



أثر تخفيض العملة على الهيكل الاقتصادي: التجربة المصرية المرية (٢٠٢٣-١٩٩٠)

The Impact of Currency Devaluation on the Economic Structure: The Experience of Egypt (1990-2023)

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Abstract

This research aims to evaluate the impact of currency devaluation on the Egyptian economic structure during the period (1990-2023), using the Autoregressive Distributed Lag (ARDL) methodology to test the relationships in the long and short run, and estimating the Error Correction Model (ECM).

The results revealed the existence of a statistically significant direct relationship in both the short and long term between the value of the local currency and the share of agriculture in GDP. There was also a statistically significant direct relationship between the value of the local currency and the share of manufacturing in GDP in the short term, while there was no statistically significant relationship between the two variables in the long term. The results also showed a statistically significant inverse relationship between the value of the local currency and the share of services in GDP in both the short and long term.

The structural change accompanying the devaluation policy was an increase in the share of services at the expense of agriculture and manufacturing. This may be primarily due to the heavy reliance on imported inputs in agriculture and manufacturing compared to services, which led to increased production costs, decreased profitability in these sectors, and a shift in resources to services, particularly information and communications, financial investment, and real estate.

Based on the above, the study recommends the need to develop a comprehensive industrial policy that prioritizes reducing dependence on imported inputs and supporting industrial integration. Efforts should be made to combat inflation resulting from currency depreciation by supporting productive activities and improving the investment environment, rather than raising

interest rates. Efforts should be made to support human development efforts which aim to enhance the efficiency of the human resource.

Keywords: Currency devaluation, economic structure, premature deindustrialization, industrial policy, ARDL methodology.

مستلخص

يهدف هذا البحث إلى تقييم أثر تخفيض قيمة العملة على الهيكل الاقتصادي المصري خلال الفترة (١٩٩٠-٢٠٢٣)، باستخدام منهجية الانحدار الذاتي ذي الفجوات الموزعة (ARDL) لاختبار العلاقات في الأجلين الطويل والقصير، وتقدير نموذج تصحيح الخطأ (ECM).

أظهرت النتائج وجود علاقة طردية ذات دلالة إحصائية في كل من الأجلين القصير والطويل بين قيمة العملة المحلية والنصيب النسبي للزراعة في الناتج المحلي الإجمالي. كما وجدت علاقة طردية ذات دلالة إحصائية بين قيمة العملة المحلية والنصيب النسبي للصناعات التحويلية في الناتج المحلي الإجمالي في الأجل القصير، بينما لم توجد علاقة ذات دلالة إحصائية بين المتغيرين في الأجل الطويل. كما أظهرت النتائج وجود علاقة عكسية ذات دلالة إحصائية بين قيمة العملة المحلية والنصيب النسبي للخدمات في الناتج المحلي الإجمالي في كل من الأجلين القصير والطويل.

لقد كان التغيير الهيكلي المصاحب لسياسة تخفيض قيمة العملة هو زيادة حصة الخدمات على حساب الزراعة والصناعات التحويلية. قد يُعزى ذلك بالدرجة الأولى إلى الاعتماد الكبير على المدخلات المستوردة في قطاعي الزراعة والصناعة مقارنة بالخدمات، مما أدى إلى زيادة تكاليف الإنتاج، وانخفاض الربحية في هذين القطاعين، وتوجه الموارد نحو الخدمات، وخاصة المعلومات والاتصالات، والاستثمار المالى، والعقارات.

وبناءً على ما سبق، توصي الدراسة بضرورة وضع سياسة صناعية شاملة تُعطي الأولوية لتقليل الاعتماد على المدخلات المستوردة ودعم التكامل الصناعي. كما ينبغي بذل الجهود لمكافحة التضخم الناتج عن انخفاض قيمة العملة من خلال دعم الأنشطة الإنتاجية وتحسين بيئة الاستثمار، بدلاً من رفع أسعار الفائدة. وينبغي بذل الجهود لدعم التنمية البشرية التي تهدف إلى تعزيز كفاءة الموارد البشرية.

الكلمات المفتاحية: تخفيض قيمة العملة، الهيكل الاقتصادي، التراجع المبكر في التصنيع، السياسة الصناعية، منهجية الانحدار الذاتي ذي الفجوات الموزعة ARDL.

1- Introduction

Many developing countries resort to devaluing their local currencies through administrative pricing decisions or by adopting a policy of full or partial currency liberalization. The goal is to reduce the trade deficit by encouraging exports and promoting growth and shifting resources from less productive sectors to more productive ones. There is considerable empirical evidence that there is a link between growth, economic structural development, and currency devaluation (Rodrik, 2008; Bahlla, 2012; Rapetti, 2020; Demir and Ramzi, 2021). There is also other evidence that currency devaluation has little or no effect on growth or economic structure. Some studies also indicate an inverse relationship between currency devaluation and growth (Tafesse, 2019; Ribeiro et al., 2020; Dada et al., 2022; Ali et al., 2022; Umoru & Imimole, 2022)

The impact on the production structure through industrialization is one of the channels that the literature follows to explain the positive impact of currency devaluation on growth. Currency devaluation increases the profitability of sectors that produce tradable goods compared to sectors that produce non-tradable goods (Rodrik, 2008). This diverts resources from services to manufacturing, which is considered the leading sector for growth. Manufacturing is the sector with the greater ability to generate innovative activities, increasing returns to scale and the backward/forward linkages (Tregenna, 2008; Szirmai, 2012)

However, this policy may not yield these results, whether in terms of reducing the deficit or achieving the desired structural transformation and growth. The rigidity of the production system, the weak elasticity of demand for exports and imports, and the reliance of domestic production on imported inputs, whose prices rise with the depreciation of the currency, all stand in the way of achieving this policy's objectives. Furthermore, this policy results in increased income inequality and a decline in real wages. This may be reflected in a decline in aggregate demand, thus fueling stagflation.

All of this indicates that a competitive currency exchange rate may be a necessary condition for promoting growth and developing the production

structure, but it is not a sufficient condition. A comprehensive industrial policy aimed at reducing domestic production's dependence on imported inputs, balanced monetary and fiscal policies, developing education and training, encouraging innovation, and social policies to contain inequality and the decline in real incomes during transitional phases are all conditions for the success of a currency devaluation policy in supporting growth and developing the production structure. This is evidenced by the experiences of currency devaluation in two groups of countries: Southeast Asian countries, where currency devaluation succeeded in developing the production structure and supporting growth, and Latin American and African countries, where this policy was generally unsuccessful in achieving its objectives (Iasco-Pereira & Misso, 2022). Southeast Asian countries implemented this policy as part of an integrated industrial policy (Amsden, 1992; Bresser-Pereira, 2010, 2019; Bresser-Pereira et al., 2020; Ang, 2016), while other countries implemented the same policy without fulfilling the necessary conditions for success.

Over the past decades, the Egyptian economy has witnessed a series of economic reforms aimed at achieving economic stability and sustainable growth. The policy of devaluating the local currency (the Egyptian pound) is one of the most prominent monetary tools used by successive Egyptian governments to influence economic performance and stimulate the desired structural transformation within the economy.

Studying the relationship between local currency devaluation and economic structural changes in Egypt is of great importance, as successive devaluations represent a significant opportunity to promote the desired structural transformation in Egypt. The Egyptian economic structure still suffers from reliance on low-productivity sectors, a weak industrial sector, a declining contribution of the agricultural sector to GDP while still absorbing a large proportion of the labor force, and an increasing reliance on the services sector (Adly, 2020). This makes understanding the mechanisms of structural transformation and the factors influencing it, including exchange rate policies, of paramount importance for economic policymakers.

1/1- Research Problem

Despite the theoretical importance of the currency devaluation policy as a tool for stimulating exports and enhancing economic competitiveness, applied studies have shown mixed results regarding the effectiveness of this policy in achieving the desired structural transformation, especially in developing economies suffering from chronic structural imbalances (Rodrik, 2008). This research analyses the impact of the devaluation of the Egyptian pound on the economic structure during the period (1990-2023). The research raises several questions:

- To what extent have the Egyptian pound devaluation policies contributed to develop the Egyptian economic structure?
- Which economic sectors have benefited most from currency devaluation policies, and which have been harmed by them?
- What are the factors and conditions that determine the effectiveness of the currency devaluation policy in developing the Egyptian economic structure?
- How can we maximize the benefits of exchange rate policies in stimulating the desired structural transformation in the Egyptian economy?

1/7 - Research Hypothesis

The study attempts to verify the validity of the following hypothesis:

There are statistically significant relationships between the devaluation of the Egyptian currency and the changes that occurred in the Egyptian economic structure, represented by the shares of the main economic sectors - agriculture, manufacturing, and services – in the Egyptian GDP during the research period (1990-2023).

1/\(^\text{Research Objectives}\)

This research aims to:

- Analyze the impact of Egyptian pound devaluation policies on the structure of the Egyptian economy in terms of the distribution of GDP across various sectors.
- Identify the economic sectors that benefited from the currency devaluation and those that were harmed by it and analyze the reasons for this variation in response.
- Examine the role of mediating variables in determining the effectiveness of currency devaluation in achieving the desired structural transformation.

 Provide recommendations to economic policymakers in Egypt on how to maximize the benefits of exchange rate policies in stimulating the desired structural transformation and diversifying the economy.

1/4- Research methodology

The study relies on the analytical approach, both inductive and deductive, in the theoretical part of the study. It also uses the quantitative approach to test the relationship between currency devaluation and economic structure in Egypt during the period (1990-2023) by using the Autoregressive Distributed Lag (ARDL) methodology. The methodology includes unit root test, cointegration test, identification of long- and short-term relationships, and estimation of the error correction model (ECM).

1/°- Research Plan

After the introduction, the research includes four sections. The first section discusses the theoretical framework for the relationship between currency devaluation and the economic structure. The second section addresses the previous literature and the research gap. The third section analyzes the evolution of the local currency exchange rate and the structural changes in Egypt during the research period. The fourth section presents a quantitative model for the relationship between currency devaluation and economic structure in Egypt. The research then presents a conclusion, policy recommendations, and proposed future studies.

2- The Theoretical Framework for the Relationship between Currency Devaluation and Structural Transformation

2/1- Currency Devaluation

Currency devaluation refers to a decrease in the nominal value of the local currency against foreign currencies. This devaluation can occur administratively through a decision by the monetary authorities, or automatically through market mechanisms under a flexible exchange rate regime (Krugman & Obstfeld, 2018). The theoretical basis for currency devaluation is that currency devaluation can improve the trade balance by increasing the competitiveness of exports and reducing imports. This is due to currency devaluation makes domestic goods cheaper for foreign buyers, increasing external demand for domestic products. However, Marshall and

Lerner concluded that this positive effect on exports and the trade balance can only occur if the sum of the elasticities of demand for exports and imports is greater than one (Marshall, 1923; Lerner, 1944). However, currency devaluation may initially worsen the trade balance in the short term before improving it in the medium and long term. This is because the price effect precedes the quantity effect, with the cost of imports increasing immediately while the adjustment in export and import volumes takes longer (Krugman & Obstfeld, 2018).

2/2- Currency Devaluation and Economic Structure

The export-led growth model supports the idea that exports are a major driver of economic growth, and that currency devaluation can boost exports and lead to increased investment in export sectors, thus promoting structural transformation (Balassa, 1978). It is believed that currency devaluation can stimulate export-oriented industrialization, contributing to positive structural transformation. When a currency depreciates, a country's exports become more competitive in global markets, encouraging the expansion of the manufacturing sector and the shift of resources from low-productivity agriculture and services to higher-productivity industries (Rodrik, 2008).

Rodrik's argument is that currency devaluation impacts the size of the tradable sectors within the productive structure, principally the manufacturing sectors, in detriment to the non-tradable sectors (services), and that this boosts economic growth. The link between currency devaluation and this structural change is in its expansionary effects on tradable sector profitability. By increasing profitability, currency devaluations increase investment and efficiency, and induces the production of new products, boosting the complexity and long-run growth (Rodrik, 2008). Moreover, the expansion of tradable activities generates different forms of positive externalities such as learning by doing, learning by investing and technological spillovers, to the rest of the economy (Rapetti, 2020).

A competitive exchange rate also had a positive effect on investment, savings, and employment (Gluzmann et al., 2012). Specifically, it reduces real wages, transferring income from a class with a lower propensity to save (workers) to a class with a greater propensity to do so (firms). It increases national savings, enhancing the economy's investment capacity. By affecting a firm's profit rate, a currency devaluation affects its decisions concerning production, worker

employment and capital accumulation (Frenkel and Ros, 2006), favoring the tradable sectors. Insofar as these productive activities include manufacturing firms, pursuing a competitive exchange rate reallocates national resources from non-industrial (non-tradable) sectors to industrial (tradable) ones, leading to a more industrialized, diversified, and modern productive structure (Ros and Skott, 1998; Gabriel and Missio, 2018; Gabriel and Ribeiro, 2019). Lower real wages and higher profits resulting from currency devaluation expand profits and capital accumulation in manufacturing activities (Ros, 2015). As a result, currency devaluation induces the exports of manufactured goods, leading to changes in the productive structure towards manufacturing sectors, these sectors are more capable of inducing domestic integration through backward and forward links with other sectors.

The growth of manufacturing has a pulling effect on the economy (Tregenna, 2008; Iasco-Pereira & Misso, 2022). Developed countries are those that have enhanced industrialization in the production structure, while developing countries are those that have been confined to primary sectors. (Su & Yao, 2016) explore the role of manufacturing industry as the key engine of economic growth. They found that the manufacturing sector has three main features which are very important for economic growth. The development of manufacturing industries promotes incentives for savings, accelerates the pace of technological accumulation and, compared to other sectors, enhances the use of domestic human capital and institutions (Su & Yao, 2016; Gabriel & Ribeiro, 2019).

2/3- Limits of Currency Devaluation Policy

However, on the other hand, currency devaluation may increase the cost of importing capital goods and technology, which may hinder structural transformation if an economy relies heavily on imports to modernize its productive sectors (Krugman & Taylor, 1978; Nucci and Pozzolo, 2001). Thus, the influence of currency devaluation on productive structure depends on which effect prevails (Iasco-Pereira & Misso, 2022). Furthermore, if nominal wages respond to inflation resulting from a currency devaluation, the cost of production in these industries rises, affecting the price advantage they have achieved and negatively affecting the capital accumulation of these fields (Bahmani-Oskooe & Hajilee, 2010). All of this hinders the desired structural transformation and maintains the status quo. Furthermore, the fundamental theoretical argument for the Marshall-Lerner condition is present, which many

developing economies lack due to the weak elasticity of demand for both their exports and imports. All of this indicates that currency devaluation is not substitute for industrial policy.

Other factors that determine the effectiveness of currency devaluation in achieving the desired structural transformation include: the ability of productive sectors to increase output in response to changes in relative prices (Aghion et al., 2009) such that if supply is inelastic, devaluation may lead to inflation rather than increased production (Eichengreen, 2008). The quality of institutions and infrastructure (Acemoglu & Robinson, 2012), as well as the development of human capital, improving the business environment, and proper industrial policies to support the structural transformation, are also essential (Lin, 2012).

Furthermore, macroeconomic stability is a prerequisite for the success of a devaluation policy. Without balanced fiscal and monetary policies, devaluation may lead to high inflation, capital flight, and economic instability (Hausmann et al., 2005). The problem of inflation resulting from the rising cost of imports represents an obstacle to the expansion of exports that a devaluation policy may enable. It leads to an increase in the costs of exported goods, eroding the profitability of exports, or eliminating the price advantage achieved by the devaluation policy. Therefore, reducing inflation is a condition for the policy's success in achieving export expansion and thus contributing to achieving the desired structural transformation.

For a developing economy burdened by external debt or heavily dependent on government imports of critical commodities such as food and energy, a currency devaluation will increase public spending on these needs or on servicing external debt, reducing the share of public investment in infrastructure, human development, and supporting productive activities and exports—all of which are prerequisites for the success of structural transformation resulting from the opportunity provided by a currency devaluation. This means that the impact of currency devaluation on public spending represents an additional obstacle to structural transformation.

These obstacles to currency devaluation in achieving the desired structural transformation may help explain the discrepancy in the outcomes of the East Asian and Latin American experiences. The experiences of South Korea,

Taiwan, and Singapore are successful examples of using currency devaluation as part of an export-led industrialization strategy. These countries maintained competitive exchange rates, which facilitated manufacturing sector growth and rapid structural transformation (Amsden, 1992). In contrast, some Latin American countries faced challenges in using currency devaluation to achieve structural transformation. In some cases, repeated devaluations led to high inflation and economic instability, hindering the structural transformation process (Taylor, 1998).

It is an essential fault to consider that the central explanation in new developmentalism for economic success is the adoption, or not, of a competitive exchange rate. It ignores aspects associated with a country's economic, social, and political characteristics. Important themes such as technical progress, industrial policy, labor productivity, income distribution, investment in infrastructure and the development of a national system of innovation, are not addressed (Medeiros, 2020). This doctrine also assumes that national firms are already operating competitively in the international market, with the modern technology and institutions that are required. Finally this doctrine gives a considerable emphasis upon the importance of external markets for domestic demand, which is an incorrect assumption in most developed and developing countries, where the domestic market is the major source of demand for industrial production. (Medeiros, 2020)

3- Review of the Empirical Literature

It is noteworthy that studies that have empirically addressed the impact of currency devaluation on the economic structure are scarce, while there are numerous studies that have addressed the impact of currency devaluation on economic growth. However, there are also indications in some of these studies to the structural changes that occurred and its effects on growth. Therefore, the researcher considers the latter to be related to the subject of the research and addresses its results.

3/1- Studies at the level of one country

(Amsden, 1992) conducted a detailed study of structural transformation in South Korea for the period (1960-1990). He explained that the currency devaluation policy was part of an integrated strategy that included targeted industrial policies and government support for emerging industries. The results

showed that the manufacturing share of GDP rose from 14% in 1960 to more than 30% in 1990, coinciding with ongoing currency devaluation policies. (El-Ramly & Abdel-Haleim, 2008) analyzed the relationship between exchange rate changes and output in Egypt over the period (1982–2004). The results indicate that currency devaluations have an initial contractionary effect on output. This contractionary effect lasts for up to four years before the expected positive impact of currency devaluation begins to appear.

(Mwanza, 2013) aimed to explore the relationship between currency devaluation and exports and imports in Malawi over the period (1980-2010). The study demonstrated that impact of currency devaluation of exports and imports is not statistically significant. The reasons are complex export procedures and reliance on imports of intermediate goods that are difficult to replace. For Ghana, (Nyeadi et al., 2014) aimed to investigate the impact of exchange rate on export growth for the period (1990-2012). The study finds that exchange rate has no impact on the export of goods and services in Ghana. The study however finds that GDP, gross national saving, import growth and total investment have significant impact on export. (Yusuf & Bambale, 2016) examines the relationship between currency devaluation and firm performance in Nigeria's northwestern geopolitical zone. The study highlights the theoretical inconsistency between currency devaluation and Nigeria's foreign trade performance under the Marshall-Lerner condition, and argues that this provides a solid basis for rejecting the policy due to its ineffectiveness in improving the trade balance or increasing exports.

Elbagoury (2017) measured the effects of currency devaluation on the Egyptian economy for the period (1980-2016). The results indicated that currency devaluation has an expansionary effect on the Egyptian economy and that currency devaluation explains a significant portion of the change in Egypt's GDP. The results of the mediation analysis in (Tafesse, 2019) study, which was applied to the Ethiopian economy using data of 27 years, showed that the devaluation of the currency on the Ethiopian economy contributed to a negative impact on the country's exports and an increase in imports, contrary to theoretical expectations. The study attributed this to the heavy reliance on imported basic goods and inputs, the high inflation resulting from the devaluation of the currency, and the decline in foreign direct investment. (Ali et al., 2022) examines the mediating role of the current account deficit in the relationship between currency depreciation and economic growth in Pakistan

over the period (1972–2016). The results showed that currency depreciation negatively impacts the current account balance, hindering economic growth. The study attributes this to the primary trade deficit and the low elasticity of imports and exports. Also, for Pakistan, the (Khan et al., 2022) study examined the impact of currency devaluation on economic growth for the period (1990–2018), the findings indicate that the devaluation of Pakistan's currency has no significant impact on the long-run changes in economic growth. However, interest rates and gross capital formation are positively correlated with economic growth in the long run.

(Dada et al., 2022) examine the impact of currency depreciation on output in the Nigerian experience over the period (1981–2020). The results show that currency devaluation and associated returns have an expansionary effect on total economic output. (Sharaf & Shahen, 2023) investigates the asymmetric impact of the real effective exchange rate on Egypt's real domestic output for the period (1960-2020), Results show evidence of a long-run asymmetry in the output effect of REER changes in which only real currency depreciations have a contractionary impact on output, while the REER has no impact on output in the short run. So, the Egyptian monetary authority cannot rely on domestic currency depreciation as a policy instrument to boost domestic output. (Ogiriki & Emeke, 2024) investigated the impact of currency devaluation on economic growth in Nigeria during the period (2003-2022). The study found significant positive impact of the foreign currency exchange rate and GDP, and a significant negative impact of the inflation rate on GDP. These results mean that a currency devaluation policy can have a net positive effect on economic growth when the resulting inflation can be controlled. (El-Ghorab, 2025) examined the impact of currency devaluation of the Egyptian pound on export margins at the firm level in 2008, 2013, 2016, and 2020 using a comprehensive dataset of over 7,000 firms. The study found that real devaluation boosts export performance by between 5.7 and 6.2 percentage points. The results also indicate that the competitiveness gains achieved by firms with high import intensity were greater than the harm caused by higher costs of imported inputs.

3/2- Cross-country Studies

The study of (Galindo et al., 2006) aimed to test whether exchange rate fluctuations have a significant impact on employment. The study treated 9 Latin

American countries. The results support that real exchange rate devaluations can impact employment growth positively. In industries with high liability dollarization, the overall impact of a currency devaluation on employment can be negative. (Freund & Pierola, 2008) examine 92 episodes of export surges to answer the question: how can countries stimulate and sustain strong export growth? They find that export surges in developing countries tend to be preceded by large currency devaluations. The currency devaluation leads to a significant reallocation of resources in the export sector into new export products and new markets.

(Rodrik, 2008) examined the relationship between currency devaluation and economic growth in ^V developing countries over the period (1950-2004): China, India, South Korea, Taiwan, Uganda, Tanzania, and Mexico. The study concluded that a 20% devaluation of the currency in developing countries boosts annual growth by 0.4 percentage points. He concluded that the currency devaluation contributed to the development of manufacturing industries and stimulated exports. (Cantavella & Gutierrez, 2012) gathered export data from 67 countries around the world across 65 export sectors for the period of (1976-2006) to examine the question of how a real devaluation affects real export growth in a direct way. The results revealed that currency devaluation has contractionary effects on real exports in 80 per cent of specific export sectors and affects a variety of industries without distinction as to whether products incorporate more added value or less added value.

(Lanau, 2017) explores the effects of real exchange rate devaluation on growth across sectors in 61 countries including 5 countries from Latin America for the period (1995–2011). The results confirm that sectors that export relatively more to begin with, grow relatively faster in response to a devaluation; and sectors where import penetration in final demand is higher, also grow relatively faster in response to a devaluation. The results hold for the subsample of Latin American countries too. (Gabriel & Missio, 2018) aims to analyze the relationships between the real exchange rate, growth rate, and level of economic complexity. The study spanned 181 economies for the period (1990-2011) The study confirms that the level of the RER influences the share of manufacturing in GDP, and consequently, the GDP growth rate. The results also show that an undervalued RER exhibit positive and significant effects on the level of economic complexity as a measure of economic diversification.

Belete (2019) attempts to estimate the role of local currency devaluation on the competitiveness of COMESA countries over the period 2004–2017. The results show that local currency devaluation has little impact on COMESA competitiveness. However, exports, GDP per capita, trade balance, unemployment, and governance effectiveness play significant roles. Therefore, the study suggests that COMESA stakeholders should prioritize economic and non-economic variables over local currency devaluations. The study of (Chukwudi & Okechukwu, 2021) examines the asymmetric effects of currency devaluation on economic output for the period (1980-2019) in six selected SSA countries, namely Ghana, Kenya, Tanzania, Mozambique, Nigeria, and Malawi. The results are mixed, as devaluation impacts positively and significantly on economic output in Ghana, Kenya, Tanzania, and Mozambique, but is insignificant in Nigeria and Malawi. This mixed result suggests that the impact of currency devaluation on output differs across countries depending on the structure and size of the economy, the nature of goods produced, and the supportive policies in place, among other things.

The study of (Hernandez & Saury, 2021) assesses the effects of an undervalued currency upon key macroeconomic variables for different developed and developing countries. Results revealed that an undervalued currency has expansionary effects on the trade balance and the manufacturing production ratio, and negative effects on the wage-share and the inflation rate, especially in developing countries. (Iasco-Periera & Missio, 2022) estimates the impact of currency devaluation on structural change. The study examined 148 countries over the period (1991–2018), and the evidence suggests that a lower real exchange rate promotes structural change toward manufacturing in terms of GDP and employment. A 10% devaluation of the national currency increases the manufacturing share of GDP by rates ranging from 0.4% to 2.9% over a five-year period (according to different models).

The study of (Umoru & Imimole, 2022) assesses how currency devaluation influenced non-oil export in 11 African countries for the period of (1991-2020). The results revealed that currency devaluation had a negative and significant impact on non-oil exports except for 2 countries. This negative impact is due to high inelastic import dependence. (Iasco-Pereira & Misso, 2023) discuss how the real exchange rate influences growth and the contrasting experiences of 151 Asian and Latin American countries for the period (1990-2017). The results

indicate that currency devaluations increase inequality. It is negatively associated with the wage-share of GDP and positively associated with profit-share of GDP. In contrast, there is no robust evidence that RER measures exert any influence over net exports. The estimates provide empirical evidence that pursuing a competitive RER, influences social capability and total factor productivity (TFP) positively.

3/3- A Critical Assessment of the Literature and Research Gap

The review of empirical literature on the impact of currency devaluation on the economic structure in developing economies presents a complex and diverse picture. While some studies, particularly those related to East Asia, indicate a positive relationship between currency devaluation and structural transformation, others, particularly in the context of Latin America and Africa, showed the opposite or at least showed that this relationship is not direct and depends on intermediary factors such as the quality of institutions, human capital, the degree of trade openness, and the nature of complementary policies. The literature also highlights the significant variation in the response of different sectors to currency devaluations, underscoring the need to adopt a differentiated approach that considers the specificities of each sector.

The results of empirical studies are diverse, making it is complex to predict the impact of currency devaluation on economic structure in advance. Rather, they reveal themselves through research, both in terms of its direction and the factors influencing it. Furthermore, we note the scarcity of studies on the subject in the Egyptian case, despite the numerous exchange rate devaluations over the past two decades. Hence, the need to analyze the relationship considering the Egyptian experience emerges as an attempt to bridge this research gap and provide valuable recommendations to decision-makers in this field.

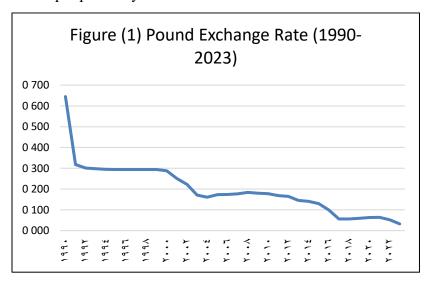
4- Exchange Rate and Economic Structure in Egypt during the Period (1990-2023)

4/1- Egyptian Pound Exchange Rate

The most significant movements in the Egyptian pound's exchange rate during the research period can be summarized as follows (Figure 1):

- The first liberalization within the economic reform program in 1991, the pound fell from about \$0.64 in 1990 to \$0.32 in 1992.

- A period of relative stability (1991-2000).
- The pre-partial float period (2000-2002), The period began with \$0.28 per pound, with increasing pressures leading to a gradual depreciation.
- The partial float in 2003, a sharp decline from \$0.22 to \$0.17.
- The period of relative stability (2004-2010), the exchange rate ranged between \$0.18 and \$0.16 per pound.
- The period of political unrest (2011-2016), the pound gradually declined from \$0.17 to about \$0.1.
- Full flotation in November 2016, a sharp depreciation reaching \$0.056 per pound in 2017.
- Relative stability with slight improvement (2018-2021), a gradual increase from \$0.056 to \$0.064 per pound.
- Successive devaluations (2022-2023), a sharp depreciation reaching \$0.032 per pound by the end of 2023.

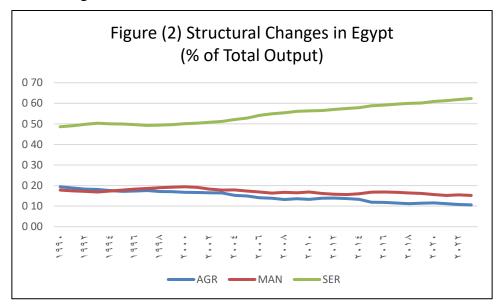


Source: Calculated by the researcher using data from World Bank data base available at: https://data.albankaldawli.org/.

4/2- Structural Changes in Egypt

The Egyptian economy witnessed significant structural changes in the shares of key economic sectors during the period from 1990 to 2023. As shown in Figure (2), the agricultural sector contributed about 18% of the GDP in 1990, and the

contribution gradually decreased to reach 14.5% in 2010, there was a continuous decline in the share of the agricultural sector until the contribution reached 10.5% in 2023, which reflects the decreasing dependence on agriculture and the shift of resources from it to other sectors, whether manufacturing industries or services.

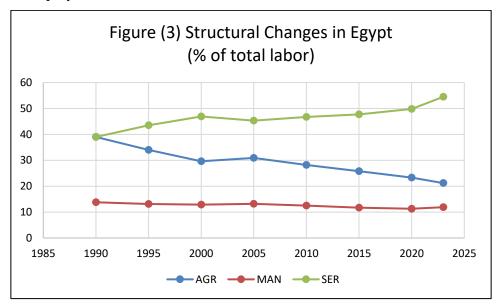


Source: Calculated by the researcher from data of: CAPMAS, *Statistical Yearbook*, Cairo, (1990-2023).

However, we note that the relative decline in the contribution of agriculture to GDP was not matched by an increase in the contribution of manufacturing industries. The sector's contribution declined from about 18% in 1990 to 15.8% in 2010 due to the repercussions of the global financial crisis. The sector's share declined during the period of political unrest, reaching 15.5% in 2013. After the flotation of the pound, the sector's contribution reached 16.7% in 2017, gradually declining to 16.2% in 2023.

However, the beneficiary of the declining share of agriculture in GDP was the services sector. Its contribution gradually increased from 49% in 1990 to reach 53.4% in 2010. Despite the negative impact of political and security unrest on the services sector after 2011 saw a decline in tourism, its contribution to GDP continued to rise, reaching 55.2% in 2016 to reach 58.5 in 2023. The most prominent contributing sectors being communications and information technology, construction, trade, and transportation.

If we look at the structural changes from an employment perspective (Figure 3), we observe a continuous decline in the proportion of workers in agriculture, from approximately 39% in 1990 to nearly 21% in 2023. This is contrasted with an increase in the services sector, from 39% in 1990 to over 54% in 2023. Meanwhile, the manufacturing sector has witnessed a decline in its share of total employment from 13.8% in 1990 to 11.9% in 2023.



Source: Calculated by the researcher from data of: CAPMAS, *Annual Labor Bulletin*, Cairo, (different years).

This demonstrates the growing dominance of the services sector in the Egyptian economy at the expense of the agricultural sector. The manufacturing sector is also unable to increase its contribution to GDP despite targeted industrialization policies and the implementation of a devaluation policy, which is supposed to create new opportunities for industrial exports.

5- The Model

The econometric model aims to estimate the impact of currency devaluation on the Egyptian economic structure, represented by shares of the agriculture, manufacturing, and services sectors in GDP, during the period (1990-2023).

5/1- Model Specification

The effect of devaluation of the currency on economic structure can be estimated using a model consisting of three equations:

$$AGR_t = \alpha_\theta + \alpha_1 EXR_t + \varepsilon_t \tag{1}$$

$$(2) MAN_t = \beta_\theta + \beta_1 EXR_t + v_t$$

$$SER_t = \gamma_0 + \gamma_1 EXR_t + \mu_t$$

Where:

AGR is the share of agriculture in GDP

MAN is the share of manufacturing in GDP

SER is the share of services in GDP

EXR is the exchange rate of the local currency

5/2- Data

Data on the share of each of the main economic sectors (agriculture, manufacturing, and services) in the GDP during the research period were prepared by the researcher using data from statistical yearbook issued by the Central Authority of Public Mobilization and Statistics (CAPMAS) available at: https://www.capmas.gov.eg/. Exchange rate of Egyptian pound during the research period was calculated by the researcher using data from the World Bank database available at: https://data.albankaldawli.org/.

5/3- Methodology

The researcher uses the autoregressive distributed lag (ARDL) methodology to estimate the impact of exchange rate on economic structure. The ARDL methodology was first introduced by (Pesaran & Shin, 1999; Pesaran et al., 2001). It can be defined as a regression model that contains the lagged values of the dependent variable and the current and lagged values of the independent variables for one or more periods. The model deals with time series of different degrees of integration, provided they are integrated of degree zero I(0) or degree one I(1). Therefore, it is consistent with the time series covered by the model in its three equations. The model includes testing the stationarity ranks of time series (unit root), conducting cointegration testing, estimating the long-run relationship, estimating the short-run relationship using the error correction model (ECM), and conducting diagnostic tests of the model to ensure the quality of the model and its lack of statistic problems.

5/4- Testing the Stationarity of Time Series (Unit Root)

The following table (1) shows the results of the Augmented Dickey-Fuller (ADF) test and the Phillips-Perron test for the ranks of the time series stationarity of the variables included in the model.

Augmented Dickey-Fuller (ADF)				
	Le	evel	1st Def	erence
	t-statistic	Prob.	t-statistic	Prob.
AGR	-0.914797	0.7708	-5.359872	0.0001
MAN	-0.465550	0.8857	-3.873914	0.0058
SER	1.302255	0.9981	-3.205407	0.0289
EXR	0.153581	0.9650	-39.43618	0.0001
		Phillips-Perron (PP)	_
AGR	-0.914072	0.7711	-5.361922	0.0001
MAN	-0.717610	0.8286	-3.847499	0.0062
SER	0.719415	0.9908	-3.316547	0.0224
EXR	-5.910069	0.0000	-	-

Table (1) Unit Root Test

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

Table (1) shows that all series were stable after taking the first difference for each of them in both tests, augmented Dickey-Fuller and Phillips-Perron, except for the one series for local currency exchange rate which were stable at the level according to the Phillips-Perron test. All of the series were stable at the 1% significance level, except for one series share of services sector in GDP, at the 5% significance level according to two tests. The calculated t value was found to be less than the tabulated t value in all cases. Therefore, the null hypothesis of unit root was rejected, and the alternative hypothesis of series stability was accepted. According to these results, ARDL is an appropriate method for estimating the model with its three equations.

5/5/1- Estimating the impact of the exchange rate on the relative share of the agricultural sector in GDP

The results of the boundary test in Table (2) indicate that the calculated F value (7.253) was greater than the upper limit at a significance level of 1%, thus proving the significance of the relationship in the long run between the two

variables, which means that there is a significant effect of reducing the value of the pound on the share of agriculture in the output in the long run in the Egyptian case. The coefficient of this direct relationship is 0.267.

Table (2)	Bounds '	Test and 1	Long-term	Relationship	Estimation
1 4010 (2	Dominas	I Obt wild i		1 coluctioning	Domination

F-Bounds Test Null Hypothesis: No levels relationship					
Test Statistic	Value	Signif.	I(0)	I(1)	
F-statistic	7.253324	10%	3.02	3.51	
k	1	5%	3.62	4.16	
		2.5%	4.18	4.79	
		1%	4.94	5.58	
Cas	Case 2: Restricted Constant and No Trend				
Variable	coefficient	Std. Error	t-statistic	Prob.	
EXR	0.267455	7.031762	8.420678	0.0000	
С	0.087367	007611	11.47909	0.0000	
EC = AGR - (0.2675*EXR - 0.0874)					

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

Table (3) also shows the significance of the short-term relationship between currency devaluation and the agricultural share of output. The error correction coefficient appeared with a negative sign (-0.607) and a value less than one and with statistical significance (1%).

Table (3) Estimation of the Relationship in the Short Term and the Error Correction Coefficient

ECM Regression					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
EXR	0.060905	0.011841	5.144150	0.0000	
CointEq(-1)*	-0.232654	0.048239	-4.822931	0.0000	
R-squared 0.219563 Durbin-Watson 2.025641					

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

To ensure the quality of the model used and its lack of statistic problems, we conducted the following tests:

- LM Lagrange Multiplier test for autocorrelation of residuals.
- Breusch-Pagan-Godfrey test for non-stationarity of variance.
- Jarque-Bera test for normal distribution of residuals.
- Ramsey RESEST test for model specification validity and stability.

Table (4) shows that the results of the previous tests indicate the validity of the model specification. The structural stability of the model parameters can be tested using the CUSUM test and the CUSUM of squares test. The test statistics fall within the critical limits at the 5% level, indicating the stability of the model parameters and the model's standard validity.

Test	F-statistic	Prob.
Serial Correlation: LM Test	0.035211	0.9654
Heteroskedasticity	0.188520	0.9034
Normality: Jarque-Bera test	8.364120	0.015267
Stability: Ramsey RESET	0.526608	0.526608

Table (4) Results of Diagnostic Tests for the Model

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

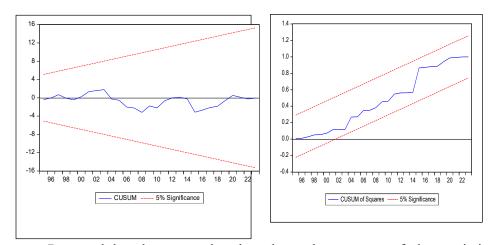


Figure (4) Model Stability Test Results

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

5/5/2- Estimating the Impact of Currency Devaluation on the Share of the Manufacturing sector in GDP

The results of the boundary test in Table (5) indicate that the calculated F value is less than the minimum at a significance level of 5%, which means that the significance of the relationship between the two variables is not proven in the long run, i.e. there is no significant effect of devaluing the currency on the share of manufacturing industries in output in the long run in the Egyptian case.

Table (3) Bounds Test and Long-term Relationship Estimation					
F-Bound	F-Bounds Test Null Hypothesis: No levels relationship				
Test Statistic	Value	Signif.	I(0)	I(1)	
F-statistic	3.433318	10%	3.02	3.51	
k	1	5%	3.62	4.16	
		2.5%	4.18	4.79	
		1%	4.94	5.58	
	Case 2: Restrict	ted Constant and	l No Trend		
Variable	coefficient	Std. Error	t-statistic	Prob.	
EXR	0.136141	0.038828	3.506231	0.0010	
С	0.144624	0.008076	17.90824	0.0000	

Table (5) Bounds Test and Long-term Relationship Estimation

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

However, it is clear from Table (6) that the short-term relationship between the first lag of the exchange rate and the manufacturing share of output was significant. The coefficient of this direct relationship is 0.267. The error correction coefficient appeared with a negative sign (-0.607) and a value less than one and statistically significant (1%).

Table (6) Estimation of the Relationship in the Short Term and the Error Correction Coefficient

ECM Regression					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
D(MAN(-1))	0.349992	0.144889	2.415593	0.0225	
CointEq(-1)*	-0.216474	0.065164	-3.321997	0.0025	
R-squared 0.345291 Durbin-Watson 2.201362					

EC = MAN - (0.1361*EXR + 0.1446)

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

Table (7) shows that the results of the previous tests indicate the validity of the model specification. The structural stability of the model parameters can be tested using the CUSUM test and the CUSUM of squares test. The test statistics fall within the critical limits at the 5% level, indicating the stability of the model parameters and the model's standard validity.

Test	F-statistic	Prob.
Serial Correlation: LM Test	1.105937	0.3460
Heteroskedasticity	0.479480	0.6992
Normality: Jarque-Bera test	0.844733	0.655494
Stability: Ramsey RESET	1.575560	0.2202

Table (7) Results of Diagnostic Tests for the Model

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

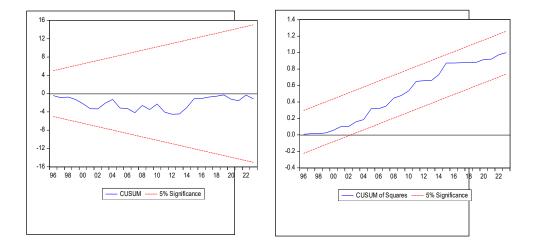


Figure (5) Model Stability Test Results

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

5/5/3- Estimating the Impact of Currency Devaluation on the Share of the Services sector in GDP

The results of the boundary test in Table (8) indicate that the calculated F value (17.484) was greater than the upper limit at a significance level of 1%, thus proving the significance of the relationship in the long run between the two variables, which means that there is a significant and negative effect of currency devaluation on the share of services in the output in the long run in the Egyptian case. The coefficient of this negative relationship is 0.626.

Table (8) Bounds Test and Long-term Relationship Estimation

F-Bounds Test Null Hypothesis: No levels relationship				
Test	Value	Signif.	I(0)	I(1)
Statistic				
F-statistic	17.48452	10%	3.02	3.51
k	1	5%	3.62	4.16
		2.5%	4.18	4.79
		1%	4.94	5.58
	Case 2: Restri	cted Constant	and No Trend	
Variable	coefficient	Std. Error	t-statistic	Prob.
EXR	-0.626089	0.063499	-9.859814	0.0000
С	0.689356	0.019110	36.07377	0.0000
EC = SER - (-0.6261*EXR + 0.6894)				

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

However, it is clear from Table (9) that the significance of the relationship between the two variables is not proven in the short term. The error correction coefficient appeared with a negative sign (-0.144) and a value less than one and statistically significant (1%).

Table (9) Estimation of the Relationship in the Short Term and the Error Correction Coefficient

ECM Regression					
Prob.					
Variable Coefficient Std. Error t-Statistic					

D(EXR)	-0.054538	0.037665	-1.447987	0.160
				0
D(EXR(-1))	0.076247	0.044490	1.713781	0.098
				9
D(EXR(-2))	-0.006420	0.004721	-1.360027	0.186
				0
CointEq(-1)*	-0.144430	0.019189	-7.526610	0.000
				0
R-squared 0.448656		Durbin	-Watson 1.64	4865

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

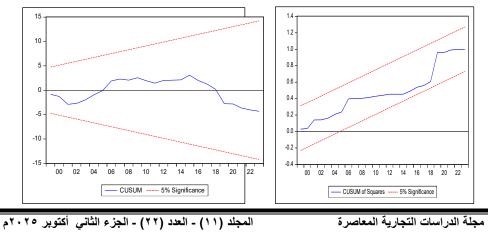
Table (10) shows that the results of the previous tests indicate the validity of the model specification. The structural stability of the model parameters can be tested using the CUSUM test and the CUSUM of squares test. The test statistics fall within the critical limits at the 5% level, indicating the stability of the model parameters and the model's standard validity.

Table (10) Results of Diagnostic Tests for the Model

Test	F-statistic	Prob.
Serial Correlation: LM Test	2.334675	0.1194
Heteroskedasticity	0.591781	0.7063
Normality: Jarque-Bera test	0.666355	0.716643
Stability: Ramsey RESET	3.590858	0.0299

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

Figure (6) Model Stability Test Results



(OAV)

Source: Prepared by the researcher based on the outputs of the statistical program (E-Views).

5/6- Interpretation of Model Results

The results showed a direct and significant relationship between the value of the local currency and the agricultural share of GDP. This means that currency devaluation has a negative impact on agriculture's share of GDP. This can be explained by the increased costs of agricultural production resulting from increased prices of imported inputs such as seeds, fertilizers, and equipment¹. This is coupled with a continued decline in the share of public investment in agriculture during the research period, which fell from 9.3% in 2003 to 3.6% in 2023 (MPED, National Accounts Data). The results also showed no significant long-term impact of currency devaluation on the share of manufacturing industries in Egypt's GDP. This may be due to the limited competitiveness of Egyptian industrial exports on the one hand and the heavy reliance on imported inputs on the other. The increase in industrial production costs immediately following the currency devaluation due to inflation and the rise in the prices of imported inputs significantly reduced profit margins in these industries, eliminating the price advantage of Egyptian industrial exports—an advantage that the currency devaluation policy aimed to achieve. This is consistent with studies that confirm that the limited benefits of currency devaluation for manufacturing industries in developing countries are due to heavy reliance on imported inputs, weak supply flexibility, limited infrastructure and technology, weak institutions and economic governance, and problems related to macroeconomic stability and inflation. In the Egyptian case, the absence of a comprehensive industrial policy that includes protectionist regulation, export support, and supply chain development, along with weak manufacturing infrastructure (energy, transportation, technology), and the flight of industrial capital to non-productive sectors such as real estate and financial services, can

¹ Although there is no direct data available on the extent of dependence of different sectors on imported inputs, the study of (Kamal, 2018), which used the input-output technique, attempted to measure this indirectly by estimating the impact of excluding imported inputs on employment multipliers in the three sectors. This study concluded that the manufacturing sector is highly dependent on imported inputs, the agricultural sector is moderately dependent on imported inputs, while the services sector is low in dependence on imported inputs. This partly explains why the agricultural and manufacturing sectors did not benefit from the price advantage achieved by the currency devaluation policy compared to the services sector.

also be considered. This is in addition to the continuous decrease in the share of manufacturing in public investments, which decreased from approximately 5.5% in 2013 to nearly only 3% in 2023 (MPED, National Accounts Data,).

The results also demonstrate a significant inverse relationship in the long run between the value of the currency and the share of services in GDP, which supports the gradual and ongoing structural transformation of the Egyptian economy toward services. This relationship may be explained by the flexibility of the services sector in adapting to economic changes, the emergence of new opportunities in financial services, the growth of digital services sectors, and increased investment in services, particularly in the information and communications technology (ICT) sector. It also indicates that some important service sectors, such as tourism and telecommunications, benefit directly from the currency devaluation. This benefit may be due primarily to the relative decline in imported inputs required for service activities compared to manufacturing and agriculture, which supports the profitability of these services and supports their expansion. Also, when the pound depreciates, the value of remittances from Egyptians working abroad increases when converted into local currency, boosting spending on domestic services such as education, health, and real estate. These remittances are counted within the services sector, increasing its share of GDP. This is in addition to the continuous increase in the share of services in public investments, which increased from approximately 24% in 2013 to nearly 37% in 2023 (MPED, National Accounts Data), and the presence of a supportive infrastructure for services.

6- Conclusion

Many developing countries pursue a policy of currency devaluation with the aim of improving the trade balance. This can result from the transfer of resources from non-tradable activities (services) and lower-productivity activities (agriculture), to tradable and higher-productivity activities (manufacturing), thereby encouraging exports and supporting growth, employment, and development. However, implementation presents challenges that hinder this, such as the lack of the Marshall-Lerner condition for export and import elasticities, the excessive reliance of productive activities on imported inputs, and inflation, which negatively impacts domestic production costs. Similarly, for countries burdened by external debt, such as Egypt, the inflation resulting from currency devaluation will increase the burden of debt service, denominated in the local currency. This negatively impacts government

spending directed towards human development, which is one of the conditions required to leverage a currency devaluation policy to bring about the desired structural transformation, namely the shift towards sectors with higher productivity.

Research has shown that the currency devaluation policy has failed to bring about structural transformation that supports growth, employment, and development, particularly industrialization in Egypt during the research period. The relative shares of both agriculture and manufacturing in both output generation and labor absorption declined over the period, while the relative shares of services in output and employment rose significantly. The results of the statistical analysis supported the existence of a statistically significant direct relationship in both the short and long term between the value of the local currency and the share of agriculture in GDP. There was also a statistically significant direct relationship between the value of the local currency and the share of manufacturing in GDP in the short term, while there was no relationship between the two variables in the long term. The results also showed a statistically significant inverse relationship between the value of the local currency and the share of services in GDP in both the short and long term during the research period. This means that the devaluation of the currency contributed to an increase in the share of services in GDP at the expense of agriculture and had no impact on manufacturing.

Indeed, the overall impact of currency devaluation on Egypt's economic structure is a "premature deindustrialization", a phenomenon that is negative for job creation, growth, and sustainable development. This impact, in the Egyptian case, is explained by the excessive reliance of agricultural and manufacturing production activities on imported inputs, whose costs are high when denominated in local currency. Consequently, the profitability of these activities declines, they falter, and resources are diverted to services driven by increased public and private investment, particularly in the fields of information and communications, as well as financial and real estate services.

Numerous studies document the heavy reliance on imported inputs in Egypt's manufacturing industries, as well as the disparities between different subsectors in this regard (Zaki, 2017; Kamal, 2018; Zarzoso et al., 2018). The automotive, machinery, and equipment industries rely on imported inputs to a very high degree, the petrochemical and chemical industries rely on imported inputs to a high degree, while the food, clothing, and textile industries rely on imported

inputs to a moderate degree. Overall, we can say that Egypt's manufacturing sector relies heavily on imported inputs. We can link currency depreciation to productivity, and we expect total factor productivity (TFP) to decline in sectors that rely more heavily on imported inputs. This could explain part of the problem of resource diversion from productive agricultural and industrial sectors to services.

Services are the sector that is least dependent on imported inputs, and therefore the cost structure is not greatly affected by the rise in the foreign exchange rate resulting from the liberalization policy, thus remaining a safe haven for more profitable and stable investment. This transformation towards services also explained by the lack of a comprehensive industrial development plan that works to reduce reliance on imported inputs, supports industrial integration, improve the industrial investment environment, and implement trade protection when necessary. The fiscal and monetary economic policies accompanying the liberalization of the exchange rate did not work in favor of the industrial or agricultural production sectors. Government investments directed to both sectors deteriorated significantly, on the one hand, and the high interest rate implemented to combat inflation contributed to the rise in financing costs and made it difficult to continue the productive activity, on the other hand.

7- Policy Recommendations

Based on the findings of the study, several recommendations can be made that economic policy makers should take into consideration. The most important of these recommendations are the following:

- Design and implement a comprehensive industrial policy that prioritizes reducing dependence on imported inputs and realizing the industrial integration, improving the industrial investment environment, supporting research and development activities, and applying trade protection when necessary. Gradual currency devaluation could be part of this policy, rather than a standalone measure.
- Work to combat inflation resulting from currency depreciation by supporting productive activities and improving the investment environment, rather than adopting a tight monetary policy of raising interest rates.

- Work to avoid raising interest rates, as this eliminates the price advantage provided by currency depreciation by raising production costs and diverting resources from productive activities to nonproductive investments, particularly in financial services and real estate.
- Support human development efforts, particularly in the areas of education, training, and healthcare, aimed at enhancing the efficiency of human resources so they can seize the opportunities offered by structural transformation to higher-productivity manufacturing sectors.
- Investing in logistics infrastructure such as ports, roads, and transportation and energy networks to reduce shipping and export costs for local products.

8- Proposed Future Studies

Through the study, some points emerged to the researcher that require further study and are suitable as points for future studies. Perhaps the most important of these are the following:

- The phenomenon of premature deindustrialization in Egypt, its causes, and how it can be addressed.
- The extent of reliance on imported inputs and its impact on the effectiveness of the currency devaluation policy in encouraging industrial exports.
- The impact of currency devaluation on production costs in the agricultural sector and the prices of basic food commodities in the local market.

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