



The Nexus Relationship between Exports and Government size Dynamic Panel Evidence from the MENA Region

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ABSTRACT

Objective –This article aims to detect empirically, the nexus relationship between exports and government size in seven middle-income MENA countries, namely, Algeria, Egypt, Jordan, Lebanon, Morocco, Palestine, and Tunisia, from 2000 to 2019.

Methodology/Technique – This article employs two econometric techniques, simultaneous equations using OLS, and recent Dynamic Panel Data system analysis.

Findings– Article results show a significant and robust negative association between exports and government size that indicates the need for government adoption of a series of policies for exports promotion strategies and likewise, openness can increase both variables. Growth and FDI increase exports and decrease government size, while ODA decreases exports and increases government size with Inflation-decreasing exports.

Novelty –This article shines a light on the expanded government size capable of hindering growth and exports through the adoption of unfavourable policies to support the private sector, growth, and exports. Ultimately, this determines whether government policies are favourable or not.

Type of Paper: Empirical.

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Keywords: Exports, Government size, MENA, GMM DPD system.

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1. Introduction

There is no doubt that the exports sector is one of the most important sectors as the main promoter of economic growth, increased productivity, and employment. In addition, developing countries suffer from a saving-investment gap, trade balance deficit and thin tax base. Moreover, exports revenues supplement the domestic savings and contribute to filling the foreign exchange gap, facilitating the penetration of foreign markets, increasing competitiveness, generating positive externalities, creating access to better technology and managerial skills. Furthermore, exports earnings enhance investment, reinvestment and employment that may enlarge government activities resulting in an increase or decrease in government revenues and size, whereas increasing government revenues may increase its size, meanwhile widening the private sector may reduce government size calculated as the relative size of a government in an economy, on one hand.

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On the other hand, government expenditure is essential for market functioning, enhancing legal and institutional factors and creating a private sector friendly environment. This is true to a specific limit of government size that is known as optimal size of government, which enhance growth and exports. A higher rate of government spending may cause rent behaviour, corruption, high tax rate, hindering of production and investment, retreat exports promotion and crowd out the private sector activities, including exports.

Therefore, both exports and government size are related and influence each other. In essence, these effects depend on the development stage and exports composition that can be suggested for further research investigations. This nexus relationship is vital to detect whether government policies, expenditure and behaviour enhance exports or not. Put simply, the expanded government size hinders growth and exports, whereas the adoption of unfavourable policies supports the private sector's, growth, and exports.

This research aims to investigate empirically the nexus relationship between exports and government size, using two different econometric techniques in selected MENA countries. This work handles such an issue both in theory and practice along with the empirical application on the MENA area basing on current data. The MENA region countries suffer from a huge relative government size and need to enhance exports as a promoter of economic growth hence, the importance of this issue.

This research shall proceed as follows: the related theoretical and empirical literature will be reviewed after which the theoretical considerations will be introduced alongside present data and methodologies and end with rough estimations, a conclusion, and recommendations for future actions.

2. Literature Review

Extensive literature indicates the essential role of exports to lead growth, especially, in developing countries. Export-led growth economies benefit from specialization and the comparative advantage and can better react to international demand, which increases exports earnings and fills both, saving-investment and imports-exports gaps and provides highly needed foreign exchange to the local economy. This foreign exchange provides more raw input and capital goods, attracts technology, enhances managerial skills and entrepreneurial trust, all of which widen the production base in the economy. In addition, higher productivity and competitiveness internationally reduce economic units' production costs and increase economic benefits and returns, including wages and profits that may add to government treasuries through higher tax revenues. Furthermore, strong, wide, and dynamic expansion of the exports sector leads to a wide structural change in the economy through technological changes, human capital developments and causes the attraction of both, horizontal and export-platform FDI that expands the private sector and reduces relative government size, Sabra, (2021b). Hence, exports enhance growth directly while indirectly leaving contradicted, positive, or negative impacts. These impacts depend on whether the government size associates positively or negatively with economic growth.

Furthermore, globalization and more openness that increase exports, increase the government size in turn, whereas the government, in this case, plays a stabilizer factor in the economy against the external shocks, (Rodrik, 1998), furthermore, (M. Sabra, 2016), provide evidence on the positive relationship between openness and government size in the MENA area. Hence, several impacts can be expected of exports to have on the government size, which raises the need to understand the overall relationship between both variables.

On the other hand, the government attitude, policies, and expenditure have a crucial role that affects either the promotion or hindering of exports through strengthening the production base, penetrating foreign markets, establishing free zones, and providing access to finance, technology, and other policies.

Export-led growth enhances employments, productivity and expands the private sector activities and sectors that may reduce the relative size of government in the economy. Armev, (1995) suggested that an inverse U shape curve formulates the relationship between government size and GDP growth, whereas a low level of government size enables the government to regulate the market and enhance economic growth. On

the other hand, a high level of government expenditure to GDP discourages investment, production, and private sector efforts due to the burden of high taxes capable of hindering economic growth and exports, (M. M. Sabra, 2016). Moreover, with a given input of production factors, if public spending productivity is lower than market economy productivity, the high public spending hinders the growth and exports, (Magazzino & Magazzino, n.d.), (Forte, 2011), (Sabra, M. M., & Eltalla, 2016).

Several reforms may still be needed in the developing countries, including but not limited to: reducing current expenditure in favour of supporting capital and social infrastructure, enactment of pricing policies, organizing and opening local markets, (El-Sakka, M. I., & Al-Mutairi, 2000), reform taxation system, reduce rent-seeking activities, liberalizing exchange rate and interest rate, enhance exports and investment programs, support education and R&D, provide logistics for exporters and reforming the trade, fiscal, structural and monetary policies. The shape of such policies influences the government size in the economy as well as the performance and magnitude of the export.

Finally, exports increase economic growth, openness and FDI where these variables may increase or decrease government size. The negative or positive relationship between exports and government size can exist, based on the influence of exports on economic growth, government size higher or lower the optimal size, government policies and expenditure behaviour.

3. Theoretical justifications

The article aims to capture the nexus association between exports and government size, which is proxied by government expenditure as a share of GDP. Therefore, two equations models are demonstrated within the article. In the first equation, we regress on exports, and government size. In the second equation, each dependent variable must be included as an explanatory variable in the other equation to detect the relationship transversely, and this is true in each estimation.

Exports and government size determinants are well known in theory and can be well justified, and we have to derive our model for this purpose. Two different econometric techniques have been employed for model estimations with the first being a simultaneous analysis employing Ordinary Least Squares (OLS), and the second being the Dynamic Panel Data (DPD) system analysis.

The exports equation includes, besides the government size, the main determinants of exports, which are GDP, domestic savings, inflation proxied by Consumer Price Index (CPI), openness, inward flows of Foreign Direct Investment (FDI) and Official Development Assistance (ODA). Other than exports, the government size equation includes the main factors that influence the government size and those being: FDI inflows, ODA, openness, and GDP per capita growth. Furthermore, lagged variables of exports and government size are included in each one of the equations. Dependent variables are included transversely as explanatory variables to detect the nature of the relationship. The inclusion of the dependent variables is for detecting the nexus relationship between both variables, exports, and government size, and of course, it allows the simultaneous analysis for both equations, which are intersected transversely, in model one, shown in section 4.1.1. Both variables can be associated positively or negatively. Economic growth is the key factor in understanding the relationship between exports and government size.

If the government size exceeds the optimal size of government, government size is associated negatively with economic growth, (Rodrik, 1998), Armey, (1995), (Mahmoud M Sabra, 2015), therefore exports associate negatively with government size as long as exports increase economic growth. This represents the trade-off between exports and government size, under the dominance of rent-seeking behaviour of government, and monopoly concentration activities enhanced by government in exports sectors. Furthermore, this indicates governmental, semi-government and authorial pressure-group investments in the exports sectors, and inefficient public sector especially, considering the high corruption perception index in the region.

On the other hand, if government size does not exceed the optimal size of government, government size associates positively with economic growth, (Rodrik, 1998), Armeiy, (1995), (M. Sabra, 2016), therefore, exports associate positively with government size as long as exports increase economic growth. This, indeed, represents the expansion of GDP and growth as a result of exports expansion that increases government revenues and encourages more government expenditure on various types such as infrastructure, education, health and institutional building to create market friendly environment, regulate the economy and support the private sector and thus, such case would persist until the government arrives at the optimal size limit.

GDP captures the production level of the economy, supply-side potential, and economic growth, which all enhance exports expansion. The production potential, sustainability, and surplus, captured by GDP, determine the exports and potential exports of an open economy, Bertil (1968); (Kumar, 2015) ; (Majeed, M. T., Ahmad, E., & Khawaja, 2006). In addition, government size influences the number of economic units in the economy that realize economies of scale and reduce government size. Therefore, we anticipate a positive impact of growth on exports, and a negative impact on government size, especially if government size exceeds the optimal size, (Rodrik, 1998), Armeiy, (1995).

Gross Domestic Savings are important for capital and good accumulation, R&D, buying new technologies and enhancing investment that can enhance production and exports. The savings-investment gap in developing countries may affect exports and potential exports.

Higher savings lead to more production, surplus and exports. Therefore, we expect a positive association between exports and gross domestic savings, Sabra, (2021a); (Majeed, M. T., Ahmad, E., & Khawaja, 2006).

FDI is a direct investment involving a strategic long-term relationship. Increasing FDI inflows accumulate more capital, increases investment, production, and exports. FDI attracts more technology, know-how, enhances human capital formation and enforces more production techniques for the local enterprises through learning by doing and learning by observation.

Furthermore, specific types of FDI such as vertical and exports-platform, are increasing exports through lowering trade barriers, "tariff-jumper type", (Pfaffermayr, 1996). In addition, it enhances foreign markets penetration either directly through FDI-led exports growth, or indirectly through enhancing local market capabilities. On the other hand, increasing FDI, investment and production increase government revenues that may in turn increase government size, from one side, and increases the GDP and private sector, which may reduce government size, from the other side, (Mahmoud M Sabra, 2015). FDI increases the number of economic units in the economy such as employees, enterprises and production that increases country size, which in turn decreases government size, (Alesina, A., & Spolaore, 1997), (Alberto Alesina & Wacziarg, 1998), (A. Alesina, 2003), (Mahmoud M. Sabra, 2021a). Therefore, we anticipate a positive impact of FDI on exports, and a possible positive or negative impact of FDI on government size.

ODA is an international purchasing power that enhances local demand that appreciates local currency and impacts exports negatively, on one side. On the other hand, it can increase local demand and expand non-tradable sectors, which can move the productive factors from tradable sectors to non-tradable ones that shrink the productive sectors including the exports sector while reducing productivity and causing Dutch disease. Hence, we expect a negative impact of ODA on exports. On the contrary, ODA is an easy resource that enlarges government financial resources and increases rent-seeking behaviour in government, which increases its size. Furthermore, ODA causes Dutch disease in the region, (Sabra, M. M., & Eltalla, 2016), and shrinks productive sectors that reduce government revenues and leave the final impact ambiguous, which has to be detected empirically according to the region and time. Therefore, we expect positive or negative impacts of ODA on government size.

More openness is associated with trade liberalization that reduces trade barriers and increases trade, besides capital inflows including FDI, which increases growth and exports. Meanwhile, openness causes

more potential external shocks in the economy and GDP volatility that increases government size to face such potential shocks, (Rodrik, 1998), (M. Sabra, 2016). Therefore, we expect a positive impact of openness on both exports and government size.

CPI is a proxy for inflation and an important determinant of exports that may associate negatively with exports. Appreciation of exchange rate, which may be caused by capital inflows such as ODA and FDI, creates higher relative prices in the local economy and reduces exports. We expect a negative impact of inflation, proxied by CPI, on exports.

Finally, the exports lagged variable created in the dynamic analysis represents previous exports performance that should work as a good predictor for the current and potential exports. Foreign market penetration and establishing exports networks for the foreign markets provides logistic support and encourages exporters to engage in new or existing foreign markets, (Girma, n.d.); (Pain & Wakelin, 1997) ; (Roberto, 2004). Moreover, new exporters are influenced strongly by the previous exporters when they decide to engage in serving markets overseas. Therefore, exporters are normally well developing with an excellent learning capability that is likely to reap the early experience from their previous exporters and activities, (Mahmoud M Sabra, 2015),(Majeed, M. T., & Ahmad, 2007). The government size lagged variable is an important explanatory variable that explains the current behaviour of government and size. In other words, the current government size influences and is determined essentially by the previous government plans, expenditure, and behaviour, which are expressed by the lagged variable. Lagged variables must have positive signs.

4. Empirical model:

4.1 Ordinary Least Squares (OLS) estimation

4.1.1 Model One

Simultaneous equations models take under consideration the impact from explanatory variables to response variables and vice versa. I.e., it takes into consideration the impact from dependent to independent variables also. This provides a clear-cut relationship and deep analysis between studied variables, comparing to the one equation models. We employ panel data of seven middle-income MENA countries, which are (Morocco, Algeria, Egypt, Palestine, Jordan, Lebanon, and Tunisia) for the period 2000 to 2019 basing on available data collected from the World Bank database. The two-equations model avoids the simultaneity bias that normally occurred in a single-equation model, allowing two directions influence between variables, and indicates a clear-cut relationship between variables. In addition, the two-equations model allows for the joint determination of both exports and government size on each other's considering the other main determinants impact of exports and government size.

$$\ln \text{Exports} = \beta_0 + \beta_1 \ln \text{Savings} + \beta_2 \ln \text{FDIinflow} + \beta_3 \ln \text{Growth} + \beta_4 \ln \text{CPI} + \beta_5 \ln \text{OPEN} + \beta_6 \ln \text{Gov.S} + \beta_7 \ln \text{ODA} + \epsilon \text{Equation 1}$$

$$\ln \text{Gov.S} = a_0 + a_1 \ln \text{Growth} + a_2 \ln \text{FDIinflow} + a_3 \ln \text{Exports} + a_4 \ln \text{ODA} + a_5 \ln \text{OPEN} + v \text{Equation 2}$$

Where Exports is exports of goods and services. Gov.S is the government size, which is total government expenditure as a percentage of Gross Domestic Product (GDP). Savings is the gross domestic savings. Growth is proxied by gross domestic product (GDP) in the first equation, and GDP per capita growth in the second one. FDI is inward flows of foreign direct investment. CPI is the Consumer Price Index. ODA is Official Development Assistance. OPEN is the trade openness calculated by the sum of exports plus imports

as a share of GDP. And ϵ and v are error terms. The parameters $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7 represent the elasticities of Exports concerning Savings, FDI, Growth, CPI, OPEN, Gov.S and ODA respectively. In addition, the parameter $\alpha_1, \alpha_2, \alpha_3, \alpha_4$ and α_5 represents the elasticities of Government Size concerning Growth, FDI, Exports, ODA, and openness. The model aims to detect the nexus relationship between exports and government size while taking into consideration other main determinants, which are openness, FDI, Growth, Savings, CPI and ODA, as determinants of exports; and Growth, FDI, ODA and openness as a determinant of government size.

4.2 Dynamic Panel Data System

4.2.1 Model Two

Model two considers the dynamic estimators in each equation of exports and government size, whereas each of these variables is highly influenced by the previous experience of its behaviour. I.e., exporters and government are currently highly influenced by their previous behaviour and activities. In addition, the dynamic panel GMM system approach estimates the parameters from a system of equations which makes it outstanding for the dynamic panel data analysis,

$$\begin{aligned} \Delta \text{Ln Exports} = & \beta_0 + \beta_1 \Delta \text{Ln Exports}_{t-1} + \beta_2 \Delta \text{Ln Savings} + \beta_3 \Delta \text{Ln FDIinflow} \\ & + \beta_4 \Delta \text{Ln Growth} + \beta_5 \Delta \text{Ln CPI} + \beta_6 \Delta \text{Ln Gov.S} + \beta_7 \Delta \text{Ln OPEN} + \beta_8 \Delta \text{Ln ODA} + \\ & \mu + \Delta v_t \text{ Equation 3} \end{aligned}$$

$$\begin{aligned} \Delta \text{Ln Gov.S} = & \beta_0 + \beta_1 \Delta \text{Ln Gov.S}_{t-1} + \beta_2 \Delta \text{Ln FDIinflow} \\ & + \beta_3 \Delta \text{Ln Growth} + \beta_4 \Delta \text{Ln Exports} + \beta_5 \Delta \text{Ln ODA} + \beta_6 \Delta \text{Ln OPEN} + \mu + \Delta v_t \text{ Equation 4} \end{aligned}$$

Where: Gov.St-1 and Exportst-1 are the lagged variables of the dependent variables. These lagged independent variables are explanatory variable can strongly explain the dependent variables. Furthermore, these lagged variables include the previous behavior, plans, decisions, institutional alliances and previous attitude of government and exporters. μ represents the unobserved country specific effects, and v_t is the standard error. Dynamic Panel Data (DPD) system takes under consideration the cross-country heterogeneity raise from pooled OLS estimation with cross sectional data. In addition, DPD system analysis provides more coherent estimation compared to fixed or random effect models, which addresses several biases related to heterogeneity across countries and time, (Mitze, 2010).

5. Econometric Methodology

Multiple equation models use the Ordinary Least Squares (OLS) which is a famous technique in econometrics and widely employed in the empirical studies in the literature. It is used to estimate the parameters of simultaneous equations when errors are not correlated across the equations, and the related equations are over-identified or accurately identified, (Mishra, 2008). Estimations of exports and government size equations individually might endure simultaneous equations bias due to some of the independent variables not being truly exogenous. Consequently, we estimate both equations simultaneously. This simultaneous analysis introduces the dynamic analysis and supports the nature of the relationship between the variables. We rely on dynamic analysis for an explanation.

Standard estimators of the Fixed Effects Model (FEM) and Random Effects Model (REM) approaches, which are normally used for the static panel data model, control for the existence of individual effects. The empirical estimation with these models addresses multiple biases, these biases concern heterogeneity across panels and periods. The problem with the FEM is that it drops time-invariant variables parameters and cannot

estimate. Conversely, the REM defect is the biases realized by the endogeneity problem due to the possible correlation between one or several independent variables on one hand, and the residuals on the other hand. However, choosing among the FEM and REM estimators rests on an all-or-nothing decision concerning the assumed correlation of right-hand side variables (independent variables) with the error term. In empirical applications, "the truth may often lie in between these two extremes", (Mitze, 2010). (Arellano, M., & Bover, 1995), Blundell-Bond is a notable econometric technique that estimates panel data dynamically in a system of equations. This method is based on the Generalized Method of Moment GMM that has been intensively employed in empirical work of panel data dynamic models. (Blundell & Bond, 1998) proposed system GMM estimators to overcome the inconsistent instrumental variables estimators realized by weak instruments. Firstly, it proved that the level GMM estimators by (Arellano, M., & Bover, 1995) are free from weak instruments when even the parameters concerning the lagged variables are close to unity, and then combined the moment conditions, which are used in first differencing, and the level GMM estimators to improve the efficiency of the estimators, (Hayakawa, 2005).

This GMM systems technique estimates the parameters from a system of equations: the first model differenced using lagged levels exports and government size as instruments for the lagged difference of both exports and government size equations. Secondly, it uses the differences as instrumental variables in the model, (Arellano, M., & Bover, 1995); Arellano & Bond (1998); (Blundell & Bond, 1998). Therefore, the article estimates dynamic panel data system analysis, which is Arellano-Bover Blundell-Bond. Furthermore, the DPD system estimation is more reliable to detect the impact of the nexus relationship between both exports and government size. Finally, the long-run coefficients are calculated by the equation: long-run parameter (coefficient) = determinant (independent variable) coefficient / 1- parameter correspondent to lagged coefficient, Sabra, (2015b).

6. Data

Both empirical models use panel data of seven middle-income selected MENA countries, namely (Algeria, Egypt, Jordan, Lebanon, Morocco, Palestine, and Tunisia) during the period from 2000 to 2019. The estimations and variables included are exports, government size, domestic savings, inward FDI flows, growth, Consumer Price Index, (CPI) "year based 2010", openness and ODA variables. Exports are the total exports of goods and services. Government size is general government final consumption expenditure as a percentage of GDP. Domestic savings are the gross domestic saving. FDI is the foreign direct investment in terms of inward flows. ODA is the net official development assistance and official aid received. Trade openness is calculated by the sum of exports plus imports as a share of GDP. Growth is proxied by Gross Domestic Product (GDP) for the exports equation and proxied by GDP per capita growth for the government size equation. The variables proxies are intensively included in the previous literature. All row data for the variables are collected from the World Bank database, except FDI inflows, which are collected from the UNCTAD database, besides openness and government size, which are calculated as exports plus imports, and government expenditure divided on GDP, respectively. Limited missing values exist. All variables in an algorithm are taken to provide elasticities, ensure linearity and reduce any potential multicollinearity with STATA software being employed for the estimations.

7. Results

The following table shows the estimation results of model one.

Table 1: Ordinary Least Squares estimation for equations 1 and 2.

	Saving	Inward FDI	Growth	CPI	Open	Gov. Size	ODA	Constant	F statistics	RMSE
Exports	.004* (3.92)	.033* (4.68)	1.07* (37.85)	-.17* (-2.77)	1.03* (92.7)	-.25* (-3.16)	-.103* (-5.83)	-.45 (-.76)	2098*	.153
	Exports	Inward FDI	Growth		Open		ODA	Constant	F statistics	RMSE
Gov. Size	-.15* (-9.8)	-.018** (-2)	.003 (.66)	-	.14* (7.32)	-	-.02 (-.95)	2.33* (3.68)	30.84*	.19

Figures in parentheses are t statistics. R2: 0.99 and 0.57 for equation one and two, the symbols *, **, *** indicate significance at 1%, 5%, and 10% levels respectively.

Table 1 shows model one estimations for equations 1 and 2. It shows a significant F-statistics, and low value of root mean square errors RMSE, which represent model validity. All variables' coefficients are significant at 1% except FDI at 5% level of significance; besides growth and ODA, which are insignificant in the second equation. R2 is 0.99, and 0.57 for the two equations, respectively.

Table 2: Dynamic Panel Data System estimation for equations 3 and 4.

	L. Exports	Savings	FDI Inflow	Growth	CPI	Gov. Size	ODA	Open	Constant	chi2
Exports	.17* (8.67)	.002* (4.25)	.008* (3.55)	.99* (39.77)	-.33* (-13.4)	-.27* (-7.3)	-.012** (-1.9)	1.001* (285.8)	-3.6* (-13.6)	110118*
Long-run coef.	-	-.0024	.01	1.19	-.4	-.33	-.014	1.21	-	
H0: overidentifying restrictions are valid										409.12*
	L. Gov.S	FDI	Growth	Exports			ODA	Open	Constant	chi2
Gov.S	.92* (20.16)	-.006** (-2.13)	-.002** (-1.69)	-.019** (-2.03)			.015** (1.09)	.031* (3.26)	.03 (.11)	698.6*
Long-run coef.	-	-.075	-.025	-.24			.19	.39	-	
H0: overidentifying restrictions are valid										132.38*

Figures in parentheses are z statistics. The symbols *, **, *** indicate significance at 1%, 5%, and 10% levels respectively.

Table 2 shows model 2 estimations for equations 3 and 4. It shows a robust model, all variables' coefficients are significant at 1%, except ODA that is significant at the 5% level in the first equation. All variables in the second equation are significant at 1%, 5% or 10%. Furthermore, as shown in Table 2, the Sargent test shows that all moment restrictions are satisfied for the dynamic specifications can't be rejected. This indicates that the instruments are valid for the model, the model is robust and correctly specified. All signs are compliant with the simultaneous analysis on one hand, and in accordance with the economic theory and expectations, on the other hand. In addition, table 2 shows the long-run parameters. All relationships are expected considering the insignificant results of growth and ODA in the second equation in table 1. Savings, FDI, growth and openness are positively associated with exports, considering the strong associations with growth and openness. The low savings coefficient in the export's equation represents the low amount levels of domestic savings, where the savings finance consumption instead of investment.

Exports and government size are negatively associated in that they represent unfavourable government size and policies toward exports on one hand and how exports require lower government size to grow or/ and redirecting government expenditure from current type to export promotion expenditures.

The increase in government size has a greater negative impact on exports than the negative impact of exports on government size. Increasing the government size by 1% lowers exports by 0.27%, meanwhile increasing exports by 1% lower government size by 0.019% because higher government size affects exports directly through crowding out for example, and indirectly through frustrating growth in the economy and in turn lowering exports. In addition, these impacts in equations 3 and 4 have a greater impact than equations 1 and 2, because the former equations consider the dynamic impact comparing to the later equations.

FDI indicates the dominance of vertical and export-platform types that enhance exports in the region, Sabra, (2021c). Furthermore, more FDI enlarges the private sector and reduces government size. FDI positive impact on exports and negative impact on government size support each other, (Rodrik, 1998), (Mahmoud M. Sabra, 2021b).

As long as GDP and growth increase, exports will in turn increase and the negative association between the growth and government size supports the theory and previous results in the region that indicated government size exceeds the optimal size of government, (Rodrik, 1998), (M. Sabra, 2016).

ODA causes Dutch disease and rent-seeking behaviour in the economy which reduces exports and enlarges government size thus, agreeing with previous results, (M. Sabra, 2016), (Sabra, M. M., & Eltalla, 2016). When ODA increases government size that is associated negatively with growth, it should decrease exports as shown in the results.

The previous exporters influence the current exporting process in a limited way compared to the government. As long as exporters build their exports channels, take their decision based on their own experience, and have limited institutions, either governmental, private or unions, there will be available power in the processes of exploring and penetrating the foreign market. In addition, exports normally are limited to bigger, stronger, and more productive firms, (M. Sabra, 2016).

The lagged explanatory variable of government size shows that government behaviour and size are essentially determined by previous size, plans, institution, and behaviour of said government.

8. Conclusion and Recommendations

Exports are essential for economic growth, especially for developing countries, which enhance government policies through exports-led growth and exports promotion strategies. Furthermore, exports bridge the twin gaps of savings-investment and trade balance in developing countries as well as increase productivity, employment, competitiveness, access to technology, managerial skills and assists in penetrating foreign markets. Exports contributions to the economy rely essentially on the role of government policies for regulating markets, enhancing the private sector, and promoting the export sector. Therefore, the inverse nexus between exports and government size in the economy retreats and hinders exports. This is due to the unfavourable macroeconomic trade, fiscal, monetary, and budget structure policies. Therefore, it is vital to carry out various packages of government policies with the aim of enhancing domestic savings, attracting more FDI, promoting R&D, assisting vocational education, redirecting current expenditure to capital expenditure on social and physical infrastructure, supporting the institutional building and restructuring the public budget. Additional policy reforms can be made through purging corruption and rent-seeking behaviour in government, reducing the informal economy and redirecting aid and loans to support the production and exports sectors. Trade reform and regional integration are highly essential to provide exporters with a friendly environment to widening access to finance, technology, raw materials, and markets, improving doing business indicators including the legal and logistic supports. Furthermore, such policies would support exports from both, supply, and demand sides through more regional integration in the Arab Free Trade Area and regional cooperation that can enhance capital and labour movements and help in the demand and attraction of more FDI and technology.

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