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# Inward FDI, IFRS Adoption and Institutional Quality: Insights from the MENA Countries

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**Abstract:** The adoption of International Financial Reporting Standards (IFRS) by 166 countries since 2004 has been a major achievement in the international standardization of accounting regulations. The present paper draws on the Eclectic Paradigm as the analytical framework to investigate the effects of IFRS adoption on foreign direct investment (FDI) inflows. The analysis is conducted based on panel data from 22 Middle Eastern and North African economies (MENA) between 1996 and 2019. The findings indicate that FDI inflows are positively associated with IFRS, and countries implementing the accounting standards receive a higher increase in FDI inflows. Furthermore, the results show that institutional quality plays an important role in attracting FDI. These results remain robust using lag and time-fixed effect estimation methods. The findings have several implications for policymakers.

Keywords: IFRS; institutional quality; MENA countries; PPML



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# 1. Introduction

Over the last years, the adoption of International Financial Reporting Standards (IFRS) has gained considerable momentum worldwide (Daske et al. 2008). As of 2021, approximately 166 countries require or adopt IFRS standards for all or the majority of domestic publicly accountable entities such as listed companies and financial institutions in their capital markets ((IFRS) 2021). The implementation of IFRS has many potential benefits that facilitate the cross-border investment activity of multinational firms (Jermakowicz and Gornik-Tomaszewski 2006), such as increasing transparency of financial reporting and enhancing the international comparability and quality of financial information, as well as enabling foreign investors and other market parties to make informed economic decisions (Humphrey et al. 2009). As a result, the majority of developed and emerging economies have adopted accounting standards. This is primarily because inward FDI may improve a host country in various ways, mainly through technology transfer and employment (De Mello 1997; Bevan and Estrin 2004).

Prior research on the association of IFRS and FDI has investigated several themes, but their findings have been mixed. For instance, empirical studies on developing countries concluded that the adoption of IFRS positively affected FDI inflows (Márquez-Ramos 2008; Gordon et al. 2012; Lungu et al. 2017; Yousefinejad et al. 2018; Tawiah 2019). In contrast, other studies document a negative effect of IFRS on FDI inflows (Efobi et al. 2014; Nnadi and Soobaroyen 2015; Mameche and Masood 2021). Finally, some other studies do not find any statistically significant relationship between IFRS adoption and FDI (Akisik 2014; Sherman and De Klerk 2015; Owusu et al. 2017). The mixed results reported in the aforementioned studies have raised questions regarding the consistency of existing research on this subject (Ball 2016).

Therefore, the main goal of this study is to investigate the economic consequences of the adoption of IFRS on inward FDI in the MENA countries across the 1996–2019 period. We employ the Eclectic Paradigm developed by Dunning (1977, 1980, 1998), which

is known as the Ownership–Location–Internalization (OLI) paradigm. OLI provides a suitable framework for understanding FDI flows. Previous studies have investigated different forms of location advantages such as physical infrastructure, particularly highways and airports, and institutional infrastructure such as political stability and the rule of law (Loree and Guisinger 1995; Globerman and Shapiro 2003; Chen et al. 2014). The present study considers IFRS as an important component of institutional infrastructure and examines whether the adoption of global accounting standards can increase FDI inflows.

In contrast to previous studies that focused on emerging and developing economies, this study concentrates on the MENA region, which has received much less attention in the literature. At the regional level, while many studies have investigated the location-related determinants of FDI in emerging and developing markets in Asia (Bruton and Lau 2008), Latin America and the Caribbean region (Khoury and Peng 2011) and Central and Eastern Europe (Cieślik 2005a, 2005b, 2005c), the MENA region is still greatly understudied in the FDI literature despite recent calls for more research (Beamish and Lupton 2016). Therefore, it is vital to study the FDI determinants in the MENA region for at least two main reasons.

First, given its economic and political significance, the region suffers from underperformance in attracting FDI compared with other regions in the developing world. For instance, in 2018 the global FDI inflows reached USD 31.5 trillion, of which 64.5% were located in developed countries, and the MENA regions accounted on average only for about 6.5% of the world's total FDI inflows ((IMF) 2018)<sup>1</sup>. Second, economic and political shifts in several MENA countries activated by the Arab Spring have brought new challenges for domestic and foreign companies. Local governments may not be able to protect foreign and regional investors without radical changes in business and institutional environments (Zahra 2011). Finally, the MENA region has rich natural resource endowments which appear to be the main reason for multinational enterprises (MNEs) to invest in the region. Therefore, it is crucial to better understand other motivations that drive foreign enterprises to invest in these countries. This could help promote inflows of FDI into the region.

Our study makes three main contributions to the existing literature. First, the study employs the Eclectic Paradigm approach and extends it to include several institutional quality indicators. Second, we employ the Pseudo-Poisson Maximum Likelihood (PPML) estimation technique which can reduce potential endogeneity among the explanatory variables. To the best of our knowledge, this approach is still relatively new to the IFRS literature, although it was extensively used in several empirical studies on determinants of international trade and FDI flows (Blonigen and Piger 2014; Gurshev and Hamza 2021). Moreover, this study extends the literature on the economic effects of the adoption of international accounting standards (Gordon et al. 2012; Efobi et al. 2014; Nnadi and Soobaroyen 2015; Ozkan et al. 2019; Mameche and Masood 2021; Siriopoulos et al. 2021) by examining the relationship between FDI and IFRS standards in the context of MENA countries. Finally, this research responds to the urgent call to investigate the importance of IFRS adoption for inward FDI in the MENA region, which has been rarely studied in the literature (Owusu et al. 2017; Lupton et al. 2021).

Our results can be summarized as follows: First, we find statistically significant evidence that FDI inflows are positively related to IFRS adoption. Second, when we distinguish between the Middle Eastern and North African countries, the results show a strong positive and statistically significant relationship for the North African countries only. Finally, institutional quality factors such as government effectiveness and political stability are important determinants of FDI in the MENA countries.

The remainder of the paper is structured as follows. In the next section, we provide a review of the relevant literature and develop our research hypotheses. Section 3 describes the data sources, summary statistics and the empirical methodology. Section 4 reports the estimation results. Finally, the paper concludes with a summary of the main findings, policy recommendations and directions for future studies.

## 2. Literature Review and Hypotheses Development

One of the most popular frameworks in the international business literature that aims at explaining reasons for FDI has been the Eclectic OLI Paradigm originally proposed by Dunning (1977). In this framework, three strands in the business literature, i.e., theory of the firm, industrial organization and internalization, are combined. According to this paradigm, FDI results from ownership, location and internalization advantages. Ownership advantages arise from firms' knowledge capital that includes intangible assets such as blueprints, human capital of employees, procedures, trademarks, etc., which can: (i) be easily transported and (ii) have a joint input (i.e., public good) property across different production facilities.

Location advantages explain reasons why MNEs want to locate their production abroad instead of concentrating it in home countries, especially if there exist economies of scale at the plant level. Location advantages are different for vertically and horizontally integrated MNEs. For example, big markets in host countries combined with high trade costs may encourage horizontal FDI, while low trade costs combined with low costs of production may encourage vertical FDI and international fragmentation of production. Location advantages may also include physical infrastructures such as motorways and airports (Loree and Guisinger 1995) and institutional infrastructure such as political stability and the rule of law (Globerman and Shapiro 2003). In our analysis, IFRS is considered as a vital element of institutional infrastructure that lightens information asymmetry and decreases information-processing costs (Chen et al. 2014).

Finally, internalization advantages explain why firms want to exploit their ownership advantages internally, rather than licensing or selling their products or processes to an independent foreign firm. Internalization advantages arise from the same public good property of knowledge that makes it easily transferrable to foreign subsidiaries; firms prefer to transfer knowledge internally to prevent knowledge dissipation (Dunning 1998).

To date, the existing research on the nexus between IFRS and inward FDI has found mixed results. For example, Márquez-Ramos (2008) used bilateral outward FDI data for 27 EU member countries, the United States, China, Japan, EFTA countries and EU candidate countries (Croatia and Turkey) from 1999 to 2006. The effect of IFRS adoption is obtained from the standard gravity framework and the fixed-effects vector decomposition (FEVD) procedure used to estimate panel data characterized by the presence of time-invariant variables. She found that IFRS adoption reduces information asymmetry and leads to increased FDI inflows to host economies. Furthermore, she found that the positive effect of adopting uniform accounting standards on FDI is stronger in transition economies compared with more developed economies.

Gordon et al. (2012) used data for 124 developing and developed countries over the 1996–2009 period to test the argument that the adoption of IFRS results in increased FDI inflows. Their analysis is based on both the OLS and difference-in-difference approaches and supports the view that adoption of IFRS leads to increased FDI. Their analysis indicates, however, that the overall increase in FDI inflows from IFRS adoption is due to the increase in FDI inflows by countries with developing, as opposed to developed, economies. They argue that the key potential driver for IFRS adoption by countries with developing economies is the desire to receive financial aid from the World Bank.

At the same time, Amiram (2012) used an extensive data set of 134 countries to explore the association between the globalization of international accounting standards and investment decisions by home corporations. First, the author showed that foreign investors have larger holdings of foreign equity portfolio investments (FEPI) in countries that adopted IFRS standards. He also demonstrated that this relationship is more potent if foreign investors come from countries that also use international accounting standards.

Subsequently, in the setting of 34 Organization for Economic Co-operation and Development (OECD) host countries, Chen et al. (2014) used the sum of FDI inflows and outflows and the difference-in-differences estimation method to examine the association between IFRS and FDI. They found that IFRS adoption leads to attracting more FDI inflows.

Int. J. Financial Stud. 2022, 10, 47 4 of 19

Beneish et al. (2015) reviewed the debit equity investment data in a panel of 67 countries to determine increased foreign portfolio investment in the postadoption period and found that IFRS adoption has a positive effect on FDI inflows in countries that experience a high-quality governance mechanism and economic development before the adoption of IFRS. Lungu et al. (2017) analyzed the European emerging countries and found that IFRS adoption by unlisted companies had a lower impact on FDI inflows than IFRS adoption by listed companies. Finally, Akpomi and Nnadi (2017) used a sample of 48 African countries between 1996 and 2011 and concluded that the IFRS adoption was an essential factor in reducing information asymmetry and the cost of cross-border transactions to attract more FDI inflows.

On the other hand, several empirical studies showed a negative association between IFRS and inward FDI. For example, Efobi et al. (2014) documented an adverse effect by examining a sample of 92 developed and developing countries for the 2002–2010 period. In a similar vein, Nnadi and Soobaroyen (2015) used panel data on 34 MENA countries over a 20-year period and stressed that institutional quality factors were more important for attracting FDI than the implementation of IFRS standards. Other researchers, such as Owusu et al. (2017) and Sherman and De Klerk (2015), found no association between the adoption of IFRS and FDI inflows.

In the context of MENA countries, the majority of existing studies on the effects of IFRS adoption used a purely descriptive approach<sup>2</sup>. A more recent study by Mameche and Masood (2021) examined the association between IFRS adoption and FDI in the Gulf Cooperation Council (GCC) countries from 1980 to 2017 using the autoregressive distributed lag model. Their findings showed that IFRS in the GCC countries had a positive effect of about 3% in the short run, while in the long run, it led to a decrease of 10.4% in FDI. They argue that the negative association may be explained by the fact that foreign investors may see the increase in the quality of financial reporting by IFRS as an important cost. At the same time, Siriopoulos et al. (2021) employed panel data for the GCC countries using three different estimation methods: Fixed Effects, Random Effects and the Arellano Bond Dynamic Model. They reported a positive association between IFRS and FDI inflows. The conflicting results between these two recent studies may be due to various problems such as insufficient theoretical support for the empirical specification of regressions and the omitted variable bias.

Based on the findings of the aforementioned studies, we can formulate the following hypothesis on the effects of IFRS adoption on FDI in the MENA countries:

**Hypothesis 1.** *The adoption of IFRS has a positive association with FDI inflows.* 

Previous studies showed that the host country's institutional quality factors may affect the relationship between IFRS and FDI (e.g., Ahearne et al. 2004; Razin and Sadka 2003). The aforementioned studies argued that institutional quality plays a significant role in economic development. Busse and Hefeker (2007) suggested that a country that adopts IFRS should have additional drivers of FDI inflows, such as good institutional quality. Not surprisingly, the majority of the MENA countries have poor institutional quality compared with other regions of the world. In particular, countries such as Algeria, Iraq, Yemen, Morocco and Syria have high levels of corruption combined with low government effectiveness. Consequently, this may affect the willingness of multinational enterprises to participate in domestic corruption mechanisms to obtain local permits or licenses in the host economy. This argument supports the notion that MENA countries need to improve their institutional quality factors to increase the inflows of FDI to the region (Kandil 2009). Furthermore, political instability and local conflicts increase the challenges that host-country governments may face.

Beneish et al. (2015) argued that countries that experience a high quality of governance mechanism and economic development before the adoption of IFRS can attract more FDI inflow. According to the World Bank (2018, p. 11), MENA countries are the least integrated into the world economy due to low political stability and the limited rule of law. Therefore,

Int. J. Financial Stud. 2022, 10, 47 5 of 19

to test the association between institutional quality and FDI, and based on the above argument, we propose the following hypothesis:

**Hypothesis 2.** *Institutional quality factors have a positive relationship with FDI inflows.* 

Although the common view is that IFRS has a positive effect on FDI, Nnadi and Soobaroyen (2015) report contrary evidence for the African countries. They found that the level of corruption and the rule of law are more important than IFRS adoption for FDI to increase in these countries. Kwarbai et al. (2016) examined the effect of IFRS on FDI in six African countries from 1980 to 2015. They found that increased transparency and information asymmetry improvement through the adoption of IFRS alone cannot attract FDI inflow without other stimulus policies such as government and political stability, tax incentives and corruption level. Their findings reinforce the view that the implementation of IFRS alone is not sufficient to gain the advantages that the literature indicates. Based on that, we derive the following hypothesis:

**Hypothesis 3.** The adoption of IFRS positively impacts FDI inflows for a country that is classified as a part of North Africa.

## 3. Statistical Data and Research Methodology

This section explains the research methodology, statistical data collection, definitions and sources of explanatory variables. We used net FDI inflows for 22 MENA countries as our dependent variable.<sup>3</sup> Such a measure has been recognized as an important driver of economic development and has broadly been used in the previous accounting literature (Asiedu 2006; Gordon et al. 2012; Nnadi and Soobaroyen 2015). The sample period was determined by data availability, where the starting year is 1996 and the final year is 2019 (World Bank 2020). The total observation count is 528.

## 3.1. International Financial Reporting Standards (IFRS)

In order to measure the IFRS adoption, we used a dummy variable that takes the value one for a country from the first IFRS adoption year onwards and zero otherwise (Beneish et al. 2015; Gordon et al. 2012; Bassemir and Novotny-Farkas 2018). The FDI inflows are expected to be positively related to IFRS adoption. For the IFRS adoption status, we follow two primary sources: (i) the International Accounting Standards Board (IASB) data website the and (ii) International Accounting Standards (IAS) from Deloitte's IAS Plus website based on Song and Trimble (2020). Their database provides the IFRS adoption status for 195 countries from 1990 to 2019.

#### 3.2. Institutional Quality Measures

We account for the institutional quality factors using four indices: (i) political stability, (ii) voice and accountability, (iii) government effectiveness and (iv) control of corruption. Each of these indicators represents a different dimension of governance. The institutional quality data is obtained from the Worldwide Governance Indicators (WGI) constructed by Kaufmann et al.  $(2010)^4$ . All institutional quality indices are measured between 2.5 and -2.5. The higher values reflect better institutional quality (i.e., a country with 2.5 has the best institutional quality while a country with -2.5 is the worst).

Political stability is an important element of institutional quality that measures the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism. Several studies show that political stability and security, along with the stability of the legal and regulatory environment, are among the main determinants of FDI. For example, according to Schneider and Frey (1985), political stability is one of the most critical factors affecting foreign investors. In addition, Abdelhadi et al. (2021) argue that foreign investors consider a country's political stability before making any investment decision.

Int. J. Financial Stud. 2022, 10, 47 6 of 19

Voice and accountability can also be an important factor for attracting FDI. It shows the voice of freedom for the individuals in the country. It measures whether the government allows individuals to make decisions. Previous studies have introduced this factor for capturing the investment climate for FDI.

Government effectiveness is an important element of institutional quality. It measures government capabilities and abilities in providing public services and indicates the freedom and quality of public and civil services and the quality of government to develop and implement policies. For example, Rammal and Zurbruegg (2006) reported a positive connection between government effectiveness and outward FDI flows between the five Association of Southeast Asian countries. Gordon et al. (2012) found a positive association between government effectiveness and FDI inflows into host countries. Hence, we also assume a positive relationship between government effectiveness and inward FDI in the MENA countries.

Corruption may be a serious problem for MNEs in many host countries. For example, when the level of corruption is high, investors may face uncertainty, higher transaction costs and additional administrative procedures. Many of the MENA countries suffer from a high level of corruption including Algeria, Egypt, Iraq, Iraq, Syria and Yemen. Hoque et al. (2016) and Cieślik and Goczek (2018) argued that a high level of corruption reduces FDI inflows. On the other hand, Helmy (2013) studied the effects of corruption on FDI in 21 MENA countries to demonstrate that FDI had a positive association with corruption. Hence, we also expect a negative association between a high level of corruption and FDI inflows to the MENA countries.

#### 3.3. Control Variables

Our study also controls for the most frequently used variables in the previous empirical studies.<sup>5</sup> These include gross domestic product (GDP) growth, per capita GDP, the level of telecommunication infrastructure development, the exchange rate and WTO membership. These variables were culled from the World Bank (2020) database.

GDP growth rate is measured as the annual growth rate of a country's real GDP. A high or above-average economic growth rate is often seen as being indicative of investment opportunities, and previous studies have usually found a positive association between GDP growth and FDI (Beneish et al. 2015; Gordon et al. 2012). The GDP growth data is obtained from World Development Indicator (WDI) database published by World Bank (World Bank 2020).

The level of per capita GDP measures a host country's level of economic development. Therefore, the higher GDP per capita, the higher the demand for goods and services and hence the higher the inflow of FDI, as foreign investors try to take advantage of revenues and profit opportunities (Gordon et al. 2012; Nnadi and Soobaroyen 2015).

The level of telecommunication infrastructure is measured by the number of mobile cellular subscriptions per 100 people. It has been frequently argued that countries with good telecommunication infrastructure can reduce operating costs for foreign investors. Moreover, a level of telecommunication infrastructure is the prerequisite for being able to produce goods and services and attract foreign direct investment (Gordon et al. 2012; Horvat et al. 2021). Consequently, we expect a positive relationship between telecommunication infrastructure and FDI inflows.

The exchange rate by definition is the official exchange rate of the local currency against the U.S. dollar measured by units per SDR scaled by 100. The exchange rate may contribute to attracting FDI by lowering the cost of domestic assets to foreign investors and affect the rate of return on foreign assets in the host country (Bayoumi et al. 1996). From a microeconomic perspective, low exchange rate volatility can be associated with lower transaction costs for international investment, thereby contributing to higher capital inflows (Yang et al. 2013). Therefore, we expect a positive association between exchange rate and FDI inflows.

Int. J. Financial Stud. 2022, 10, 47 7 of 19

We use a dummy variable that takes the value one if the country is a WTO member and zero otherwise. Around the world, 164 countries are WTO members. Moreover, the majority of the MENA countries are currently members of the WTO<sup>6</sup>. One of the main aims of the WTO is to promote trade and investment between countries (Sauvant 2021). Thus, we expect to observe a positive relationship between FDI inflows and WTO membership.

Table 1 displays the descriptive statistics for our sample. All the variables are presented in a natural logarithm except for dummy variables and institutional quality indices (WTO, VOICE, POLSTAB, GOVT and CORRUPT). The average value of FDI inflow is 20.592 with values ranging from 12.899 to 24.387. It is interesting to note that the MENA countries differed significantly in receiving FDI during the study period. For instance, net FDI inflow to Saudi Arabia in 2008 was recorded at about USD 39.3 million, which is substantially larger in comparison with Qatar and Oman, which received USD 38 and USD 30 million, respectively. Among the control variables, the percentages of GDPCAP and GDPG show different variations from a minimum of 0 to -2.13 and a maximum of 11.351 to 4.813, respectively. The level of infrastructure which is proxied by the number of mobile cellular phones per 100 people ranged on average from -4.916 to 5.36. The exchange rate variable varied from about -1.314 at the minimum to 10.645 at the maximum. Moreover, voice and accountability (VOICE) and political stability varied from a minimum value of -2.5 to about 2.39%. This shows that the countries in the Middle East such as Syria, Iraq and Sudan were suffering from low political stability (POLSTAB)<sup>8</sup>. This may be a reason why these countries attracted smaller amounts of FDI. Likewise, government effectiveness (GOVT) and the level of corruption (CORRUPT) varied from a minimum of -2.5 to maximums of 1.66% and 1.95%, respectively. All these statistics imply that not all countries in the MENA region showed similar macroeconomic performance. 9 For identifying the degree of multicollinearity, in our model, we used the Variance Inflation Factor (VIF). 10

Table 1. Summary statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max
FDI inflow	528	20.592	1.879	12.899	24.387
IFRS	528	0.818	0.386	0	1
GDPCAP	528	8.148	2.327	0	11.351
GDPG	528	1.121	0.901	-2.13	4.813
Infrastructure	528	3.097	2.237	-4.916	5.36
Exchange Rate	528	2.335	2.926	-1.314	10.645
WTO	528	0.593	0.492	0	1
VOICE	528	-0.908	0.797	-2.5	1.78
POLSTAB	528	-0.571	1.118	-2.5	2.39
GOVT	528	-0.267	0.906	-2.5	1.66
CORRUPT	528	-0.298	0.838	-2.45	1.95

Note: This table shows the summary statistical results of the variables used in this study. This study includes samples of 22 MENA countries. Definition of the variables is presented in Table A2. Source: own summary.

To estimate the empirical model, we ran the following regression using a log-transformed ordinary least squares model in Equation (1):

where: the dependent variable  $lnFDI_{it}$  is the natural logarithm of the net FDI values inflows;  $IFRS_{it}$  is a dummy variable that takes the value of 1 if the country adopted IFRS (0 otherwise);  $lnGDPG_{it}$  and  $lnGDP-CAP_{it}$  denote the natural logarithm of the domestic growth product and per capita GDP, respectively;  $lnInfrastracture_{it}$  is the natural logarithm of telecommunication infrastructure;  $lnExchange\ Rate_{it}$  is the natural logarithm of annual year-end exchange rate;  $lnExchange\ Rate_{it}$  is the Norld Trade Organization;

the remaining variables are the four measures of institutional quality that include: voice and accountability (VOICE), political stability (POLSTAB), government effectiveness (GOVE) and control of corruption (CORRUPT);  $\epsilon_{ijt}$  is the error term. The subscripts assigned to variables reflect the country (i), and  $t=1996,\ldots,2019$ , while Bs are the parameters to be estimated.

Due to the well-known limitations of OLS, we employed the Pseudo-Poisson Maximum Likelihood (PPML) regression as the main estimation method (Silva and Tenreyro 2006). <sup>11</sup> Equation (2) states that:

$$\begin{split} FDI_{it} &= B_0 + \quad B_1 IFRS_{it} + B_2 lnGDPG_{it} + B_3 lnGDPCAP_{it} + B_4 lnInfrastructure_{it-1} \\ &+ B_5 lnExchange \ Rate_{it} + B_6 WTO_{it} + B_7 VOICE_{it} + B_8 POLSTAB_{it} \\ &+ B_9 GOVT_{it} + B_{10} CORRUPT_{it} + \epsilon_{i,t-1} \end{split} \tag{2}$$

where: the dependent variable is  $FDI_{it}$  flows;  $IFRS_{it}$  is a dummy variable that takes the value of 1 if the country adopted IFRS (0 otherwise);  $InGDPG_{it}$  and  $InGDPCAP_{it}$  denote the natural logarithms of the GDP growth and per capita GDP, respectively;  $InInfrastracture_{it}$  represents the natural logarithm of telecommunication infrastructure;  $InExchange\ Rate_{it}$  is the natural logarithm of annual year-end exchange rate;  $WTO_{it}$  is membership in the World Trade Organization; the remaining variables are the four measures of institutional quality include: voice and accountability (VOICE), political stability (POLSTAB), government effectiveness (GOVE) and control of corruption (CORRUPT);  $\epsilon_{ijt}$  is the error term. The subscripts assigned to variables reflect the country (i), and  $t=1996,\ldots$ , 2019, while Bs are the parameters to be estimated.

### 4. Estimation Results

Table 2 shows the benchmark estimates of the OLI framework obtained using the OLS estimator without controlling for individual time effects. Due to collinearity between some of our explanatory variables, the estimates for particular institutional quality measures are included separately in each regression and reported in columns (1)–(4). In particular, column (1) reports estimation results where the measure of institutional quality is voice and accountability, however, it turns out that this measure is not statistically significant. The estimated coefficient on the IFRS adoption variable is positive and statistically significant at the 10% level. This supports our hypothesis that the adoption of IFRS by host countries can increase the FDI inflows. This result is consistent with previous studies, including Globerman and Shapiro (2003), Gordon et al. (2012) and Nnadi and Soobaroyen (2015). The estimated parameter for GDP growth is positive and significant at the 10% level, which implies that FDI increases with the economic size of the MENA countries. The estimated coefficient for the infrastructure variable is positive and statistically significant at the 1% level. This result supports the view that well-developed telecommunication infrastructure is important for attracting FDI. Finally, the estimated parameters on per capita GDP, the exchange rate and WTO membership variables are not significant at any usually accepted levels of statistical significance.

In columns (2)–(4), we report estimation results obtained from the specifications in which we used the alternative measures of institutional quality. In all these specifications, the estimated parameter on the IFRS variable displays the expected positive sign and is statistically significant either at the 5 or 10% level of statistical significance. Hence, these estimation results support the hypothesis that IFRS adoption is positively related to inward FDI in the MENA countries. The estimated parameters on the indices of institutional quality display the expected signs, but not all of them are statistically significant. In particular, the estimated parameter on the political stability variable, reported in column (2), displays the negative sign and is statistically already significant at the 1% level. This means that politically stable countries receive more FDI. At the same time, the estimated parameters for government effectiveness reported in column (3) display an expected positive sign and are statistically significant at the 1% level. This means that the capacity of the government to implement sound policies is a statistically significant determinant in explaining FDI

Int. J. Financial Stud. 2022, 10, 47 9 of 19

inflows to host countries. This result is in line with the findings of Bannaga et al. (2013) for Arab countries. These results are similar to the previous results obtained for the case of successful East Asian economies, which consistently improved government effectiveness and governance practices, which resulted in huge FDI inflows. Finally, the estimated parameters for the control of corruption reported in column (4) show the expected sign but are not statistically significant.<sup>12</sup>

Table 2. Benchmark OLS estimation results without individual time effects.

Explanatory Variable	(1)	(2)	(3)	(4)
IFRS	0.487 *	0.600 **	0.452 *	0.541 **
	(0.206)	(0.199)	(0.202)	(0.207)
GDPCAP	0.0387	0.0630	-0.0650	0.0122
	(0.054)	(0.054)	(0.057)	(0.058)
GDPG	0.182 *	0.153	0.212 **	0.178 *
	(0.081)	(0.080)	(0.081)	(0.082)
Infrastructure	0.478 ***	0.474 ***	0.471 ***	0.481 ***
	(0.037)	(0.037)	(0.037)	(0.037)
Exchange Rate	0.0528	0.0258	0.0651 *	0.0568
<u> </u>	(0.029)	(0.029)	(0.029)	(0.030)
WTO	-0.121	0.201	-0.358	-0.0853
	(0.186)	(0.185)	(0.198)	(0.205)
VOICE	0.190			
	(0.100)			
POLSTAB		-0.341 ***		
		(0.081)		
GOVT			0.461 ***	
			(0.123)	
CORRUPT				0.0839
				(0.142)
Constant	18.57 ***	17.55 ***	19.21 ***	18.37 ***
	(0.458)	(0.431)	(0.489)	(0.513)
N	450	450	450	450
$R^2$	0.383	0.402	0.397	0.378
F-test	39.18	42.41	41.56	34.44
<i>p</i> -value	0.00	0.00	0.00	0.00

Note: The dependent variable is raw FDI, and these results are obtained based on the modified Equation (1). Significance levels: \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01. Source: own estimation.

Tables 3–5 report estimation results obtained via the PPML estimator. The particular columns of these tables are the direct counterparts of columns in Table 2. Table 3 employs the PPML estimator having controlled for individual time effects. The estimated parameter of the IFRS variable in all columns displays the positive sign and is statistically significant at the 1% level. This confirms our previous findings that IFRS is an important determinant of inward FDI in the MENA countries. The estimated parameters on the institutional quality such as government effectiveness remain statistically significant at the 5% level. This means that a good governance structure plays a positive role in facilitating FDI inflows to the host countries. Overall, the PPML estimation results provide support for our hypotheses 1 and 2. Similar to the previous OLS results, our control variables display the expected signs and are statistically significant, albeit at different levels of statistical significance. The estimated parameters on the infrastructure and the exchange rate variables display expected signs and are statistically significant in all estimated specifications.

**Table 3.** PPML estimation results with individual time effects.

Explanatory Variable	(1)	(2)	(3)	(4)
IFRS	0.707 ***	0.713 ***	0.789 ***	0.755 ***
	(0.148)	(0.147)	(0.145)	(0.147)
GDPCAP	0.154 ***	0.200 ***	0.0584	0.0848
	(0.044)	(0.058)	(0.042)	(0.046)
GDPG	0.066	0.073	0.0662	0.0506
	(0.073)	(0.076)	(0.077)	(0.076)
Infrastructure	0.409 ***	0.402 ***	0.307 *	0.363 **
	(0.113)	(0.105)	(0.125)	(0.120)
Exchange Rate	0.102 ***	0.0848 ***	0.0936 ***	0.102 ***
	(0.024)	(0.023)	(0.026)	(0.024)
WTO	0.554 **	0.628 ***	0.297	0.377
	(0.173)	(0.156)	(0.228)	(0.227)
VOICE	0.149			
	(0.118)			
POLSTAB		-0.112		
		(0.077)		
GOVT			0.424 **	
			(0.155)	
CORRUPT				0.311
				(0.168)
Constant	17.22 ***	16.43 ***	18.68 ***	18.07 ***
	(0.693)	(0.602)	(0.953)	(0.940)
N	528	528	528	528
$R^2$	0.33	0.32	0.33	0.32

Note: The dependent variable is raw FDI, and these results are obtained based on the modified Equation (2). Significance levels: \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01. Source: own estimation.

 $\textbf{Table 4.} \ PPML \ estimation \ results \ with \ one-period \ lags \ with \ individual \ time \ effects.$ 

Explanatory Variable	(1)	(2)	(3)	(4)
IFRS	0.729 ***	0.723 ***	0.823 ***	0.780 ***
	(0.151)	(0.145)	(0.145)	(0.148)
GDPCAP	0.190 ***	0.243 ***	0.0682	0.102
	(0.048)	(0.064)	(0.052)	(0.055)
GDPG	-0.0429	-0.0398	-0.0508	-0.0672
	(0.085)	(0.094)	(0.091)	(0.090)
Infrastructure	0.302 **	0.290 **	0.234 *	0.278 **
	(0.096)	(0.089)	(0.100)	(0.096)
Exchange Rate	0.0957 ***	0.0784 ***	0.0880 ***	0.0962 ***
<u> </u>	(0.023)	(0.022)	(0.024)	(0.023)
WTO	0.550 **	0.625 ***	0.294	0.359
	(0.177)	(0.160)	(0.228)	(0.231)
VOICE	0.136	, ,	,	, ,
	(0.119)			
POLSTAB	, ,	-0.121		
		(0.082)		
GOVT		, ,	0.437 **	
			(0.160)	
CORRUPT			,	0.33
				(0.174)
Constant	17.28 ***	16.73 ***	18.37 ***	17.83 ***
	(0.551)	(0.653)	(0.638)	(0.670)
N	528	528	528	528
$R^2$	33	32	33	32

Note:  $FDI_{it-1}$  is is a log-transformed dependent variable. Significance levels: \*p < 0.10, \*\*p < 0.05, \*\*\* p < 0.01. Source: own estimations.

Table 5. PPML estimation results with individual time effects for North Africa countries only.

Explanatory Variable	(1)	(2)	(3)	(4)
IFRS	0.969 ***	1.142 ***	1.107 ***	1.029 ***
	(0.168)	(0.154)	(0.161)	(0.157)
GDPCAP	0.205 *	0.215 **	0.0102	0.02
	(0.094)	(0.073)	(0.080)	(0.082)
GDPG	0.0822	0.0688	0.0649	0.0948
	(0.080)	(0.081)	(0.085)	(0.080)
Infrastructure	0.0767	0.0644	0.0525	0.0378
	(0.068)	(0.071)	(0.068)	(0.066)
Exchange Rate	-0.137 **	-0.303 ***	-0.143**	-0.153***
	(0.047)	(0.062)	(0.051)	(0.045)
WTO	0.775 ***	1.160 ***	0.409 *	0.458 *
	(0.186)	(0.193)	(0.207)	(0.186)
VOICE	0.142			
	(0.105)			
POLSTAB		-0.263 ***		
		(0.068)		
GOVT			0.494 ***	
			(0.141)	
CORRUPT				0.561 ***
				(0.146)
Constant	16.88 ***	15.90 ***	20.56 ***	20.41 ***
	(0.931)	(0.651)	(0.868)	(0.873)
N	263	263	263	263
$R^2$	67	68	67	68

Note: The dependent variable is raw FDI, and these results are obtained based on the modified Equation (2). Significance levels: \*p < 0.10, \*\*p < 0.05, \*\*\* p < 0.01. Source: own estimation.

In Table 4, we study the robustness of our results by taking one-period lags of our independent variables to address the potential simultaneity problem. In this case, the obtained results are very similar in qualitative terms to our results reported in Table 3. In other words, the estimated parameters for IFRS, government effectiveness, infrastructure, and the exchange rate variables remain statistically significant in all estimated specifications. Summing up, the PPML estimation results reported in Tables 3 and 4 indicate that inward FDI into the MENA countries is positively associated with IFRS adoption and institutional quality. These results support our Hypotheses 1 and 2.

In Table 5, we report the PPML estimation results obtained for the subsample of the North African countries, only having controlled for individual time effects. These results are similar in qualitative terms compared with the previous results obtained for the whole sample of the MENA countries reported in Table 4. In all the estimated specifications, the IFRS variable is statistically significant at the 1% level, displays the expected positive sign and the magnitude of the estimated parameter is visibly higher compared with the results obtained for the entire sample. Hence, these results support our third research hypothesis stating inward FDI is positively related to the adoption of IFRS for a country that is classified as a part of North Africa. Our results are thus in line with the findings of Márquez-Ramos (2008); Gordon et al. (2012); Lungu et al. (2017); Yousefinejad et al. (2018) and Tawiah (2019). Moreover, all the estimated coefficients for the measures of institutional quality, except voice and accountability, are highly significant. The notable change is that now the estimated parameters for the WTO variable are positive and highly significant in all the estimated specifications.

To conclude, our estimation results indicate that inward FDI into the North African countries has a strong positive association with IFRS adoption, which supports our third hypothesis. Indeed, this result is consistent with the research hypothesis that IFRS adoption leads to increased FDI inflows in the MENA countries only in the postadoption period and does not support the findings reported in earlier studies (e.g., Nnadi and Soobaroyen 2015). This is because the North African countries are important trade partners of the European

Union (EU). Hence, adopting IFRS significantly reduces trade barriers for the EU-based MNEs. Therefore, compliance with IFRS simultaneously opens the opportunities for EU partner country multinational enterprises to invest in North Africa without raising the additional costs of financial statement reports.

#### 5. Conclusions

Although the link between FDI and IFRS has been studied extensively, mixed evidence was reported in the previous studies. This paper examined the relationship between inward FDI and IFRS adoption in 22 MENA countries during the 1996-2019 period using the OLS and PPML estimation techniques. Consistent with the general research hypothesis, we found statistically significant and robust evidence that on average IFRS adoption was positively related to FDI inflows in the MENA countries. This result was supported by the series of robustness tests including the use of individual time effects and one-period lag estimations. Moreover, when we differentiate between the Middle Eastern and North African countries, the estimation results show a strong positive and statistically significant relationship between inward FDI and IFRS adoption in the case of the North African countries. These findings are generally in line with the results reported by Gordon et al. (2012) but contradict the previous results of the study by Nnadi and Soobaroyen (2015), who found a negative association between FDI and IFRS adoption in the case of the North African countries. The main reasons for such contradictory results might be differences in data quality and the employed estimation techniques. Moreover, we also examined the relationship between inward FDI and several institutional quality measures. It was found that government effectiveness could positively affect FDI inflows in the MENA countries. These results are in line with the results obtained by Mameche and Masood (2021).

The assembled empirical evidence contributes to the literature by correcting previous research's conclusions concerning the North African countries and offering several economic policy guidelines. In particular, we recommend MENA's policymakers make policy decisions about extending the current application of IFRS in a way that would be an additional driver of FDI. While Nnadi and Soobaroyen (2015) argued that IFRS adoption could negatively affect FDI inflows into North African countries, our findings report a positive relationship between FDI and IFRS adoption by these countries. This conclusion is important to believe that IFRS rules are essential for attracting foreign investors to North Africa. In addition, we suggest policymakers improve government effectiveness and reduce the level of corruption.

The implication of this study is twofold. First, to attract more FDI, the policymakers in the aforementioned economies need to constantly work on improving institutional quality factors such as political stability, the control of corruption and government effectiveness. Second, they should also improve the general economic climate for foreign investors by reducing bureaucratic burden and external investment barriers.

Due to data collection availability, this study relied on country-level data rather than individual firm-level data. Therefore, future empirical studies should provide additional evidence on the economic consequences of IFRS adoption by investigating firm-level data. Likewise, investigating the economic results of IFRS adoption on FDI inflows into other developing countries outside the MENA region could be another topic for future research.

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# Appendix A

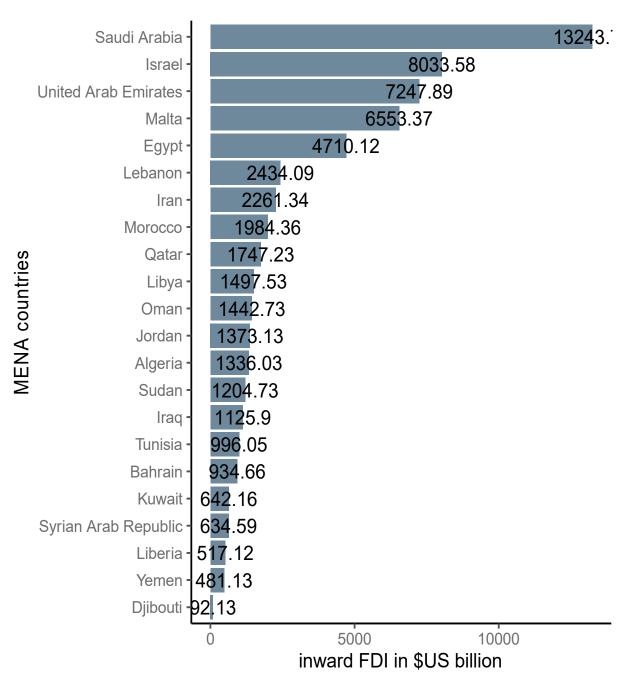


Figure A1. Average net FDI inflows to MENA countries, 1996 to 2019. Source: own summary.

**Table A1.** IFRS adoption by MENA countries.

Country	Year of Adoption
Bahrain	2001
Kuwait	2005
Iraq	1997
Lebanon	1996
Jordan	1997
Oman	1998
Qatar	2005
Saudi Arabia	2015
Iran	2005
Syria	2005
United Arab Emirates	2015
Morocco	2006
Libya	n/a
Israel	2008
Sudan	n/a
Malta	1995
Djibouti	1996
Yemen	2019
Algeria	2009
Liberia	2014
Egypt	n/a
Tunisia	1996

Source: Own summary based on Song and Trimble (2020).

Table A2. Variable description, measurement and data sources.

Explanatory Variable	Measures	Sources
Net FDI inflows	Foreign direct investment, net inflows (current USD).	World Development Indicators (WDI)
IFRS	The dummy variable takes 1 onward if a country adopted IFRS and 0 otherwise.	IASB sources, (2) Deloitte's IAS Plus website based on (Song and Trimble 2020).
GDPCAP	GDP per capita in current U.S. dollars scaled by 1000, capturing a labour cost factor that attracts FDI.	World Development Indicators (WDI)
GDPG	GDP growth is measured by dividing normal GDP by the current year population, capturing a market factor that attracts FDI.	World Development Indicators (WDI)
Exchange Rate	The exchange rate is the official exchange rate (LCU per USD, period average).	World Development Indicators (WDI)
Infrastructure	The level of infrastructure is measured by the number of mobile cellular subscriptions per 100 people.	World Development Indicators (WDI)
WTO	Dummy equal to 1 from the year that an Arab country joined the WTO, otherwise 0.	World Trade Organisation (WTO)
VOICE	Voice and accountability are measured in units ranging from $-2.5$ to $2.5$ .	Kaufmann et al. (2010).
POLSTAB	Political stability is measured in units ranging from $-2.5$ to $2.5$ .	Kaufmann et al. (2010).
GOVT	Government effectiveness is measured in units ranging from $-2.5$ to $2.5$ .	Kaufmann et al. (2010).
CORRUPT	Political stability is measured in units ranging from $-2.5$ to $2.5$ .	Kaufmann et al. (2010).

Note: This table shows the proxy variables, variable descriptions and the data sources used in this study. Source: own summary.

**Table A3.** Pairwise Pearson correlations.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) FDI inflow	1.000										
(2) IFRS	0.193	1.000									
(3) GDPCAP	0.277	0.362	1.000								
(4) GDPG	0.084	0.016	0.114	1.000							
(5) Infrastructure	0.317	0.221	0.414	-0.059	1.000						
(6) Exchange Rate	0.076	-0.013	-0.403	-0.009	-0.181	1.000					
(7) WTO	0.215	0.089	0.444	0.024	0.334	-0.489	1.000				
(8) VOICE	0.189	0.289	0.363	0.005	0.247	-0.217	0.386	1.000			
(9) POLSTAB	0.103	0.162	0.500	0.033	0.205	-0.504	0.501	0.361	1.000		
(10) GOVT	0.306	0.273	0.635	0.026	0.394	-0.472	0.601	0.616	0.690	1.000	
(11) Corrupt	0.287	0.298	0.647	0.048	0.388	-0.521	0.632	0.599	0.730	0.930	1.000

Source: own summary.

Table A4. Results of Variance Inflation Factor (VIF).

Variable	VIF	Tolerance
Corrupt	8.81	0.113541
GOVT	7.92	0.126246
GDPCAP	2.17	0.460142
POLSTAB	2.01	0.497635
WTO	2.01	0.498466
VOICE	1.81	0.553953
Exchange Rate	1.5	0.668715
Infrastructure	1.4	0.714614
IFRS	1.35	0.743093
GDPG	1.02	0.977246
Mean VIF	3	

Note: This table indicates that multicollinearity is not likely to be a problem in the data sample because the VIF of the variables and mean VIF are under 10 for all estimations O'brien (2007).

Table A5. Institutional quality indexes.

Country	Year	VA	PS	GE	CC
ALGERIA	1996-2019	-1.1	-1.4	-0.7	-0.7
BAHRAIN	1996-2019	-1.1	-0.4	0.6	0.3
DJIBOUTI	1996-2019	-1.2	-0.4	-0.9	-0.7
EGYPT	1996-2019	-1.1	-0.8	-0.5	-0.6
IRAN	1996-2019	-1.4	-1.0	-0.5	-0.6
IRAQ	1996-2019	-1.5	-2.2	-1.6	-1.5
ISRAEL	1996-2019	0.6	-1.3	1.2	1.0
JORDAN	1996-2019	-0.6	-0.3	0.1	0.2
KUWAIT	1996-2019	-0.5	0.3	0.0	0.3
LEBANON	1996-2019	-0.5	-1.2	-0.3	-0.8
LIBERIA	1996-2019	-0.7	-1.3	-1.5	-1.1
LIBYA	1996-2019	-1.6	-0.7	-1.3	-1.2
MALTA	1996-2019	1.2	1.3	1.1	0.8
MORROCO	1996-2019	-0.7	-0.4	-0.2	-0.3
OMAN	1996-2019	-0.9	0.9	0.4	0.5
QATAR	1996-2019	-0.9	1.0	0.7	0.8
SAUDI ARABIA	1996-2019	-1.8	-0.2	-0.1	0.0
SUDAN	1996-2019	-1.8	-2.2	-1.3	-1.3
SYRIA	1996-2019	-1.8	-1.0	-1.2	-1.2
TUNISIA	1996-2019	-0.7	-0.3	0.2	-0.2
UNITED ARAB EMIRATES	1996-2019	-0.9	0.9	1.1	0.8
YEMEN	1996–2019	-1.2	-1.9	-1.1	-1.1

Note: This table shows the average institutional quality indexes for MENA countries from 1996 to 2019. VA (voice accountability), PS (political Stability), GE (governments effectiveness) and CC (control of corruption). There are several countries that have higher corruption and political instability such as Iraq, Sudan, Syria and Yemen.

#### **Notes**

- The distribution of inward FDI to MENA countries from 1996 to 2019 is shown in Figure A1 in the Appendix A.
- See examples: Alsuhaibani (2012) conducted a study on Saudi Arabia; Al-Akra et al. (2009) on Jordan; Farag (2009) on Egypt; Irvine (2008) on the United Arab Emirates; Khlif et al. (2020) on Algeria, Morocco and Tunisia and Khdir and Białek-Jaworska (2020) on Iraq.
- MENA countries include Algeria, Bahrain, Djibouti, Egypt, Israel, Iraq, Iran, Jordan, Kuwait, Lebanon, Libya, Liberia, Morocco, Malta, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, UAE and Yemen.
- A reported data of Governance Indicators starting in 1996 and 2002 overlapped in our sample data. To minimize the impact of data volatility, we received average values for the years before 2002, from which we take the average to obtain annual data (Law and Habibullah 2009).
- These studies include, inter alia, Gordon et al. (2012); Nnadi and Soobaroyen (2015); Kwarbai et al. (2016).
- These include Bahrain, Egypt, Jordan, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, Yemen, Tunisia and UAE, while Syria, Iraq, Iran and Libya are not WTO members.
- In the Appendix A, Table A1 shows the country's IFRS adoption, and Tables A2 and A3 show the definitions of our explanatory variables and pairwise correlations, respectively.
- <sup>8</sup> Table A5 shows the institutional quality indices for MENA countries.
- The number of observations for the MENA countries is the same; therefore, the measure of the statistics differs. For example, Libya, Iraq, Sudan and Syria are poorly indexed. Indeed, the data of these countries has disinvestment values (negative values). Having a large missing value in the data sample may bias empirical results.
- The results are reported in Table A4 (Appendix A).
- The PPML estimator has several desirable properties. First, it assists in mitigating Jensen's inequality, which is the following:  $E[g(X)] \neq \ln[E(y)]$ . An important implication of Jensen's inequality is that when we take the logarithm of the explanatory variables, lower values and disinvestment values in the data values automatically become zero. Hence, dropping these observations causes a significant loss of information. Second, the use of the log-transformed response variable produces a potential bias for calculation estimates of  $E[y \mid x]$  on the original scale provided the residual term does not have a normal distribution (Silva and Tenreyro 2011). Moreover, the PPML can count for negative and missing values in the data, hence disinvestment and zero values in the panel data are not a problem. Finally, when we compare other methods (i.e., OLS and Nonlinear Least Squares, Feasible Generalized Least Squares and Tobit), the PPML produces more consistent results (Gurshev and Hamza 2021; Nguyen et al. 2020).
- The positive sign of the estimated parameter on the control of corruption variable is in line with the findings reported by Mina (2012) and Helmy (2013).

## References

Abdelhadi, Samer, Ala Bashayreh, and Mohammad W. Alomari. 2021. The effect of fragility on foreign direct investment deterioration: The case of MENA countries. *Journal of Sustainable Finance & Investment* 1–9. [CrossRef]

Ahearne, Alan G., William L. Griever, and Francis E. Warnock. 2004. Information costs and home bias: An analysis of US holdings of foreign equities. *Journal of International Economics* 62: 313–36. [CrossRef]

Akisik, Orhan. 2014. Financial reporting and foreign direct investments in Latin America. In *Accounting in Latin America*. Bingley: Emerald Group Publishing Limited. [CrossRef]

Akpomi, Margaret Emalereta, and Matthias Akandu Nnadi. 2017. The Impact of International Financial Reporting Standards (IFRS) Adoption on Foreign Direct Investments (FDI): Evidence from Africa and Implications for Managers of Education. *Journal of Accounting and Financial Management* 3: 51–65.

Al-Akra, Mahmoud, Muhammad Jahangir Ali, and Omar Marashdeh. 2009. Development of accounting regulation in Jordan. *The International Journal of Accounting* 44: 163–86. [CrossRef]

Alsuhaibani, Azzam. 2012. The expected impact of IFRS adoption on Saudi Arabia based on lessons from other countries: A focus on the telecommunication business. *Procedia-Social and Behavioral Sciences* 62: 1190–98. [CrossRef]

Amiram, Dan. 2012. Financial information globalisation and foreign investment decisions. *Journal of International Accounting Research* 11: 57–81. [CrossRef]

Asiedu, Elizabeth. 2006. Foreign direct investment in Africa: The role of natural resources, market size, government policy, institutions and political instability. *World Economy* 29: 63–77. [CrossRef]

Ball, Ray. 2016. IFRS-10 years later. Accounting and Business Research 46: 545-71. [CrossRef]

Bannaga, Alamedin, Yagoub Gangi, Rafid Abdrazak, and Bashar Al-Fakhry. 2013. The effects of good governance on foreign direct investment inflows in Arab countries. *Applied Financial Economics* 23: 1239–47. [CrossRef]

Bassemir, Moritz, and Zoltán Novotny-Farkas. 2018. IFRS adoption, reporting incentives and financial reporting quality in private firms. *Journal of Business Finance & Accounting* 45: 759–96. [CrossRef]

Bayoumi, Tammi, Lto Bartolini, and Symansky Klein. 1996. IV foreign direct investment and the exchange rate. In *Exchange Rate Movements and Their Impact on Trade and Investment in the APEC Region*. Washington DC: IMF, p. 145.

- Beamish, Paul W., and Nathanie C. Lupton. 2016. Cooperative strategies in international business and management: Reflections on the past 50 years and future directions. *Journal of World Business* 51: 163–75. [CrossRef]
- Beneish, Messod D., Brian P. Miller, and Teri Lombardi Yohn. 2015. Macroeconomic evidence on the impact of mandatory IFRS adoption on equity and debt markets. *Journal of Accounting and Public Policy* 34: 1–27. [CrossRef]
- Bevan, Alan A., and Saul Estrin. 2004. The determinants of foreign direct investment into European transition economies. *Journal of Comparative Economics* 32: 775–87. [CrossRef]
- Blonigen, Bruce A., and Jeremy Piger. 2014. Determinants of foreign direct investment. *Canadian Journal of Economics/Revue Canadianne D'économique* 47: 775–812. [CrossRef]
- Bruton, Garry D., and Chung Ming Lau. 2008. Asian management research: Status today and future outlook. *Journal of Management Studies* 45: 636–59. [CrossRef]
- Busse, Matthias, and Carsten Hefeker. 2007. Political risk, institutions and foreign direct investment. *European Journal of Political Economy* 23: 397–415. [CrossRef]
- Chen, Charles J., Yuan Ding, and Bin Xu. 2014. Convergence of accounting standards and foreign direct investment. *The International Journal of Accounting* 49: 53–86. [CrossRef]
- Cieślik, Andrzej. 2005a. European integration, national border effects and the location of multinational enterprises in Poland: The case of new voivodships. *Brussels Economic Review* 48: 247–60.
- Cieślik, Andrzej. 2005b. Location of foreign firms and national border effects: The case of Poland. *Tijdschrift voor Economische en Sociale Geografie* 96: 287–97. [CrossRef]
- Cieślik, Andrzej. 2005c. Regional characteristics and the location of foreign firms within Poland. *Applied Economics* 37: 863–74. [CrossRef]
- Cieślik, Andrzej, and Łukasz Goczek. 2018. Control of corruption, international investment, and economic growth. Evidence from panel data'. *World Development* 103: 323–55. [CrossRef]
- Daske, Holger, Luzi Hail, Christian Leuz, and Rodrigo Verdi. 2008. Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research* 46: 1085–142.
- De Mello, Luiz R., Jr. 1997. Foreign direct investment in developing countries and growth: A selective survey. *The Journal of Development Studies* 34: 1–34. [CrossRef]
- Dunning, John H. 1977. Trade, location of economic activity and the MNE: A search for an eclectic approach. In *The International Allocation of Economic Activity*. London: Palgrave Macmillan, pp. 395–418. [CrossRef]
- Dunning, John H. 1980. Toward an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies* 11: 9–31. [CrossRef]
- Dunning, John H. 1998. Location and the multinational enterprise: A neglected factor? *Journal of International Business Studies* 29: 45–66. [CrossRef]
- Efobi, Uchennal, Matthias Nnadi, John Odebiyi, and Ibukum Beecroft. 2014. Do the rules attract the money? Implication of IFRS adoption on foreign direct investment. SSRN. [CrossRef]
- Farag, Shawki. 2009. The accounting profession in Egypt: Its origin and development. *The International Journal of Accounting* 44: 403–15. [CrossRef]
- Globerman, Steven, and Daniel Shapiro. 2003. Governance infrastructure and US foreign direct investment. *Journal of International Business Studies* 34: 19–39. [CrossRef]
- Gordon, Lawrence A., Martin P. Loeb, and Wenjie Zhub. 2012. The impact of IFRS adoption on foreign direct investment. *Journal of Accounting and Public Policy* 31: 374–98. [CrossRef]
- Gurshev, Oleg, and Sarhad Hamza. 2021. BITs, Colony Ties, and Offshore Centers. *Journal of Economic Integration* 36: 203–26. [CrossRef] Helmy, Heba E. 2013. The impact of corruption on FDI: Is MENA an exception? *International Review of Applied Economics* 27: 491–514. [CrossRef]
- Hoque, Muhammad Nurul, Reza Monem Monem, and Tony van Zijl. 2016. The economic consequences of IFRS adoption: Evidence from New Zealand. *Journal of International Accounting, Auditing and Taxation* 27: 40–48. [CrossRef]
- Horvat, Tatjana, Horvat Bendix, Vito Bobek, and Hazbo Skoko. 2021. Impacts of investments in infrastructure projects on emerging markets' growth: The case of East African countries. *Economic Research-Ekonomska Istraživanja* 34: 2135–61. [CrossRef]
- Humphrey, Christopher, Anne Loft, and Margaret Woods. 2009. The global audit profession and the international financial architecture: Understanding regulatory relationships at a time of financial crisis. *Accounting, Organisations and Society* 34: 810–25. [CrossRef]
- International Financial Reporting Standard (IFRS). 2021. Who Uses IFRS Standards? Available online: www.ifrs.org (accessed on 10 February 2021).
- International Monetary Fund (IMF). 2018. The Middle East, North Africa, Afghanistan, and Pakistan Regional Economic Outlook (REO), Middle East and Central Asia Department. Washington, DC: World Economic and Financial Surveys. Available online: https://www.imf.org/en/Publications/REO?Middleyear=2018 (accessed on 15 February 2021).
- Irvine, Helen. 2008. The global institutionalization of financial reporting: The case of the United Arab Emirates. *Accounting Forum* 32: 125–42. [CrossRef]

Jermakowicz, K., and Sylwia Gornik-Tomaszewski. 2006. Implementing IFRS from the perspective of EU publicly traded companies. *Journal of International Accounting, Auditing and Taxation* 15: 170–96. [CrossRef]

- Kandil, Magda. 2009. Determinants of institutional quality and their impact on economic growth in the MENA region. *International Journal of Development Issues* 8: 134–67. [CrossRef]
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2010. The Worldwide Governance Indicators: Methodological and Analytical Issues. World Bank Policy Research Paper No. 5430. Available online: http://info.worldbank.org/governance/WGI/ (accessed on 1 January 2021).
- Khdir, Sarhad Hamza, and Anna Białek-Jaworska. 2020. IFRS adoption in emerging markets: The case of Iraq. Zeszyty Teoretyczne Rachunkowości 106: 177–90. [CrossRef]
- Khlif, Hichem, Khlif Ahmed, and Manzurul Alam. 2020. Accounting Regulations and IFRS Adoption in Francophone North African Countries: The Experience of Algeria, Morocco, and Tunisia. *The International Journal of Accounting* 55: 2050004. [CrossRef]
- Khoury, Theodore A., and Mike W. Peng. 2011. Does institutional reform of intellectual property rights lead to more inbound FDI? Evidence from Latin America and the Caribbean. *Journal of World Business* 46: 337–45. [CrossRef]
- Kwarbai, Jayeoba, Ajibade T. Olajumoke, I. M. Olayinka, and G. O. Kwarbai. 2016. Accounting standards and foreign direct investment inflows in selected African Countries (1980–2015). *International Journal of Advanced Academic Research, Social & Management Sciences* 20: 17–28.
- Law, Siong Hook, and Muzafar Shah Habibullah. 2009. The determinants of financial development: Institutions, openness and financial liberalisation. *South African Journal of Economics* 77: 45–58. [CrossRef]
- Loree, David W., and Stephen E. Guisinger. 1995. Policy and non-policy determinants of US equity foreign direct investment. *Journal of International Business Studies* 26: 281–99. [CrossRef]
- Lungu, Camelia Iuliana, Chirața Caraiani, and Cornelia Dascălu. 2017. The impact of IFRS adoption on foreign direct investments: Insights for emerging countries. *Accounting in Europe* 14: 331–57. [CrossRef]
- Lupton, Nathaniel C., Donya Behnam, and Alfredo Jiménez. 2021. Taking advantage of institutional weakness? Political Stability and foreign subsidiary survival in primary industries. *Multinational Business Review* 29: 501–21. [CrossRef]
- Mameche, Youcef, and Arar Masood. 2021. Macroeconomic evidence on the impact of mandatory IFRS adoption on FDI in the Gulf Cooperation Council (GCC) countries. *Journal of Accounting in Emerging Economies* 4: 610–31. [CrossRef]
- Márquez-Ramos, Laura. 2008. The effect of IFRS adoption on Trade and foreign direct investments. In *International Trade and Finance Association Conference Papers*. Berkeley: Bepress, p. 19.
- Mina, Wasseem Michel. 2012. The institutional reforms debate and FDI flows to the MENA region: The "best" ensemble. *World Development* 40: 1798–809. [CrossRef]
- Nguyen, Anh T., Alfred A. Haug, P. Dorian Owen, and Murat Genç. 2020. What drives bilateral foreign direct investment among Asian economies? *Economic Modelling* 93: 125–41. [CrossRef]
- Nnadi, Matthias, and Teerooven Soobaroyen. 2015. International financial reporting standards and foreign direct investment: The case of Africa. *Advances in Accounting* 31: 228–38. [CrossRef]
- O'brien, Robert M. 2007. A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity* 41: 673–90. [CrossRef] Owusu, Godfred Matthew, Nur Ashijin Mohd Saat, Susela Devi K. Suppiah, and Hook Law Siong. 2017. IFRS adoption, institutional quality and foreign direct investment inflows: A dynamic panel analysis. *Asian Journal of Business and Accounting* 10: 43–75.
- Ozkan, Serdar, Chadi Yaacoub, Nasser El-Kanj, and Vladimir Dzenopoljac. 2019. The Effect of IFRS Adoption on Corporate Cash Holdings: Evidence from MENA Countries. *Emerging Markets Finance and Trade* 57: 3275–300. [CrossRef]
- Rammal, Hussain Gulzar, and Ralf Zurbruegg. 2006. The impact of regulatory quality on intra-foreign direct investment flows in the ASEAN markets. *International Business Review* 15: 401–14. [CrossRef]
- Razin, Assaf, and Efrim Sadka. 2003. Gains from FDI inflows with incomplete information. Economics Letters 78: 71–77. [CrossRef]
- Sauvant, Karl P. 2021. Improving the distribution of FDI benefits: The need for policy-oriented research, advice, and advocacy. *Journal of International Business Policy* 4: 244–61. [CrossRef]
- Schneider, Friedrich, and Bruno Schneider Frey. 1985. Economic and political determinants of foreign direct investment. *World Development* 13: 161–75. [CrossRef]
- Sherman, T., and M. De Klerk. 2015. International financial reporting standards and foreign ownership in South African companies. *Southern African Business Review* 19: 72–88. [CrossRef]
- Silva, J. M. C. Santos, and Silvana Tenreyro. 2006. The log of gravity. The Review of Economist and Statistics 88: 641–58. [CrossRef]
- Silva, J. Santos, and Silvana Tenreyro. 2011. Further simulation evidence on the performance of the Poisson pseudo-maximum likelihood estimator. *Economics Letters* 112: 220–22. [CrossRef]
- Siriopoulos, Costas, Athanasios Tsagkanos, Argyro Svingou, and Evangelos Daskalopoulos. 2021. Foreign Direct Investment in GCC Countries: The Essential Influence of Governance and the Adoption of IFRS. *Journal of Risk and Financial Management* 14: 264. [CrossRef]
- Song, Xiaoxiao, and Madeline Trimble. 2020. The Historical and Current Status of Global IFRS Adoption: Obstacles and Opportunities for Researchers. *The International Journal of Accounting* 2250001. [CrossRef]
- Tawiah, Vincent. 2019. The state of IFRS in Africa. Journal of Financial Reporting and Accounting 17: 635-49. [CrossRef]

World Bank. 2018. *MENA Economic Monitor. Economic Transformation*. Washington, DC: World Bank Group, April. Available online: https://www.worldbank.org/en/region/mena/publication/mena-economic-monitor-april-2018-economic-transformation (accessed on 15 March 2021).

- World Bank. 2020. World Development Indicators. Available online: https://databank.worldbank.org/source/world-development-indicators (accessed on 10 February 2021).
- Yang, Haizhen, Yang Xiong, and Yuan Ze. 2013. A comparative study of determinants of international capital flows to Asian and Latin American emerging countries. *Procedia Computer Science* 17: 1258–65. [CrossRef]
- Yousefinejad, Maryam, Azlina Ahmad, Fairuz Md. Salleh, and Ruzita Abdula Rahim. 2018. The causal relationship between International Financial Reporting Standard (IFRS) and foreign direct investment (FDI): A panel data analysis of ASEAN countries. *Asian Journal of Accounting and Governance* 10: 61–72. [CrossRef]
- Zahra, Shaker A. 2011. Doing research in the (new) Middle East: Sailing with the wind. *Academy of Management Perspectives* 25: 6–21. [CrossRef]