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THE IMPACT OF MONETARY POLICY USING ISLAMIC OR NON-ISLAMIC MONEY SUPPLY ON FDI IN JORDAN (1980-2018)

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ABSTRACT

This study aimed to investigate the impact of monetary policy using Islamic or non-Islamic money supply on FDI in Jordan. Using time series analysis of selected variables during the period 1980 until 2018 using the ARDL model. The objective achieved the appropriate statistical tests such as data stability and co-integration tests have been used. The variables analyzed include the money supply (M2), the Islamic money supply (IMS), the export (EXP), Government Expenditure (GOV), inflation rate (INR), The gross domestic product (GDP) as independent variables. The dependant variable is the foreign direct investment (FDI). This study results in a long-term and short-term statistically significant correlation between the money supply (M2), the Islamic money supply (IMS) and FDI. The Islamic money supply (IMS) has a positive impact and the money supply (M2) has a negative impact on the FDI. The study recommended; the Jordanian government must implement a targeted Islamic monetary policy to attract foreign direct investment in the Jordanian economy. Provide an appropriate environment for investment and to remove the obstacles to investment in general, in order to attract the capital

of Jordanians working abroad for domestic investment, as well as for foreign investments.

Keywords: foreign direct investment (FDI); money supply (M2); the Islamic money supply (IMS); ARDL; Jordan

INTRODUCTION

The Jordanian economy is one of the open developing economies. The World Bank (2019) recognises two main constraints faced by Jordan's economy, namely low economic growth and high unemployment rates. In the decade from 2008 to 2018, economic growth has declined from 5.47 percent to 1.94 percent. Meanwhile, unemployment has risen from 12.9 percent in 2011 to 18.6 percent in 2018. Jordan's gross domestic product (GDP) is constrained as it has limited natural resources. Financial support for investment is also lacking, as indicated by the declining government expenditure, from 29.2 percent of GDP in 1980 to 15.4 percent in 2018 (World Bank, 2019). The country also suffers from weak investment capacity and lack of private investment capital. From 1981 to 2018, the gross fixed capital formation of the private sector has declined from 27.8 percent to 15.3 percent of GDP (Chea, 2011; Sy & Rakotondrazaka, 2015; UNCTAD, 2015; World Bank, 2019).

Developing countries with weak investment capacity and low economic growth like Jordan therefore attempt to attract foreign direct investment (FDI), considering its crucial role in overall economic growth and development. FDI is defined as the establishment of a business operation in a country by a foreign company through the establishment of a wholly owned new subsidiary (UNCTAD, 2017). FDI provides at least four direct benefits on host countries: (1) funding the establishment of productive projects, (2) transfer of technology, (3) increasing income and living standard, and (4) creating more job opportunities (Agosin & Machado, 2007; Agosin & Mayer, 2000).

Historically, the Jordanian government has initiated councils and legalized laws to attract FDI. It has introduced the Law on Promotion of Foreign Investment (1973) and established a Coordination Council and Businessman Council to coordinate

between the government and the private sector. Jordan has also signed an agreement with the World Trade Organization, becoming an official member in 2000 (Farihat, 2000; Jamel, 2002). These initiatives have led to higher FDI inflows, increasing significantly from 0.9 percent in 1990 to 23.5 percent in 2006. However, the World Investment Report states that after 2006, Jordan's FDI inflow has declined massively. The report also indicates that this decline causes Jordan to be categorised as "Underperforming": a critical issue for the Jordanian government and people (Abu Laila, 2005; Amman Stock Exchange, 2016; Central Bank of Jordan, 2017b; UNCTAD, 2010). This forms the motivation to investigate the declining FDI in Jordan.

Several studies have found that monetary policy significantly influence FDI inflow (Boateng, Hua, Nisar, & Wu, 2015; Felisoni de Angelo, Eunni, & Manoel Martins Dias Fouto, 2010; Kaur & Sharma, 2013). McConnell, Brue, and Flynn (2008) define monetary policy as the decisions of the central bank to change money supply to influence interest rate and assist the economy in achieving price stability, full employment, and economic growth. Floyd (2010) states that under fixed exchange rates with international capital mobility, monetary policy is ineffective; therefore, the stock of foreign exchange reserves can be adjusted to the desired level without incurring any costs. Monetary policy can therefore be defined as the management of interest rates and money supply to achieve such macroeconomic objectives as controlling inflation, growth, and liquidity. Monetary policy is carried out by the central bank or other monetary authority in a country that controls the supply of money in the economy. It bears mentioning that monetary policy is significantly linked to the issue of FDI decline (McConnell et al., 2008; Mulkiaman, 2016).

In the Jordanian economy, monetary policy aims to maintain and enhance political and economic stability, and to create a climate conducive for foreign investments. The Central Bank of Jordan (CBJ) reviews the operational framework of monetary policy and introduces the Central Bank interest rate, which is the reference rate by which other interest rates for monetary policy instruments are determined. This measure aims to give a clear indication of the position of

monetary policy and its orientation towards economic development at the local and external levels. This policy promotes interbank competition. The government has also developed liquidity management tools to enable banks to manage liquidity efficiently and effectively. Finally, the Central Bank issues certificates of deposit in Jordanian dinars for different periods and in various sizes. The aim is to channel the stagnant liquidity of banks towards achieving the objectives of economic growth through lending operations, as well as improving the liquidity management of public banks. The Jordanian government has also attempted to attract more FDI to induce economic gains (Central Bank of Jordan, 2017a; Saed & Al-Shawaqfeh, 2017).

Moreover, this paper investigates whether Islamic monetary policy (Islamic money supply) is more effective on FDI inflow in Jordan than conventional monetary policy. Islamic monetary policy is defined as the process by which monetary authority controls money supply, usually to promote economic growth and stability in the country. The main difference between Islamic and conventional monetary policy is that the former emphasises price stabilisation. In the Islamic view, the monetary system has no interest and inflation rates (Choudhury, 2018; El-Ashker & Wilson, 2006; Elhiraika, 2004; Ibrahim, 2009; Khan & Mirakhor, 1989).

THEORETICAL BACKGROUND

Monetary Policy Instruments

Monetary policy consists of two main instruments. The first is open market operations (OMO), covering the purchase and sales of government bonds. The government buys a sovereign bond if it wants to increase the reserves of the banking sector. The government may also increase money supply through the multiple deposit expansion process. However, if the government wants to decrease money supply, it will be selling bonds (Akhtar, 1997). The second instrument is reserve requirements. If the central bank raises the reserve requirement ratio of commercial banks, money supply will be decreasing, and vice versa (Neyer, 2007). Through these instruments, the central bank can control money supply and interest rate to achieve the monetary policy objective. Figure 3.1 shows the linkages

between the policy tools, instruments, intermediate targets, and objectives of monetary policy.

Policy tools	Instrument	Intermediate target	Objective
OMO Reserve requirements	Reserve aggregates Interest rates	Monetary aggregate (money supply) Interest rate	Price stability Financial markets stability Economic growth

Sources: Bofinger, Reischle, and Schächter (2001); Mulkiaman (2016)

Figure 1: Monetary Policy Process

Money Supply

Money is a "stock" of item or collection of items. Society has utilised money items, including furs, circular stones, gold coins, whale teeth, elephant-tail bristles, and pieces of paper. Anything that is widely accepted as a medium of exchange can serve as money. Financial instruments and government debts are also used as money (McConnell et al., 2008). Money supply includes four types of money: M1, M2, M3, and MZM (McConnell et al., 2008, pp. 229-232).

M2 is highly liquid financial assets that cannot be directly or entirely used as a medium of exchange but can be readily transformed to M1. M2 includes savings deposit and money market deposit account. Savings deposit requires the funds to be transferred from a savings account to a checkable account. The money market deposit account is an interest-bearing account that contains a variety of short-term interest-bearing instruments. The account has a withdrawal frequency limit and a minimum balance amount. On the other hand, small (less than $100,000) time deposits are those that become available during maturity. Money market mutual funds are held by individuals by using the internet, telephone call, or writing a check. The depositor can redeem shares in a money market mutual fund (Blanchard & Galí, 2010; Keynes, 2018; McConnell et al., 2008).

Islamic Money Supply

The Islamic monetary policy is one of the most important economic policies in Islamic economics. Islamic monetary policy emphasises the stabilisation of price levels and controlling the interest rate and inflation rate. In Islamic monetary policy, there is no interest rate, and the inflation rate is zero. Islamic monetary policy aims to achieve the full of resources of production and labour to reduce the problems of poverty and unemployment (El-Ashker & Wilson, 2006; Mannan, 1986).

The central bank is the sole authority responsible for implementing monetary policy and achieving its objectives, as well as maintaining the true value of money. Islamic monetary policy sees that any increase in money supply must be equal to the increase in production. In other words, if money supply increases by an actual value of $1, the volume of production must increase by the same value, thus there is no inflation rate. An unrealistic increase in money supply will result in a decline in the purchasing power of money, resulting in inflation (Precious & Makhetha-Kosi, 2014; Saed & Al-Shawaqfeh, 2017). The central bank is responsible for controlling and maintaining the value and volume of money supply in the country. The central bank is solely responsible for the quantity and quality of money. That is because money, from the perspective of Islamic monetary policy, is a product. The central bank must maintain the quality of money even after it has been created and circulated in the economy (Choudhury, 2018; Kuran, 1995; Pié, Fabregat-Aibar, & Saez, 2018; Ufoeze, 2018).

Islamic monetary policy posits that there is no inflation in the economy. In addition, the central bank should compensate the users of cash for its decline in value if there is inflation in the economy. In other words, the central bank should compensate them for the decline in the purchasing power of currency held by users (Gan & Yu, 2009; Sapova, Porshakov, Andreev, & Shatilo, 2018).Through this, the central bank can maintain price stability. The central bank balances between money supply and the rate of growth in production (economic growth). Put differently, monetary expansion is sufficient to finance the increase in economic activity resulting from growth, no

more and no less, thus avoiding inflation (Abdelbaki, 2017; Choudhury, 2018; Ismail, 2010; Mat Sari & Mirakhor, 2012).

In the Islamic system, investments can be funded using Islamic financing methods such as profit-loss sharing (PLS), istisna'a, and ijara, among others. Banks can also own companies that finance investment and trade so that they can reduce their burden to supervise financed projects and engage in sales and purchase directly. In addition, the Islamic view focuses on the real production output of a company or organization. Islamic monetary policy seeks to use the available money supply in physical investment (real project), not in portfolio investment. In this case, attracting FDI is preferable, as it is a form of physical investment (Al-Jarhi, 2000, 2004; Sarker, 2015, 2016).

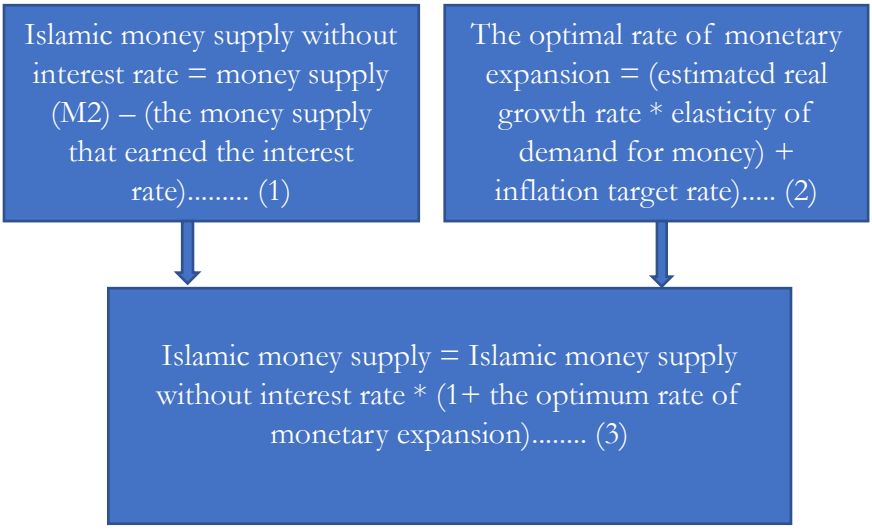

Figure 2: Islamic Money Supply Measurement

Through figure 1 the Islamic money supply is measured from the point of view of Islamic monetary policy based on two assumptions. The first assumption states that Islamic money supply comes without interest rate. The interest rate is the price that is paid to lenders in exchange for borrowed money. The interest rate is a resource allocation tool, providing information to both producers and buyers.

Foreign Direct Investment

FDI is the establishment of a business operation in a country by a foreign company through the establishment of a wholly owned new subsidiary. It is a long-term investment, reflecting an unceasing control and interest by a resident entity in one economy (foreign direct investor or parent enterprise) or an enterprise resident in an economy other than that of the foreign direct investor (UNCTAD, 2017). FDI can also come in the form of a joint venture company in the host economy or the acquisition of a local company (Moran, 2001). Technology transfer, large technical improvement, and efficiency improvement are the most important benefits of foreign investment (Caves, 1974).

FDI is a primary driver of international economic integration. Through an appropriate policy framework, it can develop economies, improve social well-being, and promote financial stability (OECD, 2008). Four major reasons for investing abroad include the search for new markets, the search for natural resources, restructuring existing foreign production, and the search for new strategic assets (Narula & Dunning, 2000).

The definitions indicate that FDI is an investment of by foreign agents in productive facilities. This can take the form of constructing a completely new facility, starting a new operation at a site that was previously occupied, or buying an existing enterprise through a privatisation agreement, acquisition, or merger (Narula & Dunning, 2000; Newman, Rand, Talbot, & Tarp, 2015).

Attracting FDI is an important political priority in developing countries, as it could create jobs and inject capital into the local economy. In addition, FDI often comes with new technological innovations that are likely to be an important source of productivity

growth. Since FDI can assist the industries to catch up with international technological boundaries, governments introduce various policies to attract FDI. The derived effects have become the subject of extensive empirical literature (Newman et al., 2015).

Literature Survey

A thorough literature review shows that the decline in FDI inflow is one of the major issues faced by developing countries. In response, these countries have implemented several economic policies to increase FDI. FDI gives positive effects on developing countries' economy by reducing long-term unemployment and accelerating economic growth. Therefore, this paper considers investigating the impact of monetary policy using Islamic or non-Islamic money supply on FDI in Jordan.

According to, Alawi and Karim (2015); Auer (2014); Bekhet and Al-Smadi (2015); Gui-Diby and Renard (2015); Leoveanu (2016); Mugableh (2015); Olweny and Chiluwe (2012); Precious and Makhetha-Kosi (2014), monetary policy greatly influences FDI. This shows that the monetary policy positively affects the FDI, this result is aligned to the liquidity preference theory. Conversely, the monetary policy gives a negative impact on FDI, Boateng et al. (2015); Durmaz (2017); Felisoni de Angelo et al. (2010); Kaur and Sharma (2013).

Compared to the previous studies, this paper investigates the effect of Islamic and conventional money supply on FDI in the Jordanian economy. In other words, this paper differs from the above studies and contributes novel knowledge to the literature by examining the impact of the Islamic money supply on FDI in Jordan.

METHODOLOGY

This section explains the model specification used to analyze the impact of monetary policy by applying Islamic or non-Islamic money supply on FDI in Jordan using an autoregressive distributed lag (ARDL) model. This model is an ordinary least square (OLS) based model which is applicable for both non-stationary time series as well as for times series with mixed order of integration. The ARDL has been used for decades to model the relationship between (economic) variables in the formation of a single time series of the equation.

(Alves & da Silveira Bueno, 2003; Dike, 2018b; R. F. Engle & C. W. Granger, 1987; Sebastian Kripfganz & Daniel C Schneider, 2018).

Moreover, there are at least three reasons for choosing the ARDL estimation. First, the time series stability of variables is stationary at mix different levels (I (0) and I (1)) and fiest different level I (1). Second, co-integration has been detected between series know that there exists a long-term and short-run equilibrium relationship between them so this model was applied. Thirdly, this model is a good model for small sample size. (Alves & da Silveira Bueno, 2003; Dike, 2018b; R. F. Engle & C. W. Granger, 1987; Sebastian Kripfganz & Daniel C Schneider, 2018).

According (Mugableh, 2015; Omanwa, 2013; Rashid et al., 2017) articles focus on the determinants of FDI. This paper depends on this article to choose the Money supply (M2), export, GDP, government spending, inflation as independents variables to show Analyze the impact of monetary policy using Islamic or non-Islamic money supply on FDI in Jordan. In addition, this paper used the Islamic money supply as indicter of Islamic monetary policy to show its effect on FDI. Moreover, this paper used the ARDL model to analyze the impact of monetary policy using Islamic or non-Islamic money supply on FDI in Jordan using the logarithmic form, depends on (Mugableh, 2015; Rashid et al., 2017) articles as follows:

1- FDI= F (M2, CPI, EXP, GOV, GDP)

FDI = B0+ B1 LM2 +B2 LCPI + B3 LEXP + B4 LGOV+B5 LGDP+U

Where FDI is foreign direct investment, B0 is the constant, M2 is money supply, Export (EXP), Government Expenditure (GOV), Output (GDP), (CPI) is inflation, and μ is the error term.

2- FDI= F (IMS, CPI, EXP, GOV, GDP)

FDI= B0+ B1 LIMS +B2 LCPI+ B3 LEXP + B4 LGOV+ B5 LGDP+U

Where FDI is foreign direct investment, B0 is the constant, IMS is Islamic money supply, Export (EXP), Government Expenditure (GOV), Output (GDP), (CPI) is inflation, and μ is the error term. The calculation method of IMS was mentioned in figure (1).

Scope and Sources of data

The population of this study, both the dependent and independent variables, is annual time-series data from 1980 to 2018. The sources of the data are the World Bank and the central bank of Jordan website.

Variable Definitions

The Dependant variable is FDI (FDI) is the investment of foreigners in productive facilities. It can take the form of creating a completely new facility where it has not existed before, starting a new operation at a site that was previously occupied, or purchasing an existing process through a privatization agreement, acquisition, or merger. The source of the data is the World Bank website. In addition, the independent variable Money Supply (M2) is the indicator of conventional monetary policy, and the data are collected from the central bank of Jordan's website. Additionally, Islamic Money Supply (IMS) is the indicator of Islamic monetary policy, and the data are collected from the central bank of Jordan. The source of the data is the central bank of the Jordan website. Inflation (CPI) is the increase in the price level of services and goods over time. It is a result of the rising cost of production or the money supply, leading to a decline in the purchasing power of the currency. The source of the data is the World Bank website. Government Expenditure (GOV) is one of the most important tools of fiscal policy. The financial authority of a country uses it to achieve its economic and social goals (Alesina & Ardagna, 2010). The gross domestic product (GDP) is the total monetary or market value of all final goods and services produced within the country's borders within a specific period of time. The source of the data is the World Bank website. Lastly, Export (EXP) is an international trade function through which goods are produced in a specific country and sold or traded to another country in the future.

The sale of these commodities is added to the total production of the producing country (Bernard, Eaton, Jensen, & Kortum, 2003; Schmitthoff & Adams, 1990).

DATA ANALYSIS

Unit Roots Tests (Augmented Dickey-Fuller test)

The stationarity of variables is an important determinant of the validity of a time-series model. A model that fails to fulfil this criterion produce unrealistic and misleading results, that is, they lead to false regressions (spurious regression). There are numerous methods to test the stationarity of variables, the most common of which is the unit root test. If the time series is stationary at the level, it is said to be integrated of order zero, i.e. I(0).If it is stationary at the first difference level, it is integrated of the first order, i.e. I(1), and so forth. The Xt time series is integrated of a certain degree (I) if it is stationary at the difference level (I) (Beare, 2018; Khraief, Shahbaz, Heshmati, & Azam, 2020; Phillips & Perron, 1988). According to Gujarati (2009), in general, the Xt time series is completely static when: (1) its arithmetic mean is constant ($E(Xt) = \mu$); (2) fixed variation ($var(Xt) = \sigma 2$); (3) the correlation between Xt, Xt + k depends only on k, meaning that:

$$Yk = cov(Xt, Xt + k) = E[(Xt - \mu)(Xt + k - \mu)], k = 1, 2, 3, \dots, T$$

To test the stationarity of time series variables and their degree of integration, the augmented Dickey-Fuller (ADF) test is used. It is one of the most popular tests to detect stationarity and co-integration. This test is based on the following formula(Cheung & Lai, 1995; Paparoditis & Politis, 2018):

$$Yt = \Lambda Yt\text{-}1 + Ut\Delta$$
$$Yt = C + \Lambda Yt\text{-}1 + Ut\Delta$$
$$Yt = C + \boldsymbol{\beta} t + \Lambda Yt\text{-}1 + Ut\Delta$$

If the error terms (Ut) of the above formulae areautocorrelated, the DF test corrects them by adding several lagged differences to the equations:

$$YT = C + \boldsymbol{\beta}t + \Lambda Yt\text{-}1 + \sum (t = 1) \wedge (\varrho\text{-}1)\ \alpha i\ \Delta Yt + Ut\Delta$$

The Dickey-Fuller test is then called the augmented Dickey-Fuller test. The decision whether to accept the hypothesis is done by comparing the test statistic, DF, with the tabulated critical value. If the absolute DF value is less than the absolute critical value, the null hypothesis is not rejected, indicating that the time series is non-stationary (Cheung & Lai, 1995; Paparoditis & Politis, 2018).

Table 1: ADF Test for Variables of FDI Determinants Models

Variables	t-statistic	1%	5%	10%	Level	Result
LFDI	-1.0629	-3.6210	-2.9434	-2.6103	I(0)	
	-10.7979	-3.6210	-2.9434	-2.6103	I(1)	Accept
LM2	-1.5482	-3.6210	-2.9434	-2.6103	I(0)	
	-3.5079	-3.6210	-2.9434	-2.6103	I(1)	Accept
LIMS	-1.0108	-3.6155	-2.9411	-2.6090	I(0)	
	-7.0955	-3.6210	-2.9434	-2.6102	I(1)	Accept
LGOV	0.2186	-3.6210	-2.9434	-2.6102	I(0)	
	-4.7094	-3.6210	-2.9434	-2.6102	I(1)	Accept
LEXP	-0.2711	-3.6155	-2.9411	-2.6090	I(0)	
	-4.0022	-3.6267	-2.9458	-2.6115	I(1)	Accept
LGDP	0.2635	-3.6210	-2.9434	-2.6103	I(0)	
	-4.2728	-3.6329	-2.9484	-2.6102	I(1)	Accept
LCPI	-1.2478	-3.6210	-2.9434	-2.6103	I(0)	
	-3.6999	-3.6210	-2.9434	-2.6103	I(1)	Accept

The results in Table show that the determinants of FDI are not stationary at the level. Some variables are stationary at the first difference level at a significance level of 1 percent, except M2 ($p < 0.05$). Because the absolute values of the test statistic are greater than the absolute critical values at the first difference level ($p < 0.01, 0.05$), the null hypothesis is rejected. This means that the is stationary at I(1), that is, there is a unit root at the first difference.

Lag Length Selection Test

The lag length is selected using a number of criteria, including the likelihood ratio test (LR), final prediction error criterion (FPE), Hannan-Quinn information criterion (HQC), Akaike information criterion (ATC), and Schwarz information criterion (SIC).The results in Table and Table show that the best lag length for models **Ralat! Sumber rujukan tidak dijumpai.** and **Ralat! Sumber rujukan tidak dijumpai.**is four.

Table 2: Lag Length for the M2 Model

Lag	LR	FPE	AIC	SC	HQ
0	NA	6.54e-09	-1.818818	-1.552186	-1.726776
1	351.2517	1.88e-13	-12.30638	-10.43996	-11.66209
2	45.37194	2.27e-13	-12.31160	-8.845394	-11.11506
3	56.62054	9.02e-14	-13.79324	-8.727248	-12.04446
4	64.09525*	4.69e-15*	-18.14562*	-11.47984*	-15.84460*

Table 3: Lag Length for the IMS Model

Lag	LR	FPE	AIC	SC	HQ
0	NA	2.24e-07	1.716652	1.983283	1.808693
1	317.0185	2.19e-11	-7.548296	-5.681878	-6.904009
2	44.97146	2.69e-11	-7.535310	-4.069106	-6.338777
3	43.21689	2.47e-11	-8.179223	-3.113232	-6.430444
4	76.50527*	3.72e-13*	-13.77261*	-7.106830*	-11.47158*

Diagnostic Tests

In addition to the previous tests, diagnostic tests like serial correlation and heteroskedasticity tests are also important to ensure the model is free of standard problems. Table shows that the probability values for F are greater than 5 percent for both models. Therefore, the null hypothesis is not rejected, which means that serial correlation and heteroskedasticity are not found in both models.

Table 4: Results of Diagnostic Tests for the M2 and IMS Models

Equations	Test	Test statistic	Prob.
LFDI= F(M2 ,	Serial	F- Cal.=	0.7013

CPI, LEXP, LGOV, LGDP)	correlation	0.360364	
	Heteroskedasticity	F- Cal.= 1.866129	0.0953
LFDI= F(IMS, CPI, LEXP, LGOV, LGDP)	Serial correlation	F- Cal.= 0.155671	0.8569
	Heteroskedasticity	F- Cal.= 1.689325	0.1346

Normality test

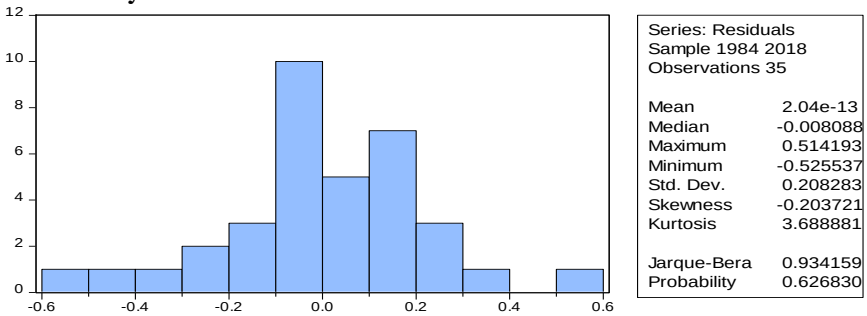

Figure 3: Results of Normality Tests for the M2 Model

Figure 3 shows that the residuals of the conventional money supply model are normally distributed. The histogram depicts a bell curve and the p-value of Jarque-Bera is not statistically significant. This strongly supports that the t-statistic and F-statistic are valid. Figure 4 shows the same results for the Islamic money supply model. The residuals are likewise normally distributed.

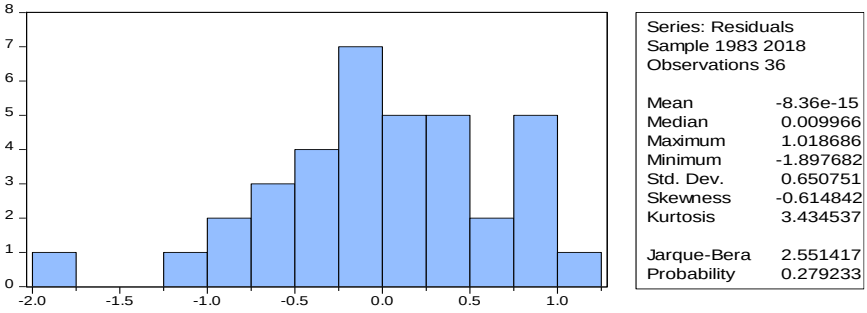

Figure 4: Results of Normality Tests for the IMS Model

CUSUM Test

The CUSUM tests for both models show that it is not necessary to divide the sample period into sub periods, as the recursive residuals remained within the upper and lower bounds. The results are illustrated in Figure 5 and Figure .

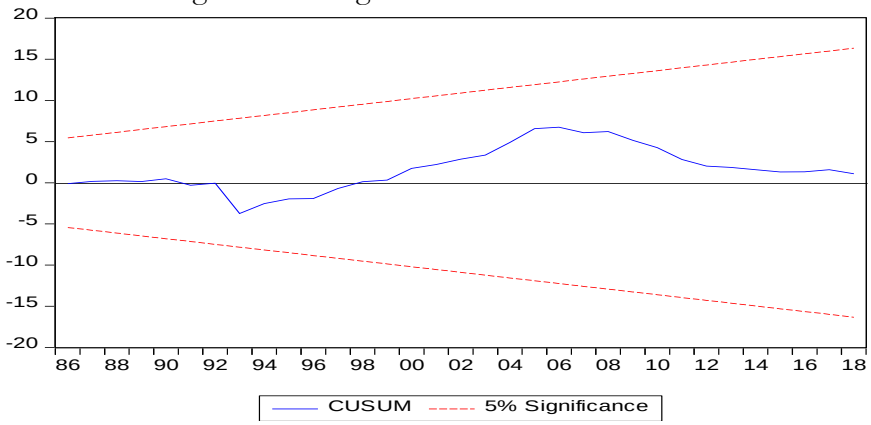

Figure 5: CUSUM for the M2 Model

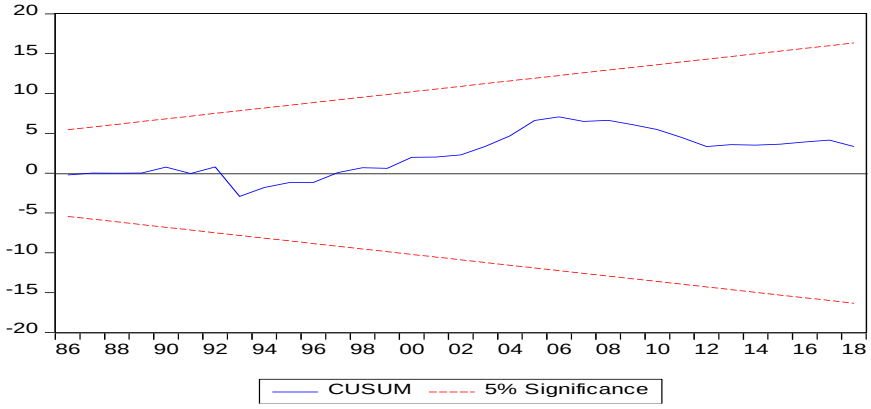

Figure 6: CUSUM for the IMS Model

ARDL Model

Among the main components of ARDL model are as followed.

Bounds Test

Time series that is not stationary at level becomes static after taking the first difference level. This lowers the possibility of a significant long-run equilibrium correlation between the variables. As a solution, the ARDL method uses the bound test proposed by Pesaran and Smith (2001) to determine whether the variables are co-integrated (Mulok, Kogid, Lily, & Asid, 2016; Pesaran, Shin, & Smith, 2001).

Table 1: Bounds Testing for the M2 and IMS Models

Models	f	1%		5%		10%		Result
		I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	
LFDI = f(LM2, LCPI, LGDP, LGOV, LEXP	9.414	3.06	4.15	2.39	3.38	2.08	3	Cointegration
LFDI = f(LIMS, LCPI, LGDP, LGOV, LEXP	7.227	3.06	4.15	2.39	3.38	2.08	3	Cointegration

Table 5 shows the bounds testing results, which indicate that some variables in the previous models have long-term relationships. These are confirmed by comparing the calculated f value with the boundaries. Therefore, the null hypothesis (no co-integration) can be rejected, indicating that there are co-integrating relationships at all levels of significance.

Estimating Long-run Elasticity

Since the variables are co-integrated, it means that they have long-term equilibrium relationships. The long-term elasticity of these

variables is estimated using the ARDL model. Table shows the estimated long-run coefficients of the variables of the M2 model. The ARDL model uses lag lengths defined by the EVIEWS 10 software (1, 2, 2, 1, 0, 0). The R2 amounts to 0.89, which means that on average, the independent variables account for 89 percent of variance in FDI in Jordan. The results also indicate that LM2, LGOV, LGDP, and LCPI are statistically significant determinants of FDI, while LEXP is not.

Table 6: ARDL Estimation of the M2 Model
Dependent Variable: LFDI
Akaike info criterion (AIC), ARDL (1, 1, 1, 0, 1, 0)

Variables	Coefficient	SE	t-statistic	Prob.
LGDP	-14.03448	2.520908	-5.567230	0.0000
LM2	-3.581198	1.692444	**-**2.115992	0.0445
LGOV	16.76133	2.484350	6.746769	0.0000
LEXP	0.612085	1.101882	0.555490	0.5835
LCPI	-2.899998	2.441699	-1.187697	0.2461
C	-21.43051	2.974392	-7.205005	0.0000

R-squared	0.892072	Mean DV	5.685642
Adjusted R-squared	0.844584	SD DV	1.956874
S.E. of regression	0.771456	AIC	2.575533
Sum squared resid.	14.87861	SIC	3.097993
Log likelihood	-35.64735	HQC	2.759724

F-statistic	18.78507	Durbin-Watson	2.045642
Prob(F-statistic)	0.000000		

EC = LFDI - (-14.0345*LGDP - 3.5812*LM2 + 16.7613*LGOV + 0.6121*LEXP -2.9000*LCPI -21.4305)

DV: dependent variable; AIC: Akaike information criterion; SIC: Schwarz information criterion; HQC: Hannan-Quinn information criterion

Based on the results shown, it can be clearly shown that there is an inverse relationship between FDI and M2. The results show that the effect of money supply on FDI in Jordan is straight forward: Ceteris paribus, a 1 percent increase in money supply leads to a decrease in FDI by 3.58 percent. The long-run M2 model can be written as:

LFDI = 21.43+ 14.03*LGDP - 3.58*LM2 -16.76*LGOV - 0.61*LEXP + 2.9*LCPI

Table 7: ARDL Estimation of the IMS Model

Dependent Variable: LFDI

Akaike info criterion (AIC), ARDL (1, 2, 1, 0, 0, 2)

Variables	Coefficient	SE	t-statistic	Prob.
LIMS	0.838731	0.406171	2.064968	0.0469
LGOV	12.98109	4.120945	3.150028	0.0046
LGDP	-10.08174	3.621466	-2.783884	0.0108
LCPI	-1.197351	1.472101	-0.813362	0.4247
LEXP	3.430684	1.425463	2.406716	0.0249
C	-19.09405	2.583301	-7.391340	0.0000

R-squared	0.870120	Mean DV	5.685642
Adjusted R-squared	0.812973	SD DV	1.956874
S.E. of regression	0.846282	AIC	2.760678
Sum squared resid.	17.90482	SIC	3.283138
Log likelihood	-39.07254	HQC	2.944869
F-statistic	15.22596	Durbin-Watson	2.315364
Prob(F-statistic)	0.000000		

EC = LFDI - (0.8387*LIMS + 12.9811*LGOV -10.0817*LGDP - 1.1974*LCPI + 3.4307*LEXP -19.0941)

DV: dependent variable; AIC: Akaike information criterion; SIC: Schwarz information criterion; HQC: Hannan-Quinn information criterion

Table shows the estimated long-run coefficients of the variables of the IMS model. The ARDL model uses lag lengths defined by the EVIEWS 10 software (1, 2, 1, 0, 0, 2). The R2 amounts to 0.87, which means that on average, the independent variables account for 87 percent of variance in FDI in Jordan. The

results also indicate that LIMS, LGOV, LGDP, and LEXP are statistically significant determinants of FDI, while LCPI is not.

The results show that the effect of Islamic money supply on FDI in Jordan is straightforward: Other factors remaining constant, a 1 percent increase in Islamic money supply leads to an increase in FDI Jordan by 0.83 percent. The long-run IMS model can be written as:

LFDI =18.84 + 8.73*LGDP - 12.06*LGOV - 2.13*LEXP+0.05*LCPI+0.78*LIMS

There are not many explanations for the long-term coefficients because the variables have shown co-integration and long-run elasticity. Nonetheless, long-term elasticity is estimated to follow the error correction coefficient (Coint Eq (-1)). Table 8 shows the long-run elasticity estimations of the M2 model. The error correction term (ECT) in the long run is negative, and its absolute value is higher than 1. Its absolute value indicates the percentage of disequilibrium in FDI in the previous period that is corrected at a later period towards long-run equilibrium. In this case, the error correction term for the M2 model is -1.17. In other words, the economy is adjusting towards long-run equilibrium at a speed of 1.17.

Table 8: Long-run Elasticity Estimations of the M2 Model

Variables	Coefficient	SE	t- statistic	Prob.
D(LGDP)	-7.390161	2.234127	-3.307852	0.0028
D(LGDP(-1))	-5.934122	1.347183	-4.404839	0.0002
D(LM2)	11.26127	3.120596	3.608692	0.0013
D(LM2(-1))	6.688594	2.742425	2.438934	0.0222
D(LGOV)	13.03710	2.391115	5.452311	0.0000
CointEq(-1)*	-1.178432	0.130364	-9.039552	0.0000

Table 9: Long-run Elasticity Estimations of the IMS Model

Variables	Coefficient	SE	t- statistic	Prob.
D(LGDP)	-2.378252	2.041460	-1.164976	0.2550
D(LGDP(-1))	-4.604998	1.306119	-3.525710	0.0017
D(LGOV)	7.478539	2.290416	3.265145	0.0032

D(LIMS)	0.409006	0.412219	0.992208	0.3306
D(LIMS(-1))	0.980312	0.422171	2.322076	0.0287
CointEq(-1)*	-1.063029	0.134217	-7.920253	0.0000

Table 9 shows the long-run elasticity estimations of the IMS model. The error correction term (ECT) in the long run is negative, and its absolute value is higher than 1. Its absolute value indicates the percentage of disequilibrium in FDI in the previous period that is corrected at a later period towards long-run equilibrium. In this case, the error correction term for the IMS model is -1.06. In other words, the economy is adjusting towards long-run equilibrium at a speed of 1.06.

Estimating Short-run Causality

Table 10: Short-run Causality Relationship for the Money Supply Model

Variable	Test statistic	Value	df	Probability
LGDP	F-statistic	12.78806	(3, 25)	0.0000
	Chi-square	38.36419	3	0.0000
LM2	F-statistic	4.801363	(3, 25)	0.0089
	Chi-square	14.40409	3	0.0024
LGOV	F-statistic	17.63903	(2, 25)	0.0000
	Chi-square	35.27807	2	0.0000
LEXP	F-statistic	0.307841	(1, 25)	0.5839
	Chi-square	0.307841	1	0.5790
LCPI	F-statistic	1.408768	(1, 25)	0.2464
	Chi-square	1.408768	1	0.2353

Table 10 shows there is a short-term causality relationship between LM2, LGDP, and LGOV, ceteris paribus, as the probability of the chi-square is less than 5 percent. But there is no short-term causality relationship between LEXP and LCPI (ceteris paribus) because the chi-square probability is more than 5 percent.

Table 11: Short-run Causality Relationship for the Islamic Money Supply Model

Variable	Test statistic	Value	df	Probability
LGDP	F-statistic	4.819787	(3, 25)	0.0088
	Chi-square	14.45936	3	0.0023
LGOV	F-statistic	3.951290	(2, 25)	0.0323
	Chi-square	7.902579	2	0.0192
LIMS	F-statistic	2.581386	(3, 25)	0.0760
	Chi-square	7.744159	3	0.0516
LEXP	F-statistic	2.335609	(1, 25)	0.1390
	Chi-square	2.335609	1	0.1264
LCPI	F-statistic	0.001357	(1, 25)	0.9709
	Chi-square	0.001357	1	0.9706

Table 11 shows there is a short-term causality relationship between LIMS, LGDP, and LGOV, ceteris paribus, as the probability of the chi-square is less than 5 percent. But there is no short-term causality relationship between LEXP and LCPI (ceteris paribus) because the chi-square probability is more than 5 percent.

CONCLUSION

This study aimed at the impact of monetary policy using Islamic or non-Islamic money supply on FDI by focusing on time series analysis of selected variables during the period 1980 until 2018 using the ARDL model. The objective achieved the appropriate statistical tests such as data stability and co-integration tests have been used. The variables analysed include the money supply (M2), the Islamic money supply (IMS), the export (EXP), Government Expenditure (GOV), inflation rate (INR), The gross domestic product (GDP) as independent variables. The dependant variable is the foreign direct investment (FDI). This study results in a long-term and short-term statistically significant correlation between the money supply (M2), the Islamic money supply (IMS) and FDI. The Islamic money supply (IMS) has a positive impact and the money supply (M2) has a negative impact on the FDI.

Moreover, the money supply is an indicator of monetary policy in Jordan, noted that the ARDL model used by the EVIEWS 10 software-defined the slowdown periods (0, 0, 2, 1, 2, 1). It is also clear from the results that the value of the coefficient of determination (R2) amounted to (89%) This means that the independent variables combined account for (89%) of foreign direct investment in Jordan on average. Results also indicate that (M2, GOV, GDP, C) are statistically acceptable, (CPI, EXP) are not statistically acceptable. Also, it shows the estimated coefficients of independent and constant variables in the long run. Moreover, the money supply (M2) has a negative impact on FDI (3.58). In another word, if the money supply (M2) increased by (1%) the FDI will decrease by (3.58%). The Islamic money supply is an indicator of monetary policy in Jordan, noted that the ARDL model used by the EVIEWS 10 software-defined the slowdown periods (1, 0, 1, 2, 0, 2). It is also clear from the results that the value of the coefficient of determination (R2) amounted to (87%) This means that the independent variables combined account for (87%) of foreign direct investment in Jordan on average. Results also indicate that (MS, GOV, GDP, C) are statistically acceptable, (CPI, EXP) are not statistically acceptable. Moreover, the Islamic money supply (IMS) has a positive impact on FDI by (0.83). In another word, if the Islamic money supply (IMS) increased by (1%) the FDI will increase by (0.83%).

Moreover, the short term has indicated the model of monetary policy using Islamic or non-Islamic money supply on FDI. The short run by the value of the error correction threshold coefficient (because it is negative). Its absolute value indicates the percentage of imbalance in the previous period that is corrected at a later period when shocks in the independent study variables affect the dependent variable. This has been the ratio of the model of the money supply (1.17). Moreover, the short term has indicated the model of the Islamic money supply in the short run by the value of the error correction threshold coefficient (because it is negative). Its absolute value indicates the percentage of imbalance in the previous period that is corrected at a later period when shocks in the

independent study variables affect the dependent variable. This has been the ratio of the model of the Islamic money supply (1.06).

The study recommended; the Jordanian government must implement a targeted Islamic monetary policy to attract foreign direct investment in the Jordanian economy. Provide an appropriate environment for investment and to remove the obstacles to investment in general, to attract the capital of Jordanians working abroad for domestic investment, as well as for foreign investments.

REFERENCES

Abdelbaki, H. H. (2017). Money and the traditional monetary system and the possibility of monetary reform. *Journal of King Abdulaziz University: Islamic Economics, 3*, 223-247.

Abu Laila, Z. M. (2005). *Impact of foreign direct investment and imports on economic growth in Jordan for the period 1976-2005* (Unpublished master's thesis), Yarmouk University, Irbid, Jordan. Available from Irbid, Jordan Yarmouk University database.

Agosin, M. R., & Machado, R. (2007). Foreign Investment in developing countries: does it crowd in domestic investment? *Oxford Development Studies, 33*(2), 149-162. doi:10.1080/13600810500137749

Agosin, M. R., & Mayer, R. (2000). *Foreign investment in developing countries: does it crowd in domestic investment?* Retrieved from https://ideas.repec.org/p/unc/dispap/146.html

Akhtar, M. A. (1997). *Understanding open market operations*. Retrieved from https://files.stlouisfed.org/files/htdocs/aggreg/meeks.pdf

Al-Jarhi, M. (2000). السياسات النقدية في إطار إسلامي *[Monetary policy in an Islamic framework]*. Retrieved from Germany: https://ideas.repec.org/p/pra/mprapa/67547.html

Al-Jarhi, M. (2004). Remedy for banking crises: what Chicago and Islam have in common: a comment. *Islamic Economic Studies, 11*(2), 24-42.

Alawi, M. H., & Karim, B. R. (2015). The Impact of Monetary and Fiscal Policy on Foreign Direct Investment Flows in Algeria: Empirical Study for the Period 1990 - 2012. *Ru'á Iqtiṣadiyah*(9), 31-51. doi:10.12816/0017466

Alesina, A., & Ardagna, S. (2010). Large changes in fiscal policy: taxes versus spending. *Tax policy and the economy, 24*(1), 35-68.

Alves, D. C., & da Silveira Bueno, R. D. L. (2003). Short-run, long-run and cross elasticities of gasoline demand in Brazil. *Energy Economics, 25*(2), 191-199.

Amman Stock Exchange. (2016). Low investment in ASE. Retrieved from www.ase.com.jo

Auer, S. (2014). *Monetary policy shocks and foreign investment income: evidence from a large Bayesian VAR*. Retrieved from

Beare, B. K. (2018). Unit root testing with unstable volatility. *Journal of Time Series Analysis, 39*(6), 816-835. doi:10.1111/jtsa.12279

Bekhet, H. A., & Al-Smadi, R. W. (2015). Determinants of Jordanian foreign direct investment inflows: Bounds testing approach. *Economic Modelling, 46*, 27-35.

Bernard, A. B., Eaton, J., Jensen, J. B., & Kortum, S. (2003). Plants and productivity in international trade. *American economic review, 93*(4), 1268-1290.

Blanchard, O., & Galí, J. (2010). Labor markets and monetary policy: a new Keynesian model with unemployment. *American economic journal: macroeconomics, 2*(2), 1-30. doi:10.1257/mac.2.2.1

Boateng, A., Hua, X., Nisar, S., & Wu, J. (2015). Examining the determinants of inward FDI: Evidence from Norway. *Economic Modelling, 47*, 118-127.

Bofinger, P., Reischle, J., & Schächter, A. (2001). *Monetary policy: goals, institutions, strategies, and instruments*. Oxford: Oxford University Press.

Caves, R. E. (1974). Multinational firms, competition, and productivity in host-country markets. *Economica, 41*(162), 176-193. doi:10.2307/2553765

Central Bank of Jordan. (2017a). *50 years of achievements*. Retrieved from Amman: https://www.cbj.gov.jo/EchoBusv3.0/SystemAssets/PDFs/EN/50th%20acheivements.pdf

Central Bank of Jordan. (2017b). *Central Bank of Jordan Reports*. Retrieved from Amman: www.cbj.gov.jo

Chea, A. C. (2011). Sources of global private capital flows: what developing countries can do to attract, manage, and retain

global private capital flows to finance economic growth and sustainable development. *Business and Economic Research, 1*(1). doi:https://doi.org/10.5296/ber.v1i1.993

Cheung, Y.-W., & Lai, K. S. (1995). Lag order and critical values of the augmented Dickey–Fuller test. *Journal of Business & Economic Statistics, 13*(3), 277-280. doi:https://doi.org/10.1002/jae.2458

Choudhury, M. A. (2018). Comparative Islamic perspectives in money, monetary policy, and social wellbeing. *Journal of Economic Cooperation & Development, 39*(1), 143-162.

Dike, C. (2018a). Effects of foreign direct investment in Sub-Saharan Africa economic growth: evidence from panel data analysis. *International Journal of Economics and Financial Issues, 8*(2), 255-261.

Dike, C. (2018b). Effects of Foreign Direct Investment in Sub-Saharan Africa economic growth: evidence from panel data analysis. *International Journal of Economics and Financial Issues, 8*(2), 255.

Durmaz, N. (2017). Foreign direct investments, democracy, and economic growth in Turkey. *International Journal of Social Economics*.

El-Ashker, A., & Wilson, R. (2006). *Islamic economics: a short history*. Leiden, the Netherlands: Brill.

Elhiraika, A. B. (2004). *On the design and effects of monetary policy in an Islamic framework: the experience of Sudan* (9960321479). Retrieved from Jeddah, Saudi Arabia:

Engle, R. F., & Granger, C. W. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica: journal of the Econometric Society*, 251-276.

Engle, R. F., & Granger, C. W. J. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica, 55*(2), 251-276. doi:10.2307/1913236

Farihat, H. (2000). WTO Membership on Economic Development in Jordan. *Middle East Studies, 12*, 1-17.

Felisoni de Angelo, C., Eunni, R. V., & Manoel Martins Dias Fouto, N. (2010). Determinants of FDI in emerging markets: evidence from Brazil. *International Journal of Commerce and Management, 20*(3), 203-216. doi:https://doi.org/10.1108/10569211011076901

Floyd, J. E. (2010). *Interest rates, exchange rates and world monetary policy*. Berlin: Springer.

Gan, P., & Yu, H. (2009). Optimal Islamic monetary policy rule for Malaysia: The Svensson's approach. *International Research Journal of Finance and Economics, 30*(30), 165-176.

Gui-Diby, S. L., & Renard, M.-F. (2015). Foreign direct investment inflows and the industrialization of African countries. *World Development, 74*, 43-57.

Gujarati, D. N. (2009). *Basic econometrics*. New Delhi: Tata McGraw-Hill Education.

Ibrahim, M. F. (2009). The relationship between monetary policy and Islamic stock market. *Labuan e-Journal of Muamalat and Society, 3*, 49-64.

Ismail, A. G. (2010). *Tools for controlling monetary variables in the Islamic banking system*. Retrieved from Kuala Lumpur:

Jamel, H. A. (2002). Foreign investment in Jordan: its size and its determinants. *Irbid Journal for Research and Studies*(2), 1-35.

Kaur, M., & Sharma, R. (2013). Determinants of foreign direct investment in India: an empirical analysis. *Decision, 40*, 57-67. doi:https://doi.org/10.1007/s40622-013-0010-4

Keynes, J. M. (2018). *The general theory of employment, interest, and money*. London: Palgrave Macmillan.

Khan, M., & Mirakhor, A. (1989). The financial system and monetary policy in an Islamic economy. *Journal of King Abdulaziz University: Islamic Economics, 1*(1), 39-57.

Khraief, N., Shahbaz, M., Heshmati, A., & Azam, M. (2020). Are unemployment rates in OECD countries stationary? Evidence from univariate and panel unit root tests. *The North American Journal of Economics and Finance, 51*. doi:10.1016/j.najef.2018.08.021

Kripfganz, S., & Schneider, D. C. (2018). *ardl: Estimating autoregressive distributed lag and equilibrium correction models*. Paper presented at the Proceedings of the 2018 London Stata Conference.

Kripfganz, S., & Schneider, D. C. (2018). *ardl: estimating autoregressive distributed lag and equilibrium correction models*. Paper presented at the Proceedings of the 2018 London Stata Conference, London.

Kuran, T. (1995). Islamic economics and the Islamic subeconomy. *Journal of Economic Perspectives, 9*(4), 155-173. doi:10.1257/jep.9.4.155

Leoveanu, V. M. (2016). *The relationship between monetary policy and foreign direct investment in Romania during 2003-2014*. Paper presented at the 28th International Business Information Management Association (IBIMA), Seville.

Mannan, M. A. (1986). *Islamic economics: theory and practice*. London: Hodder and Stoughton.

Mat Sari, N., & Mirakhor, A. (2012). *Islamic monetary policy in Malaysia: a conceptual framework*. Paper presented at the 2nd ISRA Colloquium 2012: "Islamic Finance in a Challenging Economy: Moving Forward", Kuala Lumpur, Malaysia. https://ikr.inceif.org/handle/INCEIF/1203

McConnell, C. R., Brue, S. L., & Flynn, S. M. (2008). *Economics: principles, problems, and policies*. New York City, NY: McGraw-Hill Higher Education.

Moran, T. H. (2001). *Parental supervision: the new paradigm for foreign direct investment and development* (Vol. 64). Washington, DC: Peterson Institute for International Economics.

Mugableh, M. I. (2015). Time series analysis of inward foreign direct investment function in Malaysia. *Procedia-Social and Behavioral Sciences, 172*, 679-685.

Mulkiaman, M. (2016). *Impact of monetary policy and macroeconomic environment on Islamic banking operations in a dual banking system of Malaysia.* (Unpublished doctoral dissertation), Durham University, Durham, UK.

Mulok, D., Kogid, M., Lily, J., & Asid, R. (2016). The relationship between crime and economic growth in Malaysia: re-examine using bound test approach. *Malaysian Journal of Business and Economics 3*(1), 15-26.

Narula, R., & Dunning, J. H. (2000). Industrial development, globalization and multinational enterprises: new realities for developing countries. *Oxford Development Studies 28*(2), 141-167. doi:https://doi.org/10.1080/713688313

Newman, C., Rand, J., Talbot, T., & Tarp, F. (2015). Technology transfers, foreign investment and productivity spillovers.

European Economic Review, 76, 168-187. doi:Technology transfers, foreign investment and productivity spillovers

Neyer, U. (2007). *The design of the Eurosystem's monetary policy instruments*. Berlin: Springer Science+Business Media.

Olweny, T., & Chiluwe, M. (2012). The effect of monetary policy on private sector investment in Kenya. *Journal of Applied Finance and Banking, 2*(2), 239-287.

Omanwa, S. M. (2013). Determinants of FDI in Kenya: An Empirical Study. *Vilakshan: The XIMB Journal of Management, 10*(1).

Paparoditis, E., & Politis, D. N. (2018). The asymptotic size and power of the augmented Dickey–Fuller test for a unit root. *Econometric Reviews, 37*(9), 955-973. doi:10.1080/00927872.2016.1178887

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics, 16*(3), 289-326. doi:10.1002/jae.616

Phillips, P. C. B., & Perron, P. (1988). Testing for a unit root in time series regression. *Biometrika, 75*(2), 335-346. doi:10.2307/2336182

Pié, L., Fabregat-Aibar, L., & Saez, M. (2018). The influence of imports and exports on the evolution of greenhouse gas emissions: the case for the European Union. *Energies, 11*(7), 1644. doi:https://doi.org/10.3390/en11071644

Precious, C., & Makhetha-Kosi, P. (2014). Impact of monetary policy on economic growth: a case study of South Africa. *Mediterranean Journal of Social Sciences, 5*(15), 76-84. doi:http://dx.doi.org/10.5901/mjss.2014.v5n15p76

Rashid, M., Looi, X. H., & Wong, S. J. (2017). Political stability and FDI in the most competitive Asia Pacific countries. *Journal of Financial Economic Policy, 9*(02), 140-155.

Saed, A. A., & Al-Shawaqfeh, W. (2017). The stability of money demand function in Jordan: evidence from the autoregressive distributed lag model. *International Journal of Economics and Financial Issues, 7*(5), 331-337. doi: 10.13140/RG.2.2.14803.68646

Sapova, A., Porshakov, A., Andreev, A., & Shatilo, E. (2018). *Review of methodological specifics of consumer price index seasonal adjustment in*

the Bank of Russia Retrieved from Moscow: https://ideas.repec.org/p/bkr/wpaper/wps33.html

Sarker, A. A. (2015). *Islamic monetary policy instruments (IMPIs)*. Retrieved from Jeddah: https://ideas.repec.org/p/ris/irtiwp/1436_004.html

Sarker, A. A. (2016). An evaluation of Islamic monetary policy instruments introduced in some selected OIC member countries. *Islamic Economic Studies, 24*(1), 1-47.

Schmitthoff, C. M., & Adams, J. (1990). Schmitthoff's export trade: the law and practice of international trade.

Sy, A., & Rakotondrazaka, F. M. (2015). *Private capital flows, official development assistance, and remittances to Africa: who gets what*. Retrieved from Washington, DC: https://www.brookings.edu/wp-content/uploads/2015/05/global_20160811_private_capital_flows_africa.pdf

Ufoeze, L. O. (2018). Effect of monetary policy on economic growth in Nigeria: an empirical investigation. *Annals of Spiru Haret University, Economic Series, 9*(1), 123-140.

UNCTAD. (2010). *World Investment Report 2010* (978-92-1-112806-2). Retrieved from New York, NY:

UNCTAD. (2015). *Global FDI flows declined in 2014: China becomes the world's top FDI recipient*. Retrieved from New York, NY and Geneva: https://unctad.org/system/files/official-document/webdiaeia2015d1_en.pdf

UNCTAD. (2017). *World Investment Report 2017: investment and the digital economy*. Retrieved from New York, NY and Geneva:

World Bank. (2019). *Macro poverty outlook: Middle East and North Africa*. Washington, DC: The World Bank.