks in Yemen. The last part of the questionnaire covers the value of capital budgeting projects accepted by MNEs in Yemen for 2008, 2009 and 2010. The questionnaires[2] were distributed to the senior management or the key decision makers in

the MNEs. There are 141 MNEs in Yemen. However, 110 questionnaires were distributed due to the difficulties in finding the correct address of the remaining MNEs. The number of questionnaires returned was 83. The response rate was 75% from the total number distributed. Twenty one questionnaires were discarded because they were not completely filled. Eventually, 62 questionnaires were used for further analysis, making a valid response rate of 56%.

Two multiple linear regression models are utilized to examine whether political, exchange rate and inflation risks affect the foreign direct investment inflows in Yemen. The first multiple linear regression model is for the country level, where time series data over the period of 1990 to 2010 is used as follows:

$$YFDI_t = \alpha_0 + \alpha_1 PR_t + \alpha_2 ERR_t + \alpha_3 IR_t + \alpha_4 GDP_t + \varepsilon$$

where

$YFDI_t$ = FDI inflow in Yemen for year t
PR_t = Political risk for year t, measured as score ranging from one to one hundred (higher, higher risk)
ERR_t = Exchange rate risk, measured by $[(ER_t / ER_{t-1}) -1]$, percentage change in the nominal Yemeni Rial (YER) against US dollar (USD) exchange rate for year t
IR_t = Inflation risk, measured by $[(CPI_t / CPI_{t-1}) -1]$, percentage change in the consumer price index (CPI) for year t
GDP_t = Economy size, measured by gross domestic product (in USD million) for year t

The second multiple linear regression model utilized the questionnaire data to examine the relationship between the perceived political, exchange rate, and inflation risks of MNEs with their corporate FDI, as shown below.

$$CFDI_i = \alpha_0 + \alpha_1 PPR_i + \alpha_2 PERR_i + \alpha_3 PIR_i + \alpha_4 S_i + \varepsilon$$

where

$CFDI_i$ = Corporate FDI of MNE i, measured by the total value of capital budgeting projects accepted by the MNE in Yemen for 2008, 2009 and 2010
PPR_i = Perceived political risk of MNE i, measured by the average of the responses to the eleven items that reflect the political risk dimensions[3]

$PERR_i$ = Perceived exchange rate risk of MNE i, measured by asking the respondent to indicate how concerned is the MNE about the exchange rate in Yemen
PIR_i = Perceived inflation risk of MNE i, measured by asking the respondent to indicate how concerned is the MNE about the inflation risk in Yemen
S_i = Size of MNE i, measured by the total assets of the MNE

ANALYSIS OF RESULTS

Table 1 presents the descriptive statistics of the time series variables. It shows that the mean of the yearly foreign direct investment inflows (YFDI) into Yemen is USD222.9 million and the median is USD58.75 million with a standard deviation of USD533.6 million. The minimum value of -USD329 million is in 2006 when the FDI inflow dropped drastically, whereas the maximum is in 2000, when the FDI inflow was USD1554.6 million. In term of political risk (PR), Yemen has a mean of 39.6 points. This means that Yemen is considered a moderate risk country. The median is 38.75 while the standard deviation of this score is 4.01. The minimum and maximum points are 33 and 51 points in 1996 and 1991, respectively. Meanwhile, the percentage change in the exchange rate risk (ERR) on average is 10.4 with median and standard deviation values of 4.8 and 11.11, respectively.

The mean of the percentage change in CPI, which represents the inflation risk (IR) is 17.13 percent and the median is 10.77 percent while the minimum and maximum percentage changes are 3.5 and 41.6, respectively. As for the economy size measured by the annual GDP, Yemen has an average of USD14.1 billion and the median is USD11.05 billion, with a standard deviation of USD9.4 billion. Meanwhile the minimum GDP is USD4.45 billion in 1994. In 2010, Yemen has the highest GDP which is USD32.7 billion.

As for the total value of capital expenditure project accepted by the MNEs in Yemen for 2008, 2009 and 2010, Table 2 shows that the average value of capital budgeting project accepted by an MNE in 2008 was USD6.44 million with a standard deviation of USD13.37 million. The maximum value that was accepted by an MNE was USD50 million. In comparison with 2009, the mean was USD11.1 million with a higher variability, where standard deviation was USD42.26 million. In 2010, the average

TABLE 1. Descriptive statistics

Variable	Description	Mean	Median	Std. Dev.	Min	Max
YFDI	Yearly FDI inflow in US dollars at current market price	222.9	58.75	533.6	-329	1554.6
PR	Political risk index of June month for each year	39.6	38.75	4.01	33	51
ERR	Annual percentage change in the nominal exchange rate of YER/USD	10.4	4.8	11.11	0.4	41.4
IR	Annual percentage change in CPI	17.1	10.77	12.72	3.54	41.61
GDP	Annual GDP (PPP) in US dollars at current market price	14.1	11.05	9.4	4.45	32.7

value of capital budgeting project accepted was USD10.69 million with a standard deviation of USD26.54 million. The maximum values for 2009 and 2010 were USD320 million and USD152 million, respectively. The minimum value was zero. In terms of the mean and median values of corporate foreign direct investment (CFDI) (measured as average for the three years 2008, 2009 and 2010) were USD9.44 and USD1.48 million with a standard deviation of USD22.57 million. In addition, the minimum and maximum values for this variable were USD0.60 and USD157.33 million.

TABLE 2. Value of capital budgeting projects accepted by MNEs in Yemen for 2008, 2009 and 2010 (in USD millions)

Description	Mean	Median	Std. Dev.	Min	Max
2008	6.44	0.45	13.37	0	50
2009	11.1	1	42.26	0	320
2010	10.69	1.28	26.54	0	152
CFDI*	9.44	1.48	22.75	0.06	157.33

* CFDI: The average of the three years (2008, 2009 and 2010)

Descriptive statistics for the eleven items of political risk, perception of the exchange rate risk and inflation risk are reported in Table 3. The overall mean for perceived political risk was 2.96 with a minimum of 1.36 and a maximum of 5. This indicates that, on average, the respondents were somewhat concerned about political risk when making investments in Yemen. The respondents appeared to be more concerned about exchange rate risk and inflation risk as their means were higher, which in this case were 3.48 and 3.16, respectively. Examining each of the dimensions of political risk, it shows that companies were somewhat concerned with the expropriation and confiscation, contract repudiation, currency inconvertibility, ownership and personnel restrictions, taxation restrictions, import

and export restrictions and economic sanctions. These items were very much related to the host government. However, the MNEs were more concerned with terrorism, demonstrations, riots and insurrection, revolutions, coups and civil wars, and wars, as the mean score ranges between 3.62 and 3.74.

Table 4 Panel A[5], shows that there is a statistically significant negative relationship between YFDI and PR. This implies that political risk in a host country can make an otherwise desirable investment location undesirable. A high political risk in Yemen deters investment flows, and renders an existing investment site less attractive, reducing reinvestment, limiting expansion and potentially inducing pre-emptive divestment. This result is in line with Krifa-Schneider and Matei (2010) and Solomon and Ruiz (2012).

Exchange rate risk is also statistically significant and negatively related to the yearly foreign direct investment, implying that the increase in the exchange rate poses greater threat to foreign investor. For MNEs that aim to service the local market, the weakening of the local currency will have a negative effect on sales, as the purchasing power of local customers decreases with the depreciation of the local currency. On the other hand, depreciation of the currency will be favourable for those investors who aim to export, as the depreciation would give them increased price competitiveness relative to overseas competitors. Nonetheless, depreciation of the local currency affects the foreign investors at the time of repatriation of profits. The negative sign for exchange rate risk is consistent with previous findings (Clare & Gang 2010; Mughal & Akram 2011; Vijayakumar et al. 2010).

A positive significant relationship is found between YFDI and inflation risk. This is consistent with Khrawish and Siam (2010), Leitao and Faustino (2010), and Zaman et al. (2006). Result implies that the inflation risk in Yemen might be considered tolerable as MNEs are prepared to assume greater inflation risk in exchange for other advantages.

TABLE 3. Descriptive analysis of respondents' perception on business environment issues[4]

Panel A: Description	Mean	A1	A2	A3	A4	A5
Political risk	2.96					
Expropriation & confiscation	2.61	10	24	13	10	5
Contract repudiation	2.62	10	24	12	11	5
Currency inconvertibility	2.61	11	18	20	10	3
Ownership & personnel restrictions	2.41	13	20	21	6	2
Taxation restrictions	2.53	13	18	18	11	2
Import & export restrictions	2.46	13	17	24	6	2
Terrorism	3.67	3	5	15	25	14
Demonstrations, riots & insurrection	3.74	1	6	17	22	16
Revolutions, coups & civil wars	3.67	1	10	13	22	16
Wars	3.62	2	9	14	22	15
Economic sanctions	2.64	12	18	16	12	4
Exchange rate risk	3.48	2	12	13	24	11
Inflation risk	3.16	8	11	12	25	6

A1: Not concerned at all, A2: Slightly concerned, A3: Somewhat concerned, A4: Very concerned, A5: Extremely concerned.

TABLE 4. Multiple regression

	Panel A: Model 1				Panel B: Model 2		
Independent Variables	Unstandardized coefficient	t-ratio	P-value	Independent Variables	Unstandardized coefficient	t-ratio	P-value
PR	-62.215	2.74***	0.015	PPR	0.216	0.79	0.433
ERR	-47.491	-3.99***	0.001	PERR	-0.040	-0.12	0.902
IR	55.407	4.95***	0.000	PIR	0.113	0.38	0.702
GDP	29.917	2.83***	0.013	logSize	0.654	6.00***	0.000
Cons	-4408.59	-2.99***	0.009	Cons	-3.079	-3.69**	0.000
Number of cases	20				62		
R^2	0.6717				0.418		
Adjusted R^2	0.5841				0.377		
F	7.67***				10.24***		

***Significant at the 0.01 level; **Significant at the 0.05 level; *Significant at 0.10 level

Note: In Model 1, YFDI is the dependent variable; in Model 2, logCFDI is the dependent variable; based on the normality tests, the CFDI and MNEs'size are not normal. Thus, both variables were transformed to log as it is the best transformation based on the ladder command in STATA, to meet the normality assumptions.

Furthermore, the significant positive relationship would indicate that FDI inflows in Yemen might come from MNEs that are searching for a market niche where they can take advantage of the business environment in the long run. In addition, MNEs might implement their internationalization strategies by investing in countries where the risk levels are high, aiming to maximize the opportunities of acquiring cheaper resources, as well as diversify their FDI portfolios so as to protect themselves against this risk. Gross domestic product (GDP), a proxy for market size, is also found to be statistically significant. The market size plays a significant role in attracting more FDI flows into Yemen. Overall, political risk (PR), exchange rate risk (ERR), inflation risk (IR) and GDP could explain 58 percent of the variance in the yearly foreign direct investment.

In contrast, the study finds that the perceived risk factors (PPR, PERR and PIR) had no significant relationship with corporate foreign direct investment[6]. It is likely that foreign investors will take these risks into account when they make decisions on their initial investments in Yemen. However, the amount of their subsequent capital investments given their operations in Yemen may not be affected by political, exchange rate and inflation risk considerations. In other words, political, exchange rate and inflation risks were possibly only examined in the initial business plan. Another interpretation for this insignificant relationship is that MNEs may not necessarily concern too much about the risks for particular investments, since they can diversify away some of the risks with simultaneous investments in other countries. Thus, MNEs may not have been too concerned about these risks, and this may have resulted in perceived political, exchange rate and inflation risks having no effect upon CFDI. Another possibility is due to the characteristics of flow of FDI, which is less fluid compared to the flow of goods, for example. While traders are sensitive to and constantly internalize the changes in trading costs due to risk, FDI tends to be much more rigid and stationary in the host economy. A third possibility is that foreign investors who currently undertake operations in Yemen may have

long term horizons and global perspectives, which are unlikely to be reassessed due to short-term changes in specific risks. Another justification is perhaps MNEs already operating in Yemen may have developed capabilities in terms of knowledge, bargaining and lobbying skills. Therefore, the perceived risks no longer seem to influence their investment decisions. The only variable found to be significant is size, which is a control variable in model 2. A positive and significant coefficient implies that larger MNEs had larger CFDI in Yemen, suggesting that other things being equal, larger MNEs have larger investments in Yemen.

CONCLUSION

In this study, both secondary and primary data have been used to identify whether the actual and perceived political, exchange rate and inflation risks influence the yearly FDI inflows and corporate FDIs in Yemen. Secondary data is taken from 1990 to 2010 while primary data is from questionnaires collected from 62 MNEs in Yemen. Results of multiple regression analysis showed that political risk negatively influences FDI. This means that the political instability in Yemen makes it an undesirable location that deters the FDI inflows. Exchange rate risk is also found to be influencing FDI negatively, indicating that exchange rate stability is important to promote the flow of FDI into Yemen and the higher the uncertainty in the exchange rate, the greater the threat to foreign investors. Furthermore, inflation risk which positively and significantly affects YFDI indicates that MNEs may be willing to assume this risk in exchange for the incentives and exemptions advantages. They might implement their institutionalisation strategies by diversifying their investment in different countries to protect themselves against this risk. In term of the insignificant influences of the perceived risk factors on corporate FDI, these can be justified by viewing that these factors did not seem to influence only the MNEs' subsequent capital investments. During the initial stage of investment, the perceived

political, exchange rate, and inflation risks are likely to be important considerations. In fact, analysis based on annual country data show that actual political, exchange rate, and inflation risks are important determinants of FDI. Thus, the perceived risk factors appear unimportant to MNEs' in determining their subsequent or continuing capital investments, possibly because MNEs might have long term horizon and global-diversified perspectives, which are less affected by perceived immediate or short-term risks.

This study may have some limitations. The insignificant relationship found between the perceived risk factors and CFDI indicates that it would be useful for future studies to examine initial and subsequent investments separately, as these two types of MNEs investment may be differently influenced by MNEs' perceived risks. Another issue that should be factored in is whether or not FDIs of the MNEs come from a single country or many countries. This is important as MNEs that invest in several countries would be more tolerant of the political, exchange rate, and inflation risks. In addition, there is a need to examine the various entry modes of FDI and the characteristics of MNEs within an integrated theoretical framework, as the perceptions of MNEs who have entered the host country through subsidiaries or branches might be different from those that entered the country through initial investment. Our study focuses on Yemen alone. Thus, no generalization of the result could be made to the Middle-Eastern and North African (MENA) countries. All these limitations could be addressed in future researches.

ENDNOTES

[1] Yemen had negative FDIs from 1995 to 1999, 2005 and 2010.

[2] The questionnaire was developed in two languages, Arabic and English. A Five-Categorical Likert Scale is used from not concerned at all to extremely concerned.

[3] The eleven dimensions (demonstrations, riots & insurrection, import & export restrictions, terrorism, ownership & personnel restrictions, taxation restrictions, contract repudiation, currency inconvertibility, revolutions, coups & civil wars, and wars & economic sanctions) are adopted from Alkattab, Anchor and Davies (2007).

[4] The respondents' perceptions of political risk, exchange rate risk and inflation risk, incidentally, were not associated with, or were independent of, the respondents' background and demography factors. The results are not presented here, but are available from the authors upon request.

[5] The results of the normality, homoscedasticity, autocorrelation, and multicollinearity tests are not presented here but available from the authors upon request.

[6] We thank an anonymous reviewer of this journal for pointing out that the respondents' perception of risk may be influenced by the respondents' background and demographic factors. We checked for this, but find no such evidence. Please refer to endnote 4.

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