

Current Account Determinants in Jordan: An ARDL Approach

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Abstract: The current account provides insights into trade, capital flows, financial stability, and international competitiveness. Policymakers, investors, and economists use this measure to monitor a country's economic health and to make informed decisions about trade, investment, and monetary policy. This study investigates the determinants of current account in Jordan, using an Auto-Regressive Distributed Lag approach to estimate the long- and short-run effects of fiscal balance, openness to trade, oil prices, foreign reserves, investment, and shocks for the period 1994-2021. The study provides support for the significant positive effect of fiscal balance and oil prices on current account, while revealing a significant negative impact of openness to trade and investment. It further shows that in the long run, the system tends to equilibrium, which is also confirmed by the effect of shocks, which is significant only in the short term, but not in the long run. Based on these results, the study concludes with evidence-based policy recommendations to grant the sustainability of current account.

Keywords: Current account, Jordan, Fiscal Balance, Oil Prices, Openness, ARDL

1. INTRODUCTION

The current account is an important measure of a country's economic performance and reflects its position in the global economy. It is a measure of the country's international trade, including goods and services, as well as income received from investments and transfers. Overall, the current account provides an important snapshot of a country's international trade and financial transactions. Therefore, policymakers, economists, and investors often closely monitor a country's current account balance as it can provide insights into the health of its economy and its role in the global market. A current account surplus can indicate a strong external sector, while a current account deficit can indicate potential vulnerability and dependence on foreign borrowing.

Persistent current account imbalances in many countries, especially the developing ones, stirred concern among international institutions such as the International Monetary Fund (IMF) and the World Bank (WB), policymakers, and economists to make a clear comprehension of the CA imbalances' role in macroeconomic insights. The determinants of a country's CA imbalances, whether these imbalances are structurally normal or need fundamental policy shifts to correct them are central issues to the debate on CA imbalances (Kwalingana & Nkuna, 2009). Recent research has been also focusing on the regional transmission of shocks in the current account balances (Beirne et al., 2021). In addition, defining the determinants of the CA is one of the earliest steps to assess the sustainability of the current account deficit.

The present study aims at contributing to the literature on current account determinants, focusing on the case of Jordan, a small upper-middle-income open economy, which is characterized by a chronic deficit in its balance of trade. It is in general an interesting research question to investigate the key determinants of current account in countries with current account imbalances to generate a thorough understanding of how the country manages to finance the deficit to avoid balance of payment (BOP) crises and financial crises. Regarding the case of Jordan, the large deficit in the trade in goods is mitigated, but not compensated, by a timid surplus in trade in services and primarily by the surplus in secondary income (foreign grants and remittances). To bring the balance of payment to an equilibrium, Jordan is envisioned to the capital and financial accounts, whereas FDI and borrowing play a major role. The study employs an Auto -Regressive Distributed Lag (ARDL) approach to estimate the long- and short-run effects of fiscal balance, openness to trade, oil prices, foreign reserves, investment, and shocks on current account over the years 1994 to 2021.

2. LITERATURE REVIEW

Overall, a country's CA imbalances are influenced by a wide range of factors, and their causes can be complex and interrelated. Understanding the determinants of CA imbalances provides insights into the long-term economic prospects of a country, as it reflects the interplay between macroeconomic, institutional, and financial variables (Altayligil & Çetrez, 2020). Much of the debate on CA imbalances centers on understanding the specific factors determining a country's CA balance, including whether they are structurally normal or call for significant policy changes (Kwalingana & Nkuna, 2009).

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This is relevant to understand the sustainability of current account imbalances, which “implies that an economy can meet its intertemporal budget constraint in the long run without a drastic policy change, such as currency devaluation or sharp reduction in government expenditures” (Dash, 2020). The sustainability of the current account can be assessed by analyzing the composition of the deficit to determine if it is caused by structural issues, such as a lack of competitiveness, or temporary factors such as fluctuations in commodity prices or exchange rates (Altayligil & Çetrez, 2020). A further approach to capture the sustainability of CA imbalances relies on evaluating the sources of financing for the deficit, with sustainable financing coming from foreign investment rather than short-term loans. Assessing the size and trend of the deficit in comparison to GDP and export earnings can also provide insight into its sustainability. Considering the policies and measures taken by the government to address the deficit, such as promoting export-oriented industries or reducing import subsidies, can further inform the analysis. Ultimately, a comprehensive evaluation of the external sector and accompanying policies is necessary to gauge the sustainability of a current account deficit.

In general, the determinants of the CA balance can be classified as internal and external. Among the external ones, openness to trade, terms of trade, exchange rate, oil prices, and foreign direct investment play a central role.

International trade policies and terms of trade, that is the ratio of export to import prices, are useful in understanding the conditions under which trade takes place between a country and the rest of the world. As such they influence the CA balance (Debelle & Hamid, 1996; Aristovnik, 2006). The degree of openness to trade in a country has been shown to play a significant negative effect on the current account, in particular for developing countries (Chinn and Prasad, 2003). Furthermore, empirical studies confirm that real exchange rate depreciation can be beneficial to the current account balance (Viera & Mac Donalds, 2020). Most of the studies indicate that higher oil prices improve the CA for oil exporting countries and tend to deteriorate it for oil importing countries, as the demand elasticity of crude oil is typically low (see Varlik & Berument, 2020, for the case of Turkey). There is also evidence for improvements in the CA for non-oil exporting countries, through workers’ remittances, grants, and/or international tourism (Aristovnik, 2007; Morsy, 2012; and Batdelger & Kandil, 2012). In general, however, the effect on current account balances varies depending on how much a country is reliant on oil imports or how significant an exporter is in terms of oil production (Altayligil & Çetrez, 2020). Foreign Direct Investments are often regarded as a significant way of financing a current account deficit (Ariyani et al., 2018; Feriyantoa, 2020). Nevertheless, there is mixed evidence on the links between FDI and current account, with cross-country differences (Bedir & Soydan, 2016).

Among the key internal determinants of a country's CA, there are fiscal deficit and economic performance, foreign reserves, natural resources endowment, savings, and investment rates. Policymakers and investors should be aware of these internal factors when assessing a country's economic

outlook and potential risks associated with its current economic policies.

Fiscal deficit often leads to a deterioration in the CA balance, as it increases borrowing and thus interest rates, leading to increase in imports and decrease in exports (Daoud et al., 2023). This relationship is known in the literature as the twin deficit (Bollano & Ibrahimaj, 2015; El-Khishin & El-Saeed, 2021; Koukouritakis & Panousis, 2020). The twin deficit phenomenon occurs when a country experiences a simultaneous shortfall in both its current account and fiscal balance. A negative current account balance means that a country imports more than it exports, resulting in a net outflow of currency. The fiscal balance, on the other hand, refers to the difference between a country’s revenue and spending. A negative fiscal balance means that a country is spending more than it is earning, resulting in excessive borrowing. When both of these deficits occur at the same time, it can lead to economic instability and currency depreciation. This phenomenon is often seen in developing countries that are heavily reliant on imports and foreign aid. To overcome the twin deficits, governments must implement policies that promote exports while curbing spending and increasing revenues. Foreign reserves have been also seen in the literature as an alternative to debt to compensate for current account imbalances (Edwards, 1990).

Further, also natural resource endowment can affect the CA, as the presence of fossil fuels and minerals often leads to a trade surplus due to the high demand for those resources in global markets (Araujo et al., 2016).

A country’s savings and investment rates are important internal determinants of its current account balance. If a country has high savings rates and low investment rates, this can lead to a current account surplus as savings are channeled into foreign investments. Conversely, if a country has low savings rates and high investment rates, this can lead to a current account deficit as it borrows from abroad to finance investment. This mechanism conceives a CA deficit as a surplus of investment over savings and is at the basis of the saving/investment paradigm (Alexander, 1959; Borio & Piti, 2015). In this line of analysis, Gross Capital Formation has been used as an indicator for the level of investment in an economy and found to have a negative effect on CA (Aristovnik, 2007; Goyal & Sharma, 2019).

Several studies have empirically investigated current account determinants, both relying on the panel and time series data. Aristovnik (2008), Morsy (2012), Bollano & Ibrahimaj (2015), and Ariyani et al., (2018) can be mentioned as examples of panel studies testing different determinants of CA discussed in the literature for different sets of countries. Further, based on evidence from a panel of 129 countries, Dash (2020) provides evidence of the interrelation between external debt and current account sustainability. The study by Altayligil & Çetrez (2020), referring to a panel data set of 97 countries, shows that fiscal balance, growth, terms of trade, exchange rate, trade openness, stage of economic development, oil dependency, financial market development, macroeconomic stability, and institutional quality are significant determinants of the current account.

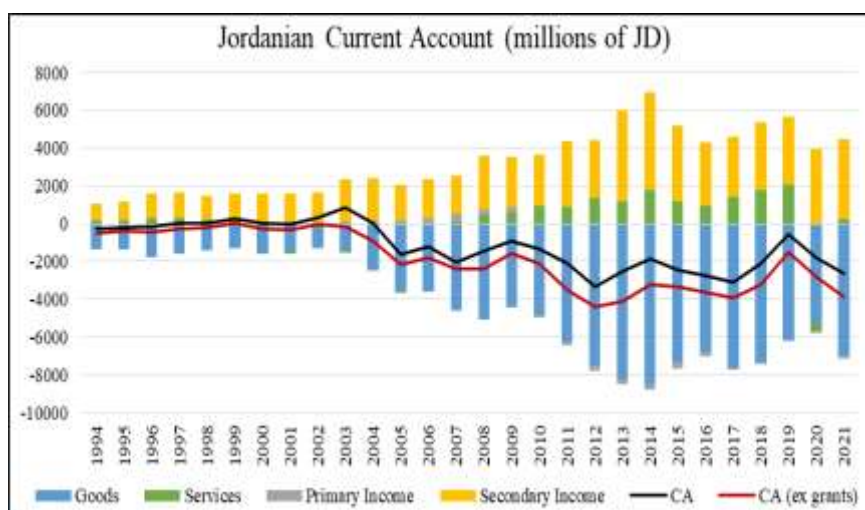


Fig. (1). Jordanian Current Account (millions of JD).

Many studies examine the economic relationship between the CA balance and its determinants focusing on individual countries (e.g. Bitzis et al., 2008; Kwalingana & Nkuna, 2009; Batdelger & Kandil, 2012; Fayaz & Sandeep, 2016; Feriyantoa, 2020). On the other hand, there is scarce empirical evidence on the determinants of current account in Jordan. Among the studies including Jordan in their analysis are Aristovnik (2007), which examines the short and medium-term empirical link between the CA balance and a set of economic variables proposed by theoretical and empirical literature to 17 MENA countries during the period 1971-2005. Further, Chinn & Prasad (2003) empirically investigate the medium-term determinants of CAs in 18 industrial countries and 71 developing countries, including Jordan, based on a structural approach for the period 1971-1995. To the best of the authors' knowledge, the study recently published in Arabic by Daoud et al. (2023) is the only time series study dedicated to the current account determinants in Jordan.

3. CURRENT ACCOUNT IN JORDAN

The Jordanian current account is characterized by a chronic deficit (Figure 1). Current account imbalances are evident since 2004, whereas it should be noted that the balance and eventual surpluses between 1997 and 2004 (the largest of which was in 2003) were mostly due to the ongoing market liberalization and economic reforms, to the privatization proceedings, to a significant increase in grants from the US, as well as to the inflow of capital from Iraqis businessman and refugees, fleeing from the war in Iraq (Alshyab, 2012; Sab, 2014).

The goods account represents the largest share of the current account in Jordan (approximately 60%), with a significant disproportion of exports to imports, leading to a large deficit in the goods account. The services account, which represents net international transactions from the import and export of services, has been registering surpluses since 2007 and has also been close to balance. Surpluses are mostly driven by travel, which represents 70% of the services account. This also explains the exceptional deficit of 2020, due to the COVID-19 movement restrictions. Previous research has

already discussed the importance of trade in services for Jordan for reducing the deficit in the balance of trade (Sandri et al., 2016).

As for the third component of the current account, which is the primary income account, Fig. (1) shows that it is the least important component for Jordan in terms of magnitude. Hereby, income from investment constitutes the largest part. The secondary income account (the fourth component), which represents all current transfers between residents and non-residents, whether they are transfers to the government (grants) or personal transfers, is a very important component for balancing the current account in Jordan. The secondary income account is characterized by a significant and sustained surplus. Its most important component is workers' remittances, followed by grants, both of which are crucial for the Jordanian balance of payment.

Fig. (1) further shows a significant increase in the goods account deficit starting in 2010: this can be explained in relation to the Arab Spring and the disruption of natural gas supply from Egypt, which had to be substituted with more expensive crude oil imports (Sandri et al., 2020). The increase in secondary income, which was still not sufficient to counterbalance the deterioration in the balance of trade deficit, was mostly driven by international support provided to face the massive inflow of Syrian refugees, reaching its peak in 2013. Further important in improving the current account deficit was trade in services, most probably also in relation to the demand for logistics and transportation services to the refugee population. The current account deficit reached its minimum in 2019, accruing to 2.1% of GDP. The COVID-19 pandemic, however, interrupted this positive development, as due to mobility and trade restrictions, accompanied by a decrease in remittances and investment. As a result, in 2021, the current account deficit widened to reach 8% of GDP.

Summarizing, we can conclude that in Jordan the current account is negative, mainly because of the significant deficit in the trade of goods, which is not entirely compensated by the surplus in the trade in services and secondary income (grants and remittances playing a major role). The resulting chronic imbalance in the current account is compensated by

the financial accounts. This explains the efforts Jordan puts in attracting Foreign Direct Investment and improving financial sector resilience and stability (IMF, 2023). As proof of the perceived stability of the financial sector in Jordan and of the credibility of the institutions, the latest issuance of Jordanian Eurobonds in the global market in April 2023 for a value of \$1.25 billion generated offers for six times the target volume (Jordan Times, 2023, April 5). To be also mentioned regarding the stability of the financial sector is the exchange rate, which is pegged to the US Dollar since 1995.

4. FRAMEWORKS TO MODEL THE BEHAVIOR OF CURRENT ACCOUNT

Several models have been developed in the literature to theoretically explain the behavior of the current account balance, relying on different determinants. In particular, four well-known basic frameworks are commonly used to model the behavior of the current account: the elasticities approach, the absorption approach, the savings-investment approach, and the monetary approach.

The elasticities approach (the BOT approach) observes the CA as the gap between exports and imports, which are determined by exchange rates, interest rates, relative prices, and the output gaps in current account adjustments (Metzler, 1948). The elasticities approach to the balance of trade illustrates how different levels of demand and supply elasticities of imported commodities may impact the balance of trade. The idea goes back to the Marshall-Lerner condition, according to which a devaluation of currency lowering the domestic prices in terms of foreign currency leads to an increase in exports. Higher prices of imports will also lead to reducing import levels, overall improving the balance of trade. The elasticities approach highlights the fact that this mechanism is related to the elasticity of imported commodities (Melvin & Norrbin, 2023).

The absorption or structural approach (Alexander, 1959) derives the current account from the national income identity, setting it equal to the domestic demand (called absorption). In this logic, the current account represents the gap between production and demand. This is obtained by rearranging the national income identity $Y=C+I+G+X-M$, into $X-M=Y-(C+I+G)$, which can be re-read as current account (X-M) equals production (Y) minus domestic demand or absorption (C+I+G).

A third approach, similarly derived from the national income identity is the savings-investment approach, which conceptualizes the current account, X-M, as the gap between aggregate savings and aggregate investment (public and private) (S-I)+(T-G) (Artis & Bayoumi, 1990; Phillips et al., 2013).

The fourth approach is the monetary approach which sees the current account as a monetary phenomenon that is determined by the spontaneous supply and demand of money. Any disequilibrium that emerges in the markets for goods and financial assets or in the money market will be fully reflected in the balance of payments. The changes in the money supply would lead to a proportional change in international reserves. In addition, the changes in money demand would lead to changes in international trade (Mundell, 1963; Bijan & Mohsin, 1977).

5. METHODOLOGY AND ECONOMETRIC MODEL

Relying on these frameworks and the determinants of the current account discussed in the literature, this paper suggests an econometric model to explain the behavior of the current account in Jordan. In particular, the basic specification regresses the current account against a vector of variables consisting of fiscal balance, openness to trade, oil price, change in foreign reserves, investment, and shocks:

$$CA_t = \alpha + \beta_i X_{it} + \varepsilon_{it}$$

The model is estimated for Jordan using annual data covering the period from 1994 to 2021. The following variable specifications and sources were considered: CA is the current account balance in year t, as obtained from official data by the Central Bank of Jordan (CBJ). The fiscal balance (FISCAL_BALANCE) was taken from official data by the Ministry of Finance (MOF). This variable is expected to influence the CAB through saving, and investment in the goods market as postulated by the savings and investment approach. OPENNESS is the rate of openness to external trade, calculated based on CBJ data by dividing the sum of exports and imports by nominal GDP. Openness is considered to affect the CAB through interest rates and relative prices, as stated by the elasticities approach. Data for the growth rate of crude oil prices (OIL_PRICE) were obtained from Federal Reserve Economic Data (FRED). The change in foreign reserves (RESERVE_CHANGE) was calculated based on CBJ data and is considered to influence the CAB through the monetary policy as stated in the monetary approach. Gross capital formation (GCF) is considered as a proxy for investment, and data stems from WDI. Further, the dummy variable SHOCKS is introduced to capture sudden changes in economic conditions, as discussed by the literature. Major events for Jordan were considered such as the accession to WTO in 2000, the war in Iraq in 2003, the global financial crisis of 2008, the Arab Spring and the regional instabilities starting by 2010, and the COVID-19 pandemic.

To choose the most appropriate estimation technique, diagnostic tests were run. Firstly, the stationarity of the time series is analyzed to determine the degree of integration for each variable. Among the stationarity tests, Augmented Dickey-Fuller (ADF) test was performed, and the results revealed that some variables are integrated of order zero (I(0)) and other variables are integrated of order one (I(1)) as shown in the table (1) below:

In cases where variables are integrated of different order (I(0), I(1), or mixed), with no variable being stationary at I(2) level, the Auto-Regressive Distributed Lag (ARDL) is the appropriate estimation technique (Pesaran et al., 2001). ARDL models estimate the long and short-run relationships among the variables considering all interactions between variables without imposing theoretical constraints on them. Preliminary tests are performed to ensure the validity of using ARDL and avoid spurious results.

Therefore, the following specification of the model was estimated, to assess the long- and short-term macroeconomic relationships between the CA and its determinants in Jordan:

$$\Delta CA_t = \alpha_0 + \sum_{j=1}^j \beta_0 \Delta CA_{t-j} + \sum_{j=0}^6 \beta_{it-j} \Delta X_{it-j}$$

Table 1. Results of the Augmented Dickey-Fuller Test of Unit Root.

Variables	level	Exogenous	Statistic	Critical	Sign at	Lags
CAB	I(1)	constant	-4.9501	-3.7241	0.0005	1
FISCAL_BALANCE	I(1)	constant	-7.0494	-3.7115	0.0000	0
OPENNESS	I(1)	constant	-3.8718	-3.7115	0.0068	0
OIL_PRICE	I(1)	constant	-4.6669	-3.7115	0.0010	0
RESERVE_CHANGE	I(0)	constant	-5.0073	-3.7115	0.0004	1
GCF	I(1)	constant	-3.9518	-3.7115	0.0057	0
SHOCKS	I(1)	constant	-2.6229	-2.6665	0.1078	9

Table 2: Lag Order Selection Criteria.

Lag	LogL	Sequential Modified LR Test Statistic	Final Prediction Error FPE	Akaike Information Criterion AIC	Schwarz Information Criterion SC	Hannan-Quinn Information Criterion HQ
0	-1069.9242	NA	2.24e+27	82.84033	83.17905	82.93787
1	-956.73326	156.7260	1.85e+25	77.90256	80.61230	78.68287
2	-872.41617	71.34522*	3.29e+24*	75.18586*	80.26663*	76.64894*

* indicates lag order selected by the criterion.

$$+ \sum_{i=1}^6 \beta_{it-1} X_{it-1} + \epsilon_{it}$$

The parameter α_0 is the constant, β_0 and β_i represent a vector of coefficients to be estimated, and ϵ_{it} is the error vector. The subscript t, j, and i represent the time, number of lags, and number of variables respectively.

In order to avoid spurious results, it is necessary to determine lag length and to test for cointegration between variables (Pesaran et al., 2001). Table 2 presents the results of lag order selection criteria, indicating two as the optimal lag length.

To check for cointegration, the F-Bounds test was performed and revealed the existence of a long-run equilibrium relationship among the considered variables. The value of the F-statistic is greater than the values of critical upper bounds at a 5% significance level (Table 3).

Table 3. F-Bounds Test.

Test Statistic	Value	Significant	I(0)	I(1)
F-statistic	4.4110	10%	2.12	3.23
K	6	5%	2.45	3.61
		1%	3.15	4.43

* Null Hypothesis: No levels of relationship.

Table 4 presents the results of the further diagnostic tests that were conducted to check for serial correlation, heteroscedasticity, and non-normal distribution. The results show that there are no problems among the residuals in the model. This indicates the appropriateness of the regression model and its specification.

Table 4. Diagnostic Tests.

	F-statistic	Probability
Breusch-Godfrey Serial Correlation LM test	1.0105	0.41854
Breusch-Pagan-Godfrey Heteroscedasticity test	0.4976	0.8921
The Jarque-Bera Normality test	0.6614	0.7184

* Null hypothesis: No problem.

Stability tests investigate whether the parameters of the model are stable across various subsamples of the data and the absence of structural break. CUSUM and CUSUM of Squares stability tests are based on the cumulative sum of the recursive residuals. The tests' results indicate stability in the equation during the sample period, as the cumulative sums lie within the 5% critical values (Figs. 2 and 3).

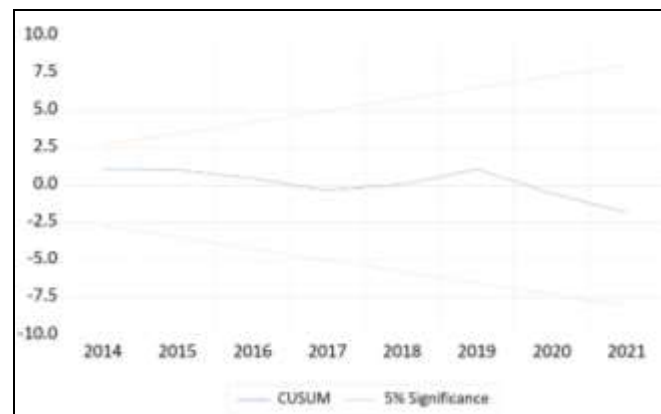


Fig. (2). CUSUM Stability test.

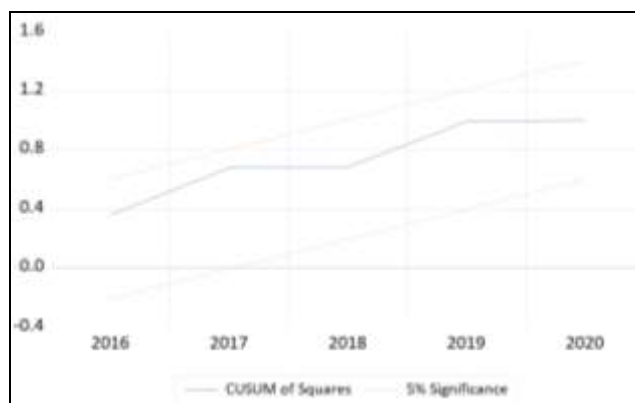


Fig. (3). CUSUM of Squares Stability test.

6. EMPIRICAL FINDINGS

The results of the short-term analysis show that all of the regressors have a significant influence on the current account (Table 5). The error correction term (ECT, referred to as COINTEQ in Table 5) is negative and significant. The error correction term indicates the speed of adjustment, which captures the short-term dynamic and ensures that the long-term equilibrium is maintained. The value of the ECT coefficient is -0.62, indicating thus that 62% of disequilibria will be corrected in each period.

Table 5. ECM Regression.

Case 3: Unrestricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
COINTEQ*	-0.617097	0.083949	-7.350855	0.0000
D(FISCAL_BALANCE)	0.0146008	0.211957	0.0688859	0.9461
D(FISCAL_BALANCE(-1))	-1.3585308	0.335003	-4.055272	0.0012
D(OPENNESS)	-64.541324	11.18544	-5.770118	0.0000
D(OPENNESS(-1))	58.486962	15.46047	3.7829986	0.0020
D(OIL_PRICE)	46.392285	6.811412	6.8109639	0.0000
D(OIL_PRICE(-1))	-24.636181	7.456894	-3.303812	0.0052
D(RESERVE_CHANGE)	0.5972384	0.078563	7.6019396	0.0000
D(RESERVE_CHANGE(-1))	-0.1613273	0.062995	-2.560952	0.0226
D(SHOCKS)	-990.30441	182.43724	-5.428192	0.0001
D(SHOCKS(-1))	-555.87968	169.83160	-3.273123	0.0056
C	7183.40572	987.50240	7.274317	0.0000
R-squared	0.9092500	Mean dependent variance	-95.16538	
Adjusted R-squared	0.8379465	S.D. dependent variance	773.74927	
S.E. of regression	311.47949	Akaike info criterion	14.624581	
Sum squared residual	1358272.6	Schwarz criterion	15.205241	
Log-likelihood	-178.1195	Hannan-Quinn criterion	14.791790	

F-statistic	12.75182	Durbin-Watson stat	2.2327470
Prob. (F-statistic)	0.000018		

The coefficients in Table 6 refer to the estimation of the long-run relationship between the current account and the other variables considered. The sign and significance of the estimated coefficients are consistent with the theoretical expectations.

Table 6: Levels Equation.

Case 3: Unrestricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
FISCAL_BALANCE(-1)	3.676340	2.047446	1.795573	0.0876
OPENNESS(-1)	-160.1007	84.42705	-1.896320	0.0724
OIL_PRICE(-1)	107.09075	61.24036	1.7486955	0.0956
RESERVE_CHANGE(-1)	1.4681837	0.669987	2.1913615	0.0404
GCF	-0.5951498	0.316034	-1.8831795	0.0743
SHOCKS(-1)	-1320.3936	1235.651	-1.0685809	0.2979
CE = CAB(-1) - (3.68*FISCAL_BALANCE(-1) - 160.1*OPENNESS(-1) + 107.1*OIL_PRICE(-1) + 1.47*RESERVE_CHANGE(-1) - 0.6*GCF - 1320.39*SHOCKS(-1))				

The results show a positive and statistically significant impact of the government budget (FISCAL_BALANCE) on the current account. The coefficient indicates a strong relationship and shows that the two variables move together in the long run, providing evidence for the twin deficit phenomenon in Jordan. This result is consistent with previous studies (e.g. Morsy, 2012; Bollano & Ibrahimaj, 2015).

Table 6 further shows a negative and significant effect of trade openness (OPENNESS) on the current account balance: this effect can be explained by the reliance of the Jordanian economy on imports and is also in line with the results of other studies (Aristovnik, 2007; Fayaz & Sandeep, 2016).

The results show a statistically significant positive effect of the growth of international oil prices (OIL_PRICE) on the current account performance: specifically, an increase in oil prices leads to an improvement in the current account balance. This is in tune with studies supporting the view that the CA balance of non-oil exporting countries can benefit from oil price increases through workers' remittances, grants, and/or international tourism (Aristovnik, 2007; Morsy, 2012; and Batdelger & Kandil, 2012). Results confirm that this applies also to the case of Jordan, where the deterioration of the trade balance due to the higher cost of crude oil imports is compensated by other transfers from abroad. The Jordanian economy has strong ties to its oil-rich neighbors: therefore, a reduction in oil prices, deteriorating the economic conditions in the oil exporting countries, reflects in a decrease in workers' remittances to Jordan, into a lower demand for Jordanian workers, as well as into a parallel decrease in the financial assistance provided and in general into a contraction of the capital flows accruing to Jordan. This

appears to be a structural feature of the Jordanian economy and some studies even associate the Jordanian financial crisis of 1989 with the sharp decrease in oil prices throughout the 1980s (Alshyab, 2022).

It is also found that there is a positive and significant influence of the change in the foreign reserves held by the Central Bank of Jordan (RESERVE_CHANGE) on the current account balance. This result is similar to Phillips et al. (2013). It should be also noted that foreign reserves are one of the key variables targeted at the policy level in Jordan to achieve financial stability and maintain investors' confidence.

Further, Gross Capital Formation (GCF), which was selected as a proxy for investment, has a significant negative effect on the current account performance. This result is consistent with the predictions by the savings-investment framework.

Finally, the impact of external shocks (SHOCKS) is significant in the short run (Table 5), but non-significant over the long run (Table 6). This is consistent with the estimated rate of adjustment, which reveals the tendency of the system toward restoring its equilibrium.

7. CONCLUSIONS AND RECOMMENDATIONS

The current account is an important measure of a country's economic performance and its relationship with the rest of the world. Sustainability of its imbalances is also crucial for making sure a country can meet its intertemporal budget constraint without drastic policy changes and herewith to maintain the confidence of investors and avoid capital flight.

Jordan is characterized by a chronic deficit in its trade balance, which is a major source of deficit in its current account. Nevertheless, the country can finance its international transactions. Therefore, this study aims to investigate the determinants of current account in Jordan. Understanding the main determinants of the current account in Jordan can help to derive evidence-based policy recommendations to grant the sustainability of the current account.

Merging different frameworks formulated in the literature to explain the behavior of current account, this study uses an ARDL approach to estimate the long- and short-run effects of fiscal balance, openness to trade, oil prices, foreign reserves, investment, and shocks on current account. The model is estimated for time series data for the period 1994-2021. The main findings of the study confirm the significance of the considered determinants and highlight a positive effect of fiscal balance and oil prices, vis a vis a negative effect of openness to trade and investment. The effect of shock is only significant in the short run, while in the long run, the system tends towards equilibrium, as corroborated by a negative error correction term of -0.62.

The direct relationship between fiscal and current account balance heightened the importance of one of Jordan's policy priorities, that is, increasing domestic revenues to reduce fiscal deficit. The authorities should strengthen efforts to "broaden the tax base and close tax loopholes" (IMF, 2022), and fight tax evasion.

Being Jordan heavily reliant on the import of goods, there is a negative effect of openness to trade on the current account balance: this result does not contradict the overall positive

effect of trade openness on the Jordanian economy (Arabiyat et al., 2020; Obeid & Awad, 2018), but rather points to the need of improving the overall competitiveness of the Jordanian exports. A related recommendation would be to invest in the exports of services, relaunching tourism, and improving the infrastructure to facilitate transportation services, but also to invest in digital services, for which Jordan already has young and qualified human resources.

The positive impact of oil prices on the current account heightens the policy relevance of strengthening the ties with the oil-exporting countries of the region and reflects the importance of workers' remittances. Jordan is envisioned to the stability of remittances' inflows and should therefore explore mechanisms to increase the incentives to remit, such as saving funds and/ or attractive pension and insurance schemes for its citizens abroad.

The negative effect of investment is consistent with the theoretical predictions of the savings/ investment framework (Artis & Bayoumi, 1990; Phillips et al., 2013). Further, the fact that shocks have only a short-term effect on the current account balance is a sign of the overall sustainability of the current account deficits in Jordan: this is also an expression of the sound monetary policy and the stability of the Jordanian financial management and system. Talking about financial management it is important to note how reserves are among policy the key variables monitored by the Central Bank of Jordan.

CONFLICT OF INTEREST

The authors confirm to have no affiliations nor involvement in any organization or entity with any financial interest or non-financial interest in the matter or materials discussed in this work.

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