

The Country Risks and Foreign Direct Investment (FDI)

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Abstract

The importance of foreign direct investment (FDI) in developing countries has begun to spread very rapidly, especially after the transition of command economies countries into open markets. Many countries see attracting FDI as an important element in their strategy for economic growth because FDI is widely regarded as an amalgamation of capital, technology, marketing, and management. So, it is important to understand why in many countries FDI inflow is lower than the expected. This paper is to investigate the linkages between political risk and foreign direct investment inflows. International country risk guide (ICRG) has dispersed separate financial, economic, and political ratings, and has identified 12 different political risks indices. Theoretically, it seems that there is a relationship between FDI and political risks, which is precisely the analysis undertaken in the current study. This paper employs an instrumental variable approach to investigate Iran time series data from 1985 to 2016. Wu-Hausman test is used to test for the presence of endogeneity, and two-stage least square estimator (2SLS) is estimated to find out the relationship between political risks indices and FDI inflows in Iran. The results show that external conflict, ethnic tensions, socioeconomic condition, investment profile, military, and religious tensions are the highly significant determinants of foreign investment inflows in Iran.

Keywords: Political Risk, Country Risk, Foreign Direct Investment.

JEL Classification: C31, C33, F21, F23.

1. Introduction

FDI plays a significant role in the countries' economic growth; although it less is understood about the specific mechanisms through which it contributes to their economic development. The most

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fundamental contribution of FDI is to enhance a country's stock of physical capital; but according to the new growth theory, its indirect effects arising from technology abundance and efficiency gains, are of much importance (Elkomy, Ingham & Read, 2015).

Considering the determinants of the FDI location, literature revealed two main types of factors including internal factors (theory of "pull-factor"), and external factors (theory of "push-factors"). The earlier contains the quality of socioeconomic infrastructure, market size, the rate of human capital development, the distance between the countries, the labor cost, openness to international trade, politics exchange, fiscal and non-fiscal incentives, political stability, monetary policy, and the degree of financial liberalization (Dabla-Norris et al., 2010; Arbatli, 2011; Anyanwu, 2011). The latter primarily includes the growth rate of developed countries and interest rates (Elleuch et al., 2015).

As the literature on the FDI informs determinants, and political and institutional risks is one of the major concerns for foreign investors, especially in developing countries, some political risks, e.g. "resurgence of resource nationalism" (MIGA, 2010), and unfavorable annulment or change of the foreign investment terms (Barthel, Busse and Neumayer, 2010), continue to pose a great challenge to foreign investors in developing markets.

A question thus arises: How does political risk affect FDI flows in Iran? Logically, it should be the case that political risk would have a significant negative impact on FDI. Political instability increases uncertainty in the economic environment, through reducing the foreign investors' incentive to invest in the host country.

It seems that there is a relationship between FDI and political risks (Bussmann, 2010; Buthe and Milner, 2008; Daniele and Marani, 2010; Enders, Sachsida and Sandler, 2006; Haftel, 2006b; Jensen, 2008; Ramamurti and Doh, 2004), which is exactly regarded in the current study.

The remainder of this paper is organized as follows. Section 2 reviews the theoretical analyses on the subject. Section 3 discusses the literature review. Sections 4 and 5 specify the models to be employed in the study along with the estimation techniques. Section 6 provides the regression results with interpretations, and section 7 concludes the paper.

2. Theoretical Analysis

Country risk is separated into several categories such as economic risk, transfer risk, political risk, sovereign risk and exchange rate risk. These categories overlap each other and maybe the one of them might have an influence on another (Nordal, 2001).

2.1 Political Risk

Some scholars define political risk as general government's intrusion regarding business transactions (Kobrin, 1978). Others consider political risks as separate occasions of new pieces of actions taken against the interest of a particular company, or a mix of the two (Root, 1972). There may be found lots of similarities between country risk and political risk analysis. Used to forecast possible issues in cross-border transfer of capital, country risk analysis aims to assess the future risks by accounting various factors, such as political, social both macro and microeconomic together with countries' ratings, and other measures of economic performance (McGowan and Moeller, 2009). Although such indicators may be quite useful in assessing the investment climate of a host country, they do not take into full account all the peculiarities of political risk. There may be a country with relatively low rates of country risk but a great exposure to political risk, for example a wealthy and competitive country that is politically unstable. Brink (2004) speculated about the contingency that a country attracting financing from abroad might be able to serve the interest on its loans, but unwilling to do so for ideological reasons or other sorts. This example shows the interconnection between the two types of analysis and the kind of policy problems that could have been foreseen by a more profound political risk analysis (Brink, 2004). Some other authors (e.g. Finnerty, 2001) consider currency inconvertibility as a political risk. Brink (2004) mentions imposing high quality standards and safety regulations that in comparison with local competitors, being imposed upon foreign firms, may disadvantage the foreign investors. In spite of the fact that the recent definitions are less encircling than those mentioned above, they seem to be rather better at encompassing the complexity of interrelations of a country's economic and political systems. So, more comprehensive definition of a political risk to FDI, should take into account the

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diverse nature of its origins, including both the event and policy aspects, as well as the possibility of general political and/or economic instability within a state. For the purpose of this paper, we should define political risk as any potential threat to profitability or assets allocated in a host country that arises as a result of a country's political or socioeconomic turmoil or the government's action, rights violations or restrictions.

2.2 FDI and Political Risk

Foreign Direct Investments may be defined as follows:

- a) Foreign direct investments consist in the transfer of an industrial package which comprises capital, technologies, methods of industrial organization, managing expertise, marketing expertise, etc. which allow the investor to exercise the right of control over the investment .
- b) Foreign direct investments represent the expenditure incurred for the purchase or the creation of economic units, the modernization and expansion of the present and future income, with the purpose of obtaining future income from foreign investors (UNCTAD, 2015)
- c) foreign direct investments is a category of international investments that reflects the purpose of a business entity residing in a country (direct investor) to obtain a long-term collaboration in a company residing in a foreign country (direct investment) (International monetary fund, 2015).

On the basis of the definitions above, we can extract the following aspects:

- the risk factors that influence the foreign direct investments are born in the business environment characterizing the host country;
- the events which lead to the rise of country risk are controlled by the Government of the country in which the investment is carried out;
- decisions concerning the achievement of a foreign direct investment in a host country should be taken exclusively on the basis of a solid documentation on the financial and economic and political environment;
- the implementation of investments is made only if they provide a safe profit with a minimum of risks;

- avoiding the losses in the case of the contracting the investment should be a constant concern for investing companies and these losses may be: loss of opportunities generated by locking the profits made from the investment made, losses resulting from additional costs arising from the adoption of various actions in order to avoid and reduce the risk of loss arising from the capital invested that once lost can no longer be recovered in the host country .

Country risk can influence the foreign direct investments by means of the following levers:

- limitation or restriction of the capital
- political, economic or social events (strikes, military conflicts, elections)
- loss of profit caused by economic crisis
- corruption, legislative instability (Lapadusi and Ciurlau, 2016).

Political risk is recognized as the possibility that the policy decision and the political and social events in a country could affect the business climate so that it induces a loss of the potential investor's profits (Alon & Herbert, 2009). Political risk is a type of risk faced by investors, corporations, and governments that political decisions, events, or conditions will significantly affect the profitability of a business actor or the expected value of a given economic action (Kennedy, 1988).

3. Literature Review

While the economic determinants of FDI flows to developing countries have been analyzed to a considerable degree, it is somewhat surprising that the importance of changes in political institutions and of other relevant policies in host countries, have received much limited attention.

Henisz (2000) shows that multinationals face an increasing threat of expropriation if political hazard in the host country increases. However, the degree of risks depends on the strategic behaviour of the multinational, which may partner with host-country firms that have a comparative advantage in interactions with the host-country government.

Asiedu (2002) examined the impact of political stability on inflows

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of FDI flows in Sub-Saharan Africa. The author found that there is a lack of connection between the two economic concepts.

Tavakoli and Khataei (2002) show that the Iranian economy has a sound economic performance and its economic, financial and political risks are moderate among selected nations. Even though Iran's economic liberalization policy performance, seems low, but its economic and policy indicators as the stimulator of FDI ranks the country in middle. The Iranian economy has improved its FDI attraction position through more favorable and flexible economic liberalization policies nationally and internationally since 1993: As a result of these policies, the foreign investments have already started to increase by a moderate rate.

Click (2005), in an attempt to measure political risk, deducted financial risks from total country risks to calculate political risks. The standard deviation of each country's regression residuals was assumed to provide a measure of the unexplained country risk, i.e. the unobserved political risk. The study showed differences in Return on Assets (ROA) related to measurable financial risk variables. To further examine whether country risk captured political risk, correlations of residual deviations were computed by the author with other country and political risk indicators. Consequently, it was revealed that the correlation between residual deviations and average Euro money, Institutional Investor and ICRG ratings was moderately high, establishing the notion of a significant correlated relationship. The author concluded that political risk is unrelated to ROA of the companies.

Jensen (2006) finds that democratic countries attract greater inflows of resource-seeking FDI into abundant natural resources after controlling for selection bias of authoritarian developing countries.

Busse and Hefeker (2007) explore the linkages between political risk, institutions and foreign direct investment inflows using data from 83 countries for the period 1984–2003 using different econometric techniques such as fixed effects and GMM estimator. They found that government stability, law and order, quality of the bureaucracy investment profile, internal and external conflict, ethnic tensions and democratic accountability are statistically significant determinants of foreign investment flows. Across different econometric models, the

relative magnitude of the coefficients are largest for government stability and law and order, indicating that changes in these components of political risk and institutions are highly relevant for investment decisions of multinationals.

Desbordes (2010) asserts that rise in political risk is the direct consequence of the instability of the government, public corruption, the weak protection of property rights and economic imbalance. The author also underlined that this risk end by affecting negatively the inflows of foreign direct investment.

Asiedu and Lien (2011) find that democratization had a positive and significant effect on FDI in developing countries, given a certain share of natural resource and minerals in total exports.

Hayakawa et al. (2012) examine the impact of various components of political as well as financial risk on inward FDI. They used the dynamic generalized method of moments (GMM) estimator with data from 90 countries for the period of 1985–2007, mostly in developing countries. They found that among the political risk components, government stability, socioeconomic conditions, investment profile, internal and external conflict, corruption, democratic accountability, and religious and ethnic tensions had a direct positive relationship with FDI flows.

Savoiu, Dinu and Ciuca (2012) identify several econometric models of Foreign Direct Investment focused on the country risk in Romania. The findings and conclusions amplify the importance of Foreign Direct Investment models, as a development factor even in times of recession, highlighting the increasing importance of the country risk signal.

Elleuch et al. (2015) attempt to highlight the essence of the relationship between foreign direct investment (FDI) and political risk in particular. The investigation authorized to underline the positive correlation between country risk and political risk in Tunisia on the intention of foreign investors, because of the macroeconomic policies implementing targeting the improvement of the stability of the country.

Mehmet and Ozlem (2016) analyze the effect of country risk on FDI. In their study, the annual data from 2002 to 2014 of 49 countries were utilized, and the relationships between the variables were

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analyzed through two phase system-GMM dynamic panel method. Three model assumptions were constructed for the study. According to the assumption results of the first model which focus on the country risk's effect on the FDI inflows, a raise in the country risk increases the FDI inflows. The results of the second model through which the effects of sub-elements of country risk (financial, economic and political) on the FDI are analyzed separately, showed that the financial risk did not create statistically meaningful effect, while a decrease in economic and political risk affects the FDI inflows in positive means. At last, according to the results of the third model, FDI reduces the effect of country risk and indirectly inconsistencies.

Lapadusi and Ciurlau (2016), presented the influence of country risk over FDI one aims at evaluating the relationship between risk and potential gain resulting from conducting the respective business. The purpose of this article is an attempt to identify and develop aspects that outline a number of risk factors of influence over FDI. They concluded that, the decision to invest in a particular country is based on an analysis of the factors characterizing the local market of the host country, as well as the opportunities offered by this market in order to obtain profitability. Among the factors to be considered we can mention: the economic and political stability, the seriousness of governmental institutions, the safety and fairness of the legal system, the accessibility to the information system and the development of the infrastructure of the host country, etc.

Ibrahim (2017) examines how risks affect entry to the market and operations in foreign countries. The results derived by using multiple regression analysis showed there are significant relationship between the country risks, and FDI inflows. The findings therefore imply that FDI levels in countries, and decision of market entry as well as business operations are significantly affected by political, financial, and economic risks of the host country. Moreover, the study suggests that firms need to increase the risk awareness and prepare risk management plans to minimize the occurrence of risks.

Dellis et al. (2017) investigates the role of economic structures as the determinants of FDI inflows. Results showed that there was an empirical relationship between the quality of a host country's economic structures and FDI inflows. Their results were robust to

various economic specifications, and were confirmed when restricting the sample to euro area countries only.

Akhtaruzzaman, Berg and Hajzler (2017) present empirical evidences, suggesting a relatively clear statistically robust, and intuitive characterization. Institutional factors that affected on likelihood and total loss of foreigners' capital, dominated those that affected the rates of return conditional on a strictly positive terminal investment value. They showed in the context of a simple model with endogenous expropriation that when there was a binding threat of expropriation, foreign investors could become unresponsive to differences in other dimensions of institutions and political risk, and might even reduce optimal investment as these institutions improve.

Aziz (2017) examines the impact of institutional quality on FDI inflows in the Arab region. The analysis is performed by employing system GMM estimation in panel data comprising 16 Arab countries over the period 1984–2012. The study finds that the institutional quality variables of economic freedom, ease of doing business and international country risk (ICRG) have a positive and significant impact on FDI inflows in Arab economies. The results of this study have several implications for policy makers

Erkekoglu and Kilicarslan (2016), in the study that covers the years 2002-2012 and data from 91 countries, the impact of political risk on foreign direct investment has been demonstrated by conducting panel data analysis. Political risk and control variables have been used. An increase in political stability and absence of violence and management effectiveness has reduced the foreign direct investment. Moreover, a rise in the variables of the exportation of goods and services, population, GDP growth, regulatory quality has increased the foreign direct investment.

Kurul and Yalta (2017) revisit the relation between institutional factors and foreign direct

investment (FDI) inflows in developing countries by employing a dynamic panel methodology,

which enables us to deal with the persistency of FDI flows and endogeneity issues and also contribute to the literature by using various measures of institutions to identify which aspects of institutional quality affect FDI in the developing world. Empirical

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findings based on 113 developing countries over the period 2002–2012 show evidence that some institutional factors matter more than others in attracting more FDI flows. We also found that the financial crisis in 2008 and 2009 had a negative impact on FDI flows.

Frenken and Mbuvi (2017), based on the identification of two transition phases within the Investment Development Path (IDP), explores the relationship between country risk and foreign direct investment (FDI) over time and in relation to the process of economic convergence between emerging and developed economies. The findings suggest that both economic - and business environment risk factors are closely related to FDI flows. Furthermore, it is found that as countries progress through the various stages of the IDP, economic convergence comes together with similar trends of convergence in economic - and business environment risk exposure. These simultaneous long-term developments plausibly contribute to the convergence of countries in terms of in- and outward FDI flows during the later stages of the IDP.

From the empirical investigation, it arose that the political risk was a key factor, and contributed to stimulate FDI. These studies have emphasized that the risk in its various forms (political, economic and financial) had a significant impact on making decisions of foreign investors, and therefore appeared as a key factor in the investors' choice of location. This paper attempted to find out the effect of political risk as a determinant of FDI in Iran.

From the studies underlining a beneficial effect of political risk on FDI, we may cite the studies of Akhtaruzzaman et al. (2017) in which the authors had carried out their empirical research focusing on a dynamic panel of 83 developing countries. In these models, they have been regarded explanatory variables such as political stability, good governance, gross national income (GNI), trade and inflation as the FDI main determinants.

As it can be seen, the deep study of the political risk impact on FDI in developing countries, has been the major concern of many studies. Therefore, an empirical approach regarding the case of Iran will be applied, to provide a new analytical framework for the issue of the relationship between FDI and political risk in the country. Iran is not randomly chosen as the case study, but rather it is picked in a

liberalization and structural adjustment program to set market mechanisms and trade freedom.

4. Data and Variable

Few quantitative measurements exist to analyze political risk. Measurement approaches are ranged from classification methods (type of political structure, range and diversity of ethnic structure, civil or external strife incidents) to surveys or analyses, by political experts. Most services tend to use country experts who grade or rank multiple sociopolitical factors, and produce a written analysis to accompany their grades or scales. Company analysts may also develop political risk estimations for their business through discussions for local country agents or visits to other companies operating similar businesses in the country. In many risk systems, analysts reduce political risks to some type of index or relative measure.

Political risk covers cultural and ethnic risk, socio-economic risk or changes in political institutions. Consequently, typical measures are the type of the political structure, the ethnic structure or the incidence of violence. Political risk is recognized as the possibility that the policy decision and the political and social events in a country could affect the business climate so that it induces a loss of the potential investor's profits. Thus, the risk refers to modifications and changes often arbitrarily made by governments and that lead to a reconfiguration of the business environment in a country. The appreciation of the risk country is depending on the stability of government, the implementation of an independent judiciary and the credibility of the legal system. The same risk is also linked to the investing decision due to alteration in the economic climate or political environment can trigger direct or indirect financial loss or harm an investment project (Hamada & al, 2004). This risk refers to the possibility or the probability that a foreign borrower is unable or unwilling to fulfill its foreign obligations due to the specific conditions of the country, which can be the basis of the economic, political, social, natural or others.

The major origin of the risk country primarily depends on destabilizing events, sometimes, limited to a particular state, sometimes shared by several countries with common characteristics.

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The creators of the risk factors fall into two categories depending on whether they are political and geopolitical (war, coup, civil unrest, conflicts) or financial-economic marked by the cessation of payment of the foreign debt of countries, rescheduling of the public debt of a State (Elleuch et al., 2015).

This paper is to examine political risks and find out the relative importance of this indicator for FDI inflows after controlling for other relevant determinants of observed changes in FDI flows.

To account for additional factors which may affect direct investment inflows, we analyze a number of control variables commonly found in the literature on the determinants of FDI. Commonly used controls in empirical models of FDI include gross domestic product (GDP) or gross national income (GNI), macroeconomic stability, and other institutional measures (e.g. openness to international trade in the host country). Absolute GDP instead of GDP per capita had been employed in the literature to get to the market size (e.g. Asiedu, 2002). Market size is generally expected to have a positive impact on FDI; because larger market size implies greater demand, and this size advantage attracts more market-seeking foreign investors.

Openness to international trade is another potentially relevant factor in the foreign firm's decision to invest, because trade influences access to essential inputs and revenues from production (e.g. Edwards, 1992; Wheeler and Mody, 1992).

The inflation rate, as the annual percentage change in the domestic consumer price index (CPI), will be applied as a proxy for macroeconomic instability. Low inflation is hypothesized to reduce uncertainty and enlarge the confidence level in the economy, through attracting higher FDI inflows. Also real exchange rate is expected to discourage FDI.

Information on political risk is taken from the International Country Risk Guide (ICRG) provided by the Political Risk Services (PRS) Group. we use the PRS Group's International Country Risk Guide (ICRG) indices for two primary reasons. First, these indices provide greater detail on several key dimensions of institutional and political risk compared with other

data sources. They also enjoy relatively wide coverage of countries and years in comparison with other measures of institutional quality.

The ICRG Investment Profile index captures three sub-categories of risk with regard to foreign investors' property rights: risk of outright expropriation of assets, payment delays, and restrictions on profit repatriation.

Although investment profile does not exclusively measure expropriation risk, this index nevertheless provides a strong proxy for it, and we therefore use it as our primary measure of expropriation risk. The ICRG data also enable finer comparisons of the effects of different political risks and greater flexibility when constructing composite risk indicators (discussed below). A second reason in favor of the ICRG data is that they are widely used in previous studies estimating effects of institutional quality on FDI (possibly owing to some of the benefits just mentioned). The ICRG indices therefore enable comparison of our findings with those in the broader literature. (See Appendix A for a summary of related empirical literature on the effects of expropriation risk on FDI, as well as the various political risk measures used) Since 1984, PRS Group has provided information on 12 risk indicators that address not only political risk but also various components of political institutions. In general, we expect all 12 indicators to be positively related to FDI flows, as less political risk and better institutions are expected to attract foreign investment due to a lower risk premium they are defined as follows:

***Government Stability – 12 Points**

This is an assessment both of the government's ability to carry out its declared program(s), and its ability to stay in office.

***Socioeconomic Conditions – 12 Points**

This is an assessment of the socioeconomic pressures at work in society that could constrain government action or fuel social dissatisfaction.

***Investment Profile – 12 Points**

This is an assessment of factors affecting the risk to investment that are not covered by other political, economic and financial risk components.

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***Internal Conflict – 12 Points**

This is an assessment of political violence in the country and its actual or potential impact on governance. The highest rating is given to those countries where there is no armed or civil opposition to the government and the government does not indulge in arbitrary violence, direct or indirect, against its own people. The lowest rating is given to a country embroiled in an on-going civil war.

***External Conflict – 12 Points**

The external conflict measure is an assessment both of the risk to the incumbent government from foreign action, ranging from non-violent external pressure (diplomatic pressures, withholding of aid, trade restrictions, territorial disputes, sanctions, etc.) to violent external pressure (cross-border conflicts to all-out war).

External conflicts can adversely affect foreign business in many ways, ranging from restrictions on operations to trade and investment sanctions, to distortions in the allocation of economic resources, to violent change in the structure of society.

***Corruption – 6 Points**

This is an assessment of corruption within the political system. Such corruption is a threat to foreign investment for several reasons: it distorts the economic and financial environment; it reduces the efficiency of government and business by enabling people to assume positions of power through patronage rather than ability; and, last but not least, introduces an inherent instability into the political process.

***Military in Politics – 6 Points**

The military is not elected by anyone. Therefore, its involvement in politics, even at a peripheral level, is a diminution of democratic accountability. However, it also has other significant implications.

The military might, for example, become involved in government because of an actual or created internal or external threat. Such a situation would imply the distortion of government policy in order to meet this threat, for example by increasing the defense budget at the expense of other budget allocations.

***Religious Tensions – 6 Points**

Religious tensions may stem from the domination of society and/or governance by a single religious group that seeks to replace civil law by religious law and to exclude other religions from the political and/or social process; the desire of a single religious group to dominate governance; the suppression of religious freedom; the desire of a religious group to express its own identity, separate from the country as a whole.

The risk involved in these situations range from inexperienced people imposing inappropriate policies through civil dissent to civil war.

***Law and Order – 6 Points**

“Law and Order” form a single component, but its two elements are assessed separately, with each element being scored from zero to three points. To assess the “Law” element, the strength and impartiality of the legal system are considered, while the “Order” element is an assessment of popular observance of the law. Thus, a country can enjoy a high rating – 3 – in terms of its judicial system, but a low rating – 1 – if it suffers from a very high crime rate if the law is routinely ignored without effective sanction.

***Ethnic Tensions – 6 Points**

This component is an assessment of the degree of tension within a country attributable to racial, nationality, or language divisions. Lower ratings are given to countries where racial and nationality tensions are high because opposing groups are intolerant and unwilling to compromise. Higher ratings are given to countries where tensions are minimal, even though such differences may still exist.

***Democratic Accountability – 6 Points**

This is a measure of how responsive government is to its people, on the basis that the less responsive it is, the more likely it is that the government will fall, peacefully in a democratic society, but possibly violently in a non-democratic one.

***Bureaucracy Quality – 4 Points**

The institutional strength and quality of the bureaucracy is another

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shock absorber that tends to minimize revisions of policy when governments change. Therefore, high points are given to countries where the bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services. In these low-risk countries, the bureaucracy tends to be somewhat autonomous from political pressure and to have an established mechanism for recruitment and training.

5. Model Specification

This section describes empirical models. Since the variables based on the size of the market, such as GDP, economic growth or national income has two-way relation with FDI, in this paper, GDP as an indicator of the size of the market is considered to investigate the relationship between the capital foreign investment and national income, as an endogenous variable in the equation that is in order. Inclusion of these variables follows the econometric specifications used by others in the empirical FDI literature (Adam and Filippaios, 2007, Asiedu, 2002, Asiedu and Lien, 2011, Chakrabarti, 2001 and Akhtaruzzaman et al., 2017).

Also, due to the form template in the form of logarithmic and inflow of FDI in some years in Iran, the number is negative, the data storage inflow of FDI is used not only in the framework of the discussion does not harm but because the store entrance FDI flows include previous years as well, the model provides a better analysis. Data was collected for Iran over 1985 to 2016. The general specification for model is:

$$FDI_t = f((GDP_t = f(FDI_t, IM_t, EX_t), Openness_t, Exch_t, INF_t, PR_{kt}, U_t)) \quad (1)$$

where,

FDI = Log of FDI measured in current prices

GDP = Log of GDP measured in current prices

Openness = Log of Openness measured in current prices

Inf: GDP deflator (*Inflation*) as a proxy for (macroeconomic) policy distortions

Exchange rate (Exch): Changes in exchange rates and its multi-rate

coupled with economic instability and has led to the divergence of foreign investment.

$PR_k = \text{Log of the political risk component } k$, where k refers to one of twelve different indices: Government Stability, Socioeconomic Conditions, Investment Profile, Internal Conflict, External Conflict, Corruption, Military in Politics, Religion in Politics, Law & Order, Ethnic Tensions, Democratic Accountability and Bureaucracy Quality. To eliminate zero values so that logarithm exists, 1 has been added to all the political risk indices; and

$t = \text{year } t$.

Log is taken of all variables with an aim to stabilize variance and make symmetric distributions so that the respective coefficients are not influenced by extreme values. It is to be noted that one political risk component is examined at a time.

As equation (1), shows the variables GDP, indigenous and function of import, export and FDI is considered. In fact, these variables as tools to be used to estimate the 2SLS method. Choose variables in terms of exports and imports means that the variables most closely two variables simultaneously with the GDP and foreign direct investment.

Theoretically, the larger the market size and the higher the overall GDP, the more profits are to be made by foreign investors, and hence the higher is the FDI. Therefore, one of the control variables for the current paper is GDP. Another important factor which effect on FDI is the economy openness (openness is denoted by the amount of exports and imports over GDP). Both GDP and openness are expected to have a positive relationship with FDI, leading to higher economic growth, and better standards of living. Inflation utilization in empirical studies generally reflects the economic stability of the developing countries. The power of attracting markets will increase if a country follow a consistent macroeconomic policy in place. Apart from boosting growth rates, a good macroeconomic policy that embraces (or leads to) small budget, trade deficits, low inflation and interest rates, is likely to reduce the risk premium for foreign (and domestic) investment, and decrease transaction costs, which may boost FDI. As a (rough) measure for various macroeconomic imbalances forms, the inflation rate was added to the regressions, as it can be expected to be

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closely linked to a range of policy distortions forms, such as fiscal or monetary imbalances.

It is the case that higher political risks might arise in different circumstances, such as political instability, poor law or order, etc. The higher the political risk, the higher the probability of decreasing the investment in the host economy. Hence, political risk can be stated to be a significant factor affecting FDI. To avoid multicollinearity, the political risk indicators are added one by one to the benchmark regression.

6. Empirical Specification and Results

The analysis will continue with an instrumental variable regression. Two Stages Least Square estimator (2SLS) were used after checking endogeneity test. Wu-Hausman test was performed and it showed endogeneity is present; so, based on Baum et al. (2003), an IV approach is recommended. It was also check for the stationarity of data. Unit root test results in Table 1 by using Dicky – Fuller test have been reported. The results show that all variables are stable:

Table 1: Results of Unit Root Test

variable	Test Statistic	p-value	variable	Test Statistic	p-value
GDPt	2.03	0.005	Investment profile	4.04	0.000
IMt	2.89	0.004	Internal conflict	4.00	0.000
EXt	3.01	0.000	External conflict	3.96	0.000
Excht	2.97	0.004	Corruption	3.03	0.000
INFt	3.41	0.000	Military in politics	3.55	0.000
FDIt	4.22	0.000	Religious tension	4.01	0.000
Opennesst	2.12	0.005	Law and order	3.66	0.000
Government Stability	4.01	0.000	Ethnic tensions	4.11	0.000
Socioeconomic condition	4.36	0.000	Democratic accountability	3.55	0.000
Quality bureaucracy	4.02	0.000			0.000

Table 2 describes the estimated values of the coefficients, and their

corresponding t statistics. As can be seen from the benchmark regression results, reported in column 2 to 6 of Table 1, all coefficients have theoretical signs (note: column 1 introduces political risks that have been added to explanatory variable in column 6).

The overall performance of the FDI determinants, are quite satisfactory with a computed F-value which far exceeded the critical F-value at 5 percent significance level.

Table 2: Estimation Result

Political Risk	explanatory variable	GDP Growth	Trade	Inflation rate	Exchange Rate	Political Risk	R ²	F (Prob>F)
Government Stability	1.04 (0.84)	0.04 (2.63)	-0.01 (-1.54)	-5.38 (-2.63)	1.25 (1.95)	0.60	6.61 (0.00)	
Socioeconomic condition	1.54 (1.40)	0.03 (2.3)	-0.05 (-1.86)	-6.64 (-3.4)	0.82 (2.47)	0.60	9.62 (0.00)	
Investment profile	1.42 (1.22)	0.03 (2.29)	-0.72 (-2.01)	-6.1 (-3.54)	0.87 (1.92)	0.65	8.15 (0.00)	
Internal conflict	1.55 (1.27)	0.03 (2.6)	-0.94 (-3.08)	-4.05 (-1.86)	0.24 (1.46)	0.62	7.23 (0.00)	
External conflict	1.07 (0.94)	0.04 (2.96)	-0.86 (-1.76)	-4.72 (-2.61)	0.24 (2.03)	0.66	8.41 (0.00)	
Corruption	1.16 (0.86)	0.04 (2.61)	-0.21 (-2.00)	-5.94 (-3.08)	0.01 (0.03)	0.58	5.92 (0.00)	
Military in politics	2.35 (2.03)	0.02 (1.41)	-0.50 (-1.68)	-2.86 (-1.46)	2.85 (2.69)	0.70	10.27 (0.00)	
Religious tension	1.41 (1.23)	0.03 (2.86)	-0.28 (-1.84)	-5.21 (-3.00)	0.77 (2.04)	0.66	8.45 (0.00)	
Law and order	2.08 (1.69)	0.03 (2.67)	-0.16 (-2.16)	-3.50 (-1.68)	0.65 (2.02)	0.66	8.39 (0.00)	
Ethnic tensions	1.80 (1.53)	0.04 (3.46)	-0.76 (-2.10)	-3.28 (-1.54)	0.64 (2.08)	0.66	8.54 (0.00)	
Democratic accountability	2.86 (1.87)	0.03 (1.93)	0.62 (2.12)	-4.16 (-2.06)	1.31 (1.74)	0.64	7.77 (0.00)	
Quality bureaucracy	1.45 (1.13)	0.04 (2.97)	0.67 (2.38)	-4.76 (-2.10)	0.70 (0.91)	0.60	6.44 (0.00)	

Notes: t-values reported in parentheses

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Taken together, it implies that all variables significantly explain Iran FDI. The analysis provides compelling statistical evidence that the market growth variable, calculated as the GDP, has a positive coefficient. Local market size variables have been widely supported in the literature as the determinants of foreign direct investment, with the exception of totally export oriented, extraction FDI. A large growing market will attract FID, because of the possibility that a large market would make it possible to be an efficient scale on site production, through realizing the scale economies.

Another determinant that is likely to have an impact on FDI is openness to trade, usually measured by the ratio of imports and exports to GDP. This ratio is often interpreted as a quantification of trade restrictions. In general, the impact of openness to trade is related with the type of foreign investment (Asiedu, 2002). Horizontal FDI may be attracted by higher trade barriers, as they also protect the output of the foreign investor in the local market against the competitors imports (tariff-jumping hypothesis). On the opposite, multinationals engaged in export-oriented investment, called vertical FDI, may favor investing in a relatively open economy since trade barriers expand transaction costs. Also, trade restrictions particularly in developing countries may be linked to other forms of policy imperfections, such as the exchange rate controls, leading to a reduction of foreign investment inflows. Additionally, openness to trade may be positively or negatively associated with FDI, depending on the country sample. The empirical evidence, on the other hand, suggests that a positive link may be expected (Chakrabarti, 2001).

The exchange rate (one unit of foreign currency to national currency) is among variables which reduce the attraction of FID in Iran. In this sense, volatility and fluctuation of the exchange rate lead to instability and insecurity in the economy. Aliber (1983) suggested that the key attribute of MNC was not its engaging in foreign production, but that it financed at least part of the production in its home currency. He stated that the stronger currency enabled companies in their area of advantage in investing over weaker currencies; because the investor's preference for security and hence a cheaper cost of capital, denominated in the stronger currency. Recently, Froot and Stein (1991) have investigated this viewpoint.

According to them, the strong home currency discourages, and the weak home currency encourages FDI in the country.

The regression analysis strongly provides the statistical support that there is a strong link between the political risk and FDI, as suggested.

Socioeconomic condition, external conflicts, law and order, religious and ethnic tensions, investment profile, and military in politics have a negative impact on FDI inflows, as the coefficients are positive and statistically are significant at the 5 percent level. Because if countries have a lower risk, will get a higher risk index. In other words, larger numbers represent lower risks.

Based on the estimated coefficient for investment profile, an increase in invest index by 1 point, will lead to an increase in net FDI inflows by US \$0.87 per capita.

The estimated coefficient for socioeconomic condition, show that an increase in socioeconomic condition index by 1 point, is associated with a grow in net FDI inflows by US \$0.82 per capita. SOCIO, which has a positive sign, meaning that an improvement in the socioeconomic conditions, is positively associated with FDI inflows. SOCIO consists of the unemployment rate, consumer confidence, and the poverty rate. These indicators are associated with an increase in FID inflows.

Religious tensions have a positive effect on attracting FID. The coefficient (0.77) showed that by a decrease in religious tensions, FID would be intensified in the country. This result is supported by Li and Resnick (2003), and Busse (2004).

External conflict include various components e.g. the risk to the incumbent government from foreign action, ranging from nonviolent external pressure, such as diplomatic pressures, withholding aid and trade sanctions, to violent external pressures, ranging from cross-border conflicts to all-out war. The sign of the external conflicts is positive (coefficient = 0.24). Changes in external conflicts in Iran during the study period, was associated with economic instability which led to the FID divergence. This conclusion is supported by Chakrabarti, 2001; Asiedu, 2002; and McDonald, 2010.

Internal conflicts include some components e.g. political violence within the country, and its actual or potential impact on governance by focusing on, for instance, civil war, terrorism, political violence or

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civil disorder. The estimated coefficient for this variable is 0.24, meaning that a raise in index by one point, is associated with an increase in net FDI inflows by US \$0.24 per capita.

Socioeconomic condition, external conflict, military in politics, law and order, and religious and ethnic tensions are even significant at 1 percent level, indicating a positive direct relationship with FDI flows.

Among the political indicators that are statistically significant, the estimated coefficients for military in politics, and democratic accountability are somewhat larger than those for the other indicators. The estimated coefficient for democratic accountability is 1.31 which means that an increase in democratic accountability index by one point, is associated with an increase in net FDI inflows by US \$1.31 per capita. The finding regarding democratic accountability is in line with the results reported by Harms and Ursprung (2002), Jensen (2003), and Busse (2004), who found a statistically significant link between fundamental democratic rights, such as civil liberties and political rights, and foreign investment inflows.

Quality bureaucracy index has a significant positive effect (by coefficient 0.7) on Iran FDI flows. This coefficient is logical and consistent with theoretical expectations. Decreasing bureaucracy leads to a reduction in corruption, and assists expanding FDI flows in the country.

Results for government stability and democratic accountability of the government, show that foreign investors are also highly sensitive to changes in political stability, and the framework in which governments operate. Fundamental democratic rights like civil liberties and political rights, do matter to multinationals operating in Iran.

Similarly, multinational corporations seem to care about internal and external conflicts that affect the host country of their investment because it improve economic and political instability. The threat of civil wars incidence, political violence, trade sanctions or an all-out war, increases the risk premium of investment projects, reducing overall investment.

7. Conclusion

Foreign direct investment (FDI) is a desirable form of capital inflow to emerging and developing countries, because such investment is less susceptible to crises and sudden stops. This paper was to precisely

explore the role of political risks as determinants of FDI. Results showed that in particular socioeconomic condition, law and order, religious and ethnic tensions, investment profile, military in politics, and internal and external conflicts, are some important determinants of foreign investment flows. Based on our results, these political risks and institutional indicators matter the most when multinational corporations confront decisions about where to invest in Iran.

Since the political indicators in the study are categorized, it is advantageous to identify the different types of political risks which are the characteristic of the different subdivisions. It is also important that political parties, other stakeholders and bureaucrats take into account the fact that aggravation of political situations in the country would lead to an overall negative impact. The consensus is that Iran should decrease political risks and uncertainties since political instability play an important role in the determination of FDI, and consequently the long-run economic performance of a country.

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