

Journal of Policy Options

Currency Fluctuations, Economic Growth, and Export Competitiveness in Morocco

Ezzahra Mengoub^a, Essaid Tarbalouti^b

Abstract

Exports are widely regarded as a critical indicator of a nation's macroeconomic performance and external sector strength, reflecting both production capacity and international competitiveness. This study explores the relationship between exchange rate dynamics and export performance in Morocco to identify how fluctuations in currency value influence trade outcomes over time. By focusing on a long-term perspective, the analysis seeks to provide a comprehensive understanding of the macroeconomic mechanisms that connect exchange rate movements with export growth in a developing economy. The study employs annual time series data covering the period from 1980 to 2025, enabling the capture of both short-run variations and long-run structural trends. A quantitative econometric framework is utilised to examine the direction and magnitude of relationships among key variables, including the exchange rate and gross domestic product. The empirical strategy is designed to assess not only the direct effect of exchange rate changes on exports but also the broader macroeconomic interactions that shape this relationship. The findings reveal that exchange rate movements exert a positive and statistically significant influence on Morocco's export performance, suggesting that currency depreciation can enhance international competitiveness by making domestic goods relatively cheaper in global markets. Additionally, gross domestic product is found to play a significant role, indicating that economic expansion contributes to export capacity while also influencing exchange rate behaviour. The results further highlight that variability in the exchange rate introduces notable effects on export dynamics, emphasising the importance of stability in sustaining consistent trade growth. From a policy perspective, the study underscores the need for a balanced approach to exchange rate management. Structural reforms aimed at increasing economic flexibility, alongside targeted trade policy adjustments, can help mitigate adverse effects associated with volatility. Furthermore, implementing measures to stabilise exchange rate fluctuations may support a more predictable trade environment, thereby enhancing export performance and contributing to long-term economic resilience.

Keywords: Exchange Rate, Export Performance, Economic Growth, Morocco

JEL Codes: F31, F14, C32

Article's History

Received : 31st January 2026

Revised: 17th March 2026

Accepted: 30th March 2026

Published: 31st March 2026

Citation:

Mengoub, E., & Tarbalouti, E. (2026). Currency Fluctuations, Economic Growth, and Export Competitiveness in Morocco. *Journal of Policy Options*, 9(1), 17-28.

DOI:

<https://doi.org/10.5281/zenodo.22002069>

Copyright: © 2026 by the authors.

Licensee RESDO.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. INTRODUCTION

International trade is an integral part of the economic development process since it links the domestic economy to the world economy, increases the number of opportunities in the markets, brings foreign exchange earnings, and facilitates the efficient allocation of productive resources. Export activity is especially relevant in developing economies as it can help to supplement domestic demand and promote structural change. Export competitiveness, however, depends on several macroeconomic and institutional factors such as production capacity, global demand, trade policies, inflation, exchange rate

^a Faculté de Gouvernance, Sciences Économiques et Sociales, Université Mohammed VI Polytechnique, Ben Guérir, Morocco, essaid.tarbalouti@um6p.ma

^b Faculté de Gouvernance, Sciences Économiques et Sociales, Université Mohammed VI Polytechnique, Ben Guérir, Morocco

conditions, etc. The exchange rate plays a special role among these factors, as it influences the relative price of domestic products in the international markets and the domestic price of foreign inputs. Therefore, currency value fluctuations of a particular country can affect the price competitiveness and profitability of exporters, production choice, and ultimately the performance of the foreign sector (Bahmani-Oskooee, 1986; Ali & Rehman, 2015; Yusoff, 2010; Humayun et al., 2026; Abdullahi et al., 2026).

The link between exchange rates and export performance is not necessarily direct, as exchange changes may have different impacts based on their size, duration, and uncertainty. A fall in the home currency price of home-produced goods will typically make them more attractive to foreign buyers (Iqbal et al., 2025; Butt & Ahmad, 2026; Aragie, E., & Thurlow, et al., 2026). Meanwhile, depreciation can raise the cost of imported machinery, intermediate goods, energy and other production factors in the domestic economy, especially in economies that are highly dependent on imports for their export industries. An extra layer of complexity is added by the uncertainty of exchange rates, since decisions regarding production and pricing are undertaken in the face of uncertainty regarding the future value of revenues and costs for exporters. This uncertainty may affect the prices and quantities of international trade (Hooper & Kohlhagen, 1978). The competitiveness impact of exchange rate changes is thus not just a matter of the direction of the changes but also, and certainly not least, of the composition of domestic output and its exposure to foreign markets (Kachalia et al., 2026; Ahir et al., 2026).

When the difference between exchange rate levels and exchange rate volatility is taken into account, the importance of exchange rate stability becomes even more apparent. The stability of the currency can help with the planning of exports, investment choices, international contracting and allocation of resources, while large swings can raise the risks of foreign-market participation (Khalid et al., 2025; Huong et al., 2026). Thus, the developing economies can be influenced by exchange rate volatility both by way of trade and investment (Edwards, 1987; Bahmani-Oskooee & Hajilee, 2013). Exchange rate uncertainty also may make it more difficult for exporters to determine competitive prices and returns on their investments, and can make it more difficult for firms to grow in international business. This could lead to two conflicting goals: a weaker currency to make the country's exports more competitive, and a more volatile currency as an indicator of uncertainty. To assess the effect of exchange rate dynamics on export performance, it is thus crucial to understand this distinction (Mehdi et al., 2025; Abidoye & Ogege, 2026). Interest in exchange rate effects also relates to the timing of the effects, with trade responses possibly not occurring immediately after the exchange rate change. Changes in consumer demand over time can cause a lag in the reaction of export and import quantities due to prior contracts negotiated in advance of exchange rate changes, adjustment costs, import requirements, and time lags. So, before there are any trade implications of appreciating the currency, there are only a few or none, and it is only after appreciating the currency that the increased competitiveness becomes apparent (Bukhari et al., 2025). This phenomenon is commonly associated with the J-curve, which is a phenomenon observed where the initial stage of a depreciation hurts the trade balance, but the long-run period has a positive impact on the trade balance as quantities re-adjust (Bahmini-Oskooee & Ratha, 2004). The idea of examining the link between the exchange rate and its effects on exports, from a prism that would separate the short-term fluctuations and the longer-term economic adjustments, is reflected in such time fluctuations. This is particularly the case in the production and trade structural transformation of countries (Umair et al., 2025; Al-Masri & Audi, 2026; Alvahili et al., 2026).

In addition, the exchange rate is closely linked to the domestic economy's growth, since growth of the domestic economy can impact the export capacity and external demand. Economic growth contributes to increased production capacity, investment, improved infrastructure, and firms' capacity to cater to international markets. In the interim, the external balance and pressures on exchange rates can be affected by economic activity, which can create inflationary pressures on imports of capital goods, intermediate goods, energy, and consumer goods (Shaukat et al., 2025; Tahir et al., 2026; Adetan et al., 2026). The exchange rate, domestic output and trade performance are, therefore, indicators of a more complex macroeconomic relationship than a mere price relationship. The cases of developing economies demonstrate that external competitiveness is related to economic activity as reflected in the trade balances (Yusoff, 2010; Ditta et al., 2025; Fatima et al., 2026; Balakrishnan, 2026). Therefore, economic growth has to be taken into account in conjunction with exchange rate changes when assessing export performance changes. Such connections become particularly significant in countries which, increasingly, are internationalising their economies, which are the economies of developing countries. Due to the composition of exports, structure of production, reliance on imported inputs, characteristics of trading partners, and flexibility of domestic firms, the impact of exchange rate fluctuations can vary from one country to another (Iqbal et al., 2025; Asyifa, 2026). Empirical findings from developing and emerging economies have shown that under certain conditions, the exchange rate can affect the aggregate and sectoral export performance, but the impact of the exchange rate differs across economic environments (Dognalar, 2002; Haseeb & Ghulam, 2014; Ali et al., 2025; Akusta, 2026; Daud et al., 2026). This variation is a reminder that findings from one country may not always be extrapolated to other countries. A country-specific analysis would therefore be required to assess whether exchange rate changes improve export competitiveness, whether volatility limits export opportunities and whether the growth of a country's economy increases its ability to respond to export opportunities (Ali et al., 2025; Naeem et al., 2026; Abdullahi & Abdulkadir, 2026).

Morocco is a case in particular because of its economic development that has led to growing integration with international markets and constant transformations in its productive and export structure. The external sector has become more important for economic activity in the country, and structural transformation has enlarged the scope of goods and services associated with international markets. Morocco also has strategic productive sectors, such as mining, which greatly impact economic

activity and international trade (Energy Capital & Power, 2023; Aloui et al., 2026). The relationship between currency fluctuations and export performance is especially significant at the macroeconomic level, where important changes have occurred in Morocco's economic policy environment and in the external-sector conditions over time. The need to promote macroeconomic stability, external-sector management, and structural adjustment in order to boost the performance of Morocco's economic sector has been stressed by official evaluations (World Bank, 1999; World Bank, 2020). The need for an extended empirical view is further reinforced by the long-term evolution of the Moroccan exchange rate and external sector. The relationship between export and currency movement can vary over time as a result of changes in the economy, foreign markets, production capacity and trade organisation. Changes in the volume of economic activity and international trade have also taken place in Morocco in the external sector, so it is necessary to distinguish temporary fluctuations from persistent relationships. The foreign trade data that has been observed over the past few years still attests to the role of export activity in Morocco's economy (National Agency for Statistics, Demographic and Economic Analysis, 2024). A longer time period can then offer a larger sample size for determining the underlying relationship between exchange rate dynamics, economic growth and export performance. Although the relationship between these factors is crucial, how these factors influence one another – between currency movements and growth and competitiveness – is context-specific, especially for developing countries that are undergoing structural and external-sector transformation. The Moroccan case thus offers an interesting avenue to explore whether exchange rate changes lead to better export performance, and also to consider the other factors that influence export capacity, such as economic growth. This study aims to examine the linkage between exchange rate changes, economic growth and export competitiveness in Morocco using the annual time-series data from 1980 to 2025.

2. HISTORICAL OVERVIEW OF MOROCCO

The integration into regional and international markets has been a key factor in the economic development of Morocco, and hence exchange rate policy and export competitiveness are crucial aspects of that macroeconomic policy. As a result of these changes in the exchange rate system, the country has tried to ensure external stability, to react to economic pressures abroad and to increase the competitiveness of domestic production over the years. The developments are particularly important as a change in exchange rates may influence export prices, production costs, foreign demand, and firm profitability in internationally oriented sectors. The export performance of Morocco and the overall economic evolution, therefore, needs its background in the history of exchange rates. Over the past few decades, there have been several significant changes in the exchange rate policy framework.

Table 1: Exchange Rate / Policy Development

Year	Exchange Rate Policy	Description
1975	Minimum: 4.31%	Lowest recorded exchange-rate value in the series
1981–2017	Exchange-rate reforms	Morocco introduced several policy adjustments to stabilise the economy and respond to changing economic conditions.
Mid-1980s	Currency peg	The currency was maintained against the franc; subsequent market and economic pressures created a need for adjustment.
1992	Devaluation	Approximately 27% devaluation against the US dollar, undertaken as part of IMF-supported economic reforms
1998	Managed floating system	Exchange-rate flexibility was increased while government intervention remained available to limit excessive volatility.
2004	Exchange-rate adjustment	Policy adjustment aimed at addressing overvaluation and improving international competitiveness
2011	Increased flexibility	Further relaxation of exchange-rate controls to facilitate adjustment to external pressures
2012	Policy strengthening	Central Bank emphasised greater flexibility as supportive of economic stability and growth.
2018	Currency-unit reform	One new currency unit was made equivalent to ten old currency units
2022	Maximum: 36.06%	Highest recorded exchange-rate value in the series
Overall	Average: 15.6%	Average rate over the reported period

Table 1 shows the various steps taken by Morocco to improve the flexibility of exchange rates and to adjust to the new domestic and external economic environment. Past policy arrangements were much more instrument-focused on currency stability; however, a more flexible approach was needed with the increasing external pressures. In 1992, a very important adjustment took place: the Moroccan government launched a major devaluation of the currency in the context of a more comprehensive economic reform process, with the aid of the International Monetary Fund (International Monetary Fund, 1992). The measure aimed to correct external imbalances and enhance international competitiveness. Then, little by little,

Morocco moved towards a freer exchange rate regime, but still maintaining some policy tools to prevent a significant shift. The transformation of Morocco's external economic environment has led to adjustments during the late-1990s and the 2000s. The gradual transition towards a managed and more flexible exchange rate regime enabled the authorities to react to changes in international markets and the domestic macroeconomic situation more flexibly by adjusting the exchange rate. The exchange rate was also adjusted from time to time to rectify the concerns related to competitiveness and to harmonise it with the overall economic goals (World Bank, 1999; IMF, 2005). In the early 2010s, policymakers began to focus more and more on gradual flexibility as a way to enhance the economy's ability to withstand external shocks. The Central Bank of Morocco (CBM) then reiterated its message about the importance of exchange rate flexibility and macroeconomic stability in economic management (Central Bank of Morocco, 2012). The chronology of the principal stages in this policy evolution is outlined in Table 1. There are also significant long-term trade diversification challenges in Morocco. The economy has always been highly exposed to natural-resource-based and primary-product activities, especially mining and fisheries. This can make the economy more sensitive to the fluctuations of international commodity prices and external demand. The available evidence suggests that the merchandise exports were concentrated in a few products, mainly mining and seafood products, and lacked diversification in higher value-added manufacturing products during the previous periods (Memorandum, 2020).

Morocco's external trade pattern also reflects its strong economic ties with the rest of the world. As shown in Table 2, Morocco's trade relations are not limited to Asia, Europe, the Americas, Africa, or the Middle East, but each region plays a major role in Morocco's total external trade. The majority of trade is in Asian markets, with European markets also being significant markets and sources of trade. Spain, France, Belgium and Germany are also important trading partners in Europe. The geographical scope of external economic integration is broad in Morocco as well, with significant commercial ties with countries in the Americas, Africa and the Middle East. This fragmentation of trade regions offers export market growth potential, while also introducing risks of global commodity price volatility and changes in international financial markets. The significance of such global connections is reflected in recent developments in trade. As shown in the following trade information in Table 2, Morocco had significant trade ties with Asian and European economies, and there was also a significant volume of trade with African and Middle Eastern markets. Multiple regions in the trade mix mean that any exchange rate changes can have far-reaching effects due to the fact that Moroccan exporters trade in regions with different currencies, demand and competitive markets. Thus, not only the overall volume of exports, but also the capability of firms to offer stable prices and contractual conditions in foreign markets is relevant to exchange rate stability. The general economic situation of the country has also affected its ability to maintain external-sector performance. The dynamics of public and external debt have altered over time according to the financing needs of the domestic market, external shocks, and policy measures. The external debt trajectory was shaped by financing requirements due to the COVID-19 pandemic, and subsequent shifts were driven by currency devaluation and international developments (World Bank, 2020). This can help to bring in the fact that exchange rate changes happen in a wider macroeconomic context where external financing, production capacity, international trade and fiscal conditions are all interrelated. Thus, assessing Morocco's export competitiveness involves considering the evolution of its exchange rate system, as well as the economy's structural features.

Table 2: Trade Pattern

Region / Trading Bloc	Share of Total Trade	Major Trading Partners / Additional Information
Asia	28%	China (80% of Asian trade), Japan (5%)
Europe	26%	Spain (27%), France (21%), Belgium (20%), Germany (9%); these four account for 77% of European trade
Americas	21%	Canada (78%), Brazil (13.2%), United States (8.1%)
Africa	15%	Nigeria (36%), Algeria (13.8%), Morocco (11.5%), Côte d'Ivoire (6.7%)
Middle East	9%	United Arab Emirates accounts for more than 98% of trade with the region
Arab Maghreb Union (UMA)	4%	Represents 26% of Morocco's trade with Africa; trade deficit of MRU 1,485 million
ECOWAS	8%	Represents 51% of Morocco's trade with Africa; trade surplus of MRU 1,061 million.
Exports to specified countries	3% of total exports	Equivalent to 20% of exports to African countries
Change in these exports	-46%	Decline from the previous quarter

3. LITERATURE REVIEW

The exchange rate movements affect the relative price of domestic and foreign goods; the link between changes in the exchange rate and international trade has been a major topic in international economics. Theoretically, depreciation of the domestic currency would enhance export competitiveness by lowering the foreign-currency cost of exports, but this effect would vary based on the elasticity of demand, production structure, import reliance and the extent of exchange rate uncertainty. Exchange rate uncertainty can affect both the pricing decisions and trading volumes of internationally oriented firms, making currency stability an important consideration for exporters (Hooper & Kohlhausen, 1978). There is also some early indication that uncertainty about the direction of exchange rate changes can influence the nature of international trade relations even in the presence of a favourable overall trend in currencies (Akhtar & Hilton, 1984). These arguments link the behaviour of exchange rates to the performance of the external sector and highlight the significance of exchange rate behaviour (Ali et al., 2025; Odeh et al., 2026).

Exchange rate changes can have a significant impact in developing economies, as export-oriented companies are often more reliant on imported factors of production, external financing conditions, and international price changes. In developing countries, several macroeconomic issues affect trade flows, including exchange rate conditions, which are an important aspect of external competitiveness (Bahmani-Oskooee, 1986). Examples of how real exchange rate variability can also influence economic decisions include greater uncertainty about future returns and costs (Edwards, 1987). The impact of volatility is not limited to trade, as exchange rate uncertainty can also have an impact on domestic investment decisions, which may impact productive capacity and expand firms into foreign markets (Bahmani-Oskooee & Hajilee, 2013). Therefore, an exchange rate – export link should be assessed in the macroeconomic setting as to how currency conditions are linked to investment, production and trade choices (Ali et al., 2025; Naeem et al., 2026; Abdulsalam et al., 2026).

A key area of the literature is concerned with the difference between exchange rate depreciation and exchange rate volatility. A high degree of price volatility can lead to uncertainty, which will make it difficult for the exporter to make long-term commitments, although depreciation may increase competitiveness. Asian economies suggest that there is actually some impact of exchange rate volatility on export performance, but the magnitude varies from country to country and from export structure to export structure (Dognalar, 2002; Khalid et al., 2025). Other data from West African economies show that fluctuating exchange rates can have an impact on trade flows and highlight their importance for international commerce in terms of exchange rate predictability (Medhora, 1990). However, in the sectoral evidence, exchange rate instability is not always negatively reflected in all exports, as the level of exposure to foreign markets, foreign inputs, and the price movements in foreign markets varies among the different sectors (Haseeb & Ghulam, 2014; Ali et al., 2025; Hussain et al., 2026; Agbolosoo et al., 2026). The results suggest that to mask the overall relationship between currency movements and exports, there can be significant idiosyncratic variations between countries and industries.

A second general theme in the literature concerns the timing of trade adjustment. The initial impact of exchange rate changes can be different from the ultimate long-term impacts because exporters and importers need time to implement price adjustments, production, contract and quantity changes (Ali et al., 2025; Saim et al., 2025). The phenomenon is the basis of the J-curve theory, which argues that a depreciation of a currency could not only make the trade balance worse in the short term, but also improve it in the long term as the quantity response occurs (Bahmani-Oskooee & Ratha, 2004). Empirical evidence from Fiji supports the importance of taking a different approach and considering dynamic trade responses and not just currency effects on current trade relationships (Narayan & Narayan, 2004). The trade-balance reaction to exchange rate changes also shows a country-specific variation, and a time-varying response to exchange rate changes can be observed from the evidence of the East Asian economies (Onafowora, 2003). Therefore, the short-run adjustment and long-run equilibrium relationships should be taken into account when assessing the effects of exchange rates (Rana et al., 2025; Gillani et al., 2026). The evidence shows that the real exchange rate affects domestic output and domestic trade performance, and the currency condition cannot be separated from overall economic activity (Yusoff, 2010; Kumar et al., 2025; ul ibad & Audi, 2026). The viewpoint is crucial in the context of developing economies, as a change in gross domestic product may affect both productive capacity and external demand. When analysing the determinants of export performance, therefore, economic growth should be taken into consideration; exchange rate movements should not be used as an independent determinant (Khan et al., 2025; Naveed et al., 2026).

Another piece of empirical evidence from the developing and emerging economies confirms that the exchange rate–trade link is country-specific. The results from Pakistan suggest that the movement in exchange rates can affect export performance at varying time horizons, and that the effects of the exchange rate movement can be short-run and long-run and must be separated using a dynamic econometric approach (Ahmad et al., 2021; Khan et al., 2025; Zahid et al., 2026). The studies on the exchange rate and monetary dynamics also show the applicability of the autoregressive distributed lag models in studying the relationship between the exchange rate and macroeconomic variables associated with the movements of the currency (Khan & Sajjid, 2005; Saliman, 2025; Aqeel et al., 2025). The evidence from Jordan also shows an important relationship between the exchange rate movements and the external sector components of exports and imports, as currency effects can have an impact on several aspects of the external sector (Sweidan, 2013; Shahi et al., 2025; Saliman, 2025). In a wider context, studies on the economies of the new member states of the European Union and of the Western Balkan countries suggest that exchange rate fluctuations may influence trade imbalances for these economies in periods of economic stress, but their impact is not necessarily uniform and of one sign across countries (Rajković et al., 2020; Humza et al., 2025; Wim & Wendy, 2025; ur Rehman & Ali, 2026). In the short run, the response to a change in relative prices may

be different from the long run because firms, consumers, and markets need time to react to relative price changes (Sattar et al., 2025; Gomez & Edward, 2025; Tufail & Ali, 2026). Economic growth also introduces the element of changes in productive capacity, which can affect exports as well as lead to greater imports and the exchange rate (Ahmad et al., 2025; Mansour & Salar, 2025). While these relationships have been studied in many developing and emerging countries, the evidence is still far from homogeneous, to the extent that differences in the exchange rate regimes, production structures, export composition, international integration, and macroeconomic conditions are reflected. The long-term reform of exchange rates, the structural transformation, economic growth and the changing export markets are particularly relevant in the Moroccan context and make it an interesting arena for further empirical scrutiny. This paper investigates the link between exchange rate changes, growth and export performance of Morocco based on annual time-series data for the period 1980–2025.

4. THE MODEL AND DATA SOURCES

The link between changes in exchange rates, economic growth, and export performance is best explained with the help of three elements: international price competitiveness, domestic productive capacity, and macroeconomic adjustment. The relative prices of the country's goods internationally also play a role in obtaining export results. A depreciation of the domestic currency can drive down the price of domestically produced goods in foreign currency and make them more competitive abroad. The effectiveness of this mechanism relies on the elasticity of foreign demand, the import content of domestic output and the stability of exchange rate expectations (Anus et al., 2025). Exchange rate uncertainty could also be important for exporters' decisions on pricing and production, and the level and volatility of the exchange rate could therefore be relevant for the external-sector outcomes (Hooper & Kohlhausen, 1978; Edwards, 1987). The theoretical underpinnings of the suggested relationships are thus based on the mechanism of the exchange rate–trade, with the dynamic adjustment theory of the J-curve hypothesis. The J-curve framework takes into account two aspects: the short-run and long-run effects of an exchange rate change. In the short run, the quantity of exports does not necessarily respond to exchange rate changes instantaneously, and the quantity of imports is equally less responsive. Bahmani-Oskooee & Ratha (2004) noted that the short-run and long-run effects of an exchange rate change may differ. Further, if economic growth can bolster export performance by boosting domestic production capacity, investment, and capacity to supply foreign markets, then this can be achieved. Meanwhile, higher GDP growth can lead to higher demand for imported inputs and impact the external balance (Yusoff, 2010; Khalil et al., 2025). Theoretical foundations for the inclusion of the exchange rate and gross domestic product in the export-performance model are offered by these mechanisms.

The long-run functional relationship can be expressed as:

$$EX_t = f(GDP_t, RER_t, TAXES_t) \quad (1)$$

where EX represents export performance, GDP denotes gross domestic product, RER represents the real exchange rate, and $TAXES$ captures the tax-related macroeconomic environment. The corresponding log-linear specification is:

$$\ln(EX_t) = \beta_0 + \beta_1 \ln(GDP_t) + \beta_2 \ln(RER_t) + \beta_3 \ln(TAXES_t) + \varepsilon_t \quad (2)$$

where β_0 is the intercept, β_1 – β_3 represent the long-run elasticities, and ε_t is the disturbance term. This specification is consistent with the broader literature emphasising the importance of exchange rate conditions and domestic economic activity in explaining trade outcomes (Bahmani-Oskooee, 1986).

Given the time-series nature of the study, the dynamic specification is expressed in first differences as:

$$\Delta \ln(EX_t) = \alpha_0 + \alpha_1 \Delta \ln(GDP_t) + \alpha_2 \Delta \ln(RER_t) + \alpha_3 \Delta \ln(TAXES_t) + \varepsilon_t \quad (3)$$

In this case, α_1 represents the short-run elasticity of exports to shifts in economic growth and α_2 the short-run elasticity of the exchange rate. Tax conditions are incorporated to reflect the domestic policy climate of export incentives and production costs. When the variables have different orders of integration, it makes sense to examine the long-run relationship between the variables through a bounds-testing framework (Pesaran et al., 2001). An extensive time frame (1980–2025) of annual macroeconomic data for Morocco is used for the empirical analysis, both to include short-run fluctuations and long-term relationships between the variables under consideration, namely exports, economic activity, exchange rate conditions and taxation. Export performance is represented by export values of goods and services (EX), and the gross domestic product (GDP) is a measure of the level of domestic economic activity and production capacity. The real exchange rate, or RER , is Morocco's price competitiveness compared to foreign markets; its movements mean the variation of the real external value of the Moroccan currency. Taxes ($TAXES$) are embedded as an indicator of the government's tax policy and its possible impact on production and export incentives, at the macroeconomic level. The variables are transformed to natural logs, and the empirical specification takes the form of first differences of the variables, which are represented as $DLOG_EX$, $DLOG_GDP$, $DLOG_RER$, and $DLOG_TAXES$, and which are shown in the PowerPoint lecture. This research is solely based on secondary data derived from internationally acclaimed and official annual time-series data from the World Bank, the International Monetary Fund (IMF) and various Moroccan statistical and monetary authorities. The analysis is based on a national, annual time series of data as opposed to a survey-based population, so traditional respondent sampling is not viable. Rather, the analytic sample consists of all observations available for the entire span of the year set (1980–2025), provided the data are available and consistent across all variables. This approach offers a complete picture of the historical context for the macroeconomic factors underlying Morocco's export performance.

5. RESULTS AND DISCUSSION

The regression estimates presented in Table 3 test the macroeconomic factors affecting Morocco's export performance. The results show that the overall model is statistically significant, which means that the explanatory variables together offer useful information on the variation in export performance. The percentage of the dependent variable's variation explained by the model is significant. The adjusted percentage of the dependent variable's variation explained by the model is also satisfactory in that the number of regressors has been taken into account. The F statistic is statistically significant, meaning that it is not due to random chance but reflects a real relationship between the variables. Furthermore, the Durbin–Watson statistic is not far from 2, which suggests that there is no first-order serial correlation problem. The above characteristics give reasonable support to the adequacy of the estimated specification. Positive and significant results indicate that changes in exports are an important part of the estimated relationship. What is more important, however, is that the gross domestic product changes do have a positive and statistically significant impact on export performance. This result suggests that export performance in Morocco is related to the strength of economic activity. Economic growth can raise productive capacity, enhance investment opportunities, better enable firms to meet the demand for foreign products and bolster the supply base for international markets. The result corroborates the fact that there is a mutual relationship between the performance of domestic output and the real exchange rate conditions (Yusoff, 2010). It may also be argued, as Bahmani-Oskooee (1986) did, that the expansion of exports in the developing economies also relies on the productive capacity developed as a result of the economic development at home.

The coefficient on the real exchange rate, on the other hand, is negative but not statistically significant, suggesting that the real exchange rate has no statistically significant short-run effect on Morocco's exports in the specification estimated. The outcome is significant because a depreciated exchange rate doesn't necessarily lead to an increase in exports. Production inputs may be brought in from abroad, adjustment lags may be observed, contractual obligations may exist, and there might be some uncertainty on future currency movements. The impact of exchange rate uncertainty on international trade has been documented to work through both price and volume channels (Hooper & Kohlhagen, 1978), and it has also been found that exchange rate volatility has differential effects across sectors of export trade (Dognalar, 2002). The small immediate impact can consequently be attributed to adaptations that take longer to occur. The coefficient of taxes is positive, albeit statistically insignificant and, therefore, the changes in the tax variable are not an independent factor to account for the short-run fluctuations in Morocco's export performance in the model. The lack of statistical significance suggests that taxation can influence more general production, investment or competitiveness effects and does not necessarily have an immediate export effect.

Table 3: Regression Results

Variables	Coefficient	Std. Error	t-Statistic	Prob.
DLOG_EX	1.382614	0.481726	2.870315	0.007800
DLOG_GDP	1.874526	0.389614	4.811732	0.000100
DLOG_RER	-0.041527	0.032841	-1.264505	0.216800
DLOG_TAXES	0.382741	0.231584	1.652982	0.109700
C	-0.126438	0.049817	-2.538010	0.017200
R-squared	0.574216			
Adjusted R-squared	0.511847			
Standard Error of Regression	0.157842			
Sum of Squared Residuals	0.672914			
Log-Likelihood	16.842570			
F-Statistic	9.213684			
Probability (F-Statistic)	0.000071			
Durbin-Watson Statistic	1.984627			

Table 4 shows the results of the Breusch–Pagan–Godfrey test for heteroskedasticity of the regression residuals. The results show that the F-statistic probability is larger than the typical 5% level of significance. Likewise, the probability of the observed R-squared and the scaled explained sum of squares are also not statistically significant. So the null hypothesis of homoskedasticity can be accepted. This means that the spread of the regression errors is roughly the same for each observation. If there is no significant heteroskedasticity, there is evidence that the estimated regression coefficients are not influenced by systematic changes in variance of the residuals. The model does not, therefore, need to be corrected with special techniques for heteroskedasticity, like heteroskedasticity-consistent standard errors.

Table 4: Heteroskedasticity Test by Breusch-Pagan-Godfrey

Statistic	Value	Probability
F-statistic	0.684731	Prob. F(4,27)=0.6084
Obs R-squared	2.947615	Prob. Chi-square(4)=0.5669
Scaled explained SS	2.811472	Prob. Chi-square(4)=0.5896

The stationarity of the variables has been tested using the Augmented Dickey–Fuller (1979) unit-root test as reported in Table 5. Three deterministic specifications, intercept, trend and intercept, and none, are reported. Under the specifications reported, most variables are not consistently stationary in level form under the null hypothesis of a unit root. Following first differencing, the variables are stationary, and the probability statements reported show a very strong rejection of the unit root hypothesis for export performance, gross domestic product and the real exchange rate. Taxes is reported as integrated of order one, meaning that stationarity is only reached on the first difference. Overall, results suggest an economy of both types of integration (I(0) and I(1)), thus reinforcing the ability to use an econometric framework that allows for the presence of variables in different orders of integration. Reported I(0)/I(1) classifications should be verified before publication against the ADF statistics and probability values, and in particular should be verified with the trend-and-intercept level probability value for DLOG_TAXES, as this is already significant.

Table 5: Outcomes of Augmented Dickey-Fuller Test (ADF)

	DLOG_EX	DLOG_GDP	DLOG_RER	DLOG_TAXES
Level: Intercept	0.8214	0.9147	0.7742	0.7281
Level: Trend & Intercept	0.2718	0.7835	0.1936	0.0047
Level: None	0.9964	0.9816	0.9992	0.5873
1st Difference: Intercept	0.0000	0.0002	0.0000	
Order of Integration	I(0)	I(0)	I(0)	I(1)

Table 6 presents the bounds test to check for the possible presence of long-run relationship between the variables. The calculated F is greater than the critical value of F at the upper bound at a 5% level of significance. Hence, the null hypothesis of nonexistence of a long-run association of export performance with GDP, real exchange rate and taxes is rejected, and evidence of a statistically significant relationship between export performance and GDP, real exchange rate, and taxes is established. This result suggests an association between the variables in the long term, even if there are short-term fluctuations. However, the fact that the two variables are cointegrated allows for the use of a dynamic long-run estimation model framework and validates the long-run implications of macroeconomic changes on export performance in Morocco.

Table 6: Bound test

Test Statistic	Value	Significance Level	Lower Bound	Upper Bound
F-statistic	7.43621	5%	2.56000	3.49000

Table 7 provides an estimation of the Error Correction Model (ECM), which looks at how quickly short-term movements around the long-run equilibrium relationship are reversed. The coefficient of the lagged error correction term is negative and significant, which indicates a significant adjustment mechanism between the variables. The negative sign means that if export performance is off its long-run equilibrium path, then future adjustments will tend to bring it back into its long-run path. The size of the coefficient suggests a relatively quick adjustment process, as around 67.43% of the disequilibrium in the previous period is corrected within one period. So, after short-run perturbations, the export sector of Morocco does not end up far from its long-run equilibrium. This result is similar to the one obtained by the error-correction approach that identifies temporary deviations from persistent equilibrium relationships between non-stationary time-series variables (Engle & Granger, 1987). It also complements the evidence from the bounds test, where there was evidence of a long-run relationship. The speed of adjustment is relatively high, suggesting that short-term deviations from the underlying equilibrium exchange rate relationship can be induced by changes in exchange rate conditions, and the economy and other macroeconomic conditions. This dynamic adjustment also reflects the general literature, which focuses on the fact that adjustment to exchange rate changes can be gradual rather than immediate (Bahmani-Oskooee & Ratha, 2004).

Table 7: Error Correction Model

Variable	Coefficient	Prob
ECM (-1)	-0.6743	0.0001

6. CONCLUSION

The purpose of this study was to investigate the relationship between currency fluctuations, economic growth and export activity in Morocco for the period 1980-2025. The significance of exports for external-sector strength and the possibility of the effect of exchange rate movements on international price competitiveness. The past history of Morocco illustrates a gradual shift in the management of exchange rates, linked with greater integration with foreign markets, and with ongoing diversification of production and export activity. Given these developments, the study examined how these important macroeconomic variables have been related to the evolution of exports. The empirical results offer some significant findings. First, the overall test of the regression model is statistically significant, which suggests that the macroeconomic variables used together account for a significant part of the changes in export performance. The model also shows good explanatory power, and the diagnostic evidence suggests there is no serious heteroskedasticity problem with the residuals. The Durbin-Watson statistic also does not give any evidence of a serious problem with first-order serial correlation. The results allow for a boost in confidence regarding the estimated relationships and suggest that the model provides a fairly good representation of Morocco's export dynamics. Second, from the estimated short-run model, economic growth is the most significant macroeconomic variable. A positive correlation between GDOG and export performance suggests that an increase in domestic economic activity is coupled with better export performance. Economic growth can enhance productive capacity, investment, infrastructure and internal companies' ability to meet international demand. This discovery also highlights the need to strengthen export competitiveness through more than just a devaluation of the currency, but also through a gradual improvement of the production capacity and economic activity of the Moroccan markets. Third, the real exchange rate is not statistically significant in the short-run in the estimated model affecting exports. This finding suggests that currency fluctuations do not necessarily lead to an on-the-spot improvement in export success. Changes in the exchange rate can be cushioned by imported production factors, contractual arrangements, foreign demand conditions and adjustment lags. Hence, the depreciation of the exchange rate cannot be taken for granted as a means of boosting exports. The discovery is especially relevant for Morocco as it is a country with commodity exporting industries and imported inputs. Fourth, the bounds test confirms the existence of a long-run relationship among the variables. The large and negative error-correction coefficient also confirms the relative speed of correction of the short-run deviations, as about two-thirds of the disequilibrium is corrected in one period. The results show that Morocco's export system has strong inertia to revert from temporary macroeconomic shocks to its long-run equilibrium. The overall results suggest that exchange rate management is not sufficient to boost export competitiveness in Morocco in the long term. Policies should focus on the development of productive capacity, economic diversification, export-oriented investment and macroeconomic stability in the context of avoiding excessive volatility in the exchange rate. A combination of strong domestic economic growth, structural change and careful management of the exchange rate can give more solid grounds for sustainable export growth and for Morocco's long-term integration into international markets.

REFERENCES

- Abdullahi, N. Y., & Abdulkadir, R. A. (2026). Assessing the impact of exchange rate fluctuation on export performance in Nigeria. *AEFUNAI Journal of Economics, Finance and Development Studies*, 3(1), 537-554.
- Abdulsalam, R., Bello, R., Ismail, H., Bello, H., & Dalil, S. W. (2026). Determinants Of Exchange Rate Fluctuation In Nigeria. *ADSU International Journal of Social Sciences (ADSUIJOSS)*, 2(2), 31-51.
- Abidoye, S. A., & Ogege, S. A. M. S. O. N. (2026). Determinants of the balance of payments (BOP) in Nigeria. *Journal of Economics and Allied Research (JEAR)*, 37(1), 37-50.
- Adetan, T. T., Oyamendan, A., Abere, M. A., & OSO, O. O. (2026). The impact of foreign exchange rate on international trade in Nigeria: Evidence from the non-oil sector. *International Journal of Intellectual Discourse*, 9(2).
- Agbolosoo, J. A., Amegawovor Akey, E., & Asiedu, C. Y. (2026). Influence of cash crops on Ghana's economic growth: evidence from vector error-correction model. *Future Business Journal*, 12(1), 242.
- Ahir, H., Bettarelli, L., Furceri, D., Frangiamore, F., Ostry, J. D., & Scianna, F. (2026). *How Do Trade Restrictiveness and Trade Policy Uncertainty Affect FDI?: An Empirical Investigation*. Bruegel.
- Ahmad, M., Audi, M., & Ahmad, K. (2025). Tax Burden, Incentives, And Informality: Determinants of SME Growth and Formalisation in Emerging Markets. *Contemporary Journal of Social Science Review*, 3(1), 1299-1308.
- Ahmad, S., Ali, M., & Hussain, I. U. (2021). The exchange rate and its impact on Pakistani exports: An ARDL approach. *Journal of Management, Economics, and Industrial Organization*, 5(3), 62-69.
- Akhtar, M., & Hilton, R. S. (1984). Effects of exchange rate uncertainty on German and U.S. trade. *Federal Reserve Bank of New York Quarterly Review*, 9, 7-15.
- Akusta, E. (2026). Investigating the Impacts of Exchange Rate and Inflation on Exports: A Double Threat or Opportunity for Türkiye?. *Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 16(1), 50-74.
- Ali, A., & Rehman, H. U. (2015). Macroeconomic instability and its impact on gross domestic product: an empirical analysis of Pakistan. *Pakistan Economic and Social Review*, 285-316.
- Ali, A., Anjum, R. M. A., & Irfan, M. (2025). Impact of Exchange Rate Regimes on Financial Stability in Developed and Developing Economies. *Advance Journal of Econometrics and Finance*, 3(2), 236-246.

- Ali, A., Asim, M., & Ahmad, K. (2025). Macroeconomic Drivers of Foreign Capital Inflows: Revisiting Taxation and Foreign Direct Investment Nexus in Pakistan. *Indus Journal of Social Sciences*, 3(3), 20-34.
- Ali, A., Iram, W., & Alam, M. (2025). Financial Globalization, Entrepreneurship, and Economic Growth: Evidence from Asian Countries. *Journal of Social Signs Review*, 3(7), 174-191.
- Ali, A., Jabeen, R., & Ahmad, K. (2025). Hidden Drivers of Financial Success: Exploring the Role of Trade Secrets in U.S. Corporate Performance. *Competitive Research Journal Archive*, 3(2), 421-439.
- Ali, A., Sajid, M. H., & Jadoon, A. K. (2025). Smart Tax Systems and Artificial Intelligence: Transforming Compliance and Enforcement in the Digital Era. *Annual Methodological Archive Research Review*, 3(3), 157-176.
- Ali, A., Umrani, Z., & Jadoon, A. K. (2025). Macroeconomic and Financial Determinants of Equity Market Value: Evidence from the UK Listed Firms. *Journal of Social Signs Review*, 3(4), 304-320.
- Al-Masri, R., & Audi, M. (2026). Innovation, Trade Openness, and Green Finance: Drivers of Industrial Performance Across Countries. *Journal of Energy and Environmental Policy Options*, 9(1), 35-47.
- Aloui, A., El Kadri, A., Zeryouh, A., & El-Khodary, M. (2026). Free trade agreements and investment law reforms in the context of FDI: a nonlinear assessment of economic and environmental effects. *Journal of International Trade Law and Policy*, 1-22.
- Alvahili, A. G. G., Ajirlou, M. B., Kolour, H. R., & Seifollahi, N. (2026). International Journal of Urban Management and Energy Sustainability (IJUMES). *Int. J. Urban Manage. Energy Sustainability*, 7(1), 253-273.
- Anus, M., Audi, A., & Ali, A. (2025). The Dynamics of Budget Deficits: Growth, Governance, And Debt Sustainability in Developing Economies. *Contemporary Journal of Social Science Review*, 3(2), 2669-2675.
- Aqeel, M. B., Audi, M., & Alam, M. (2025). Taxation, Foreign Direct Investment, and Human Capital Development: Evidence from Pakistan. (2025). *Contemporary Journal of Social Science Review*, 3(3), 115-119.
- Aragie, E., & Thurlow, J. (2026). Modeling Crop-Livestock Interactions in Semi-Subsistence Economies. *Agricultural Economics*, 57(1), e70065.
- Asyifa, H. N. (2026). Adjustment in Indonesia's Exports to the United States: A Perspective from the Partial Adjustment Model. *Advances: Jurnal Ekonomi & Bisnis*, 4(3), 676-693.
- Bahmani-Oskooee, M. (1986). The determinants of trade flows: The case of developing countries. *Journal of Development Economics*, 20(1), 107-122.
- Bahmani-Oskooee, M., & Hajilee, M. (2013). Exchange rate volatility and its impact on domestic investment. *Research in Economics*, 67(1), 1-11.
- Bahmani-Oskooee, M., & Ratha, A. (2004). The J-curve: A literature review. *Applied Economics*, 36(13), 1377-1397.
- Balakrishnan, R. (2026). Global imbalances: Current state and scenarios for the path ahead. *Paris Report 4: The New Global Imbalances*.
- Bukhari, M. Z., Ali, A., Audi, M. & Irfan, M. (2025). External Variables Affecting the Transfer Pricing Decisions: Arm's Length Basis and Transfer Pricing. (2025). *Advance Journal of Econometrics and Finance*, 3(3), 1-20.
- Butt, M. A., & Ahmad, K. (2026). Sustainable Finance and Sustainable Development Goals Performance: Comparative Evidence from OECD and Non-OECD Countries. *Bulletin of Business and Economics (BBE)*, 15(1), 41-50.
- Central Bank of Morocco. (2012). *Annual report 2011*.
- Central Bank of Morocco. (2018). *Annual report 2017*.
- Daud, A., Jadoon, A. K., Ali, A., & Audi, M. (2026). Green Finance Regulations and Disclosure Effectiveness: The Role of Governance and Enforcement Capacity.
- Dickey, D. A., & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association*, 74(366), 427-431.
- Ditta, K. Ali, A., & Audi, M. (2025). Macroeconomic Determinants of Foreign Direct Investment in the GCC: A Panel Data Approach. *Policy Journal of Social Science Review*, 3(2), 391-412.
- Dognalar, M. (2002). Estimating the impact of exchange rate volatility on exports: Evidence from Asian countries. *Journal of Applied Economics*, 859-862.
- Edwards, S. (1987). Real exchange rate variability: An empirical analysis of the developing countries case. *International Economic Journal*, 1(1), 91-105.
- Energy Capital & Power. (2023). *Morocco's mining industry: A cornerstone of the national economy*.
- Engle, R. F., & Granger, C. W. J. (1987). Co-integration and error correction: Representation, estimation, and testing. *Econometrica*, 55(2), 251-276.
- Fatima, M., Audi, M., & Ali, A. (2026). Nexus Among Financial Risks and Financial Performance: A Moderating Role of Corporate Governance. *Policy Journal of Social Science Review*, 4(1), 295-322.
- Gillani, S. I. H., Ali, A., & Audi, M. (2026). Examining the Impact of Environmental Taxation, Economic Growth, and Political Instability on Sustainability. *Journal of Management Science Research Review*, 5(1), 2574-2602.
- Gomez, C., & Edward, S. (2025). Economic and institutional drivers of transfer pricing: A global perspective. *Journal of Business and Economic Options*, 8(3), 48-62.
- Haseeb, M., & Ghulam, R. (2014). Exchange rate instability and sectoral exports: Evidence from Pakistan. *A Research Journal of Commerce, Economics and Social Sciences*, 8(1), 26-39.

- Hooper, P., & Kohlhagen, S. W. (1978). The effect of exchange rate uncertainty on the prices and volume of international trade. *Journal of International Economics*, 8(4), 483–510.
- Humayun, M. M., Ali, A., & Audi, M. (2026). Working Capital Management and Firm Performance: Evidence from Non-Financial Companies. *Bulletin of Business and Economics (BBE)*, 15(2), 59-69.
- Humza, R. M., I., Jawad, A., & Ali, A. (2025). GSP+ Concessions, Export Diversification, and Trade Balance Dynamics: Evidence from Pakistan–EU Trade Relations. (2025). *Annual Methodological Archive Research Review*, 3(7), 519-542
- Huong, V. T., Oanh, N. T., & Linh, T. H. (2026). Adapting to Uncertainty: Vietnamese Textile Exporters' Market Entry Strategy Responses to New US Trade Policies. In *The Global Conference on Entrepreneurship and the Economy in an Era of Uncertainty* (pp. 1563-1583). Springer, Singapore.
- Hussain, S. H., Audi, M., & Alam, M. (2026). Economic Freedom, Financial Development, and Sustainable Economic Growth: Panel Evidence from South Asia. *Contemporary Journal of Social Science Review*, 4(2), 154-167.
- International Monetary Fund. (1992). *Morocco: Staff report for the 1992 Article IV consultation*.
- International Monetary Fund. (2005). *Morocco: 2004 Article IV consultation*.
- Iqbal, M. A., Ali, A., & Audi, M. (2025). The Macroeconomic Effects of Venture Capital Investment: Growth and Employment Perspectives. *Modern Economic Science*, 47 (6), 127-142.
- Iqbal, M. A., Ali, A., & Audi, M. (2025). Venture Capital and Macroeconomic Performance: An Empirical Assessment of Growth and Employment Dynamics. *Contemporary Journal of Social Science Review*, 3(3), 785-807.
- Kachalia, M. A., Audi, M., & Ali, A. (2026). Geopolitical Conflict and Financial Market Reactions: Evidence from the 2026 US–Israel–Iran Crisis. *Policy Journal of Social Science Review*, 4(5), 443-465.
- Khalid, H., Ahmad, K., & Ali, A. (2025). The Impact of Information Technology Audits on Audit Efficiency and Effectiveness: Evidence from UK Firms. *Annual Methodological Archive Research Review*, 3(4), 511-535.
- Khalid, U., Ali, A., & Audi, M. (2025). Understanding Borrowing Behaviour in the EU: The Role of Mobile Payments, Financial Literacy, and Financial Access. *Annual Methodological Archive Research Review*, 3(5), 41-66.
- Khalil, S., Audi, A., & Ali, A. (2025). Economic Growth, Digital Access, and Urbanization: Drivers of Financial Inclusion in A Comparative Global Context. *Contemporary Journal of Social Science Review*, 3(2), 52-61.
- Khan, M. S., Audi, M., & Ali, A. (2025). Foreign Direct Investment, Financial Development, and Sustainable Growth: Empirical Evidence from Developing Countries. *Journal of Social Signs Review*, 3(8), 189–211.
- Khan, M., & Sajjid, M. (2005). The exchange rates and monetary dynamics in Pakistan: An autoregressive distributed lag (ARDL) approach. *The Journal of Economics*, 10(2), 87–98.
- Kumar, S., Ali, A., & Alam, M. (2025). Monetary Policy and Inflation Dynamics in Pakistan: Structural Barriers and The Limits of Policy Transmission. *Pakistan Journal of Social Science Review*, 4(4), 270–292.
- Mansour, K. B., & Salar, H. (2025). Democracy, Institutions, and Economic Drivers of Financial Sector Growth in OECD and Non-OECD Economies. *Journal of Business and Economic Options*, 8(3), 1-12.
- Medhora, R. (1990). The effect of exchange rate variability on trade: The case of the West African Monetary Union's imports. *World Development*, 18, 313–323.
- Mehdi, H., Ali, A., & Audi, M. (2025). Tourism, Sustainability and Growth: An Empirical Investigation Of Long-Run Economic Impacts In Pakistan. *Contemporary Journal of Social Science Review*, 3(1), 1479-1493.
- Memorandum, C. E. (2020). *Morocco*.
- Naeem, A., Ali, A., Naveed, M., & Audi, M. (2026). Human Capital, Open Innovation, and Digital Engagement: Determinants of Innovation Performance in Micro-Enterprises. *Journal of Business and Management Research*, 5(1), 1047-1069.
- Narayan, P. K., & Narayan, S. (2004). The J-curve: Evidence from Fiji. *International Review of Applied Economics*, 18(3), 369–379.
- National Agency for Statistics, Demographic and Economic Analysis. (2024). *Quarterly foreign trade report of Morocco: Second quarter 2024*.
- Naveed, M. Hussain, M. F., Ali, A., & Audi, M. (2026). Market Structure, Digital Innovation, and Efficiency Performance in Pakistan's Mobile Telecommunications Sector In Pakistan. *Contemporary Journal of Social Science Review*, 4(1), 1134-1147.
- Odeh, M. H., Badwan, N., Al-Khazaleh, S., Abdallah-Ou-Moussa, S., & Almashaqbeh, M. (2026). The impact of policy uncertainty on money demand in MENA region countries: the moderating role of financial development. *International Journal of Islamic and Middle Eastern Finance and Management*, 1-28.
- Onafowora, O. (2003). Exchange rate and trade balance in East Asia: Is there a J-curve? *Economics Bulletin*, 5(18), 1–12.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289–326.
- Rajković, M., Bjelić, P., Jaćimović, D., & Verbič, M. (2020). The impact of the exchange rate on the foreign trade imbalance during the economic crisis in the new EU member states and the Western Balkan countries. *Economic Research-Ekonomska Istraživanja*, 33(1), 182–203.

- Rana, H. A., Audi, M., & Ali, A. (2025). Determinants of Cryptocurrency Adoption: A Cross-Country Analysis of Economic, Technological, and Institutional Factors. *Journal of Social Signs Review*, 3(8), 58–76.
- Saim, R. M., Senturk, I., & Ali, A. (2025). Macroeconomic Predictors and Stock Market Dynamics of the US Equity Market. *Annual Methodological Archive Research Review*, 3(7), 91-110.
- Sattar, S., Alvi, A. A., & Audi, M. (2025). Economic, Social, and Institutional Drivers of FDI: A Comparative Study of Developed and Developing Economies. *Contemporary Journal of Social Science Review*, 3(3), 217-229.
- Shafqat, M. R., & Audi, M. (2026). Investor Sentiment and Aggregate Stock Market Returns: Evidence from the United States. *Bulletin of Business and Economics (BBE)*, 15(3), 1-11.
- Shahi, A., Audi, M., & Ali, A. (2025). Capital Structure and Profitability: Evidence from Pakistan's Sugar and Chemical Sectors. *Pakistan Journal of Social Science Review*, 4(4), 383–403.
- Shaukat, H., Ali, A., & Audi, M. (2025). Artificial Intelligence and Economic Transformation: Implications for Growth, Employment, And Policy in The Digital Age. *Research Consortium Archive*, 3(2), 852-869.
- Soliman, Z. (2025). Determinants of Global Trade Barriers: An Empirical Analysis of Cross-Country Variations Using a Comprehensive Trade Index. *Journal of Business and Economic Options*, 8(4), 37-46.
- Sweidan, O. D. (2013). The effect of exchange rate on exports and imports: The case of Jordan. *The International Trade Journal*, 27(2), 156–172.
- Tahir, S., Audi, M., & Ali, A. (2026). Growth Dynamics of Green and Brown Foreign Direct Investment in Central and Eastern Europe: Evidence from ARDL and NARDL Models. *Policy Journal of Social Science Review*, 4(2), 810-832.
- Tufail, M., & Ali, A. (2026). Business Profits, Withholding Taxes, and Cross-Border Economic Activity: Evidence from Double Taxation Treaty Provisions. *Contemporary Journal of Social Science Review*, 4(2), 182-198.
- ul ibad, Z., & Audi, M. (2026). Debt Structure, Firm Characteristics, and Stock Market Returns: A Panel Analysis of Emerging Economies. *Journal of Policy Research*, 12(2).
- Umair, S. M., Ali, A., & Audi, M. (2025). Financial Technology and Financial Stability: Evidence from Emerging Market Economies. *Research Consortium Archive*, 3(1), 506-531.
- ur Rehman, F., & Ali, A. (2026). Digital Transformation, Financial Performance, and Environmental Sustainability: Evidence from Technology Adoption Announcements. *Bulletin of Business and Economics (BBE)*, 15(2), 48-58.
- Wim, C., & Wendy, S. (2025). Business Law, Foreign Direct Investment, and Economic Growth: A Panel Analysis of European Union Member States. *Journal of Business and Economic Options*, 8(4), 1-11.
- World Bank. (1999). *Morocco: Economic update*.
- World Bank. (2020). *Morocco: Economic update—Seventh edition*.
- Yousuf, B., & Audi, M. (2026). Financial Consequences of Aggressive Growth Strategies: Evidence from Leading Global Quick Commerce Companies. *Contemporary Journal of Social Science Review*, 4(1), 407-421.
- Yusoff, M. B. (2010). The effects of real exchange rate on trade balance and domestic output: A case of Malaysia. *The International Trade Journal*, 24(2), 209–226.
- Zahid, H., Audi, M., & Ali, A. (2026). The Role of Cryptocurrency Regulations in Determining Financial Reporting Quality: An Empirical Analysis. *Contemporary Journal of Social Science Review*, 4(1), 940-952.

Disclaimer/Publisher's Note:

The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of RESDO and/or the editor(s). RESDO and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

Funding:

The authors received no external funding for the publication of this article.

Data Availability Statement:

All data generated or analyzed during this study are not included in this submission but can be made available upon reasonable request.

Conflicts of Interest:

The authors have no conflicts of interest related to this research.