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Contents

Trade Liberalization and Balance of Payments Constrained Growth in Turkey (1980-2018)

Dr. Tareq Amro   **Dr. Nader Alzabadi**

tareqa@hebron.edu   alzabadi@yahoo.com

Abstract

This study tried to examine the balance of payments constrained growth, employed Autoregressive Distributed lag bound test (ARDL) approach to test the Turkey exports and imports functions via Bound test. Descriptive statistics show that Turkey trade balance suffers from continuous trade deficit over study period (1980-2018), share of total trade to GDP still in low level and the average over study period (33.55%). Estimation show that the income elasticity of demand for imports is 1.2, while the income elasticity demand for exports is 1.66, Thirlwall's weak version confirmation that the predicted growth is higher than actual growth (Exporting without growing) , Thirlwall's strong version show that predicted growth close to actual growth (growing with integrating).

Keywords: Trade liberalization, balance of payments, Turkey.

Jel: E12, F43, O53

Introduction

There is no doubt that the political and economic authorities have a set of tools to use when forming up their economic policy to achieve equilibrium in economy by surplus in trade balance, trade balance shows the economic relations and trends with trade partners in one side and in other side as an indicator to economic growth.

Trade balance is one of the most important components of the balance of payments. The surplus in the balance of trade reflects the wealthy factors in the economy concerned such as high GDP growth, high employment level, low poverty and exchange rate stability. The deficit in the trade balance reveals the weaknesses in the economy of the country that suffers it. This is considered as an indicator of the economic strength of the state, and the achievement of economic welfare and efficiency.

Many countries follow Keynesian school to increase demand by increased government spending embodied with depreciation currency and spurious growth deepen the trade balance deficit (Kharroubi ,2011). Import elasticity play crucial role in trade policy episodes due to sensitivity of exports to imports, import elasticities in new manufacturing countries effected by external constraints particularly in post-liberalization period in Mexico, so that, economic growth consistent with trade balance position (Ibarra, 2011).

Soukiazis et al. (2017) examined The Greek economy under the twin-deficit pressure: a demand orientated growth approach, over the period 1995–2014. Result show that income elasticity of the demand for exports is unusually high which can be explained by the high importance of tourism on exported services, high sensitivity of exports on imports that might harm the positive effects of exports on growth. Finally, Greek economy grew faster than the rate consistent with internal and external balances.
To conclude, trade liberalization exposure national economy to foreign competition, this mean that economy must looking for potential powers in sectors that support economy in achieving strategic aims to bring products into globe markets, this maintaining export and limiting import, resulting in improving trade balance.

Study aim:

This study tried to examine the balance of payments constrained growth in Turkey over study period (1980-2018).

Literature review

Fasanya and Olayemi (2018) This paper examines the Balance-of-Payment (BOP) constraint growth model in Nigeria for the period of 1980 to 2012 using the bounds testing Auto regressive Distributed Lag (ARDL) approach. The ARDL test suggests that the variables in the framework have a long run relationship. The empirical findings reveal that import is cointegrated with relative price and income, and the equilibrium growth rates coincide with actual growth rates, hence, the result shows that the Thirlwall's law, of actual growth rate being equal to the predicted growth rate by the balance of payment current account equilibrium holds in Nigeria. This reason may be due the fact that the economy of Nigeria depends mainly on international trade even though oil dominates the export. This Thirlwall's BOP-constrained growth approach provides some significant policy prescriptions for Nigeria's development policy. Achievement of potential growth can be stimulated by making exports more competitive through macroeconomic stability, sound institutional qualities, improvement in human and physical capital development, reducing access problems to external market, among other factors.

using an Autoregressive Distributed Lag (ARDL) Bounds Testing approach, Ozturk and Acaravci (2010) applied the Thirlwall's basic balance of payments constraint growth model to South African economic growth for the period of 1984 to 2006, the empirical results revealed that import is co integrated with relative price and income, and the equilibrium growth rates coincide with actual growth rate. They therefore recommended that a successful economic growth policy, which reduces income elasticity of imports and promotes export, should be put into play which will permit South Africa to have a rapid growth in demand and supply without suffering deterioration in its balance of payments.

Anouar Majdoubi and Lalla Zhor Alaoui Omari (2020) tested the validity of Thirlwall's Law in Morocco from 1980 to 2018 period, using an Autoregressive Distributed Lag (ARDL) Bounds testing approach. The empirical results suggest that import is co-integrated with relative price and income, and the actual growth rate was found to be equal to the predicted growth rate by the balance of payments. Thus, The Thirlwall's law holds for Morocco. This study proposes, also, some policy recommendations to reduce the trade deficits.

Soukiazis et al (2012) The aim of this paper is to fill this gap by developing a growth model in line with Thirlwall's Law that takes into account both internal and external imbalances during 1985-2008. The model is tested for Portugal which recently fell into a public debt crisis with serious negative consequences on growth. The empirical analysis shows that the growth rate in Portugal is in fact balance-of-payments

constrained and the main drawback is the high import elasticity of the components of demand and in particular that of exports.

Soukiazis et al. (2013). The aim of this paper is to implement the more complete SCA model in Italy and check its accuracy for explaining the growth path in this country over 1983-2010. Our empirical analysis shows mainly that Italy grew less than its potential capacity due to supply constraints. A scenarios analysis shows that improving external trade performance is the most effective way to achieve higher growth in Italy.

Estimation Balance of Payments Constrained Growth in Turkey (1980-2018)

According Keynesian approach (1936) aggregate demand determines the aggregate output; however, neoclassical approach confirm that output determined by supply, countries that follow export-led growth unable to sustain growth in long run. Aoki and yoshkava (2002) developed growth model explained the growth in long run essentially depend on demand, this model structured according to "Stylized fact" this stated that an economy experienced high growth if it continues to introduce new products that temporarily enjoy a high growth in demand.

In Keynesian economy, shocks will lead to creating variation are generally shift in real aggregate demand for goods, services, and investment. in last year's autonomous demand component play essential role in growth in long run (Nah and Lavoie, 2019), sustain high growth can't achieved without expenditure -led policy to generate stable policy toward investment spending (Thirlwalls, 2004, Gibson and Van Seventer,2000, Aoki & Yoshkava, 2002).

In many emerging industrial countries followed trade liberalization programs dynamic and static benefits from exports growth dampen by imports growth, this puzzle attracts economist attention toward demand – led growth (Cimoli et al, 2010, Thirlwalls, 2003).

The failure export -led growth strategy highlights the essential of demand in long run growth, aggregate demand affected by global fluctuations, this mean that demand (domestic growth) could be constrained by its balance of payments.

Turkey, like other industrial emerging countries that have pursued a trade liberalization program to improve the balance of payments through export growth and thus achieve sustainable economic growth, Turkey exports has achieved growth in recent years, but it has not been able to sustain growth, this is what makes growth constrained by the external sector, especially as the trade balance suffers From a persistent deficit, consequently, examining Thirlwall's Law (1979) may contribute to understand the impact of trade liberalization on economic growth via growth in the balance of payments. Based on Thirlwall's original model (1979) growth rate compatible with balance of payment equilibrium for countries summarized in simple and direct between income elasticity of demand for imports and income elasticity of external demand for its exports.

Thirlwall (1979) stipulates the external equilibrium as:

$$PX = P^*ME \qquad (1)$$

Where X is export, P domestic price of exports, M is import, P^* is foreign price of imports, E nominal exchange rate. Eq.(2) expressed in terms of growth rates is:

$$P + X = P^* + m + e \qquad (2)$$

Based on economic explanation, external demand for exports, as well as internal demand for imports, depends on relative prices, (price, income elasticity) and (domestic income, foreign income) Y and Y^* respectively, it means that:

$$X = b \left[\frac{P}{P^*E}\right]^{\varepsilon} Y^{*\eta_x} \qquad (3)$$

$$M = a \left[\frac{P^*E}{P}\right]^{\varepsilon_m} Y^{\eta_m} \qquad (4)$$

After taking log export demand function can be written as:

$$x = \varepsilon_x(e + P^* - P) + \eta_x Y^* \qquad (5)$$

Where x is the growth rate of exports, e the rate of currency nominal depreciation, P^* foreign inflation rate, P domestic inflation rate, Y^* foreign real GDP growth rate, therefore, $e + P^* - P$ the rate change in real exchange rate, ε_x price of export demand, η_x is income elasticity of export demand.

The import demand function can be written as:

$$m = \varepsilon_m(e + P^* - P) + \eta_m Y \qquad (6)$$

Where m the Turkish imports growth rate, Y is the growth rate of turkey GDP, ε_m is the price of import demand, η_m the income elasticity of import demand. In long run balance of payment equilibrium require that:

$$P + x = e + P^* + m$$

$$\varepsilon_x(e + P^* - P) + \eta_x Y^* = -\varepsilon_m(e + P^* - P) + \eta_m Y$$

$$\varepsilon_x(e + P^* - P) + \eta_x Y^* + \varepsilon_m(e + P^* - P) - \eta_m Y = 0$$

$$Y = \frac{(1 + \varepsilon_x + \varepsilon_m)(e + P^* - P) + \eta_x Y^*}{\eta_m} \qquad (7)$$

Within trade liberalization relative purchasing power parity (PPP) is supposed to hold in long run even tastes are different, thus, $e + P^* - P = 0$.

$$Y_B = \frac{\eta_x Y^*}{\eta_m} = \frac{x}{\eta_m} \qquad (8)$$

Where Y = domestic income growth rate, Y^* = foreign income growth rate, η_x = income elasticity of demand for exports, and η_m = income elasticity of demand for imports.

Thirlwall's law (1979) satisfy the mechanism of the balance of payments equilibrium growth rate due to many reasons:

1- Relative prices do not change significantly

2- Exports and imports elasticity are so low, then no impact on BP.
3- Based on real wage resistance and oligopolistic structures, no variations in prices.
4- If Marshall-Learner condition is met, there is no evidence to assume that export growth can achieved by continuously of depreciation domestic currency.

To examine the validity of Thirlwall's law in Turkish case, Turkey import's function estimation required, the main determinants of imports are gross domestic products (GDP) and relative prices, high income will push demand, strong currency enable households to purchase more and vice versa. Based on Thirlwall's law (1979) demand elasticity play important role on actual economic growth.

$$IM = F(GDP_d, RER)$$

$$IM_{LR} = \alpha + \pi GDP_d + \rho RER + + \omega_t \qquad (9)$$

Where IM i import and LR for long run, GDP_d is gross domestic product of Turkey, RER is real exchange rate, ω_t is the classical regression error term.

$$\Delta IM_{LR} = \alpha + \sum_{i=1}^{m1} \sigma IM_{LR-i} \sum_{i=0}^{m2} \pi \Delta GDPd_{t-i} \sum_{i=0}^{m3} \rho \Delta RER_{t-i} \, \delta_1 IM_{LR-1} + \delta_2 GDPd_{t-1} + \delta_3 RER_{t-1} + v_t \qquad (10)$$

To examine whether variables move toward long run equilibrium values adjustment, estimates of $\delta_1 - \delta_3$ are used to form an error-correction term (EC). Thus, lagged variables in Eq. 10) are changed by EC_{t-1} establishing a modified form of Eq. (11) as follow:

$$\Delta IM_{LR} = \alpha + \sum_{i=1}^{m1} \sigma IM_{LR-i} + \sum_{i=0}^{m2} \pi \Delta GDPd_{t-i} + \sum_{i=0}^{m3} \rho \Delta RER_{t-i} + \lambda EC_{t-1} + \mu_t$$
(11)

Where λ is the speed of adjustment parameter. A significant negative coefficient EC_{t-1} support adjustment toward long run equilibrium.

Empirical results

Long run Import elasticity

Table 1. Long run Import elasticity

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(GDPd)	1.200007	0.042257	28.39778	0.0000
RER	0.002432	0.002943	0.826360	0.4161
C	2.681321	0.382928	7.002158	0.0000

EC = LOG(IMF) - (1.2000*LOG(GDPD) + 0.0024*RER + 2.6813)

Above estimation results indicate that elasticity income demand for imports is 1.20 and statistically significant means that increasing income one Turkish lira will result in increasing imports by 1.2 TL.

Thirlwall's law three versions

Although many criticisms directed at Thirlwall's law, still maintains its importance in studying economic growth constraint in developed countries as well as in developing countries. Thirlwall's law (1979) contribution concentrate on the elasticities approach in determine growth and considering that relative prices tend to be stable in the long run. Accordingly, these models were tested on Turkish economic growth in the post-implementation period of the trade liberalization program as follows:

Simple Thirlwall growth model (weak version of Thirlwall's law)

According to Thirlwall's law (1979) states that the long run growth rate of an economy is constrained by the balance of payment and is equal to the ratio of export growth rate to income elasticity of demand for imports. Trade liberalization program contributed to the emergence of great challenges facing the trade balance equilibrium. increasing exports and growth sustained faced many obstacles, especially in light of imports increasing , this caused the existence of the so-called fake growth, exporting without growing, through the Thirlwall's law, which restricted the growth in the balance of payments with a decrease income elasticity of demand for imports, meaning that importing only essential goods, but with the liberalization of trade, the flow of imports in cheap price as tariffs reduction contributed to crowding out domestic production, feeding trade balance deficit, which was one of the crucial trade liberalization aim to reduce it.

Table 2. Thirlwall's law weak version results

Period	X_t growth	Actual growth rate y_t	Predicted growth Y_t^*	Difference Yt*-yt
1981-1990	17.55	5.27	14.63	9.4
1982-1991	11.88	4.86	9.90	5.0
1983-1992	10.49	5.01	8.74	3.7
1984-1993	10.95	5.27	9.12	3.9
1985-1994	10.29	4.14	8.58	4.4
1986-1995	11.09	4.50	9.24	4.7
1987-1996	12.45	4.54	10.38	5.8
1988-1997	10.09	4.35	8.41	4.1
1989-1998	8.65	4.35	7.21	2.9
1990-1999	8.81	3.98	7.34	3.4
1991-2000	8.11	3.71	6.76	3.1
1992-2001	8.90	3.05	7.42	4.4
1993-2002	9.58	3.19	7.99	4.8
1994-2003	12.26	2.98	10.22	7.2
1995-2004	13.83	4.41	11.52	7.1
1996-2005	13.51	3.62	11.26	7.6
1997-2006	14.42	4.50	12.01	7.5
1998-2007	15.65	4.24	13.04	8.8
1999-2008	17.69	4.10	14.74	10.6
2000-2009	15.57	3.97	12.97	9.0
2001-2010	16.27	4.15	13.56	9.4
2002-2011	16.83	5.86	14.03	8.2

2003-2012	16.63	5.69	13.86	8.2
2004-2013	13.48	5.98	11.23	5.3
2005-2014	10.49	5.54	8.75	3.2
2006-2015	7.99	5.24	6.66	1.4
2007-2016	6.26	4.85	5.21	0.4
2008-2017	4.73	5.09	3.94	-1.2
2009-2018	3.13	5.29	2.61	-2.7

elasticity of demand for imports=1.2

above table show the weak version of Thirlwall's law results of Turkish predicted and actual growth, The average growth rate obtained from Thirlwall's law (Y_t^*) , given by $Y_t = \dfrac{x}{\eta_m}$ is 9.70 which overestimate the actual growth achieved in Turkey over the period study (4.542) these results confirm that predicted growth is higher that actual growth, but Thirlwall's law state that if country experienced in long run deficit balance of payments equilibrium growth rate must be too high. It's clear that Turkish economy could not grow faster than it did due to an ultimate capacity ceiling, however some countries as Italy grow slower and build up payment surpluses (Soukiazis et al. 2014). In some countries as Mexico economy experienced in export growth but without real growing (Ibarra, 2010). Turkey economy today stuck in vicious cycle between slow growth and high public deficit.

Figure 1. foreign income growth rate and Turkey Exports (1980-2018)
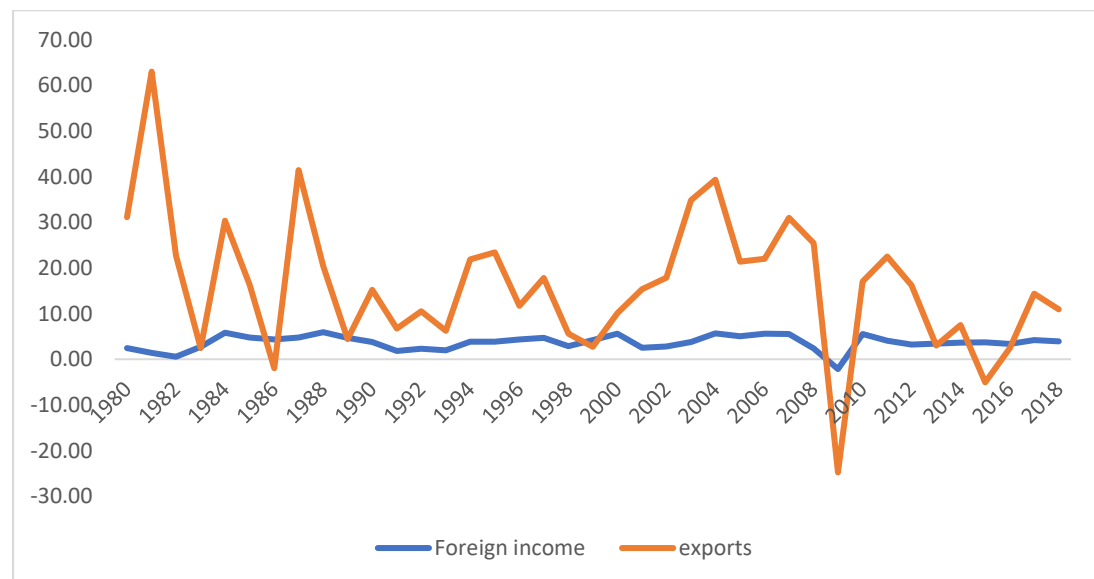
Figure 1. portrayed the trend of foreign income growth rate and Turkey exports growth rate over 1980-2018, foreign income growth rate trend is constant over period with some deviation in 2009 due to global financial crises, however exports growth rate trend not parallel foreign income, up and downward trend in exports movement means that Turkey exports not depend on external income.

Strong version of Thirlwall's law
strong version of Thirlwall's law (1979) state that long run growth depends only on external growth multiplies by the ratio of export to import income elasticities, Perraton

(2003) has called equation $(Y_t^* = \left(\frac{\varepsilon}{\pi}\right) Z)$ the "strong" version of Thirlwall's Law because the elasticity of exports and imports included in this model, the model is best tested, therefore, using the "strong" version if robust estimates can be made of ε.

To test the Thirlwall's law strong version, firstly we want to estimate export function to know the elasticity of demand income of exports.

$$EX = F(GDP_f, RER)$$

$$EX_{LR} = \alpha + \pi GDP_f + \rho RER + + \omega_t$$

$$\Delta EX_{LR} = \alpha + \sum_{i=1}^{m1} \sigma EX_{LR-i} \sum_{i=0}^{m2} \pi \Delta GDP_{f_{t-i}} \sum_{i=0}^{m3} \rho \Delta RER_{t-i} \, \delta_1 EX_{LR-1} +$$

$$\delta_2 GDP_{f_{t-i}} + \delta_3 RER_{t-1} + v_t \qquad (12)$$

Table 3. Long run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(RER)	0.963940	0.268829	3.585702	0.0011
LOG(GDPF)	1.668559	0.079632	20.95337	0.0000
C	-15.76162	1.089139	-14.47164	0.0000

EC = LOG(TOTEX) - (0.9639*LOG(RER) + 1.6686*LOG(GDPF) -15.7616)

Estimation long runs results indicate that the impact of foreign income elasticity is statistically significant on exports, this mean if foreign income increased by (1) unit, this will lead to increase in exports by 1.66. Moreover, price elasticity is significant, (Turkey export Price-driven Growth).

Table 4. Thirlwall's law strong version results

Period	Actual growth rate y_t	$Y_t^* = \left(\frac{\varepsilon}{\pi}\right) Z$	Yt*-yt
1981-1990	5.27	5.18	-0.09
1982-1991	4.86	5.36	0.5
1983-1992	5.01	5.42	0.41
1984-1993	5.27	5.65	0.38
1985-1994	4.14	5.55	1.41
1986-1995	4.50	5.28	0.78
1987-1996	4.54	5.16	0.62
1988-1997	4.35	5.16	0.81
1989-1998	4.35	5.15	0.8
1990-1999	3.98	4.86	0.88
1991-2000	3.71	4.66	0.95
1992-2001	3.05	4.92	1.87
1993-2002	3.19	5.01	1.82
1994-2003	2.98	5.08	2.1
1995-2004	4.41	5.34	0.93
1996-2005	3.62	5.59	1.97
1997-2006	4.50	5.75	1.25
1998-2007	4.24	5.92	1.68
1999-2008	4.10	6.04	1.94
2000-2009	3.97	5.97	2
2001-2010	4.15	5.09	0.94
2002-2011	5.86	5.08	-0.78
2003-2012	5.69	5.29	-0.4

2004-2013	5.98	5.35	-0.63
2005-2014	5.54	5.29	-0.25
2006-2015	5.24	5.01	-0.23
2007-2016	4.85	4.83	-0.02
2008-2017	5.09	4.51	-0.58
2009-2018	5.29	4.33	-0.96

Elasticity of export demand=1.66 / elasticity of demand for imports=1.2 , Z= world growth rate

The growth rate obtained from Thirlwall's law (Y_t^*) , given by $Y_t^* = \left(\frac{\varepsilon}{\pi}\right)Z$ is 5.24 which overestimate the actual growth achieved in Turkey over the period study (4.542) . this result must be consistent with existence of a trade deficit or at least with a trade balance in Turkey. To more understanding the results, share of imports on income over study period (0.244), share of exports on income over study period (0.131), the ratio of the two shares ($\frac{S_x}{S_m} = 0.537$) this equal half for whole period. Thus, any country demanding to grow above this rate in the long run should be able to improve income elasticities, the main conclusion from this comparison is that Thirlwall's law over-predicts actual growth in Turkey, revealing that the although predicted value exceeds actual growth not mean that country has t the potential to grow faster than it actual growth.

Figure 2 Thirlwall's law (1979) mechanism
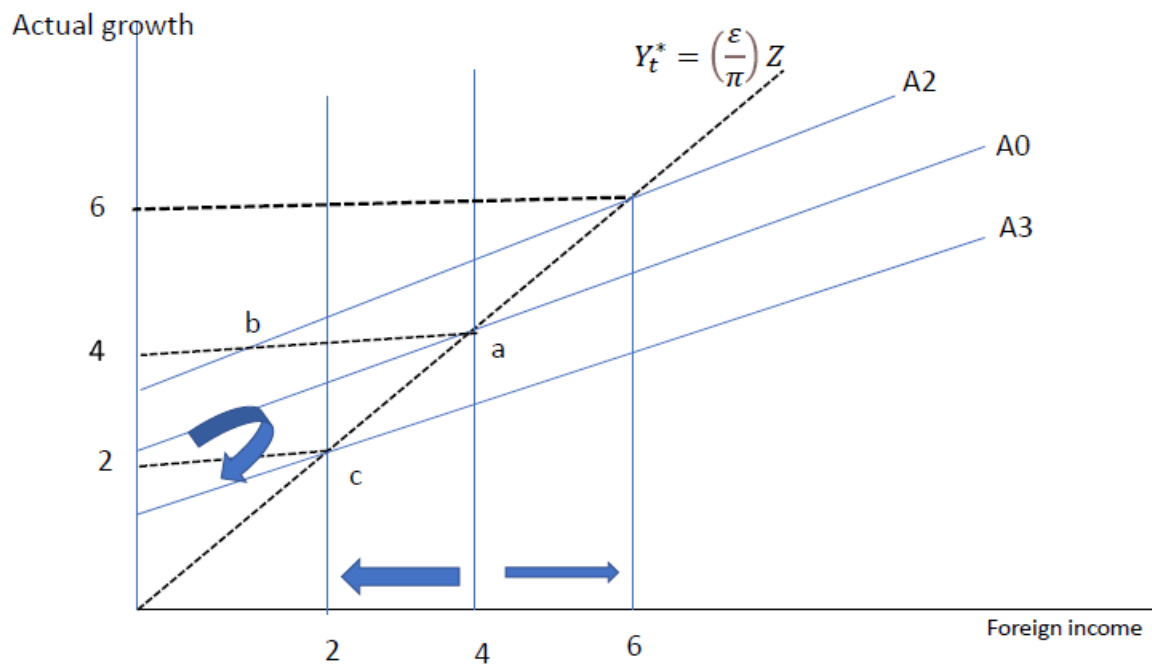
Depending on Thirlwall's law growth any country over time cant exceed the balance of payment growth constrained, three determinants of growth exports, imports elasticities, and foreign income, in figure 5.4 , assuming the initial equilibrium at 4% foreign and actual growth, in A0 the world consumption, if global economy from corona virus recession the consumption will shift to A2, export demand well be increased Automatically and the growth increased toward new equilibrium at 6%, in other hand

if global growth shrink, domestic growth also back toward down equilibrium at 2%. The main point in Thirlwall's law growth any country depends on the export share in global exports, this will create many obstacles in Development process in developing countries.

Table 5. economic growth Scenario's

TL weak version	9.7	9.7/ 4.54	2.13	Exporting without growing
TL Strong version	5.24	5.24 /4.54	1.15	Domestic growing based on global growth
Actual growth	4.542			

Based on above comparisons Turkish economy growing in internal and external imbalances, this main that Turkish economy growth is similar to Portugal economy which Soukiazis et al. (2012), while Soukiazis et al. (2017) confirm that Greece economy grew faster than the rate consistent with internal and external balances. However, while imbalance version results show that predictive growth value higher than actual growth and Thirlwall's Law strong versions this indicate that the internal imbalances are higher than external. Our result in line with what Önis (2006) confirm that, crises led growth and growth widen crises.

Conclusion

This chapter discuss trade liberalization and trade balance and growth, Turkey trade balance through (1980-2018) shows that the Turkish trade balance was accompanying with continuous deficit and that this deficit was increased collaborated with low economic growth, the possibility of improvement in the Turkish trade balance is not impossible, but it requires to diagnosis the causes behind deficit clearly and running economic policy based on cooperation between fiscal and monetary policies.

After testing Thirlwall's law versions (weak, strong, imbalance) show that the weak version exactly portrayed the unreal Turkish case exporting without growing, Turkey has growth in exports but lacking real growth, strong version described the real case that Turkey predicted economic growth can't exceeds the actual growth with small difference, last version show that predicted growth may exceeds the actual growth , based on these results the main determinant of Turkey trade – balance payments growth is global growth .

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Economic Growth and Oil Price Volatility in Iraq During the Period 2004-2023

Dr. Mizher AL Hashimi

alhashimyz@yahoo.com

Abstract

This study aimed to identify the impact of oil prices on economic growth in Iraq during the period between 2004 and 2023. The researcher reviewed some previous studies and used simple regression analysis, Granger Causality Test. the results of the study it was found that oil prices have an adverse impact on Iraqi economic growth, and he recommended that Iraq must need to diversify sources of income and not depend on oil revenues to achieve economic development.

Keywords: Economic growth, oil price, Iraq.

Introduction

Oil is considered a global strategic commodity and a vital raw material for energy, manufacturing and movement. Its derivatives are used in a large number of different basic industries and crafts in the world. It also constitutes an important and effective proportion in international trade and affects all aspects of economic activity. Oil is a highly flammable hydrocarbon substance that possesses high thermal energy. It has many uses and has a wide range of productive outputs. Among its wide uses as a source of thermal energy, it is used in the work of the industrial and agricultural sectors, the transportation sector, and electric power generation, and it is used in the petrochemical industries.

These properties pushed it to be the main driver of the global economy with low elasticity of demand. The limited and scarcity of its sources made it deviate from the laws of the market that take place as a result of the judgments and decisions taken by both producers and consumers. Its production, transportation, and marketing on a global scale has a tremendous impact, both on the countries that depend on it as a source of currency. Difficulties and income, or those on which their industrial activity depends, a single oil crisis may be enough to hinder existing economies or create an effective movement in the economy due to fluctuations in its prices. Therefore, the features of the global economic map were drawn from the ongoing struggle between countries and major oil companies to control the market.

In light of a rentier economy, the state is usually rich in the amount of cash it possesses, but this wealth or wealth is not reflected in a balanced manner among all the different groups and segments of society, and this is due to the unfair distribution of national income, as is the case in the economy of any rentier and unilateral country. This aspect is closely linked to global economic crises as a result of the dependence of its financial resources on oil rentier revenues, which are directly reflected in the effects of fluctuations and changes in oil prices. Therefore, the rentier economy is a fragile economy that is always exposed to financial and structural crises and disturbances. These disturbances affect all levels of the structural structures of society. And in all development plans and recovery programmers, the contemporary rentier economy also takes the form of the service economy, or what has become known as the virtual economy, in contrast to the productive economy, which is considered the material basis that drives all rentier phenomena.

Iraq relies on a unilateral rentier economy based on oil as a primary source in enhancing its development efforts and pushing the wheel of economic growth forward. This is mainly due to its high profitability and rapid returns, especially during the seventies and the beginning of the eighties of the twentieth century. However, what the global oil market was exposed to... Successive crises starting from the year 1986 until the year 2010, which were the result of several factors that were ultimately reflected in fluctuations and sharp changes in oil prices, both falling and rising, which led to a state of instability, and resulted in economic effects that differed according to the behavior of those prices in the global oil market.

The importance of study

This study is considered one of great importance because it deals with one of the important factors determining economic growth in one of the oil-producing countries, Iraq. There is no doubt that economic growth in Iraq has shaped and continues to constitute one of the challenges facing the political decision-maker in Baghdad. The rise in oil prices and achieving financial returns has a major impact on All Iraqi economic sectors.

Hence the importance of this study in trying to identify the role of oil prices in achieving economic growth in Iraq during the period between 2004-2023.

Study aim

This study aimed to identify the impact of oil price fluctuations on economic growth in Iraq during the period between 2004-2023, as Iraq witnessed many changes and economic development faced many challenges.

Literature review

There are many studies that dealt with the role of oil revenues in achieving economic growth in the Middle East region. The researcher worked on the most important things that the researchers addressed in this matter as follows:

Aimer (2019) The aim of this paper is to study the impact of price shocks on economic growth in Libya using a sample of annual observations from 1990 to 2016. We apply autoregressive distributed lag (ARDL) models for the analysis of long-run relations between variables. Our estimates suggest that oil price increases have a statistically significant and positive effect on the economic growth of Libya. However, that the positive change 1% in the shock of crude oil prices has a positive impact on Libya's GDP by 0.29%. In addition, the error correction (ECM) results showed that 68% of the imbalance from the previous year's shock converges to the long-term equilibrium in the current year. Overall, the results indicate that crude oil prices have had a positive impact on economic growth in the long-term, while trade openness and imports have had a negative impact on economic growth. Finally, to overcome the impact of fluctuations in oil prices, long-term plans should be initiated to diversify the Libyan economy and gradually reduce dependence on the oil.

Muhsen (2022) this study aimed to analyze the changes in oil prices in the indicators of economic growth in Iraq for the period (2005-2017). According to statistical analysis, the relationship between the average price of Iraqi oil and the national income is a positive one, and the average price of Iraqi crude oil and the average per capita national income per capita is a direct correlation between the average price of Iraqi oil and GDP.

The study recommended activating the fiscal policy in the Iraqi economy by stimulating the mechanisms of customs tax policy because it is important in enriching the budget with multiple sources of taxation so that the mechanisms of fiscal policy work to achieve economic goals, namely raising private savings rates and stimulating investment decisions.

Nassif (2016) investigated the impact of oil revenues on GDP in Iraq: An Empirical Study of 2004-2013m, with the aim to identify the size of the oil revenues in Iraq (2004-2013), and the impact of oil revenues on GDP in Iraq, presumably there is a relationship statistically significant differences between oil revenues and GDP, and to achieve the goal and research hypothesis research department has been to two topics, the first section included the importance of oil revenues in the Iraqi economy, while the second section was titled measure the impact of oil revenues on the gross domestic product (GDP) in Iraq, and finally the search is over to a number of findings and recommendations .

Abdulateef and Khams (2023) The research aims to know the impact of global oil price fluctuations on the Iraqi economy , as the Iraqi economy is a reinter economy that depends mainly on oil , and it is a one -sided economy and as a result of the economic and political conditions that the Iraqi economic reality has experienced, it's suffers from weakness in its infrastructure, imbalance in its structures , and suffers from problems Many such as depression , inflation and other problems that affect its development and prosperity , and oil revenues are the main , if not the only , source for financing development programs and government investment spending , which made it vulnerable to external shocks resulting from fluctuations in oil prices at the global level , and that oil price developments have clear reflections on revenues The rise in oil prices leads to a rise in cash flows , which is reflected in an increase in the ability of the financial authorities to expansion of spending , it is clear to us that the Iraqi economy has been affected and is still greatly affected by the political circumstances that it has gone through rather all its variables have become dependent on them and that the fluctuations of global oil prices have a great impact on the Iraqi economy, as a result of the political , economic and security instability of the country and the reduction of the role of the Iraqi economy Other economic sectors such as agriculture, industry and trade, and that the rise in oil prices is positively reflected on the conditions of the general budget and on the Iraqi economy, and oil is the lifeblood of the Iraqi economy and the main source of national income generation and financing import operations, Global oil prices have a significant impact on the Iraqi economy.

Al Khazraji (2023) aimed to shed light on the nature of external economic shocks and their various sources, as well as analyzing the effects left by these shocks on the growth of gross domestic product in Iraq for the period (2004-2021). The results of the analysis showed that global oil price shocks and external indebtedness shocks are among the

most impactful shocks on GDP growth. That this variable is negatively affected by external shocks due to the unilateralism of the Iraqi economy and its heavy dependence on the oil sector and oil revenues. These variables cause a change in the gross domestic product, which means a defect in the structure of the Iraqi economy, and this fulfills the hypothesis of the research. It is declining due to oil prices, and the need to pay attention to other revenues, especially tax revenues being an indispensable financing tool. This is done through reforming the tax system in order to be more efficient and effective in financing the deficit in the general budget. As well as setting laws and legislation for taxpayers and punishing tax evaders and working to enhance tax awareness among individuals, to benefit from it in financing public spending. Which works to reduce the deficit ratio and thus reduce the amount of indebtedness.

Idris (2019) examined the Impact of oil Price Fluctuation on Fiscal Policy in the Algerian Economy for the period between 1980 to 2014, using a Vector Auto Regression (VAR) approach, concluded that the oil prices shocks were the major reason for shocks in fiscal policy variables as expenditure and public revenue.

Al-Tamimi and Abadi (2019) checked the effect of volatility oil prices on public revenues, and they are taking a sample from 2003 until 2015. The research adopts the descriptive, theoretical method researchers recommend diversifying the sources of revenue in the Iraqi economy to avoid the imbalances that occur due to fluctuations in oil prices in the global market.

Luaaiby et al. (2019) Consider the fluctuating oil earnings in Iraq from 2005 to 2015 while analyzing the sustainability of the public debt. The fluctuation of oil income and its impact on the public debt were taken into account in this analysis. Financial and economic indicators that indicate the risk of debt, as well as measures of debt sustainability, can be used to study this. Clarifying public debt's trajectory and local and international management were the study's main objectives. The connection between Iraq's rental economy and the danger of public debt was emphasized in this study. It is crucial to study ways to create a fund to maintain the budget deficit while working on high oil prices. As a result, there will be less danger in the future from utilizing public debt to close the budget deficit. As a result, the level of sustainable debt will remain the same.

Qasabi et al. (2020) analyze the relation between volatility oil prices and public expenditure in Algeria, using ARDL Approach from 2000-2018. The study complete that there is a long-term equilibrium relationship between oil prices and public expenditure; this relationship is progressive and significant in the long term.

AlFatlawy and Al Shukri (2021) studied volatility oil prices and their impact on the sustainability of public debt in Iraq, and they used data from 2000 to 2019 and Autoregressive Distributed Lag Estimates (ARDL). They found that oil price volatility has a positive and significant relationship with the public debt index, meaning that the increase in volatility leads to decisions regarding an increase in public debt to fill the shortage in resources.

Study methodology

Study observation covers period from 2004 to 2023, to examine the impact of oil price on economic growth in Iraq, researcher used simple technique ordinary least square (OLS).

The development economic growth and oil prices in Iraq over the period 2004-2023

Year	GDP growth %	Oil price (USD)
2004	53.38	36.05
2005	1.67	50.64
2006	5.65	61.08
2007	1.89	69.08
2008	8.23	94.45
2009	3.38	61.06
2010	6.4	77.45
2011	7.55	107.46
2012	13.94	109.45
2013	7.63	105.87
2014	0.2	96.29
2015	4.72	49.49
2016	13.79	40.76
2017	-1.82	52.31
2018	2.63	69.78
2019	5.51	64.04
2020	-12.04	42.98
2021	1.58	77.97
2022	7.01	100.08
2023	6	82.95

Source: Worldbank.data. com

Iraq has gone through many major changes since 1990, which had a significant impact on economic growth. Although the Iraqi economy depends heavily on oil revenues, the economy suffered greatly from the wars that extended from 1990 to 2003, during which the economic blockade on Iraq from... Before Western countries, in the period between 2003-2015, Iraq witnessed civil wars that were a major obstacle to and a huge drain on the economy. There is no doubt that Iraqi economic growth depends on oil revenues, but the economic environment did not help in exploiting these revenues and directing them to the economic sectors. It has a significant impact on growth.

Iraqi GDP growth and Oil price trend over 2004-2023
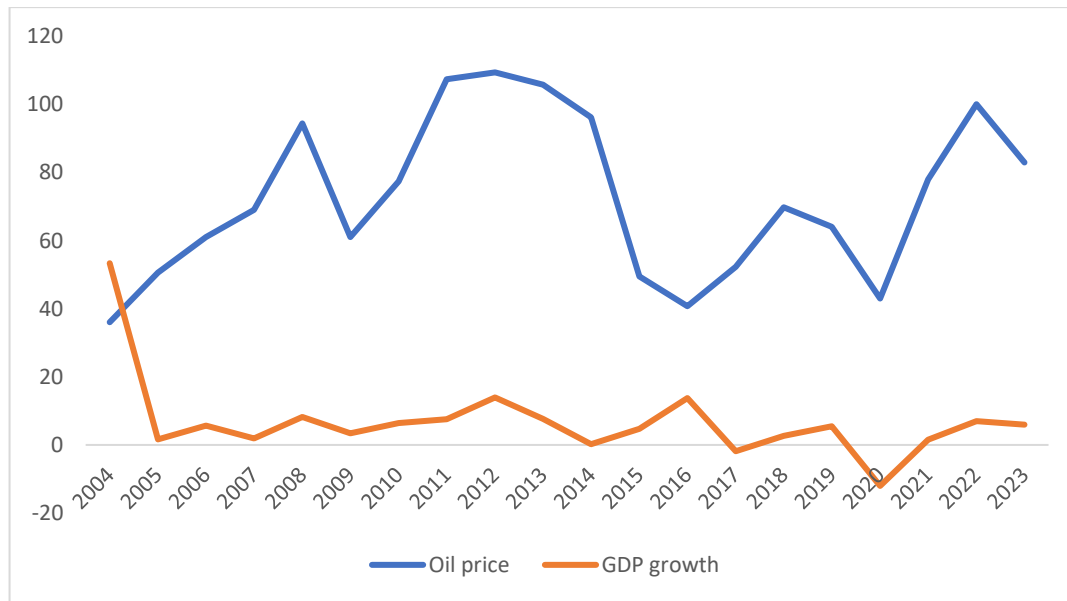
It is clear from the above figure that economic growth in Iraq during the study period is not directly linked to international oil prices. This clear trend shows that there are other factors affecting the growth mechanism. Iraq is still going through a state of political and security instability that has greatly reflected on the lack of economic stability.

Study Model:

A simple regression test between oil prices and Iraqi economic growth during the period between 2004-2023.

$$Q = f(p)$$

By taking logarithms for both sides

$$\log(Q) = \alpha + \log(p) + \varepsilon$$

Dependent Variable: LOG(G)
Method: Least Squares
Date: 05/24/24   Time: 06:01
Sample: 2004 2023
Included observations: 20

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.1305	1.584670	3.210067	5.086898	C

0.2853	-1.101321	0.756677	-0.833345	LOG(P)

1.562615	Mean dependent var	0.063130	R-squared
1.139574	S.D. dependent var	0.011082	Adjusted R-squared
3.182681	Akaike info criterion	1.133242	S.E. of regression
3.282255	Schwarz criterion	23.11627	Sum squared resid
3.202119	Hannan-Quinn criter.	-29.82681	Log likelihood
2.179119	Durbin-Watson stat	1.212909	F-statistic
		0.285266	Prob(F-statistic)

The results of simple regression analysis showed that every increase in oil prices by 1% leads to a decrease in economic growth by the equivalent of 0.83%. This is due to the fact that the rise in global oil prices will be accompanied by an increase in many consumer goods and production inputs, and this is what works to reduce this economic growth on the one hand and on the other. On the other hand, the rise in oil prices is the largest share of spending on infrastructure projects and public spending, and this contributes to leakage outside the economic cycle, which reduces economic growth.

Pairwise Granger Causality Tests
Date: 05/24/24   Time: 05:52
Sample: 2004 2023
Lags: 2

Prob.	F-Statistic	Obs	Null Hypothesis:
0.7986	0.22877	18	LOG(P) does not Granger Cause LOG(G)
0.0651	3.39511		LOG(G) does not Granger Cause LOG(P)

Results

The results of simple regression analysis showed that there is a negative impact of the rise in oil prices on economic growth in Iraq. This is due to the fact that the rise in global oil prices does not reflect positively on the economy. This is due to the monetary returns resulting from the rise in oil prices do not cover the rise in the prices of many commodities. Which Iraq imports.

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Factors Affecting the Quality of University Online Learning Post Covid-19 Pandemic: A Case Study of Palestine Polytechnic University Students

Amjad Moahmmed Horini

Palestine Polytechnic University

amjadh@ppu.edu

Abstract

The purpose of this study was to investigate the impact of several factors on PPU's e-learning quality following the Corona epidemic. Drawing from prior study, the investigator endeavored to employ a descriptive and analytical methodology. The author worked on creating a tool that contained the most important seven elements that influence the quality of online learning (administrative assistance, computer skills, system quality, electronic services, educational material, and motivations) in order to test the study questions. All enrolled university students for the 2023–2024 academic year—an estimated 9,300 students spread across various colleges—were included in the study population. The electronic study tool was built by the researcher among which 403 responses were recovered. In order to assess the internal consistency of the study tool items, the researcher extracted the Cronbach's alpha value, and found that it was 0.89.

 Multiple regression analysis was used by the researcher to ascertain how each quality component affected the quality of online learning. The study's findings demonstrated that online services, course content, motivations had a favorable and statistically significant impact on the quality of online education throughout the years after the Corona pandemic. The researcher presents a number of recommendations based on the aforementioned findings, which include: It is important to pay close attention to the factors that affect the quality of online learning, hold training sessions and educational workshops, and put into practice the suggestions made at scientific conferences regarding ongoing improvements to the caliber of educational services, as this is the best path towards overall quality. Lastly, it is recommended to replicate the experiences of developed nations in this regard and steer clear of the experiences of developing countries.

Keywords: Quality, online learning, Covid_19, Palestine Polytechnic University.
Jel: I23, I25, O03, M31.

INTRODUCTION

Traditionally, higher academic institutions have offered their services and lectures face to face by integrating students and teachers into wide discussions inside the classroom. Academic interaction is one of the means that contribute to the rapid understanding of the topic of the lesson (Davies et al. 2016).

Many researchers have focused on the quality of education as one of the main ways to reach a high level of competitiveness among academic institutions. Quality has been linked to many factors, including the size of the university or the location (developed or developing country), the type of lesson (theoretical or scientific), the administrative services (electronic or traditional), the means of technology on which the university relies, the funds invested in the localization of technology, and finally the strategic vision of the university about adopting Quality as a clear policy.

The quality of educational services has a significant impact on the student's perception of these services, which is greatly reflected in the quality of academic achievement.

Covid 19 pandemic imposed exceptional circumstances all over the world, as the closures and the irregularity of the traditional educational process contributed to the trend towards e-learning through several digital means. Educational platforms and video systems employed for conferences have become means that have been exploited in academic institutions, conferences and meetings for most countries of the world (Kuzenkoff, 2020).

The success of countries in the transition towards digital life and its academic localization depended largely on the technological readiness of countries and academic institutions. The ability of instructors and students to adapt their skills as a result of scientific institutions in developed countries has significantly contributed to the steady continuation of the educational process. Developing nations were unable to integrate technology, which led to a decline in educational outcomes (Rodriguez-Segura, 2020). The quality of educational services is the basis for sustaining educational outputs capable of bridging the gap in joining the process of technical development.

In order to increase the effectiveness of e-learning systems, many researchers have worked to uncover e-learning success characteristics such as IT competency, teaching style; and attitude and mindset (Webster and Hackley, 1997) . As a result, the quality of e-learning systems has attracted a lot of research interest.

RESEARCH PROBLEM

Covid 19 pandemic affected all our daily life activities and forced many changes and imposed many challenges on different disciplines among which is the education sector. Educational institutions were forced to continue their services during the pandemic and to adopt online learning as one of their solutions. Palestinian universities have also to tackle the problem and adopt online learning even post Covid 19 due to many reasons including Israeli occupation which sometimes prohibits students from safely reaching their universities. However, Universities in Palestine lack the strategy to implement and enhance the necessary factors that influence the quality of online education. (Khlaif et al. 2021), (Hinawi& Barahmi, 2015). Therefore, we will investigate the factors that influence the quality of online education for university students in Palestine. This will aid Palestinian educational institutions

in implementing a strategy that considers the factors influencing the quality of online education.

RESEARCH QUESTIONS

What are the factors (administrative support, computer skills, system quality, online services, course content and design, motivations) that affect the quality of online learning from Palestine Polytechnic University (PPU) student's perspective?

RESEARCH OBJECTIVE

This study tried to Identify and study the main factors (administrative support, computer skills, system quality, online services, course content and design, motivations) that affect online learning quality at PPU from student's perspective.

Definition of Key Terms

Online learning: "online learning is an umbrella term that refers to the use of any digital device or media (multi-media) for teaching and learning, especially for delivery or accessing of content. Thus, online learning can take place without any reference to a network or connectivity" (UNESCO,2020).

Education quality: "The essence of learning is quality in higher education. The objective of quality assurance is to persuade others of the adequacy of a learning process". (Harvey, 2007, p. 5)

Covid_19: "According to the World Health Organization (WHO), coronaviruses are a virus family that causes a range of ailments, from the common cold to more severe diseases such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). Initially, these viruses were transmitted from animals to humans" (WHO, 2020).

LITERATURE REVIEW

The world has witnessed widespread and rapid development in recent years, especially in the technology sector, which has greatly affected the education sector as one of the sectors that has coexisted with this development. Online learning is no longer confined to a specific region or a specific level of education. This is what prompted researchers to study the mechanism of enhancing the quality of online learning, especially in light of crises, particularly the Covid-19 crisis**.**

Al-Salim and Aledwan (2021) "The relationship between academic integrity of online university students and its effects on academic performance and learning quality". This study examined the relationship between academic integrity, academic performance, and learning quality among online university students. 155 active online university students were contacted through email to collect data. The results indicated that there is a statistically significant correlation between the academic integrity of online students and the quality of their academic learning.

Saleem et al. (2022) "Factors Affecting the Quality of Online learning During COVID-19: Evidence From a Developing Economy**".** this study Assessed the parameters influencing the quality of online education for Pakistani students during the COVID-19 pandemic. Developing countries like Pakistan present a unique scenario for online

education as the general public has limited access to technology, ICT services and the internet. In this paper, the aspects that influence students' online learning process are integrated with situational factors as boundary conditions (moderator variables). Results showed that university support, teacher support, and motivational factors influence the quality of online learning. The relationship between teachers' supportive and motivating factors and the quality of online learning was significantly influenced by context. Situational factors did not affect the quality of university support or online learning connections.

Ambayed Hiba Khalil (2020) "Analysis E-Learning Status in Palestinian Universities, A Case Study of Palestine Technical University- Kadoorie Tulkarm", The researcher tried to analyze the reality of e-learning in Palestine Technical University- Khudouri/Tulkarem, she identified the most significant challenges students face when using the educational system, as well as analyzing the degree to which university students interact with the E-learning system, and showed that e-learning is a viable option for higher education. According to the study's findings, 63.16% of those surveyed think that E-learning in universities actually has a number of issues. According to the survey, complaints about the E-learning system have increased among respondents (87.97%) since the Covid 19 pandemic, and among academics (81.36%), the infrastructure was one of the biggest obstacles to E-learning. While the majority of researchers (63.934%) believe that e-learning can help students interact with one another.

Andez-Batanero (2022) "Online education in higher education: emerging solutions in crisis times". The research attempted to examine and characterize the transition from in-person to online learning as well as how teachers and students felt about the epidemic. The study was developed using the PRISMA statement- and PICoS strategy- supported methodology using Web of Science, Scopus, ERIC, and PsycINFO to find relevant scientific literature. 29 studies out of 241 found throughout the search have been included. The findings demonstrated that online education was a viable alternative for the growth of higher education, but many flaws in the shift to online education were also discovered. The study's findings suggest that higher education will move toward online instruction in the future. Institutions should therefore increase their investments in online learning platforms and enhance their programs for teacher training.

Al-Mawee et al. (2021) "Student's perspective on distance online learning during COVID-19 pandemic: A case study of Western Michigan University, United States", The study's objectives included identifying the variables that affect students' experiences and examining the effects of student and college characteristics on views of online learning, as well as exchanging knowledge and experiences that could positively affect distance online learning at WMU. Through the official website of Western Michigan University, Qualtrics, the survey was delivered online. All WMU students, professors, and staff had access to the Qualtrics platform, a potent platform for survey design, through the WMU's official website. Students received information on informed consent and a link to the survey via university email.

The survey included 420 undergraduate and graduate students at Western Michigan University who enrolled in various online learning courses in the 2019-2020 school year. In-person or hybrid classes are preferred by many students, especially freshmen, over online programs. There are other reports that faculty and students generally prefer

hybrid or mixed programs. Students spoke of positive and negative experiences with distance online learning, including loss of social interaction and time and place flexibility.

Previous studies addressed the impact of some factors on the quality of online learning during the Covid-19 pandemic. These studies did not fully address these factors, and this is considered a large gap between the current study and previous studies. By addressing the full set of factors that affect the quality of e-learning, there is a vision. Comprehensively about the mechanism of attention to all these factors in any future plan to enhance comprehensive quality. Currently, all factors are affected and affect others, and this is what makes studying them together a scientific advantage for this study.

Online learning and Covid 19

The COVID-19 pandemic has had a significant impact on many facets of daily life, including educational systems, and caused widespread disruptions on a global scale. Nations from all around the world rushed to lessen CO2.2 VID-19's effects on society and to cut back on infections and fatalities. Many schools and institutions around the world decided that online learning would be the best answer as a result of the crisis and worry about the virus spreading (UNESCO, 2020). The abrupt global spread of the coronavirus gave administrators and educators very little time to create practical mitigating strategies. Numerous universities lacked the necessary skills to handle the numerous difficulties that developed as a result of the switch to online learning platforms (Daniel, 2020).

Quality of E-learning during Covid 19 era

Online learning tools were crucial in facilitating the shift from traditional to online education during the COVID-19 epidemic. With the ongoing advancements in educational technology, various online learning platforms have emerged, including MOOC (Massive Open Online Courses), Zoom Cloud, and WeChat Work. These platforms gained popularity during the pandemic. The rapid transition of online learning from a complementary educational tool before the pandemic to the sole substitute for traditional learning during the pandemic has led to challenges in utilizing online education platforms, prompting researchers to investigate this phenomenon (Chen et al., 2020).

Post-Pandemic Online Education

The end of numerous pandemic restrictions is approaching after three years of fighting the COVID-19 pandemic (Spencer, 2023). The normalcy that existed before to the outbreak of the disease is slowly returning. The majority of educational institutions across the globe have reopened and switched from offering online learning to regular classroom instruction. This does not imply, however, that traditional education will become obsolete and take the place of online learning. Online learning will continue to be a part of modern education for a number of good reasons. For instance, during the pandemic, it turned out to be the greatest and only substitute for traditional education, offering students online safety from the COVID-19 virus in addition to a continuation

of their education. Many scholars support the online learning in pos-pandemic, claimed that online education open the door toward new innovation.

Online learning in Palestine

In times of crisis and wars, Palestine's educational institutions always strive to offer top-notch instruction to everyone. The suggested e-learning innovation is a workable program because of the rising demand for education, the limited resources available for traditional learning, as well as the physical and security issues (EL-Harazin, et al., 2007).

Proliferation of ICTs is one of the most important effects of the continuous bloodshed in Palestine. The construction of increasingly connected communities, whose fabric gets solidified through access to the Internet and information, is seen by Palestinians as made possible by ICT, which they view as essential to their survival and quality of life (Saidam, 2007). Consequently, the international community, including the World Bank, the United Nations Development Programme (UNDP), the European Union, and others, began to include the use of ICT in policy suggestions for Palestinians (Zuriek et al., 2006). Internet access was first made available in the early 1990s. The first place in the region to connect to the Internet was Palestine, and specifically Birzeit University (Rabayah et al., 2008).

Online learning in Palestine during Covid 19

Palestine has imposed a state of emergency on 5 March 2020, related to Covid-19. Varied reactions among afflicted populations were identified. However, since education impacts almost every home, Palestinian traditional colleges were quick in placing forth a few steps and alternatives to assure the continuation of the education process in this crisis, as more than 170,000 students in the higher education sector were directly impacted (MOHE, 2020-a). As the outbreak persisted, Palestinian traditional colleges responded variously relying on the institution's capabilities and facilities, but not according to a predetermined strategy. MOHE has proclaimed that there will be a plan for the digitalization of higher education to facilitate the digital transformation in higher education institutions (MOHE, 2020-a). It added that a by-law draft for e-Learning is being created, among additional steps, and put out to go via relevant legislative procedures. Moreover, the findings from a study performed during the second semester of the academic year 2019–2020 by Ministry of Higher Education and Scientific Research, or MOHE (2020-b) demonstrated that Eighty-one percent of lecturers and 41% of students in their educational institution had trained them on online learning, whereas 67.1% of teachers and 44% of students agree that e-Learning has accomplished the knowledge part of intended learning outcomes. Furthermore, 70.9% of teachers and 39.9% of students stated that e-Learning came on every aspect of the curriculum based on course outline, while 71.8% of teachers and 43.2% of students indicated that online learning has given greater chances for lecturer-student interaction (Ministry of Higher Education and Scientific Research MOHE, 2019). The research recommended, among others, that online learning be utilized as a support to in person teaching and learning, online learning platforms become available to higher educational

institutions to train instructors and learners on online learning, online learning by-law should be executed and identified by the ministry and the universities.

Obstacles to e-learning in Palestine

There are several advantages that have developed in employing the e-learning approach, however educational institutions in Palestine still confront many hurdles and difficulties in all various areas, the most prominent of which are:

1 .Weak technical infrastructure for information and communications
2 .Lack of time required for transformation and renewal
3 .Scarcity of change leaders who bear the responsibility of awareness, creating inspiration, addressing difficulties, and following up on anything new in the field of e-learning
4 .The divide between the rising generations and the elders that make decisions
5 .Weakening the function of the teacher as a key educational supervisor and his direct relationship with his pupils and thus his capacity to directly affect
6 .Weakening the significance of the educational institution in society and losing its vital role in scientific education
7 .The advent of commercial entities that strive for profit to monitor the certification and preparation of teachers, who are not competent to do so
8 .There are numerous scientific gadgets employed in the teaching process, which may lead the student to be reluctant to utilize them.

The impact of Corona on education in Palestine

As soon as the Corona pandemic started appearing in the world, this pandemic required all countries to make changes in how to live in preventative measures ways and methods in various fields, as it affected all sectors, including education, resulting in those responsible for education adopt the method of distance education until the crisis ends.
The means of implementing distance education varies in various parts of the world. In Palestine, the Ministry of study was fast to apply e-learning techniques, as this system was fresh to deal with in its comprehensiveness in this experience, despite the problems and challenges it experiences, as it currently presents the best option for our students to continue their study.
The experience of utilizing the e-learning technique is of remarkable proportions, as the power of current technology is utilized to improve educational achievements for all students. The quality of education that students acquired during the present crisis differed to a notable degree, since the digital gap and the accompanying substantial discrepancy in homework assignments were genuine and noticed among students. everyone.
During previous times in Palestine, e-learning was unexpectedly enforced on students and there was a transition from traditional education to e-learning, causing them severe disorientation and dissatisfaction at the beginning of the crisis due to an absence of adequate willingness and getting ready for this type of education.
With the start of the outbreak of the pandemic of Corona, and after a short period of no more than a week after the declaration of the state of emergency, competition began at the level of teachers and tools for higher education, and everyone started attempting to employ social networks and all accessible technology to carry out the educational

process from home, and here we witnessed grievances, anxiety, and disarray from learners and their families who... They complained about the influx of tasks and e-learning images that filled the screens, occupied the family, and caused stress for the students. All of these paradoxes are natural in times of crisis. On the one hand, we want the process of learning to continue, and on the other hand, we want to remain away from strain and pressure.

E- learning in PPU During Covid 19

 Palestine Polytechnic University (PPU) is one of the main universities in Palestine that offers academic and professional degrees in technology and engineering in addition to ongoing learning and professional technological consulting utilizing the newest technologies and highest standards in all sectors. PPU has the purpose of graduating qualified labor forces able to generate beneficial change and meet the demands and requirements of society as a whole in scientific, technical, and research sectors. Providing creative thoughts and solutions. focusing on the importance of research and development in reaching continuous and significant national progress. And attain greatness via improving resources and expanding the possibilities of human resources. PPU was founded in 1978 by the University Graduates Union (UGU) as a local nonprofit organization that provides educational resources, and it is affiliated to the Palestinian University Presidents Council, the International Association of Universities, the Arab Universities League, and the Islamic League of Universities. PPU includes the faculties of Technology and Engineering, Applied Science, Administrative Sciences and Informatics, Information Technology and Computer Engineering, and Applied Professions, it is considered to be a medium sized university with over 50 academic programs and more than (9300) students.

E-Learning in the University of Palestine Polytechnic University (PPU) Post-COVID-19

The outbreak of COVID-19 has transformed the landscape of education across the globe with universities being forced to quickly adapt to new methods of teaching and learning. One of the most notable transformations is the extensive use of e-learning or online education. For example, PPU has not been an exception in moving towards this direction as it grapples with pandemic related challenges while keeping consistency and quality of education at par. Essentially, e-learning involves utilizing electronic technologies primarily the internet for teaching remotely. In PPU, a number of initiatives and adjustments have taken place as far as e-learning post-COVID-19 is concerned with regard to enhancing accessibility, efficiency, and engagement in virtual learning environment. One of the major objectives that have been set after COVID-19 regarding e-learning at PPU is offering students flexible and inclusive ways through which they can learn. Students can easily reach course materials, participate in interactive lectures, contribute to discussions online and submit assignments by using electronic platforms or resources from any location that has access to internet connection. This flexibility also embraces deep dive into different types of learning environments such as asynchronous at PPU, innovative technologies and pedagogical approaches are blended in e-learning to improve learners' experience. Students have a

wealth of digital tools and resources available to them ranging from interactive multimedia presentations, virtual labs and simulations that support active online learning, critical thinking as well as problem-solving skills acquisition. Furthermore, there are online platforms for collaboration which together with communication tools aid in peer-to-peer engagement thereby enriching the online learning process and creating a sense of belonging among the students and their teachers. Consequently, this means that transitioning to e-learning after COVID-19 has not been without some difficulties. Among such concerns include: technical problems, matters of unequal access due to the lack of adequate technology at home during the lockdowns and continual faculty training needs among the numerous issues being considered by e-learning strategy directors at PPU. Nonetheless, it is noteworthy that pandemic gave rise to digital transformation in education making stakeholders moving forward with new ideas considering contemporary students' demands. In summary, e-learning at PPU after COVID-19 is a flexible and changing method of teaching that emphasizes on availability, involvement, and advancement. With the adoption of technology and new ways of teaching and learning PPU has positioned itself to succeed in the digital era while encouraging student success in an increasingly intricate and globalized world.

PPU created an e-Learning center in 2006 and this unit has been cooperating with the academic staff even till now by supporting them to be more familiar with online platforms. It is after the beginning of the COVID-19 pandemic that the center has made concerted efforts to scale up the quality of the online learning in this case in various dimensions. These efforts include:

- ✓ Scheduling briefing sessions for all club's representatives from each college.
- ✓ Developing the programs for nine colleges and 10 staff members.
- ✓ Business it also provides the instructive on how Moodle, the e-learning system, is used.
- ✓ Providing online assessment methods training to College of Medicine instead of giving specific assignment to train online evaluation.
- ✓ Lane works on training and induction for the use of different online tools, examples are CANVA, Snagit, Google Meet, Nearpod among others.
- ✓ Regular training courses held on-line to introduce students to assessments, such as Socrative and Google Meet.
- ✓ By making videos illustrations which show the user how to use those online tools, aimed at raising the level of online learning quality.
- ✓ Providing online manuals to staffers covering all functionality varying among the online learning platforms. From US, to UK and Europe, Instruction: Humanize the given sentence.

These activities illuminate PPU's persistent pursuit of improving its online learning institutions, and consequently helping its academics strategize in developing quality education on the web. Recently PPU expanded cooperation with many western institutions to maintaining online learning projects, E-Pal is a long-term initiative supported by The Norwegian Agency for Development Cooperation (Norad) for a duration of six years. The initiative is a collaborative effort involving PPU, UCAS, the University of Oslo in Norway, and Oslo Metropolitan University in Norway.

The higher education sector is currently grappling with the challenge of effectively incorporating and leveraging rapid technological advancements to enhance the quality of teaching and learning. The surge in online learning during the COVID-19 pandemic

posed challenges to traditional procedures, raising several inquiries regarding the optimal utilization of current technologies to enhance students' academic and vocational growth. Presently, significant discussions revolve around the methods to tackle the involvement of generative artificial intelligence, like ChatGPT, and immersive technologies, such as virtual and augmented reality. Additionally, there is a focus on utilizing online learning to create more adaptable educational options.

RESEARCH METHODOLOGY

The research approach, study population, study sample, sampling process, and data collection tools are all introduced in this chapter along with the research methodology for the study.

Research Approach

To satisfy the objectives of the study, it relied on the descriptive analytical method based on theoretical literature and related studies, in addition to developing a tool (questionnaire) to be used in collecting data and analyzing it quantitatively.

Study Population and sampling

The target population for this research is defined to include all PPU students from different colleges which equal 9300, by computing the study sample which equal 369 , this means 369 or more measurements/surveys are needed to have a confidence level of 95% that the real value is within ±5% of the measured/surveyed value.

Questionnaire Reliability

By estimating whether the items reflect similar outcomes if the instrument is utilized at different times under similar settings, the reliability of the tool is determined. Cronbach's Alpha, a statistical test, is used to express this. Alpha has a total value of 80%. Table 5 displays the Cronbach's Alpha measures for each section of the questionnaire. According to Hair et al. (2014), the outcomes validate the instrument's reliability.

Table 1. Results Of Cronbach's Alpha for Instrument Reliability

Questionnaire Part	Number Of Items	Cronbach's Alpha
Administrative Support	7	.894
Computer Skills	5	.932
System Quality	8	.889
Online services	8	.882
Course Content	8	.887
Online learning motivations	7	.889
Quality of Online learning	9	.898
Total Degree for The Instrument	**52**	**.894**

Source: Calculated by researcher

RESULTS ANALYSIS

Analyzing the data gathered is essential to achieve the study goals and provide answers to the research questions. In this chapter, the results of the research are presented,

analyzed, and discussed. Based on the questionnaire's results, a quantitative analysis of the data was conducted based on the study sample's demographic information. The study variables' means and standard deviations were calculated as well. Finally, a simple regression analysis models was created and its shows the effect of independent variables on the dependent variable. Table .6. shows demographic data as follow:

Table .2. Demographic Data

Variable	Category	Frequency	Percent
Sex	Male	118	29.3
	Female	285	70.7
Education	Diploma	57	14.1
	Bachelor	327	81.1
	Master	14	3.5
	PHD	5	1.2
English proficiency	Beginner	47	11.7
	Intermediate	283	70.2
	High	73	18.1
College discipline	Scientific	171	42.4
	Administrative	131	32.5
	Social	36	8.9
	Professional	65	16.1
Computer availability for personal use	Available	333	82.6
	Unavailable	70	17.4
Internet accessibility for personal use	Yes	353	87.6
	No	**50**	**12.4**
Internet access technology	3G-4G	82	20.3
	ADSL	99	24.6
	Viber	173	42.9
	Other	49	12.2
Computer usage ability	Low	23	5.7
	Intermediate	171	42.4
	High	209	51.9
Type of courses	Practical	30	7.4
	Theoretical	68	16.9
	Mixed	305	75.5
Residence	City	244	60.5
	Town	71	17.6
	Village	84	20.8

	Camp	4	1.0
Total		**403**	**100%**

Source: Calculated by researcher

Demographic data contributes to giving a clear view of the composition of students at the university. Through this data, a clear framework can be reached about the mechanism for developing policies to enhance the quality of online learning.

The results of the demographic data for the study sample showed that 70.7% of the study sample are female, where 29.3% are male. These results indicate that females are more responsive to participating in expressing their opinion about this study, additionally also indicate that the number of females more than males at the PPU. Moreover, globally females more familiar with online education services. It was also found that there were 14.1% of diploma holders, 81.1% of bachelor's, 3.5% of master's, and 1.2% of doctorate. The lion's share of student sample holder bachelor degree.

Regarding English language skills, which are considered of great importance in online learning, it was found that 11.7% of the study sample have a basic level of the language, 70.2% have an intermediate level, and 18.1% of the sample have a high level of the English language. This mean that the majority of student have intermediate level in English language.

Concerning to the college which the students enrolled, the above table shows that there are 42.4% of scientific colleges, 32.5% of administrative colleges, 8.9% of the college of social sciences, and 16.1% of vocational colleges.

It was shown from the above data about the study sample members owning a personal computer that 82.6% have a personal computer, 17.4% do not own a computer. Computer as an educational tool is available in hand of students. As for access to Internet services, it was found that 87.6% of the study sample have access to Internet services, while there are 12.4 %They cannot access the Internet. Today internet access in Palestine not a problem.

As for the Internet technology that the student accesses, the results indicated that 20.3% of the sample members access 3G-4G technology, while 24.6% of the study sample uses ADSL, 42.9% of the study sample uses Viber, and finally 12.2% uses other technology. .

As for the ability to use the computer, it was found that 5.7% of the study sample had low ability, 42.4 had medium ability, while 51.9% had high ability to use the computer. This ensure that the online learning experience success in PPU although some drawbacks.

It was shown in the table above regarding the type of academic course that there were 7.4% of the study sample who had a practical course, 16.9% who had a theoretical course, and finally that there were 75.5% who had a combined practical and theoretical course. Online learning serves combined practical and theoretical course, so that students in PPU not facing obstacles in follow lessons. Finally, with regard to the place of residence of students, it is clear from the table above that there are 60.5% of the study sample residing in cities, 17.6% of the study sample residing in towns, 20.8% residing in villages, and 1% of the study sample members residing in camps.

Computer skills are considered one of the important factors in online-learning. The tremendous development in the technology and communication sector has revealed many challenges for educational staff and students alike. The tremendous acceleration in online learning technologies, especially in light of the Covid-19, has opened many

horizons for learning new skills that enhance the ability to follow... Distance education is easy and simple, away from complications. The Table .7. shows the percentage of PPU students possessing various computer skills.

Table 3. PPU student's computer Skills

Computer Skills	Fre	%
Internet	11	2.7
Internet, social communication	11	2.7
Internet, social communication, google meet	12	3.0
Internet, social communication, zoom	1	.2
Internet, social communication, zoom, google meet	25	6.2
Internet, google meet	4	1.0
Internet, zoom, google meet	7	1.7
Social communication	19	4.7
Social communication, google meet	3	.7
Social communication, zoom, google meet	9	2.2
Google meet	58	14.4
Zoom	3	.7
Zoom, google meet	16	4.0
Microsoft office	14	3.5
Microsoft office, internet	5	1.2
Microsoft office, internet, social communication	6	1.5
Microsoft office, internet, social communication, google meet	20	5.0
Microsoft office, internet, social communication, zoom, google meet	**150**	**37.2**
Microsoft office, internet, google meet	8	2.0
Microsoft office, internet, zoom	1	.2
Microsoft office, internet, zoom, google meet	3	.7
Microsoft office social communication	4	1.0
Microsoft office social communication, zoom, google meet	5	1.2
Microsoft office, google meet	6	1.5
Microsoft office, zoom, google meet	2	.5
Total	403	100%

Source: Calculated by researcher

Based on the information contained in the Table.7 about computer use skills by students at PPU, it was shown that there is a percentage of 37.2% of the students in the study sample who know Microsoft office, internet, social communication, zoom, google meet, moreover, in second place there are 14.4% who know Google meet, in other words, overall students in PPU have extensive knowledge of computer skills, which qualifies them to rely on them in online learning processes.

In a questionnaire, construct validation can be achieved by the use of basic descriptive statistics such as mean and variance. To determine if the items in each proposed grouping provide roughly the same amount of information about the construct being measured, the item mean and item standard deviation were applied. It is also used to check if the standard deviations of the items are about comparable, meaning that each item adds the same amount to the overall scale score. Stated otherwise, the means and standard deviations of the items should be approximately equal on a Likert scale.

Multiple Regression results

In order to determine the impact of independents factors (administrative support, etc.…) on the online learning quality at PPU, a multiple regression analysis was conducted, multiple regression is considered one of the statistical mechanisms that explain the deviation in the dependent variable as a result of the deviation of the independent variable by one unit. Since the study hypotheses address the effect of each independent variable on the dependent variable, this mechanism is considered the most appropriate in order to measure the effect of all independent variables and its effect on the dependent variable.

$$Y = \beta_0 + X_1 + X_2 + X_3 + X_4 + X_5 + X_6 + \varepsilon$$

Where, (Y) Online learning quality, administrative support(X1), computer skills(X2) , system quality(X3), online services(X4), course content(X5), Motivations(X6):

Table (4) Multiple regression results

R	0.75		
R-square	0.56		
F	85.5 Prob(0.00)		
Coefficients		**T**	**Sig**
Constant	.535	3.263	0.001
administrative support(X1)	.088	1.589	.113
computer skills(X2)	-.067-	-1.823-	.069
system quality(X3)	.058	.926	.355
online services(X4)	.255	3.773	0.00
course content(X5)	.225	3.897	0.00
Motivations(X6)	.242	4.291	0.00

The results of multiple regression analysis showed that some independent variables had no effect on the dependent variable, which is the quality of e-learning at the PPU, while there are variables that have a statistically significant change. online services have an impact. Increasing online services by 1% will lead to an increase in the quality of online learning is equivalent to 0.25%, and increasing the quality of educational content by 1% leads to an increase in the quality of e-learning by the equivalent of 0.22%, in addition, increasing motivations by the equivalent of 1% contributes to increasing the quality of e-learning by the equivalent of 0.24%.

Conclusion

The results of the study that there is a positive and statistically significant effect of online services, course content, motivations had a favorable and statistically significant impact on the quality of online education throughout the years post-covid pandemic.

Recommendations

Based on the above results, the researcher recommends the following:

1. Working to establish a special unit for the quality of online learning services concerned with implementing and encouraging the latest educational policies related to quality. To achieve this PPU have skilled staff able to lead it within six months.
2. It is necessary for the PPU to pay great attention to the quality of academic services at the university in a comprehensive and not partial manner. Maintaining the international academic standards.
3. Focusing on the experiences of developed countries and replicating them in the field of quality e-learning. Imitate the successful education experience and far from developing countries.
4. Organizing educational and training workshops on e-learning that are applicable in a way that suits an inclusive environment, training must provide PPU employees with modern online skills.
5. Enhancing the role of motivations, whether moral or material, in order to enhance interest in the quality of e-learning and increase its efficiency appropriately. quality online learning in PPU must be requirement not choice, culture experienced within staff.
6. Emphasis on that the quality of e-learning after the Covid pandemic is a basic requirement for the continuation of the educational process and not a choice applied only in crises. Improvement in education is adynamic process.
7. Great attention is given to the educational staff who can learn online learning skills quickly. Talent Acquisition is the first choice in recruitment.

In order to implement the study's recommendations, PPU must adopt a comprehensive strategy to localize online learning in its academic services by moving all educational and administrative processes within the university from the traditional phase to the digital one, based on the modern Holistic approach in management.

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Assessing the Appropriateness of the Current English Language Teaching Curricula and Practices to the Requirements of Employability and Economic Growth: Algeria as a Case Study

Dr. Tobbi Saida
Batna 2 University, Algeria

Abstract

There is a general agreement among economists on the importance of education in developing the national economy. Since independence until today, Algeria has implemented a set of educational reforms in an attempt to raise the stock of educational capital in society and build a strong educational base. The latest of which was introduced in June 2022. It concerns the teaching of English as a foreign language instead of French in the primary school. With the acceleration of globalization, teaching English is increasingly viewed a real investment in human capital and a means of achieving competitive economic advantage. Moreover, mastering English has become a key criterion of good human capital and one of the must have 21st century skills needed by labor in order to produce economic value. The present empirical study aims at investigating the effectiveness of the current English language teaching curricula and practices to the requirements of employability and economic growth in the Algerian context. Quantitative and qualitative data were collected from nine English as a foreign language (EFL) inspectors, 62 secondary school and university teachers, and 200 university students through online questionnaires and semi-structured interviews. Observation was also employed as a data gathering tool. Findings show the English taught is unfocused and does not prepare the students to the needs of employability, industry, and business. Furthermore, there is an inconsistency between the principles of the competency-based approach advocated in the reformed English language teaching curricula and the actual teaching practices prevalent in most Algerian EFL classrooms. This is basically due to the following reasons: the widespread "culture" of "learning for the exam", lack of technological resources, crowded classes, and lack of teachers' professional development in English for specific purposes (ESP). In light of these findings, some recommendations are put forward: First, curricula should be revised to match the specific requirements of economic growth. Second, teaching and assessment practices should be revised. Third, technological resources should be provided. Fourth, teachers should be well trained to ensure that they can teach ESP.

Key words: English language; teaching; employability; human capital; economic growth; requirements; Algeria.

Introduction

Human potential has always been the main driving force in the development of any country. Therefore, it is important to invest in it from all aspects. Human capital is implicitly and explicitly affected by education. In other words, education plays a major role in building up the human capital and increasing its productivity and hence boosting the economic growth. Léné (2005) maintains that "Dans la théorie du capital humain, l'éducation est considérée comme un investissement que l'individu effectue en vue de la constitution d'un capital productif. Cet apprentissage est coûteux, mais en retour, les connaissances acquises apportent à l'individu des gains dès lors qu'elles sont mises en œuvre dans le cadre d'activités professionnelles" (p. 94). This quotation shows the tight relationship between education and human capital. Translating it from French to English, it says that in the theory of human capital, education is regarded as an investment made by the individual in order to constitute productive capital. Such a learning is expensive, but the payoff is the acquired knowledge that would be very fruitful once it is put into professional practice.

In order to improve the quality of education, Algeria has carried out a series of educational reforms which gave foreign languages a special attention. Being the language of science and technology, English has recently received the most attention. The latest of these reforms, introduced in June 2022, replaced French with English as the first foreign language to study starting from the third grade of the primary school. The present study attempts to investigate the effectiveness of the current English language teaching curricula and practices to the requirements of employability and economic growth. In doing so, it seeks to answer the following questions:
1. Does the English taught in EFL classes prepare the learners for the needs of the workplace?
2. What are the teachers', inspectors', and students' attitudes towards the teachability of English for employment in EFL classes?
3. How can English for employability be better implemented in EFL classes to prepare future productive citizens who contribute in the economic growth?

Literature Review
Structure of the Algerian educational system

According to the Ministry of National Education, the Algerian educational system consists of the following levels:
- ❖ **Preparatory level: It is for children aged 5 and it is non-compulsory.**
- ❖ Basic level: It consists of two stages: The primary school (5 years) and middle one
  (4 years)
- ❖ Post-basic education: It includes two pathways: General and technological secondary education. The pre-university route for secondary schools (3 years) falls under the charge of the Ministry of National Education. The professional education, on the other hand, is made up of two cycles: vocational (3 years) and higher professional (2 years). It is under the aegis of the Ministry of Training and Professional Education.

❖ Vocational training: It includes initial vocational training and continuous training. The former attempts to absorb educational wastage at different levels while the second takes place in employment.

❖ Higher education is under the supervision of the Ministry of Higher Education and Scientific Research.

Foreign languages in the Algerian educational system

Since independence in 1962, Algeria has carried out a number of educational reforms in order to meet the requirements of globalization and the knowledge economy. The decisions related to teaching languages were complex and influenced by a set of political, historical, and cultural factors. The first phase of reforms witnessed the adoption of the Arabization policy which aimed at establishing the Arabic culture and eradicating all the traces of the 132 years of the French colonization. Arabization is regarded as the process of healing back to authenticity and retrieving the Arabic identity attributes that can be achieved only through restoring the Arabic language (Ennebati & Lenba, 2020).

The second phase of reforms (1976-1979) was the turning point in the Algerian educational system. Arabic was declared as the language of instruction of all subjects except sciences and medicine courses (Ibrahimi, 1995). In that period, English was taught starting from the second grade of the middle school. The delay in learning English and the little exposure to it made the students much influenced by their mother language or by French (Vermeren, 2009).

The year 1993 marked the beginning of the third phase when the possibility of introducing English in the primary school was examined. Such a process aimed to enhance the foreign languages teaching at an early age by giving the opportunity to pupils' parents to choose between French and English as a compulsory foreign language. This took place in the schools of some wilayas only. Although this proposal was very important, it was abandoned by the Ministry of National Education because the majority of parents preferred French over English (Ennebati & Lenba, 2020).

The radical changes in the Algerian educational system came in 2002. In one of his speeches of the presidential campaign in 1999, Abdelaziz Bouteflika asserts that « Le niveau a atteint un seuil intolérable, au point ou le diplôme algérien qui était reconnu par la Sorbonne, Harvard et Oxford jusqu'au années 80, n'est plus accepté pas même par les universités maghrébines. Les étudiants tunisiens et marocains venaient en Algérie pour étudier la médecine et la pharmacie. Aujourd'hui, c'est l'inverse qui se produit » (Quoted in Benranah, 2002, p. 78). Through this quotation, Bouteflika claims that the level has reached an intolerable threshold to the extent that the Algerian diploma, that was recognized by universities such as Sorbonne, Harvard and Oxford till the 80's, is no more accepted even by universities of the Maghreb. Moreover, he added that Tunisian and Moroccan students used to come to Algeria to study medicine and pharmacy. Today, it is the reverse that takes place.

The educational reform initiated under President Bouteflika began to be implemented in 2003. It addressed general reorganization of the system, teacher preparation, and pedagogical practices. Moreover, it focused on foreign language education giving equal importance to French and English. In August 2019, the Minister of Higher Education and Scientific Research, Tayeb Bouzid, urged the country's 77 universities and institutions to favor English. He declared that "French does not get us anywhere". The move towards English is seen as a means of gaining improved access to scientific research, business opportunities and employment. The latest educational

reform (June 2022) introduced English at the primary school. Making such a step, English has become the first foreign language in Algeria.

Employability skills related to EFL

There are three types of major skills that are important for future career readiness: academic skills, employability skills, and technical or job-specific skills. While core academic skills prepare students with appropriate professional knowledge, employability skills help them have essential skills in any career area (Cotton, 1993). The Employability Skills Framework of the present study was adapted from the Department of Education, Science, and Training (2004). Hence, employability skills needed for the 21st century were categorized into eight main groups: (1) Communication skills, (2) Teamwork skills, (3) Problem-solving skills, (4) Initiative and enterprise skills, (5) Planning and organizing skills, (6) Self-management skills, (7) Learning skills, and (8) Technology skills. Employability skills have become an important link between educational values and job demands. In addition to the basic and specialized knowledge, EFL students are expected to acquire a set of skills in order to be employed and meet their employers' demands (Suarta et al., 2017). These skills should be emphasized in the learning process in order to develop students' critical thinking, collaboration, creativity, social competencies, and so on (Fandino, 2013).

Methodology

Choice of the method

The present study used a mixed-methods design. It is believed that the integration of both quantitative and qualitative data provides a better understanding of the issue investigated than either of each alone.

Participants

Surveying the whole Algerian inspectors, EFL teachers as well as students is practically impossible. Therefore, the researcher used convenience sampling. She opted for this technique because the participants are not required to satisfy any specific conditions. In other words, they are all eligible and dependent on the researcher's proximity to get involved in the sample. Nine secondary school EFL inspectors, 19 university EFL lecturers, 43 secondary school EFL teachers, and 200 university EFL students took part in the present study.

Data gathering instruments

Online questionnaires

Description

Two online questionnaires were used to collect data in the present study: One for teachers and one for students. For the teachers' questionnaire, it consists of three sections: The first section confers an overview of their general information such as gender, age, qualifications, and teaching experience. The second section is concerned with their perceptions of the role of English in maximizing the chances of employability and boosting economic growth. It also seeks to probe into their opinion about the effectiveness of the current curricula in the development of the level of English language proficiency required for employment and economic growth. The third section is an endeavor to provide an in-depth coverage of their actual teaching practices and the obstacles they face in teaching ESP.

For the students' questionnaire, it is made up of two sections only. While the first section asks for demographic information such as gender, age, grade, etc., the

second one aims at knowing the responds' perceptions of the effectiveness of the English learned in the development of the skills required for employment, business, industry, and economic growth. Here, it is worth noting that the participants' general information required in the questionnaires and interviews is just to help foreground the study's context.

Validity

The two questionnaires were reviewed for their content and face validity by three teachers: Two TEFL lecturers from Batna 2 University and an ESP expert from Ourgla University. Necessary modifications and deletion of some questions were done to reach the final valid versions of the questionnaires.

Reliability

The two questionnaires were tested for reliability by measuring their internal consistency using Cronbach's alpha coefficient method. This turned to be $\alpha = 0.76$ for the teachers' questionnaire, and $\alpha = 0.80$ the students' questionnaire. This means that they are reliable.

Piloting

Before administering the questionnaires to the present study's participants, they were piloted to guarantee their adequacy and reliability. Piloting is useful in checking the appropriateness of the language used and the sequencing of questions (Sapsford & Jupp, 2006). Participants of the pilot study were 28 first year English-major students and five EFL lecturers from the Department of English Language and Literature (Batna 2 University) in addition to eight EFL instructors from different secondary schools of Batna. They are different from the participants of the main study. After getting their agreement to be subjects of the pilot study, they were sent a copy of the questionnaires and a brief evaluation sheet which comprises four main questions to help them comment on the clarity of instructions and questions, say how much time it took them to fill the questionnaire out, and add any additional comments if they want.

Administration

After making sure that the questions were clear and adequately structured, the questionnaires were administered to the present study's participants. They were created using Google Forms and the links were sent to the respondents by email in July 2022.

Semi-structured interviews

Rationale for using semi-structured interviews

The rationale for using the interviews is two-fold: First, to collect qualitative data as their form is more open-ended and participant-directed. Second, to triangulate the data drawn from the questionnaires.

Validation

In qualitative data gathering tools, validity and reliability are generally not held to be applicable to evaluate the findings but rather, rigor is associated with trustworthiness. Peer face validity checking and peer coding were opted for to ensure the trustworthiness of the interviews' findings. Two EFL teachers at the English department of Batna 2 University were requested to check the interviews and give their opinions of whether or not they seem to "measure" what they claim to "measure". They were asked to check the clarity of the questions too. They showed positive opinion on the clarity of wording, layout, and style as well as the likelihood that the target audience would be able to answer the questions. Moreover, they ensured that they are unambiguous, not biased and not leading.

Reliability

The data were coded by two coders: The researcher and an EFL teacher from Médéa University. The correlation between the two codings was calculated using Krippendorff's alpha since it is the most flexible method for checking the inter-coder reliability that produces the most possible accurate result (Nili, 2017). Krippendorff's alpha was calculated using PRAM software. The result was 0.73. It is not perfect but it can be still considered suitable for an exploratory purpose (Lombard et al., 2002; Feng 2014). The coding of the interviews can then be claimed to be systematic and consistent.

Administration

The semi-structured interviews were conducted with inspectors in July 2022 by normal and WhatsApp calls. The predetermined questions were supplemented with follow-up questions to get more in-depth data.

Classroom observation

This tool is opted for because it allows gathering direct and in-depth data about the day-today context in which English is taught in the Algerian universities. Dörnyei (2007) maintains that "classroom observation provides direct information and it is one of the three basic data sources for empirical research" (p. 178). The number of observation hours was reduced from 30 to 12 due to the final exams. Observation was carried out in June 2022 in the regular classes of English in the Department of Sociology and Demography and the Department of Commercial Sciences. Both belong to Batna 1 University, Algeria. The aim of the present study's classroom observation is examining the following points: The skills developed, the way the course is conducted, the language used during the class, the classroom interaction, the type of assessment used, the students' weaknesses and the teachers' challenges.

Techniques of data analysis

Statistical analysis was done using Statistical Package for Social Science (SPSS) version 23. Descriptive statistics were expressed by percentage and mean. Qualitative data, on the other hand, were analyzed through content analysis. NVivo 12 software was used to facilitate coding and categorization.

Data analysis and discussion

Teachers' questionnaire

The ultimate objective of teaching English as a foreign language

Table 1 *The ultimate objective of teaching EFL in the teachers' eyes*

Objective	n (%)
Develop learners' awareness of the importance of English as a means of international communication	42 (67.47)
Acquire basic language skills (listening, speaking, reading and writing) in order to communication with the speakers of English language	53 (85.48)
Develop learners' intellectual, personal and professional abilities	19 (30.64)

Prepare learners to be active citizens aware of the cultural, economic and social issues of their society in order to contribute in giving solution	21 (33.87)

N.B. In the whole paper, n = number of the respondents, % = percentage

Table 1 shows that the majority of the respondents (85.48%) think that the ultimate objective of teaching EFL is to acquire the four basic language skills that enable the learners to communicate with the speakers of English language. The second highest percentage is that of teachers who believe that developing the learners' awareness of the importance of English as a means of international communication is the objective of teaching EFL (67.47%). The objective of preparing learners to be active citizens aware of the cultural, economic and social issues of their society in order to contribute in giving solution came in the third place (33.87%) while that of developing learners' intellectual, personal and professional abilities ranked the last (30.64%). Emphasizing communication as a teaching goal by the teachers might be due to their influence with the Communicative Approach to Language Teaching.

Attitudes towards the teachability of employability skills in the EFL classroom

Table 2 *Teachers' Attitudes towards the teachability of employability skills in the EFL classroom*

	Yes n (%)	No n (%)
Question		
Can employability skills be taught in the EFL classroom?	47 (75.81)	15 (24.19)

As Table 2 shows, the majority of the surveyed teachers think that employability skills can be taught in the EFL classroom (75.81%). The 15 remaining ones hold a different opinion. When asked to justify their answers, all of them said that EFL classes are not the best place to teach employability skills and other more specialized subject classes can be created to fit this need.

Effectiveness of the actual EFL curricula in the provision of the English required for employment and economic growth

Table 3 *EFL teachers' views of the effectiveness of the actual EFL curricula in the provision of the English required for employment and economic growth*

	Yes n (%)	No n (%)	No answer n (%)
Question			

Do you think that the actual EFL curricula help in equipping the learners with the English required for employment and prepare them to be future active citizens who contribute in the national economic growth?	2 (3.22)	59 (95.16)	1 (1.61)

As can be seen from Table 3, the majority of the respondents (95.16%) think that the actual EFL curricula do not help in equipping the learners with the English required for employment. Moreover, they do not prepare them to be future active citizens who contribute in the national economic growth. When asked as to why they think so, they replied by saying that the Algerian EFL syllabi are poorly designed and restricted to a collection of functions that are randomly selected. They added that the English taught nowadays is not updated and it does not match the changing needs of globalization and economy.

EFL teachers' actual classroom practices with regard to teaching English for employability

Table 4 *EFL teachers' actual classroom practices with regard to teaching English for employability*

Statements	Never n (%)	Occasio-nally n (%)	Some-times n (%)	Often n (%)	Always n (%)
I teach my students problem solving and high order thinking skills.	24 (38.71)	15 (24.19)	11 (17.74)	5 (8.06)	7 (11.29)
I teach my students the etiquette of face-to-face and telephone conversations related to the workplace.	49 (79.03)	7 (11.29)	5 (8.06)	1 (1.61)	0 (0)
I teach my students self-introductions and the skills required in job interviews.	38 (61.29)	3 (4.84)	11 (17.74)	7 (11.29)	2 (3.22)

I teach my students the basics of public speaking and small formal presentations.	4 (4.84)	3 (4.84)	17 (27.42)	30 (48.39)	8 (12.9)
I teach my students how to do context clues and how to read between the lines effectively.	0 (0)	4 (4.84)	8 (12.9)	31 (50)	19 (30.64)
I teach my students how to interpret schedules, charts, and graphs.	51 (82.26)	2 (3.22)	9 (14.52)	0 (0)	0 (0)
I teach my students how to collect information from notes, posters, websites, and written ads.	38 (61.29)	11 (17.74)	7 (11.29)	4 (6.45)	2 (3.22)
I teach my students how to write CVs, formal letters, and reports.	0 (0)	3 (4.84)	3 (4.84)	37 (59.68)	19 (30.64)
I teach my students how to fill out forms	28 (45.16)	21 (33.87)	11 (17.74)	2 (3.22)	0 (0)

As Table 4 shows, the basics of public speaking and small formal presentations, context clues, reading between the lines, CVs, formal letters, and reports are the few areas that are often taught by the surveyed teachers. Surprisingly, the majority of them reported that they never taught problem solving and high order thinking skills, the etiquette of face-to-face and telephone conversations related to the workplace, interpreting schedules, charts, and graphs, collecting information from notes, posters, websites, and written ads, and filling out forms. Overall, results show that the skills related to employability are disregarded by the teachers.

Difficulties that face EFL teachers in teaching English for employability

Thematic analysis yielded the following codes presented in the following table.

Table 5 *Difficulties that face EFL teachers in teaching English for employability*

Code	Example
Lack of technological resources	*The changing needs of teaching EFL should go hand in hand with the tools of teaching. The facilities I mean. We need access to Internet, computers, smart screens, and so on. None is available in our classes.*
Students' low language proficiency	*Students of nowadays have more facilities and opportunities but they miss the will to learn. Frankly*

	speaking, their language level is very low. The majority of them can't produce a correct sentence and can't write a concise paragraph. These students can't be taught specialized language.
Lack of professional development	*I think that continuous training that enables us to teach such kind of specialized English.*
Loaded syllabi	*The number of hours is limited and the syllabus is very loaded. We can barely teach the must. Those skills are obviously necessary but something extra.*

As Table 5 reveals, the surveyed teachers reported a number of difficulties in teaching English for employability. The first challenge is the lack of technological resources. A lot of respondents stated that basic classroom technology is often limited in schools and universities. This lack of resources causes problems especially in teaching visual content such as graphs, posters, written ads, etc. Another reported obstacle is the students' low language proficiency which imposes severe limitations when learning more specialized English. Additionally, the teachers showed their dissatisfaction of teacher-training. They stated that they need continuous professional development to become more aware of the new teaching trends and methodologies and more creative in the ways that they implement the curriculum. Last but not least, loaded syllabi were also mentioned as a challenge that faces the respondents in teaching English for employability. The surveyed teachers complained about the limited number of teaching hours allocated to English. All these challenges were reported in previous research (e.g. Clement & Murugavel, 2015).

Students' questionnaire

Students' attitudes towards the aim of education with regard to developing employability skills and contributing in the country's economic growth

Table 6 *Students' attitudes towards the aim of education with regard to developing employability skills and contributing in the country's economic growth*

Question	Stron-gly agree n (%)	Agree n (%)	Undeci ded n (%)	Dis-agree n (%)	Stron gly dis ag-ree n (%)
To what extent do you agree with the following statement: "The aim of education					

is preparing the students to get and keep jobs and do well in them in order to contribute in boosting the country's economic growth?	189 (94.5)	9 (4.5)	3 (1.5)	0 (0)	0 (0)

As Table 6 shows, the majority of the respondents (94.5%) agree that the aim of education is preparing the students to get, keep, and do well in jobs in order to contribute in boosting the country's economic growth.

Students' evaluation of the effectiveness of the English learnt in preparing them for employability

Table 7 *Students' evaluation of the effectiveness of the English learnt in preparing them for employability*

Question	To an extremely large extent n (%)	To a large extent n (%)	To a moderate extent E3 n (%)	To a small extent n (%)	To an extremely small extent n (%)
To what extent do you think the English you have been taught so far prepare for employment?	2 (1)	29 (14.5)	103 (51.5)	15 (7.5)	51 (25.5)

As Table 7 shows, the majority of the surveyed students (51.5%) think that the English they have been taught so far prepares them for employability to a moderate extent. Unsurprisingly, the option "To an extremely large extent" comes in the last place (1%). When asked to justify their answers, the students told some of their experiences. One student, for instance said "The teachers are eager to finish the program and not to train their us to communicate. Moreover, the lectures are not interactive. There's no discussion no debates no communication". Another student also complained "In the class of Oral Expression, each student choses a topic and delivers a presentation. There is no feedback by the teacher or the classmates. The speakers often do not ask for areas of improvement".

Inspectors' interview

In one question which asked for inspectors' suggestions to make EFL classes more effective in providing students with the language skills they will need for the world of work, they insisted on the following points:
1. Develop interpersonal and problem solving skills instead of teaching grammar
2. Rely on a learner-centered rather than teacher-centered approach
3. Focus on formative assessment rather than summative assessment
4. Introduce new technologies in order to make learning interesting

Classroom observation

Classroom observation has shown the following results.

Classroom interaction

All the classrooms observed were teacher-centered. Although the class was interesting to follow, it was always the teacher who dominated the whole process. A few students who were good at speaking engaged the teacher in discussions and asked further questions whereas the majority of the students were listening quietly without any direct interaction with the teacher. Surprisingly, the majority of the teachers observed were more translators than EFL teachers. Learners in all the classes observed kept asking the teacher to translate words and expressions to Arabic claiming that they do not understand English very well.

Course content and skills developed

Observation revealed that the lexico-grammatical content was the most emphasized. The grammatical points covered were about sentence structure and elements, tenses, reported speech, and conditionals. The skill that was mostly present was reading while speaking, listening and writing were totally absent. Vocabulary was presented to the students in the form of English texts with emphasis on keywords. Grammar and vocabulary exercises (Title of the text, synonyms and antonyms, reformulation of sentences maintaining the same meaning, matching, etc.) followed the reading texts. Overall, interpersonal communication skills and problem solving skills were not developed.

Assessment

The present study's 12-hours classroom observation revealed that the only type used by the teachers observed is the summative assessment. It took the form of a quiz. Teachers focused only on the product and ignored the process of learning. In other words, there was no formative assessment which could provide teachers with information for continuous feedback to students and guide their daily instructional decisions and adaptations.

Conclusion and recommendations

Despite the fact that surveying a limited number of EFL teachers, inspectors, as well as students and observing a limited number of EFL classes during a limited period of time may not be considered sufficient to claim for setting the findings in a broader context, the present study revealed many facts about the situation of teaching and learning English for employability in Algeria. The most prominent of which is that it is still in its infancy in terms of curricula and teaching practices. Although teachers are fully aware of the teachability of employability skills and the necessity of preparing their students for the workplace in order to contribute in boosting the economic growth, their actual teaching practices are far away from the ideal situation. The findings of this study expose the necessity for meticulous professional development programs for both secondary and university EFL teachers. Moreover, these teachers must work closely with the students to understand their needs and chart out an effective methodology to enhance their employability skills. The following practical points, which aim at solving at least part of the problem, are suggested:

1. National conferences can be organized bringing together syllabus designers, academics employers, industrialists, and international agencies to initiate a policy dialogue among these stakeholders on strategies for development of employability skills.
2. EFL curricula should center around developing employability skills.
3. Creation of entrepreneurial spirit should find a place in the EFL curricula.
4. English teachers should update themselves with employers' needs and current opportunities for international partnerships.
5. Students should be sensitized on the need for learner autonomy.

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The Impact of Oil Price on Economic Growth in Qatar (1980-2023)

Dr. May Issa Ali

mayissa56@gmail.com

Dr. Mizher Alhashimi

Malhashimi56@hotmail.com

Abstract

This study aimed to test the long-term relationship between global oil prices and economic growth in the State of Qatar (1980-2023). The ARDL methodology was used for testing. The results showed that the study variables are stable for the first difference. High oil prices have a positive impact on economic growth, as high Oil prices increasing by 1% contributes to increasing economic growth by the equivalent of 3.23%, and this confirms the role of oil revenues in Qatari economic growth.

Introduction

The Qatari Ministry of Finance announced that the budget of the State of Qatar for the first quarter of 2023 achieved a surplus of 19.7 billion riyals ($5.41 billion). The figure reflects an increase of 70 percent compared to the fourth quarter of 2022, which witnessed a profit of 11.6 billion riyals.

The Ministry stated that "total revenues for this quarter amounted to 68.6 billion riyals, of which 63.4 billion riyals were oil and gas, while non-oil revenues amounted to 5.2 billion riyals."

They indicated that the total expenditures in the same quarter of 2023 amounted to 48.9 billion riyals, of which 15.6 billion riyals were for salaries and wages and 17.3 billion riyals for current expenses, while secondary capital expenditures amounted to one billion riyals and significant capital expenditures amounted to 15.1 billion riyals.

The data of the Ministry of Finance also indicated that the actual average oil price during the quarter mentioned above amounted to 82.2 dollars per barrel, which is higher than the estimated price in Qatar's budget for the year 2023, which is 65 dollars per barrel.

The Ministry's estimated data for the state's general budget for the year 2023 estimated the surplus at 29 billion riyals for the entire year 2023, which means that about 68% of this amount has already been achieved for the first quarter of 2023 only.

Today, the Qatari economy is one of the strongest economies in the region, and among the most promising economies globally. Over the past years, the State of Qatar has succeeded in consolidating its advanced position on the global economic map in accordance with the approach drawn by His Highness Sheikh Tamim bin Hamad Al Thani, Emir of the country - may God protect him - to continue the journey of achieving Qatar National Vision 2030 towards establishing a diversified and competitive economy based on knowledge and innovation. Realizing the importance of balancing its economic policies aimed at diversifying the national economy and enhancing its natural resources and wealth, Qatar's non-oil revenues are expected to reach 43 billion riyals in 2024, an increase of about 2.4% compared to the 2023 fiscal year budget. The state has given the energy sector the necessary attention as an important source for expanding the base of the national economy by working to increase the production capacity of natural gas through the expansion of the North Field for natural gas, which will increase its production of liquefied natural gas by 46% to 126 million tons annually by 2027. These systematic economic policies have contributed to supporting all sectors of the state to become an effective partner in strengthening and supporting the national economy and enhancing investor confidence in it. The State of Qatar has also achieved great success in particular in diversifying the economic base by establishing many major economic projects related to the oil and gas industry, such as the aluminum industry and petrochemical industries, which have raised Qatar to the ranks of major producing countries in this industry. The development that has occurred in the petrochemical industries is a pioneering strategic step that contributes to diversifying

the industrial base in Qatar and developing supporting industries accompanying the basic industries with the aim of diversifying sources of income in the country and producing industrial products with added value that enhance the capabilities of the Qatari economy in global markets. The state has allocated huge investments amounting to billions of dollars to raise the State of Qatar's production to 23 million metric tons annually of various petrochemical products, especially urea, ethylene, polyethylene and melamine over the next few years. His Highness the Emir's directive to develop these projects and allocate additional amounts amounting to about 30 billion dollars is a strong confirmation and evidence of moving forward in developing these industries with well-studied and effective plans that make them integrated economic projects in terms of production, operation and export. The development in the oil and gas industry in Qatar has contributed to opening up broad horizons for the petrochemical industries. And related industries, as many experts confirm that the expansion projects in the petrochemical industries will make Qatar one of the top ten countries in the petrochemical industry in the world and will achieve huge revenues, which confirms the prominent role of the energy sector and related industries in supporting the state budget and in the development and prosperity of the Qatari economy.

The oil industries in the Middle East are considered one of the most important and prominent economic sectors in the world, as the largest crude oil reserves are located in this region. Historically, the discovery of oil in the Middle East dates back to the mid-nineteenth century, when the first oil fields were discovered in the Arabian Gulf region, starting from Bahrain to Kuwait, the Emirates, Saudi Arabia and other countries. With the development of the oil extraction industry, the Middle East has become a prominent role in the global energy market, as the Gulf Cooperation Council countries, including Saudi Arabia, the Emirates and Kuwait, are among the largest oil producers and exporters in the world. In addition, countries such as Iraq, Iran, Qatar and Oman also play an important role in the oil industry.

The impact of this industry on the economies of the Middle East is not limited to achieving huge financial revenues, but rather extends beyond that to social, political and economic impacts. For example, the oil industry provides huge job opportunities such as the infrastructure financing and services sector. As for the political impact, for example, financing infrastructure projects contributes to enhancing political and economic stability in improving relations between neighboring countries. Emphasizing its control over the global market and its importance in determining global oil policies.

However, the heavy dependence of national economies on oil makes them vulnerable to fluctuations in global oil prices and changes in global demand. At the global level, and what concerns investors when trading in foreign markets, is the extent to which the global oil market affects global economies. An increase in oil prices can lead to a slowdown in economic growth and increased inflation in many oil-consuming countries, while sharp declines in oil prices can lead to economic difficulties for producing countries.

Global demand for oil remains linked to improved global economic growth and developments in the economies of major countries such as China and the United States. Emerging markets may witness an increase in demand for oil as they develop and expand, which may enhance the importance of the crude oil industry in the future. In short, the future of the crude oil industry in the Middle East depends on developments in several factors, including technology, politics, the environment, global economies, and geopolitical and economic challenges. In my opinion, the role of crude oil in the Middle East economy will remain vital and central, despite the many challenges. It is important for Arab countries to adopt sustainable strategies to diversify their economies and rely on clean and renewable energy sources in addition to oil, in order to ensure sustainable development and achieve economic stability in the future. Achieving this goal requires international cooperation and investment in innovation and technology to improve production efficiency and preserve the environment, as well as enhance transparency and governance in the energy sector. In addition, Arab countries must cooperate to promote sustainable development and provide job and educational opportunities for young people, which will facilitate

The significance of study

The energy sector is considered one of the most important sectors of the Qatari economy. The revenues that Qatar receives annually from gas exceed $100 billion. These revenues constitute the main engine for Qatari economic growth, so measuring the impact of high oil prices on long-term growth is of great importance to the decision

maker.

Study objective

This study aimed to identify the impact of global oil prices on Qatari economic growth during the period 1980-2023 by using the ARDL methodology.

Oil revenue and growth in Qatar

It is noted from Figure 1 that there is a strong correlation between the rise in oil prices and the Qatari GDP, and this clearly proves that oil revenues constitute one of the pillars of the Qatari economy. The State of Qatar, although it is not an oil exporter, is an exporter of natural gas, and the rise in global oil prices is reflected in the rise Gas This is what makes there a strong relationship between oil prices and gas prices.

Figure (1) The Development of Crude oil prices and economic growth in Qatar (1980-2023)
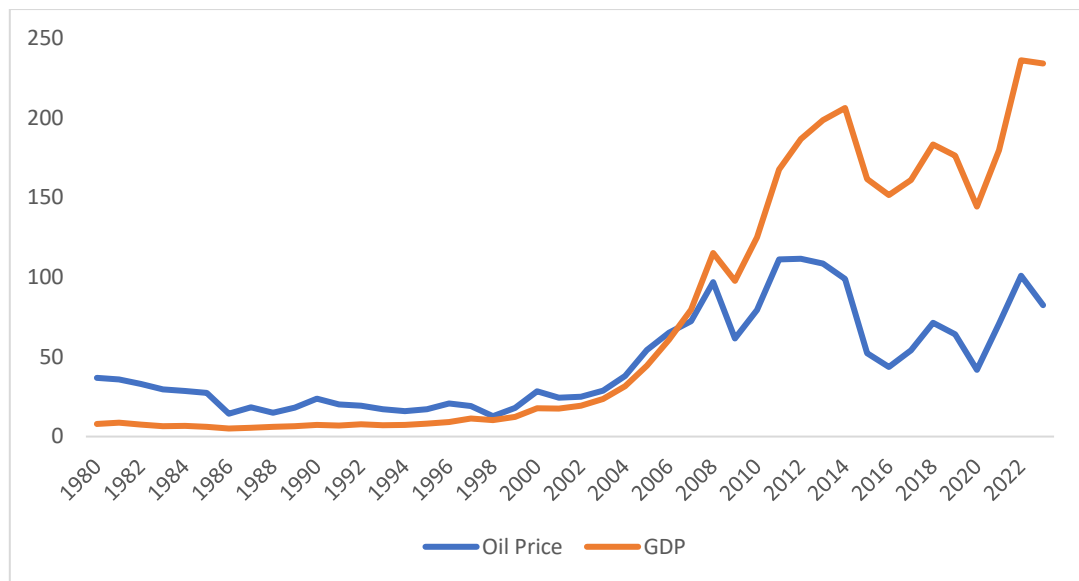
Source: www.worldbanak. Data.com

Literature review

Rumbia et al. (2022) This research aimed to examine the effect of crude oil prices and internet on economic growth in Timor Leste. An autoregressive distributed lag model was used to analyze the time series data from 2005 to 2020. The cointegration test results showed that crude oil prices, internet, and economic growth are cointegrated. Based on the model coefficients, the estimation results revealed crude oil prices and internet have a significant effect on the country's long-term and short-term economic growth. The long-term effect of crude oil prices on economic growth is negative. In every 1% increase of crude oil prices, there is a 10.3% decrease in economic growth. A 1% reduction in crude oil prices leads to a 10.3% economic growth. Furthermore, the long-term effect of the internet has a long-term positive effect on economic growth. Every 1% internet increase, there is a corresponding 27.65% increase in economic growth.

Using the ARDL model, Omitogun et al. (2018) examined the effect of crude oil prices on economic growth in Nigeria. The test results drawn from the years 1981 to 2016 revealed that crude oil prices have a significant long-term and short-term influence on the economic growth of a country. The long-term effects of crude oil prices on economic growth showed a positive correlation. Wen et al. (2018) used the TVP-VAR model to examine the effect of crude oil prices on economic growth in China. Based on the analysis of the results conducted every month from January 1996 to June 2017, there was a conclusion that the price of crude oil positively affects the economic growth of a country in the long run and short term. Using wavelet analysis, Mo et al. (2019) examined the effect of crude oil prices on economic growth in BRICS countries using quarterly data in 1996Q2-2018Q3. The data results analysis showed that crude oil prices

positively affect economic growth in each country (China, Brazil, Russia, South Africa, and India) in the long and short term.

Abbritti et al. (2020) examined the effect of crude oil prices on economic growth in the United States, and the results indicated that rising crude oil prices increase economic growth. Sadath and Acharya ,(2021)using annual data analysis from 1996 to 2017, tested the effect of crude oil price asymmetry in India with the assistance of the Structural Vector autoregressive model. The conclusion of the results showed that indeed crude oil price changes affect economic growth.

Kriskkumar et al. (2022) This paper attempts to investigate if the effect of oil price on growth is asymmetrical for Malaysia, a small-open-dynamic oil-exporting country, over a period from 1981 to 2017. The empirical method employed in this study is the augmented autoregressive distributed lag model (ARDL) bound test approach and the recent innovative nonlinear autoregressive distributed lag (NARDL) model. Results suggest that neglecting nonlinearities can lead to misleading results. More precisely, the result reveals that adjustments in the price of oil influence Malaysia's economic growth asymmetrically. An increase and decrease in the price of oil strengthen the economic growth of Malaysia, demonstrating Malaysia's ability to be both an oil producing country and a trading nation. These results strongly imply that Malaysia is able to take advantage of changes in the oil price efficiently.

Nusair (2016) This paper examines the effects of oil price shocks on the real GDP of the Gulf Cooperation Council (GCC) countries. The empirical method used is the nonlinear cointegrating autoregressive distributed lag (NARDL) model of Shin et al. (2013) in which short-run and long-run nonlinearities are introduced via positive and negative partial sum decompositions of the explanatory variable(s). The results suggest evidence of asymmetries in all the cases. We find significant positive oil price changes in all the cases with the expected positive sign, implying that increases in oil price lead to increases in real GDP. Conversely, negative oil price changes are significant for only Kuwait and Qatar with the expected positive sign, suggesting that decreases in oil price lead to decreases in their real GDP. Further analysis implemented using panel data shows that positive oil prices changes increase real GDP and negative changes decrease real GDP. Overall, the results suggest that positive oil price changes have a considerably larger impact on real GDP than negative changes.

Charfeddine and Barakat (2020) The aim of this paper is to explore the short- and long-run asymmetric impact of oil prices shocks and oil and gas revenues changes on the total real GDP, and the level of economic diversification of the Qatar economy. To this end, two econometric approaches have been used: (1) the A-B structural vector autoregressive (AB − SVARX) model with exogenous variables where four different asymmetric oil prices and oil and gas revenues measures have been employed, and (2) the nonlinear autoregressive distributed lag (NARDL) model. The results show that, in the short-run, the responses of both total real GDP and non-oil real GDP to negative shocks on real oil prices and real oil and gas revenues are higher than the impact of

positive shocks, indicating evidence for the existence of asymmetric impact of shocks in the short-run. However, the results suggest that the impact of shocks do not last more than three quarters. This evidence for the existence of asymmetric behavior is also confirmed by the NARDL analysis, which shows that, in the long-run, positive oil prices shocks and oil and gas revenues changes have higher impact on the two proxies of economic activity than negative changes do. A result that confirms the resilience of the Qatar economy to negative shocks and the positive role played by the energy sector in improving the Qatar economic diversification degree. Finally, the results show that the non-oil sector is completely resilient to negative shocks in the long-run as the impact of negative shocks are insignificant on the non-oil real GDP. Several policies aimed to improve the level of economic diversification of the country and delink the government revenues from oil and gas revenues are proposed and discussed.

Methodology

Autoregressive distributed lag (ARDL), developed by Pasaran et al. (2001), is used to clarify the long- and short-term relationships and test the validity of Thirlwall's law. This method differs from previous approaches in several ways, including the ability to determine the integrated relationship between the dependent and independent variables over the long and short terms, establish variables at different stationary levels, and, most importantly, eliminate autocorrelation.

Study model

Many researchers, such as El Anshasy and Bradley(2012), Hamdi and Sbia (2013), and Ozsagir et al. (2011), have pointed out that oil prices have a imperative impact on economic growth, especially in oil-exporting countries. Qatar is considered one of the leading countries in gas exports. The rise in oil prices is directly linked to the rise in gas prices. The equation (1) below shows that economic growth Qatar is affected by international oil prices.

$$GDP = F(P) \qquad (1)$$

$$\text{GDP}_{\text{LR}} = \alpha + \rho P + + \omega_t \qquad (2)$$

$$\Delta\text{GDP}_{\text{LR}} = \alpha + \sum_{i=1}^{m1} \pi\Delta\text{GDPd}_{t-i} \sum_{i=0}^{m2} \rho\Delta P_{t-i} + \delta_1\text{GDPd}_{t-1} + \delta_2 P_{t-1} + v_t \qquad (3)$$

Where GDP is Gross domestic product and LR for the long run, P is the Crude oil price, v_t is the classical regression error term.

The short-run dynamic adjustment process should be combined with the long-run joining in equation (3), according to recent economic literature. By expressing equation (4) in an error-correction model as described in Pesaran et al. (2001), it is possible to accomplish the goal of this work. In light of this, the cointegration strategy offers a few

methodological benefits over alternative single cointegration techniques. The primary benefit is that the ARDL method works regardless of whether the underlying regressors are mutually cointegrated, purely 1(0), or purely 1(1). The other key benefit of this strategy is that, as Narayan (2005) discusses, limits testing's small sample qualities are significantly superior to multivariate cointegration.

To examine whether variables move toward long-run equilibrium value adjustment, estimates of $\delta_1 - \delta_2$ are used to form an error-correction term (EC). Thus, lagged variables in Eq. (3) are changed by EC_{t-1} establishing a modified form of Eq. (4) as follows:

$$\Delta\text{GDP}_{\text{LR}} = \alpha + \sum_{i=1}^{m1} \pi\Delta\text{GDPd}_{t-i} \sum_{i=0}^{m2} \rho\Delta\text{P}_{t-i} + \delta_1\text{GDPd}_{t-1} + \delta_2\text{P}_{t-1} + \lambda EC_{t-1} + \mu_t$$
(4)

Where λ is the speed of adjustment parameter. A significant negative coefficient EC_{t-1} supports adjustment toward long-run equilibrium. This study depends on annual data from 1980-2023 for Qatar. That data is primarily collected from the World Bank database. Study variables are and gross domestic product and crude oil prices.

Empirical results

The findings of the bound test indicate the existence of a long-term association. This study used annual data with a sample size of 43 observations covering 1980–2023, and the maximum lag length in the ARDL was set to 1.

Because time series data frequently lacks a consistent trend and causes their means to fluctuate constantly, testing for the presence of a unit root is required to prevent erroneous results. The tests that were used were the Phillips-Perron test (PP), Phillips & Perron (1988), and the Augmented Dickey-Fuller (ADF), Dickey & Fuller (1979).

Table 1. Unit root results

Variables	At level		First difference	
	ADF Test	PP test	ADF Test	PP test
GDP	0.577	0.588	-5.456	-5.136
P	-1.405	-1.366	-5.989	-6.041

*** significance at 1%, 5%,10%. ** significance at 5%, 10%.

The results specified that the null hypothesis of the series contains a unit root that cannot be rejected at a level for all variables in the ADF and PP unit root approaches. However, at first difference, this null hypothesis can be rejected because those variables are all stationary. Thus, the long-run relationship among these variables can be tested.

Table 2. ARDL bounds cointegration test results

Null Hypothesis: No levels relationship F-Bounds Test

Test Statistic	Value	Significance	I(0)	(1)
		10%	3.02	3.51
F-statistic	9.26	5%	3.62	4.16
K	1	2.5%	4.18	4.79
		1%	4.94	5.58

Notes: *, **, and *** denote significance at 10%, 5%, and 1% levels, respectively. For more details, Narayan (2005), showed Critical values (Table Case III: Unrestricted intercept and no trend; pg. 1988).

Table 2 shows that the F-statistic is higher than the critical upper bound value at the 10% significance level; GDP and oil prices have a long-run cointegration relationship. After the existence of co-integration is confirmed, the long run and short run are presented in Table 3 below;

Table 3. Bound test results

Panel A: Long- run results. Dependent Variable LM		
Regressors	**Coefficient**	**T-ratio**
LP	3.2336	0.1187
Constant	-4.3548	0.3331
Panel B: short-run results. Dependent Variable LM		
Regressors	**Coefficient**	**T-ratio**
DLOG(P)	0.5281	0.000
CointEq(-1)*	-0.0176	0.000

Table 3 shows that the income elasticity of imports is positive and significant in the long and short run, an increase of 1% in oil price will lead to an increase in economic growth by 3.23% in the long run, as well as in short-run results reveal that an increase 1% in oil price will generate 0.5% in economic growth in Qatar. This result confirms that economic growth in Qatar embedded to increase in oil prices. The coefficient of Error Correction Term (ECM) which yields the speed of adjustment is negative and significant, it notifies us that 1.76% of all errors or disequilibrium in the short term is adjusted in the next period.

Causality test

Null Hypothesis	Obs	F-Statistic	Prob.
LOG(P) does not Granger Cause LOG(GDP)	42	3.25431	0.0499
LOG(GDP) does not Granger Cause LOG(P)		3.77998	0.0321

Stability test:
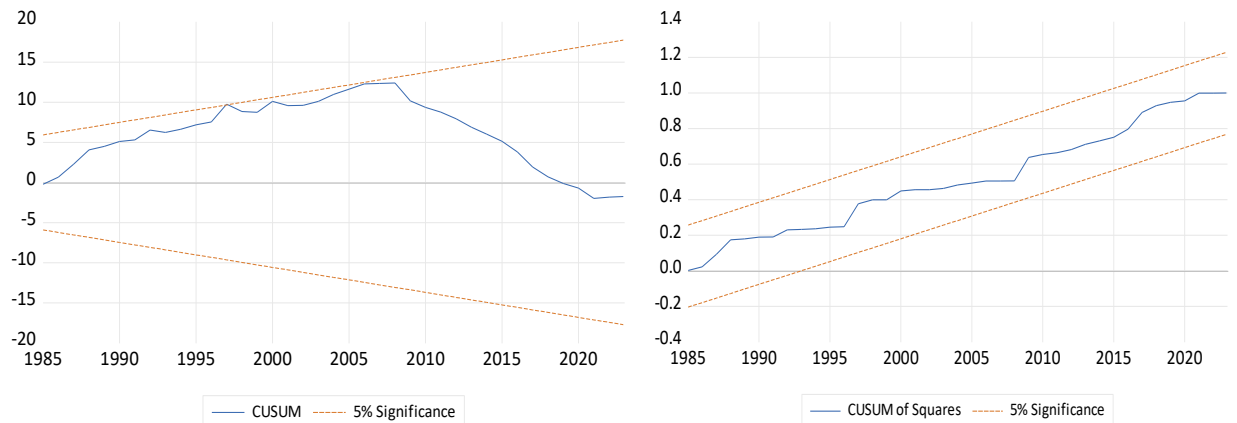
Conclusion

The results of the econometric analysis to test the relationship between oil prices and economic growth showed that high oil prices have a positive impact on Qatari economic growth. In recent years, the State of Qatar has worked to invest gas revenues efficiently, which has enabled it to undertake many projects linked to industrial nature, making it a destination for local and foreign investment, so the study recommended that to maximize benefits from these returns, it must develop the oil industries, especially gas-related industries.

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The Impact of Trade Openness on Foreign Direct Investment Inflow in Jordan: Econometric Study (1990-2022)

Dr. Nader Alzabadi

alzabadi@yahoo.com

Dr. Issam AL Dabbagh

isamdabagh@hotmail.com

Abstract

This study aimed to identify the impact of trade openness on the inflow of foreign investment in Jordan during the period 1990-2022. The researcher worked on using ARDL. This methodology is suitable for small samples. The results showed that the variables are stable on the first difference, this is what makes Bound test applicable. The results of the long-term analysis indicated that increasing openness by 1% contributes to an increase in foreign investment equivalent to 4%, moreover, that increasing openness in the short term by 1 contributes to an increase in foreign investment equivalent to 1.7%. The study recommended the necessity of maintaining this level of trade openness toward the world.

Keywords: Trade openness, inflation, foreign direct investment.

Jel: E60, O11, O24

Introduction

Trade is an essential factor in the quest to eradicate global poverty. Countries that open their doors to global trade typically grow faster, are able to innovate, improve productivity, and provide greater incomes and opportunities for their people. Trade openness also benefits low-income countries by providing affordable goods and services to their consumers. Through trade and global value chains, integration into the global economy helps promote economic growth and reduce poverty at both the local and global levels. The World Bank Group's work in countries including Bosnia and Herzegovina, Macedonia, and Indonesia has helped facilitate cross-border trade, make logistics more reliable, and simplify customs clearance procedures. These projects and others are helping to create a more open, reliable, and predictable global trading system for everyone.

Economic freedom is the important framework that enables companies and investors to carry out their economic and other activities without any interference from the government, as it allows them to exercise their responsibilities and make their decisions as long as they have positive benefits for the public good and contribute to achieving economic development. Many economists believe that the relative importance of economic freedom as a determining factor for attracting foreign direct investment, it has surpassed other traditional economic determinants.

Accordingly, many economists and politicians confirm that host countries that enjoy higher levels of economic freedom have a greater ability to attract foreign direct investments. For example, the main reason for the success of Asian countries in attracting large flows of foreign capital is the removal of barriers and restrictions that would Obstructing the path of investors, reducing and removing barriers can be translated into the state's ability to greatly facilitate export and import operations.

The Importance of the study

Trade openness plays a major role in creating the investment environment. Countries that wish to attract more foreign investments resort largely to openness to the outside world by facilitating trade operations, whether exports or imports. Jordan is one of the countries that has sought in recent years to encourage foreign investments. This study attempts to show the impact of trade openness and its role in attracting foreign investments.

Trade openness and foreign direct investments in Jordan

Jordanian trade openness to the outside world constituted a new phase of macroeconomic policies. Privatization projects and bilateral trade agreements contributed significantly to economic modernization despite the many obstacles. Despite the small size of the Jordanian economy, there are multiple latent investment opportunities. There is no doubt that openness contributed to the increase in foreign investments, the political and economic crises that the region is experiencing, had a major impact on this, and Figure No. (1) shows the development of the flow of foreign investments to Jordan during the period between 1990-2022.
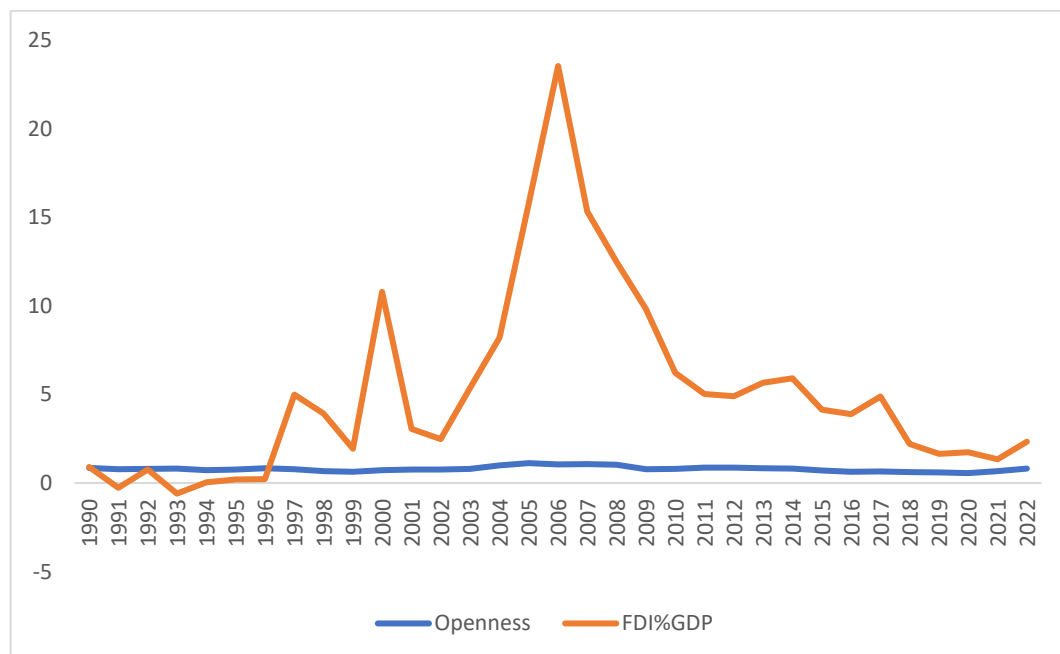
Literature review

Trade openness is considered one of the important factors in the flow of foreign investments. The acceleration in trade relations between countries that the world has witnessed has strengthened the role of foreign investments in achieving economic development. Trade liberalization has become a basic requirement in dealing with global markets, especially in light of technical development and global competition. There are many Previous studies include the following:

Hisham Mohamed Hassan (2023) examined the importance of trade openness for attracting foreign direct investment (FDI) inflows, for the GCC economies (Kingdom of Saudi Arabia, United Arab Emirates, Oman, Qatar, Kuwait and Bahrain) covering the period 1995–2018, using panel VAR model. It provides a direct test of causality between FDI inflows, trade openness, GDP per capita, and inflation. The main empirical findings of the panel analysis reveal that in the long run, trade openness contributes positively to the inflow of FDI in the GCC economies. The panel causality analysis shows that there is a unidirectional causal relationship running from trade openness and inflation to FDI, whereas no causality was traced with other variables.

Banday (2021) In this paper we investigate the causal relationship between foreign direct investment, trade openness and gross domestic product in BRICS countries over the period of 1990–2018. We applied auto regressive distributed lag model to test cointegration and the Dumitrescu and Hurlin Granger causality tests. Empirical results show that FDI and trade openness have a positive impact on long-term economic growth. We also find there is a long-run relationship from both real effective exchange rate and gross capital formation to economic growth. The main results of causality analysis reveal that there is bidirectional causality from foreign direct investment to economic growth, trade openness to foreign direct investment, and unidirectional causality from trade openness to foreign direct investment.

Lien, Nguyen Thi Kim (2021) The purpose of this paper is to study the impact of trade openness on foreign direct investment (FDI) inflows into Vietnam, an emerging country with relatively high trade openness in recent years. The study used the vector autoregression (VAR) model to examine the impact of trade openness on FDI in Vietnam, in the period from 2005 to 2019. The research data are time-series data, with quarterly frequency, from 2005:Q4 to 2019:Q3. The FDI data were collected by International Financial Statistics. The data of trade openness were calculated based on Vietnam's export, import, and GDP data collected by the General Statistics Office of Vietnam. The estimated result shows that the trade openness has a positive effect on FDI. The current FDI is heavily influenced by FDI in the past with an average explanation of 74%. The main findings indicate that trade openness has a positive effect on FDI inflows into Vietnam. The findings also show that FDI in Vietnam is significantly affected by the shocks of the FDI itself in the past. The findings of the study suggest the Vietnamese Government improves the quality of trade openness and FDI, continues and maintains economic relations with other countries to increase trade openness.

Research results of Djulius (2017) shows the impact of increasing international trade of host countries with FDI. Specifically, trade openness has a positive relationship with FDI. Burakov, Intse, and Freidin (2018) studied FDI inflows in the Russian Federation and Belarus between 1997 and 2017. Research results show that trade openness has a positive impact on FDI.

Mphigalale Tshifhiwa Victor (2011) The impact of trade openness on foreign direct investment (FDI) inflows in emerging market economies, This study examines the influence of trade openness on foreign direct investment (FDI) inflows in emerging market economies. The study focuses on a sample of 15 emerging market economies during 1992-2006. The econometric framework utilised in the study consist of panel data analysis, although the pooled OLS model is first estimated in order to give the reader a sense of what to expect in the main results. Using alternative estimation techniques, the study shows that, indeed, trade openness carries with it the potential of harnessing more FDI into emerging market economies but this need to be complemented by appropriate macroeconomic and sectoral policies. Notably, as the

results of the study suggest, foreign investors generally consider the host country's market size, its labour market practices with respect to the real wage, and the current and expected rates of inflation, in order to invest in the country. The results from the study suggests that, given identical trade openness strategies, emerging market economies that have larger market sizes are likely to be more successful in attracting FDI than those with smaller market sizes. The evidence also suggests that, given identical trade openness strategies, emerging market economies that have lower real wages and lower price inflation are likely to be more successful in attracting FDI than those with high real wages and high or variable price inflation. Finally, the findings of this study do not provide strong evidence in support of the fact that infrastructural development, property rights and external debt matter in attracting FDI into emerging markets. The policy implications of this study for South Africa, which is currently contesting for FDI with the fast growing and relatively larger economies of Brazil, Russia, India and China (otherwise referred to as, BRICs), is that urgent attention needs to be given to the rising prices and wages provoked by increasingly strong unions, and weak anti-trust regulations in the country, in spite of a fairly successful inflation targeting framework adopted a decade ago.

Shah and Khan (2016) assessed the impact of trade liberalization on inward FDIs in six emerging countries, namely Brazil, China, India, Mexico, the Russian Federation, and Turkey, for the time period of 1996 to 2014 using the random effects model. The independent variables—total population, GDP per capita, total trade, primary education, preferential trade agreements, and regional trade agreements—are used as proxies for market size, development level, openness, human capital, and trade liberalization. As results, market size, and human capital have a positive and significant impact on FDI inflows, while trade and regional trade agreements prove to be insignificant, but preferential trade agreement positively impacts on FDI inflow.

Noris Fatilla Ismail, Suraya Ismail (2023) Trade Openness and its influence on Foreign Direct Investment in ASEAN-3, Using annual data from 1980 to 2019, this study explores trade openness and its influence on FDI in ASEAN-3. The study includes Malaysia, Indonesia, and Thailand are synonymous as ASEAN-3 countries. The Autoregressive Distributed Lag (ARDL) study shows that trade openness has influenced FDI inflow into ASEAN-3. According to empirical data, trade openness and FDI inflows in Malaysia and Indonesia have a strong relationship. Meanwhile, Thailand has a negative relationship between trade openness and FDI inflows. Overall, this study can help policymakers improve their future planning in order to capitalise on greater prospects for FDI inflows into ASEAN-3 countries.

A study conducted by Asongu et al. (2018) on and MINT (Mexico, Indonesia, Nigeria, and Turkey) countries demonstrated that market size, infrastructure availability, and trade openness play significant roles in attracting FDI. According to Jabri et al. (2013), the determinants of FDI inflows to Middle East and North Africa (MENA) region

covering the period of 1970-2010 found that trade openness and economic growth had a positive influence on FDI inflows.

Vijayakumar, Sridharan, and Rao (2010) studied BRICS countries and found that variables like market size, labour cost, infrastructure, exchange rate and gross capital formation has a positive and significant impact on FDI inflows. On the other, variables like trade openness and economic stability and growth were found insignificant.

Methodology

Autoregressive distributed lag (ARDL), developed by Pasaran et al. (2001), is used to clarify the long- and short-term relationships and test the validity of Thirlwall's law. This method differs from previous approaches in several ways, including the ability to determine the integrated relationship between the dependent and independent variables over the long and short terms, establish variables at different stationary levels, and, most importantly, eliminate autocorrelation.

Model specification

The association between trade openness and FDI will be assessed using a time series data set from Jordan during the period 1990-2022. Data were collected from the World Development Indicator published by the World Bank. FDI inflows are the dependent variable, The trade openness, which is the sum of imports and exports scaled by GDP (OP), population as human index (POP) and value of percentage in the consumer price index representing the rate of inflation (INF). The model used by Abdul Rahim et al. (2018), Boateng et al. (2015) and Qamar Zaman et al. (2018) to determine the link between trade openness and FDI inflows.

The equation (1) below shows that economic growth Qatar is affected by international oil prices.

$$FDI = F(OP, INF, POP) \qquad (1)$$

$$\text{FDI}_{\text{LR}} = \alpha + \pi OP + \rho INF + \delta POP + \omega_t \qquad (2)$$

Where FDI foreign direct investment and LR for long run, OP is openness degree, INF is inflation rate, POP population, ω_t is the classical regression error term.

$$\Delta\text{FDI}_{\text{LR}} = \alpha + \sum_{i=1}^{m1} \sigma\text{FDI}_{\text{LR}-i} \sum_{i=0}^{m2} \pi\Delta\text{INF}_{t-i} \sum_{i=0}^{m3} \rho\Delta\text{OP}_{t-i} + \sum_{i=0}^{m4} \delta\Delta\text{POP}_{t-i} + \delta_1\text{FDI}_{\text{LR}-1} + \delta_2\text{INF}_{t-1} + \delta_3\text{OP}_{t-1} + \delta_4\text{POP}_{t-1} + v_t \qquad (3)$$

To examine whether variables move toward long run equilibrium values adjustment, estimates of $\delta_1 - \delta_4$ are used to form an error-correction term (EC). Thus, lagged variables in Eq. (3) are changed by EC_{t-1} establishing a modified form of Eq. (4) as follow:

$$\Delta\text{FDI}_{\text{LR}} = \alpha + \sum_{i=1}^{m1} \sigma\text{FDI}_{\text{LR}-i} + \sum_{i=0}^{m2} \pi\Delta\text{INF}_{t-i} + \sum_{i=0}^{m3} \rho\Delta\text{OP}_{t-i} + \sum_{i=0}^{m4} \rho\Delta\text{POP}_{t-i} + \lambda EC_{t-1} + \mu_t \qquad (4)$$

Where λ is the speed of adjustment parameter. A significant negative coefficient EC_{t-1} support adjustment toward long run equilibrium.

Empirical results:

The findings of the bound test indicate the existence of a long-term association. This study used annual data with a sample size of 32 observations covering 1990–2022, and the maximum lag length in the ARDL was set to 1.

Because time series data frequently lacks a consistent trend and causes their means to fluctuate constantly, testing for the presence of a unit root is required to prevent erroneous results. The tests that were used were the Phillips-Perron test (PP), Phillips & Perron (1988), and the Augmented Dickey-Fuller (ADF), Dickey & Fuller (1981).

Table 1. Unit root results

Variables	*At level*		*First difference*	
	ADF Test	PP test	ADF Test	PP test
FDI	-2.007	-2.048	-5.682	-5.683
OP	-2.419	-1.993	-3.899	-3.8007
INF	-3.500	-3.285	-6.408	-14.361
POP	1.045	1.226	-3.553	-1.934

*** significance at 1%, 5%,10%. ** significance at 5%, 10%.

The results specified that the null hypothesis of the series contains a unit root that cannot be rejected at a level for all variables in the ADF and PP unit root approaches. However, at first difference, this null hypothesis can be rejected because those variables are all stationary. Thus, the long-run relationship among these variables can be tested.

Table 2. Johanson Cointegration test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.710386	48.68328	47.85613	0.0417
At most 1	0.201122	11.50708	29.79707	0.9476
At most 2	0.108104	4.770674	15.49471	0.8327
At most 3	0.043636	1.338501	3.841465	0.2473

Table 3. Bound test results

Panel A: Long- run results. Dependent Variable LM				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(OP)	4.084997	1.519384	2.688587	0.0124
LOG(POP)	1.197011	0.736133	1.626080	0.1160
LOG(INF)	-0.174477	0.196774	-0.886691	0.3834
C	-16.07922	11.44737	-1.404622	0.1720
Panel B: short-run results. Dependent Variable LM				

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(OP)**	1.729339	0.791697	2.184344	0.0381
LOG(POP)**	0.506742	0.372368	1.360864	0.1852
LOG(INF(-1))	-0.073863	0.073753	-1.001498	0.3258
CointEq(-1)*	-0.423339	0.110080	-3.845735	0.0007

Table 3 shows that the income elasticity of imports is positive and significant in the long and short run, an increase of 1% in oil price will lead to an increase in economic growth by 3.23% in the long run, as well as in short-run results reveal that an increase 1% in oil price will generate 0.5% in economic growth in Qatar. This result confirms that economic growth in Qatar embedded to increase in oil prices. The coefficient of Error Correction Term (ECM) which yields the speed of adjustment is negative and significant, it notifies us that 1.76% of all errors or disequilibrium in the short term is adjusted in the next period.

Stability Test

Figure (2) stability test

CUSUM —— 5% Significance

CUSUM of Squares —— 5% Significance
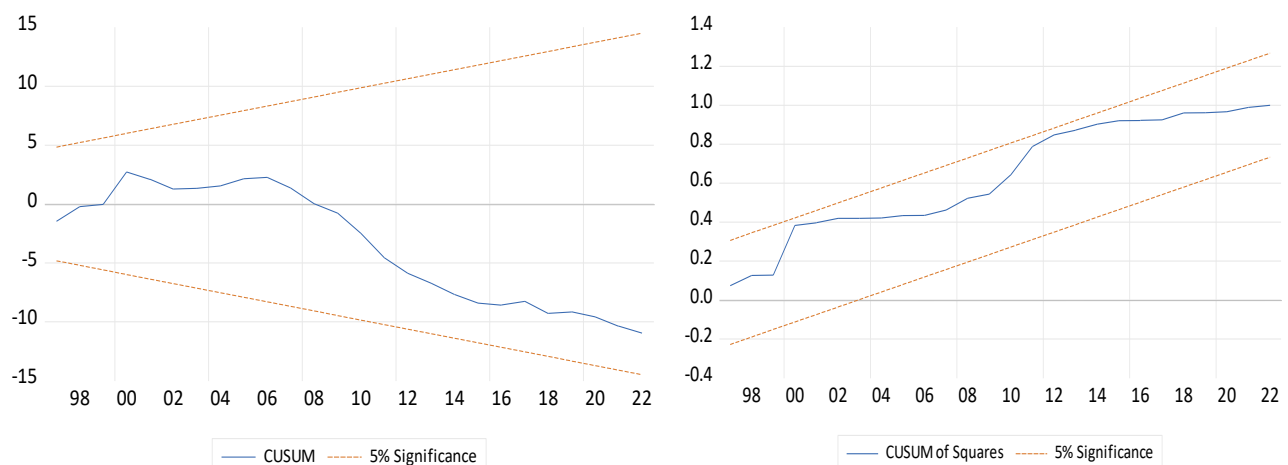
Conclusion

The results of the econometric analysis showed that trade openness has a significant impact on foreign investments in Jordan, whether in the long or short term. Trade openness is the motivating factor for investors to enter the Jordanian market. Jordan, as a country that enjoys political and economic stability in a turbulent region, has worked to connect to the global market. Largely through trade liberalization programs and the free trade agreement particularly with the United States in 2001, which allowed it to be a suitable platform for the flow of foreign investments despite its limited size. Accordingly, the study recommends the need to overcome other reasons that are largely associated with trade liberalization, especially the infrastructure sector. Because of this major role in increasing the flow of foreign investment.

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