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The Türkiye–Egypt Free Trade Agreement Revisited: Reconfiguration and Recent Dynamics

Türkiye–Mısır Serbest Ticaret Anlaşmasına Yeniden Bakış: Yapısal Dönüşüm ve Güncel Dinamikler

Aslıhan Yördem ^{a,*}

^a PhD, Independent Researcher & International Business Development Consultant, İstanbul / Türkiye
ORCID: 0000-0002-2201-2323

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ÖZ

Bu çalışma, sektör dinamikleri, karşılaştırmalı imalat performansı ve üretim bağlantılarının coğrafi yeniden yapılanması odağında Türkiye–Mısır ticari ilişkilerinin STA sonrası seyrini kapsamlı bir şekilde incelemektedir. Herfindahl–Hirschman İndeksi ve varyasyon katsayısı gibi ölçütlerden yararlanan analiz, 2007 yılında ağırlıklı olarak düşük katma değerli mallardan oluşan ticari yapının zaman içinde belirgin biçimde değiştiğini ortaya koymaktadır. Türkiye'nin ihracat profili, sermaye ve teknoloji yoğun mallarda artan uzmanlaşma ile birlikte önemli ölçüde çeşitlenmiştir. Buna karşılık, Mısır'dan yapılan ithalat başta enerji ve değerli metaller olmak üzere, daha yakın dönemde ise demir-çelik ve hazır giyim gibi belirli ürün gruplarının etkisiyle daha yoğunlaşmış ve oynak bir hâl almış; bu durum 2023 itibarıyla ticaret açığıyla sonuçlanmıştır. Söz konusu açığın konjonktürel bir dalgalanma olup olmadığı henüz saklı kalmakla birlikte, elde edilen bulgular sektörel entegrasyon dinamikleri, yatırım akımları ve Pan-Avrupa-Akdeniz menşe kümülasyonu çerçevesinde değerlendirildiğinde, ikili ilişkilerin geleneksel mal ticaretine ek olarak daha geniş bir ekonomik etkileşim alanına yöneldiğine işaret etmektedir.

ABSTRACT

Focusing on sectoral dynamics, comparative manufacturing performance, and the geographical relocation of production linkages, this study examines the evolution of Türkiye–Egypt trade relations in the post-FTA period. Drawing on the Herfindahl–Hirschman Index (HHI) and the coefficient of variation, the analysis reveals that the trade structure, initially dominated by low-value-added goods, has undergone a distinct compositional realignment over time. Türkiye's export profile has significantly diversified, with an increasing specialization in capital- and technology-intensive goods. In contrast, imports from Egypt have become more concentrated and volatile, driven by specific product groups—primarily energy and precious metals, and more recently, iron-steel and ready-made garments—culminating in a trade deficit by 2023. While it remains uncertain whether the observed deficit reflects a temporary cyclical fluctuation, the findings, when interpreted in the context of sectoral integration dynamics, investment flows, and Pan-Euro-Mediterranean diagonal cumulation of origin, suggest that bilateral relations extend beyond traditional merchandise trade to a broader sphere of economic interaction.

1. Introduction

The institutional architecture of world trade has been shaped by the interaction between the multilateral trading system established in the aftermath of World War II and the wave of regionalism that intensified from the 1990s onward (Ethier, 1998). The global trade regime, whose foundations were laid by the General Agreement on Tariffs and Trade

(GATT) in 1947, was initially grounded in the principles of non-discrimination and Most-Favored-Nation (MFN) treatment. However, as multilateral negotiations became increasingly complex and progress under the World Trade Organization (WTO) slowed, countries turned more decisively toward Preferential Trade Agreements (PTAs),

* Sorumlu yazar/Corresponding author.

e-posta: asli.yordem@gmail.com

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which offer faster and deeper forms of economic integration (Hoekman & Kostecki, 2009). Over time, these arrangements have evolved from limited instruments focused primarily on tariff concessions to more comprehensive Regional Trade Agreements (RTAs) that cover services, intellectual property rights, and investment disciplines (Lawrence, 1996; World Trade Organization [WTO], 2011).

This transformation has also generated a long-standing debate regarding the effects of regionalism on the multilateral trading system (WTO, 2011). On the one hand, scholars argue that the proliferation of overlapping preferential agreements – often described as the "spaghetti bowl" effect – may weaken the coherence of the global trade regime (Bhagwati, 2008). By contrast, an alternative view holds that regional and bilateral agreements can function as building blocks of multilateral liberalization; depending on their design and scope, such agreements may complement rather than undermine the multilateral system and further stimulate trade liberalization (Baldwin, 1993; Freund, 2000).

Recent data provide a clear indication of the scale of this regional shift. According to the WTO database, of the agreements in force, approximately 89% are Free Trade Agreements (FTAs), 7% are Partial Scope Agreements (PSAs), and 4% are Customs Unions (CUs) (WTO, 2026). Within this expanding network, Türkiye emerges as a relatively active participant, with 27 agreements in force, ranking behind major actors such as the European Union, the United Kingdom, and the European Free Trade Association (EFTA). A closer examination of Türkiye's agreement portfolio suggests a gradual shift from a traditionally Europe-centered orientation toward broader engagement with the Middle East and Africa. In particular, agreements concluded with Palestine, Egypt, Tunisia, Morocco, Mauritius, the United Arab Emirates, and Qatar indicate a clear geographical reorientation in Türkiye's external trade strategy (Ministry of Trade of the Republic of Türkiye, 2026).

This strategic redirection was subsequently situated within Türkiye's 'Year of Africa' initiative, launched in 2005. North Africa, in particular, has emerged as a key strategic hub for access to both the Middle East and Sub-Saharan Africa, owing to its geographic proximity, demographic potential, logistical advantages, and longstanding historical ties. Within this context, Türkiye's commercial engagement in the region – initially advanced through agreements with Tunisia and Morocco – gained greater institutional depth through its agreement with Egypt. Although negotiations with Cairo commenced in 1998, the process matured over the following years, culminating in the signing of the Free Trade Agreement (FTA) on December 27, 2005, which entered into force on March 1, 2007. In this sense, the Türkiye–Egypt FTA provides a particularly relevant case for examining whether regional agreements function as trade-

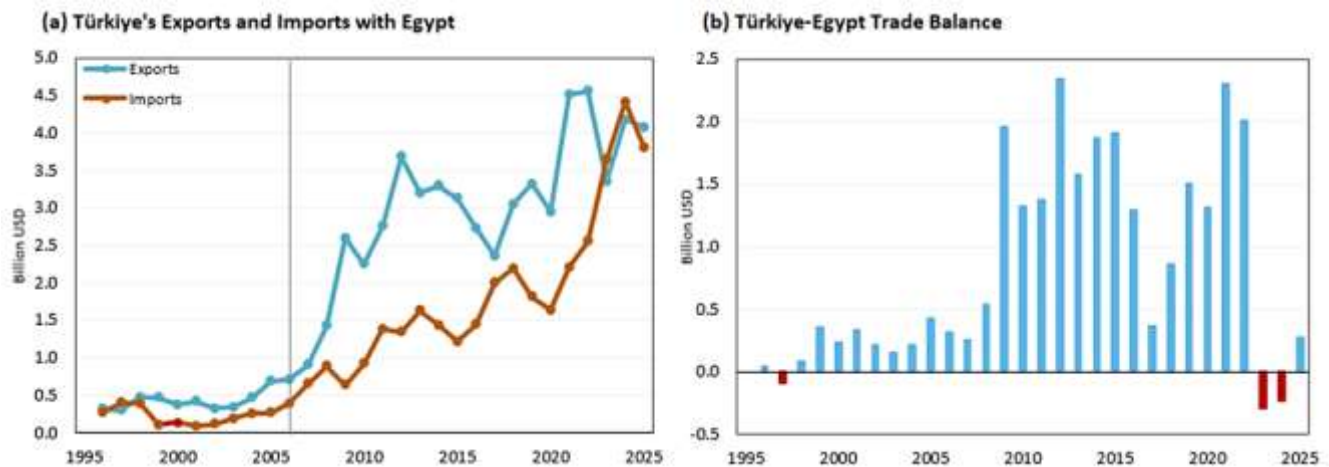
diverting arrangements or as mechanisms facilitating deeper integration into global value chains.

The Agreement constitutes a structural and complementary component of the Euro-Mediterranean (Euro-Med) process, whose vision was articulated in the 1995 Barcelona Declaration, and builds on the respective association relationships between Türkiye, Egypt, and the European Union. In particular, the Pan-Euro-Mediterranean (PEM) system of diagonal cumulation of origin – established under Article 20 of the Agreement and Protocol III – extends bilateral trade beyond conventional goods exchange by providing an institutional framework intended to facilitate the integration of regional value chains (Ministry of Trade of the Republic of Türkiye, n.d.). Initially launched in 2005, this system brought the European Union, Türkiye, Egypt, and other Mediterranean partners under a common set of rules of origin, thereby fostering a formalized basis for regional integration. Its diagonal cumulation mechanism allows intermediate goods imported from one participating country to be used in production processes in another while preserving their originating status, enabling their export to the European Union market under preferential tariff treatment (European Commission, n.d.). With the adoption of the PEM Convention in 2011, the system acquired a standardized legal basis, and following Egypt's accession in 2013, it evolved into a more comprehensive architecture designed to support collaborative production and trade linkages among participating economies (Council of the European Union, 2024).

From an institutional perspective, the Agreement largely replicates the design of the EU–Egypt Association Agreement (World Trade Law, n.d.). Under this arrangement, Türkiye abolished all customs duties on industrial products originating in Egypt upon the FTA's entry into force. Egypt, by contrast, taking into account its status as a developing country and its objective of aligning with the European Union during the 2008–2020 period, adopted a phased tariff-dismantling schedule for Turkish-origin industrial products, organized into transition periods of 1, 7, 10, and 13 years.

Building on these institutional and strategic foundations, an examination of bilateral trade volumes underscores the Agreement's impact on the scale and trajectory of economic exchanges, as illustrated in Figure 1. Following the agreement's entry into force in March 2007, Türkiye's exports increased from USD 709 million in 2006 to USD 902 million in 2007, a 27.3% increase. Over the 2006–2025 period, Türkiye's exports to Egypt expanded cumulatively by 474.9%, substantially exceeding the 138.5% increase recorded in Türkiye's total global exports. As measured by the compound annual growth rate (CAGR), this pattern remains robust: exports to Egypt grew at an annual rate of 9.7%, nearly double the global benchmark of 4.7%, suggesting sustained expansion driven by long-term structural factors.

Figure 1: Trends in Türkiye–Egypt Bilateral Trade Flows and Trade Balance (1996–2025)



Source: Turkish Statistical Institute (TurkStat).

A parallel – and even more pronounced – pattern emerges on the import side, pointing to a deepening of bilateral economic integration. Imports from Egypt, which stood at USD 393 million in 2006, rose by 66.4% to USD 653 million in the first year after the FTA entered into force. Despite temporary contractions in 2009 and 2019 due to external shocks, import volumes trended upward overall, resulting in an 868.9% cumulative increase by 2025. This growth significantly outpaced the 101.1% expansion observed in Türkiye's global imports over the same period. In terms of CAGR, imports from Egypt expanded at an annual rate of 13.1%, compared to 3.7% for Türkiye's total imports, indicating a disproportionately strong intensification of import linkages.

Consequently, by 2025, Egypt's share of Türkiye's total exports had increased from 0.83% to 2.00%, while its share of total imports had risen from 0.28% to 1.35%. More importantly, the long-term trade balance reveals a clear turning point: whereas Türkiye maintained a persistent trade surplus from 1996 to 2022, this pattern reversed in 2023 (USD -295 million) and 2024 (USD -235 million), shifting into a deficit. Although the trade balance returned to positive territory in 2025 (USD 275 million), this rebound appears insufficient to fully offset the deterioration observed in the preceding years (see Figure 1).

The remainder of the paper is organized as follows. Section 2 reviews the relevant literature on bilateral trade relations and preferential trade agreements and outlines the methodological framework adopted in this study. Section 3 provides an empirical analysis of the Türkiye–Egypt Free Trade Agreement over the 2007–2025 period, focusing on sectoral reconfiguration, trade diversification, comparative manufacturing performance, and the spatial redistribution of industrial supply chains. This section uses the Herfindahl–Hirschman Index (HHI) and the coefficient of variation (CV) as descriptive measures to map shifts in sectoral concentration and stability trends. The final section discusses the policy implications of the findings in light of

recent developments and reviews directions for future research.

2. Literature Review

A significant portion of the existing literature on Türkiye–Egypt trade relations comprises reports from official institutions, analyses by international organizations, and sectoral bulletins from professional associations. Methodologically, these studies are predominantly grounded in qualitative policy analysis and rely primarily on descriptive statistics rather than quantitative techniques. Hence, they offer a limited framework for an in-depth examination of structural convergences and divergences, as well as for empirically grounded causal inference.

Against this predominantly descriptive background, a smaller strand of the literature adopts more analytical and forward-looking approaches. Among the studies that move beyond purely descriptive frameworks are the pioneering works that theoretically assess the expected outcomes of the FTA prior to its ratification. In this context, Kheir-El-Din et al. (1999) evaluated the potential economic effects of the agreement for Egypt. Their study demonstrated that the period's trade structure exhibited an asymmetric pattern favoring Türkiye, with Egypt specializing primarily in raw materials and agricultural products, while Türkiye specialized in industrial goods. Due to long transition periods, a limited scope, and ambiguous rules of origin, the authors argued that Egypt's short-term static gains were likely to remain limited and that trade diversion effects could emerge in certain sectors. Concurrently, they suggested that dynamic gains – such as increased investment and industrial integration – could materialize in the medium and long term.

Building on this early theoretical foundation and moving to more recent evidence, these concerns regarding asymmetry appear to have been mitigated, as both countries have exhibited a tendency toward mutual specialization within the manufacturing sector. In elaborating on this dynamic, Adly (2021) explains the resilience of trade flows, even during periods of heightened diplomatic tensions, by

emphasizing the relatively depoliticized nature of economic relations. Notably, despite the political rupture in 2013 and the subsequent diplomatic stagnation, pragmatic private-sector engagement and the integration of Turkish investments into Egypt's production chains remained key determinants of trade continuity. In this regard, the literature highlights the growing role of intra-industry linkages as a stabilizing factor in bilateral trade relations. The author further argues that these intra-industry trade dynamics, characterized by the exchange of processed goods within the same industrial sectors, increase interdependence across production networks, raise the cost of disengagement, and thereby strengthen the capacity of economic relations to withstand political shocks.

Examining this deepening of trade relations from a sectoral perspective, Erkekoğlu and Koçer (2022) analyze Türkiye's export patterns toward Egypt over the 2006–2021 period using the Trade Specialization Index. Their empirical findings indicate that a significant level of specialization has been achieved, particularly in strategic sectors such as iron and steel, motor vehicles, machinery and mechanical appliances, and mineral fuels. However, the relatively modest increase in specialization coefficients suggests that both countries experienced simultaneous export growth in these sectors, pointing to a pattern of mutual trade expansion rather than unilateral specialization.

In parallel, comparative studies on Egypt's broader trade agreements provide additional methodological and empirical insights. The Egypt–EU Association Agreement serves as an important reference point. Helmy et al. (2018) examine the impact of trade liberalization under this agreement on manufacturing exports and employment using a panel data gravity model. Their findings reveal that trade agreements stimulate export growth in certain manufacturing industries, although the effects are unevenly distributed across sectors. Likewise, Kamal (2017) investigates the Egypt–Mercosur Free Trade Agreement within the framework of the so-called Sussex Approach, employing descriptive methods to examine the existing trade structure between the signatory economies and to calculate the Trade Complementarity Index and the Revealed Comparative Advantage (RCA) at the sectoral level.

From a broader macroeconomic perspective, the effects of regional integration have also been extensively examined using gravity-based frameworks. Robles et al. (2012) analyze the impact of free trade agreements on the evolution of trade flows among ten Middle East and North Africa (MENA) countries, including Türkiye and Egypt, over the 1990–2010 period. Agreements are categorized into two main groups: North–South agreements (Euro–Med, EFTA–Med, USA–Med, and the Türkiye–EU Customs Union) and South–South agreements (Agadir, GAFTA, and Türkiye–Med). The findings reveal that the effects of free trade agreements on trade are inherently asymmetric. For instance, the Euro–Med agreements and Türkiye's FTAs

with MENA countries significantly increased exports from developed partners to the region, yet failed to generate a comparable expansion in MENA countries' export performance. In contrast, a notable exception is the Türkiye–EU Customs Union, which is the only deep integration arrangement to produce simultaneous and significant increases in both exports and imports.

In a similar vein, Sözbir (2023) examines the effects of Türkiye's FTAs on foreign trade using a counterfactual impact evaluation approach. Using annual bilateral goods trade data for 1989–2021, the study defines Türkiye's 15 FTA partners as the treatment group. The findings indicate that Türkiye's FTAs have a statistically significant and positive effect on exports, while no statistically significant impact is observed on imports. In particular, exports to FTA partner countries increased by an average of 54.7% over the five years following the entry into force of the agreements. Moreover, placebo tests suggest that, in some cases, this effect can be observed prior to implementation, indicating that the announcement of FTAs may generate anticipatory effects on trade behavior.

Despite a growing body of research, the existing literature on Türkiye–Egypt trade relations remains largely descriptive and offers limited insight into recent exchange trends. Most studies focus on aggregate trade flows and tariff liberalization, while paying limited attention to structural and compositional changes, the stability of trade patterns, and the broader economic and political contexts shaping these developments in both countries. In addition, empirical evidence for the post-2023 period remains limited, and relatively few studies systematically apply measures of concentration and volatility. The institutional dimension, particularly the PEM framework, remains relatively underexplored in an integrated manner.

This study addresses these limitations by providing a systematic and empirically grounded analysis of evolving dynamics in Türkiye–Egypt trade relations in light of recent developments. First, it documents observed changes in trade composition in the post-2023 period and situates them within broader trade dynamics since the inception of the Agreement. Second, it adopts a complementary methodological approach by jointly using the Herfindahl–Hirschman Index (HHI) and the coefficient of variation (CV) to describe concentration, diversification, and volatility in trade flows within a unified framework. Third, it provides sector-specific descriptive evidence on the evolution of domestic manufacturing performance in both countries and their bilateral trade patterns, including a shift in Türkiye's export composition toward more technology- and capital-intensive goods. Fourth, by integrating macroeconomic and geopolitical developments, specifically the post-FTA dynamics of both economies and Egypt's socio-political and economic transitions, the paper places bilateral exchange patterns within a wider socio-economic context. Finally, the study briefly discusses the PEM framework as a structural context that may help interpret the

recent production, investment, and trade dynamics, without making claims of direct causal impact. In doing so, the study contributes to the literature by situating trade outcomes within economic, institutional, and contextual dimensions.

3. Bilateral Trade Dynamics and Emerging Patterns

This section investigates the evolution of trade patterns by focusing on the top fifteen product chapters in Türkiye's exports to Egypt (Table 1) and imports from Egypt (Table 4). To enhance analytical depth, the Herfindahl–Hirschman Index (HHI) (The index builds on the foundational works of Hirschman (1945) and Herfindahl (1950), with its development and nomenclature further clarified by Hirschman (1964). It is computed as the sum of squared sectoral shares and scaled by a factor of 10,000 to ensure comparability with standard concentration thresholds (1,500 and 2,500). This normalization facilitates comparability and improves the sensitivity of the measure by capturing marginal variations in sectoral composition) and the coefficient of variation (CV) (The Coefficient of Variation (CV), a standard measure of dispersion in the statistical literature (Snedecor & Cochran, 1989), is employed as a normalized indicator of relative volatility. It is defined as the ratio of the standard deviation to the mean of trade values over the relevant period, thereby expressing variability relative to the mean. This enables consistent comparisons of volatility across sectors with differing scales and facilitates the assessment of relative risk in sectoral trade performance) are incorporated into the analysis, enabling a systematic assessment of trade concentration and sectoral volatility and providing insights into patterns of diversification. HHI values are calculated for selected benchmark years (2006, 2008, 2014, 2017, 2020, and 2025), with a consistent focus on the top fifteen chapters to ensure empirical comparability between the pre- and post-FTA periods and to minimize the effect of highly fragmented low-share product categories. While Türkiye implemented immediate tariff liberalization in 2007, Egypt adopted a phased liberalization schedule, with key milestones in 2008, 2014, 2017, and 2020. These phases are used to capture observable shifts in sectoral shares and the evolving degree of market diversification across both export and import structures.

From an analytical perspective, the HHI and CV provide useful metrics for tracking changes in concentration, diversification, and volatility over time. However, these measures describe observed trade outcomes rather than directly establishing structural or institutional causality. Accordingly, the results should be interpreted as empirical indicators of evolving trade patterns, which may be associated with broader economic and institutional developments examined throughout the study.

3.1. Türkiye's Exports to Egypt

As reported in Table 1, during the 2007–2025 period, approximately 74.7% of Türkiye's total exports to Egypt—amounting to USD 59.0 billion—were concentrated in the top 15 product chapters, indicating a relatively high degree of sectoral concentration. This configuration provides a baseline for assessing ongoing transformations in market diversification, volatility, and their broader implications for the external trade balance.

3.1.1. Concentration and Diversification

In the pre-FTA reference year of 2006, the top fifteen sectors accounted for 67.4% of total exports. This share increased to 75.6% by 2017, suggesting a clustering of export activity within a limited number of leading industries during this initial sub-period. The longitudinal trajectory of the HHI reflects this shifting concentration, reaching its highest level of 917.5 in 2014 before declining steadily to 502.4 by 2025. This decline in HHI values is associated with a gradual shift from the initial post-FTA concentration toward a more diversified export structure. This transition highlights an expanding product variety within Türkiye's export basket to Egypt, suggesting a reduced reliance on a limited number of dominant sectors. Although the present analysis does not directly assess manufacturing capabilities, the observed diversification appears broadly consistent with trends in domestic manufacturing performance discussed later in the study, as well as with the increasing presence of technology- and capital-intensive sectors in Türkiye's exports to Egypt.

3.1.2. Sectoral Composition and Its Impact on the Trade Balance Reversal

Bilateral trade relations between Türkiye and Egypt were, with few exceptions in the pre-FTA period, characterized by a persistent trade surplus in Türkiye's favor up to 2022. This pattern was reversed in 2023, marking a notable realignment in the bilateral trade trajectory. The trade balance declined sharply from a surplus of USD 2.01 billion in 2022 to deficits of USD 0.29 billion in 2023 and USD 0.24 billion in 2024, shifting the bilateral trajectory into deficit (Figure 1). Although the balance reverted to positive territory in 2025 (USD 0.275 billion), the contraction observed during 2023–2024 represents the first clear divergence from the historical trend in the post-FTA period. To explore the sectoral foundations of this shift, it is useful to examine the volatility characteristics of Türkiye's trade flows using the CV metric. As reported in Table 1, the CV analysis identifies HS 71 and HS 27 as the most volatile export chapters, with CV values of 1.30 and 0.79, respectively.

Table 1: Structural Composition of Türkiye's Exports to Egypt (2007-2025)

HS Code	Sector	Total Value (USD bn)	Share	CV*	Share of Total Exports					
					2006	2008	2014	2017	2020	2025
'27	Mineral fuels & oils	9.57	16.2%	0.79	13.3%	1.8%	25.9%	18.9%	5.0%	5.6%
'72	Iron & Steel	8.22	13.9%	0.55	10.8%	17.4%	9.6%	9.1%	12.2%	8.3%
'84	Machinery & boilers	5.19	8.8%	0.53	7.7%	9.3%	6.5%	8.8%	9.4%	14.0%
'87	Vehicles	3.20	5.4%	0.68	10.2%	7.8%	5.9%	4.1%	12.4%	3.6%
'39	Plastics	2.64	4.5%	0.42	3.8%	5.0%	4.3%	5.2%	5.0%	4.4%
'73	Iron & steel articles	2.64	4.5%	0.43	4.7%	4.6%	3.7%	4.7%	4.6%	4.2%
'85	Electrical machinery	2.44	4.1%	0.38	3.9%	5.1%	3.9%	6.5%	4.6%	5.4%
'52	Cotton	2.09	3.5%	0.69	3.0%	3.7%	2.4%	3.5%	3.0%	8.2%
'28	Inorganic chemicals	1.64	2.8%	0.53	2.1%	2.5%	2.5%	3.0%	3.1%	3.5%
'40	Rubber	1.32	2.2%	0.36	2.5%	2.7%	2.3%	2.4%	2.8%	2.5%
'71	Precious metals & stones	1.17	2.0%	1.30	0.0%	8.7%	0.5%	0.1%	2.8%	5.3%
'48	Paper & paperboard	1.07	1.8%	0.46	1.2%	1.2%	1.1%	3.0%	2.0%	2.1%
'76	Aluminium	1.03	1.7%	0.51	1.5%	1.3%	1.7%	2.9%	3.1%	1.8%
'54	Man-made filaments	0.93	1.6%	0.43	1.5%	1.0%	1.9%	2.1%	1.0%	1.9%
'25	Salt, stone & cement	0.93	1.6%	0.52	1.2%	1.2%	2.2%	1.5%	1.0%	1.4%
	Total of Top 15 Sectors	44.07	74.7%		67.4%	73.3%	74.4%	75.6%	71.9%	72.4%
	Total Exports	59.00	100%							
	HHI Index				535.6	635.0	917.5	676.7	532.2	502.4

Source: Author's calculations based on TurkStat data. **Notes:** The coefficient of variation (CV) is obtained by dividing the standard deviation of exports in each product category over the period 2007–2025 by the corresponding mean of exports for the same period. The Herfindahl–Hirschman Index (HHI) is calculated as the sum of the squared market shares of the top 15 product categories, which account for approximately 75% of total exports over the specified period: $HHI_t = \sum_{i=1}^{15} s_{it}^2$. Here, s_{it} denotes the percentage share of product category i in total exports during period t .

The contribution of HS 27 to the emerging trade deficit becomes more evident when export and import dynamics are considered jointly. As documented in Table 2, which provides a detailed breakdown of bilateral trade in this chapter, Türkiye's exports in this category expanded from 2009 onward, peaking at USD 1.53 billion in 2012, largely driven by subheading HS 2710.12 (light refined petroleum oils and preparations, such as motor spirit and gasoline), accounting for 41.5% of the chapter's total export volume to Egypt that year. Export values subsequently declined to USD 1.21 billion in 2013 and USD 0.89 billion in 2014, while the chapter's share remained at 25.9%, before contracting further to 5.6% by 2025. In contrast, imports from Egypt under HS 27 remained relatively stable and

limited prior to 2023 but increased significantly during the 2023–2024 period. Consequently, the trade balance in HS 27 shifted from a USD 0.31 billion surplus in 2022 to a USD 0.76 billion deficit in 2024. This deterioration—amounting to a net shift of USD 1.07 billion within a single HS chapter—emerged as a prominent driver of Türkiye's recent shift into an overall trade deficit. Within HS 27, HS 2710.19 accounts for the largest share of imports. Unlike HS 2710.12, which mainly includes lighter petroleum distillates, HS 2710.19 comprises refined petroleum products more closely associated with industrial production and large-scale logistics, including high-speed diesel, fuel oils, and industrial lubricants such as engine, gear, and hydraulic oils.

Table 2: Türkiye–Egypt Bilateral Trade Flows at Total and HS 27 Levels (USD Billion, 2006–2025)

	Türkiye's Trade with Egypt			Türkiye's Trade with Egypt in HS27		
	Exports	Imports	Trade Balance	Exports	Imports	Trade Balance
2006	0.71	0.39	0.32	0.09	0.06	0.03
2007	0.90	0.65	0.25	0.06	0.10	-0.04
2008	1.43	0.89	0.54	0.03	0.08	-0.05
2009	2.60	0.64	1.96	0.18	0.03	0.15
2010	2.25	0.93	1.32	0.25	0.05	0.20
2011	2.76	1.38	1.38	0.88	0.15	0.73
2012	3.68	1.34	2.34	1.53	0.19	1.34
2013	3.34	1.72	1.62	1.21	0.12	1.09
2014	3.44	1.54	1.90	0.89	0.04	0.85
2015	3.12	1.22	1.90	0.62	0.03	0.59
2016	2.73	1.44	1.29	0.52	0.04	0.48
2017	2.36	2.00	0.36	0.45	0.03	0.42
2018	3.05	2.19	0.86	0.59	0.20	0.39

2019	3.51	1.90	1.61	0.63	0.15	0.48
2020	3.14	1.72	1.42	0.16	0.13	0.03
2021	4.52	2.21	2.31	0.34	0.07	0.27
2022	4.56	2.55	2.01	0.43	0.12	0.31
2023	3.35	3.65	-0.30	0.12	0.48	-0.36
2024	4.18	4.41	-0.23	0.46	1.22	-0.76
2025	4.08	3.80	0.28	0.23	0.52	-0.29

Source: TurkStat and ITC Trademap.

The magnitude of this surge is reflected in exceptionally high growth rates, with imports in this category increasing by 417.6% in 2023 relative to the previous year, followed by a further 194.1% increase in 2024. While light petroleum products previously dominated Türkiye's exports to Egypt, the structure has gradually shifted toward a growing reliance on imported refined industrial fuels. This transition in both the direction and composition of energy trade appears consistent with the downward pressure observed in the bilateral trade balance during the post-2022 period.

Turning to precious metals, although HS 71 exhibits the highest volatility ($CV = 1.30$), its impact on the overall trade balance appears less pronounced than that of HS 27. Despite its historical significance, HS 71's contribution to the Türkiye–Egypt trade surplus has weakened substantially. The surplus in this category declined by approximately 61.0% year-on-year in 2023 and remained subdued throughout 2024, thereby reducing precious metals' role as a counterbalancing factor in bilateral trade.

The deterioration in the trade balance is further reflected in the apparel chapters, which contribute to this decline through distinct trajectories. HS 62 (articles of apparel and clothing accessories, not knitted or crocheted), which had already been in deficit, widened considerably after 2023. In contrast, HS 61 (articles of apparel and clothing accessories, knitted or crocheted) experienced a marked shift from a near-balanced position to a rapidly expanding deficit. Specifically, within HS 61, imports from Egypt increased from USD 14.10 million in 2021 to USD 158.13 million in 2025, while the trade balance moved from a surplus of USD 63.55 million to a deficit of USD 119.95 million. A similar pattern is observed in HS 62, where imports rose from USD 56.83 million to USD 238.81 million, accompanied by a substantial widening of the bilateral deficit (TurkStat, 2026). Crucially, as detailed in Table 3, this asymmetric trajectory is driven not only by surging imports but also by a severe contraction in Türkiye's exports to Egypt, with HS 61 and HS 62 exports shrinking by approximately 50% and 34.3%, respectively, from their 2021 peaks. Given that Türkiye's global exports in these chapters remained relatively resilient during the same period, this divergence requires a more nuanced explanation than a generalized loss of international competitiveness.

Table 3: Türkiye–Egypt Bilateral Trade Flows and Türkiye's World Exports: HS 61 and HS 62 Levels (USD Million, 2018–2025)

(a) Türkiye's Trade with Egypt in HS 61				
	Exports	Imports	Trade Balance	Türkiye's World Exports
2018	47.78	16.26	31.52	9043.1
2019	62.99	12.44	50.55	9206.9
2020	58.35	13.37	44.98	8387.7
2021	77.65	14.1	63.55	10784.1
2022	63.26	39.55	23.71	11011.5
2023	31.79	61.12	-29.33	10277.6
2024	27.39	79.09	-51.7	10107.4
2025	38.18	158.13	-119.95	9618.8

(b) Türkiye's Trade with Egypt in HS 62				
	Exports	Imports	Trade Balance	Türkiye's World Exports
2018	42.78	108.41	-65.63	6262.5
2019	57.95	65.72	-7.77	6874
2020	52.55	62.27	-9.72	6600.6
2021	62.03	56.83	5.2	7515.5
2022	56.67	86.66	-29.99	8464.9
2023	37.07	144.39	-107.32	8037.4
2024	26.08	167.14	-141.06	7384.4
2025	40.78	238.81	-198.03	6775.5

Source: TurkStat and ITC Trademap.

The observed sectoral trends have occurred alongside the expansion of Turkish manufacturing investments in Egypt's apparel and textile industries in recent years. As highlighted during President Erdoğan's visit to Cairo in February 2026, cumulative Turkish investments across various sectors have reached approximately USD 4.00 billion (A News, 2026), with more than 200 Turkish-owned apparel facilities reported to be operating in the country (Egypt State Information Service, 2025). Contemporary industrial reports indicate that these investments are heavily concentrated in strategic industrial hubs, such as the 10th of Ramadan City and the Suez Canal Economic Zone, thereby providing an additional layer of description to the evolving bilateral economic relationship (e.g., Enterprise AM, 2025). While production cost advantages and market-access considerations appear to constitute important determinants of this outward foreign direct investment (General Authority for Investment and Free Zones, n.d.), the broader integration vision embodied in the PEM framework, embedded within the Türkiye–Egypt FTA, warrants closer institutional scrutiny. From a long-term analytical perspective, the regulatory architecture of the PEM framework provides a useful reference point for understanding the institutional

conditions under which intermediate-goods trade and cross-border production arrangements may emerge, particularly through its provisions on diagonal cumulation of origin across participating economies. Although assessing whether these investment-led linkages exert a substitution effect on domestic exports or contribute to a broader restructuring of regional supply chains remains an open empirical question for future research, the contemporary alignment between capital investment trajectories and cross-border trade flows is a noteworthy descriptive observation warranting further empirical investigation.

3.1.3. Export Upgrading

Despite recent pressures on Türkiye's bilateral trade balance, the sustained expansion of capital- and technology-intensive export segments—most notably HS 84 (machinery and mechanical appliances) and HS 85 (electrical machinery and equipment)—points to a gradual upgrading of Türkiye's export profile in the Egyptian market. Over the 2007–2025 period, exports in HS 84 recorded a compound annual growth rate (CAGR) of 11.2%, outpacing Egypt's overall export CAGR (9.7%), while the sector's share of total exports reached 14.0% by 2025 (see Table 1). A similar pattern is observed in HS 85, which maintained an annual growth rate of 8.4% over the same period, reinforcing the growing presence of technologically sophisticated exports. From a volatility perspective, the relatively low coefficients of variation for both sectors indicate a high degree of temporal stability. By 2025, their combined share in Türkiye's exports to Egypt had reached approximately 20%, highlighting their growing importance within the export basket. This trend is broadly aligned with the expansion of Türkiye's manufacturing sector. According to data from the United Nations Industrial Development Organization (UNIDO, 2025), Türkiye's Manufacture of Electrical Equipment Index reached 144.6 in 2024, while the Manufacture of Machinery and Equipment Index peaked at 178.4 in 2023. Taken together, the nearly sevenfold increase in machinery exports and the more than fourfold rise in electrical equipment exports since 2007 point to a reshaping of bilateral trade, characterized by a growing concentration in capital- and technology-intensive products.

3.2. Türkiye's Imports from Egypt

In contrast to the gradual diversification and qualitative upgrading observed on the export side, Türkiye's trade structure with Egypt also reveals a gradual yet uneven pattern of adjustment in imports. HS 2-digit level data for the 2007–2025 period, as presented in Table 4, indicate that, unlike exports, imports remain concentrated in a limited number of sectors, with temporal fluctuations exerting a disproportionate influence on the overall composition. Over the period under review, total imports amounted to USD 36.18 billion, with the top fifteen sectors accounting for a substantial 82.7%. A more detailed examination of the

drivers of this concentration is provided in the following subsections.

3.2.1. Concentration and Diversification

Sectoral concentration, as measured by the HHI, peaked at 1011.3 in 2008, suggesting that the bilateral import structure during this period was highly concentrated and thus more vulnerable to fluctuations in a limited number of commodity-based sectors. This concentration was largely driven by a limited set of commodity groups, with Iron and Steel (HS 72) accounting for 24.1% of total imports, while Copper and articles thereof (HS 74) and Inorganic Chemicals (HS 28) also made substantial contributions. In the subsequent period, concentration exhibited a downward trajectory. By 2025, the HHI fell to 573.5, reflecting a more diversified import composition. Although this broadening of the import base reduces reliance on a few dominant sectors, imports remain relatively more concentrated than exports. This contrast suggests that Türkiye's import profile from Egypt continues to be characterized primarily by industrial inputs and intermediate goods, whereas exports are distributed across a broader set of sectors.

3.2.2. Realignment Patterns and Industrial Synchronization

Türkiye's imports from Egypt are concentrated in strategic industrial inputs, with HS 39 (plastics and articles thereof) the largest category, accounting for a cumulative value of USD 5.72 billion (15.8% of total imports). A closer examination reveals a structurally stable yet compositionally evolving pattern. Although the sector's share of total imports declined gradually toward 2025, absolute import values continued to increase until 2024, peaking at USD 454.6 million. The comparatively low coefficient of variation (0.49) distinguishes this sector from more volatile commodity groups such as HS 27, indicating a relatively stable import performance over time.

Table 4: Structural Composition of Türkiye's Imports from Egypt (2007–2025)

HS Code	Sector	Total Value (USD bn)	Share	CV	Share of Total Imports					
					2006	2008	2014	2017	2020	2025
'39	Plastics	5.72	15.8%	0.49	10.1%	7.7%	23.4%	20.6%	21.4%	9.0%
'27	Mineral fuels & oils	3.75	10.4%	1.43	15.7%	8.5%	2.8%	1.7%	7.8%	13.6%
'31	Fertilisers	3.45	9.5%	0.75	4.5%	6.4%	1.4%	18.1%	11.5%	7.8%
'28	Inorganic chemicals	2.41	6.7%	0.41	8.2%	10.8%	7.9%	4.4%	4.5%	4.8%
'72	Iron & Steel	2.23	6.2%	1.07	2.5%	24.1%	4.0%	2.3%	0.2%	8.0%
'54	Man-made filaments	1.76	4.9%	0.63	0.4%	0.8%	5.2%	4.4%	5.7%	5.1%
'62	Apparel, non-knit	1.71	4.7%	0.65	0.4%	1.7%	7.7%	6.3%	3.6%	6.3%
'52	Cotton	1.70	4.7%	0.30	7.5%	5.9%	6.5%	6.8%	4.9%	1.6%
'55	Man-made staple fibres	1.46	4.0%	0.47	0.2%	0.9%	4.5%	5.4%	4.0%	3.5%
'85	Electrical machinery	1.36	3.8%	1.18	0.2%	0.2%	0.6%	1.8%	6.0%	6.5%
'29	Organic chemicals	1.15	3.2%	0.76	0.5%	0.0%	4.8%	5.6%	4.7%	1.8%
'38	Misc. chemical products	0.92	2.5%	0.42	0.6%	0.3%	4.6%	2.6%	2.5%	1.5%
'70	Glass & glassware	0.79	2.2%	0.81	0.2%	0.2%	2.7%	2.6%	2.6%	2.6%
'74	Copper	0.78	2.2%	0.69	9.2%	10.1%	0.5%	0.7%	2.2%	2.3%
'71	Precious metals & stones	0.72	2.0%	1.34	0.2%	0.0%	0.1%	6.0%	1.0%	4.4%
Total of Top 15 Sectors		29.91	82.7%		60.4%	77.5%	76.8%	89.2%	82.6%	78.7%
Total Exports		36.18	100%							
HHI Index					584.2	1011.3	836.7	998.6	833.7	573.5

Source: Author's calculations based on TurkStat data.

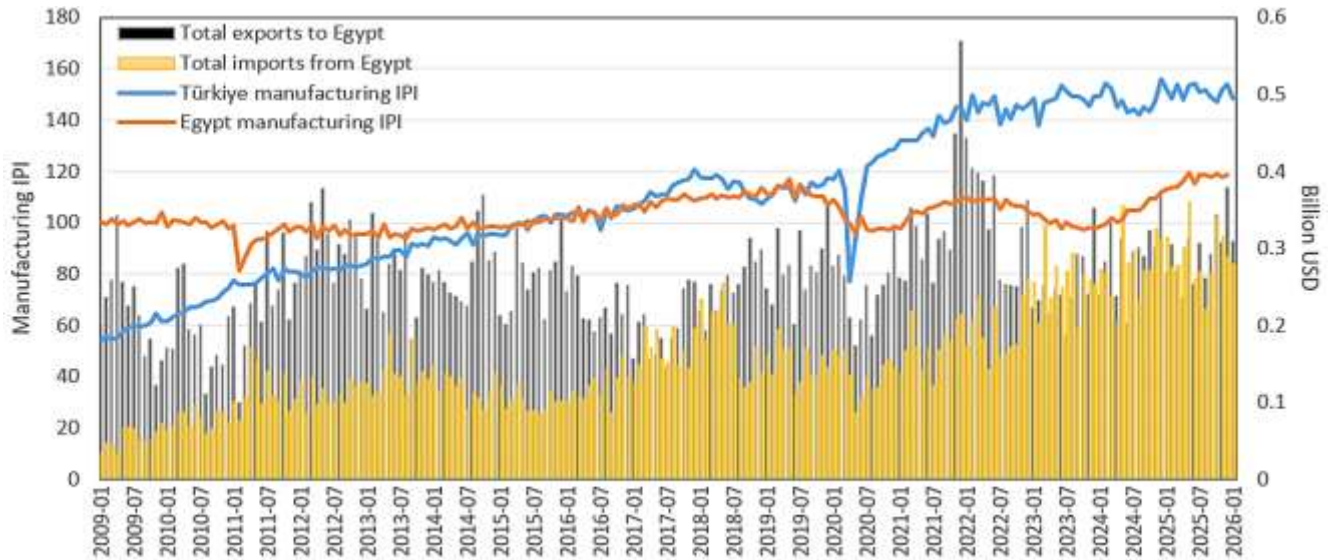
Despite the observed decline in HS 39 imports from Egypt in 2025, Türkiye's global plastic imports remained broadly stable at approximately USD 15.6 billion. This suggests that the contraction is associated with a geographical reallocation across supplier countries rather than a decline in aggregate domestic demand. Indeed, while imports from Egypt decreased by approximately 25%, alternative suppliers, including China (+7%), the Republic of Korea (+10%), and the United States (+17%), recorded notable increases in the same period (ITC Trade Map, 2025). Collectively, these developments point toward a potential

realignment of import sourcing patterns across both sectoral and geographical dimensions. In parallel, the combined share of HS 27 (mineral fuels and oils), HS 31 (fertilizers), HS 28 (inorganic chemicals), and HS 72 (iron and steel) accounted for 32.7% of total imports over the 2007–2025 period. This significant weight underscores the strategic importance of energy inputs and heavy industrial intermediates in Türkiye's import structure, indicating a substantial degree of reliance on these categories. This linkage is associated with developments on the supply side, particularly the expansion of Egypt's industrial production capacity. Major political and institutional disruptions, notably the 2011 Arab Spring and the 2013 military coup that ousted President Mohamed Morsi, initially undermined bilateral trade flows and constrained industrial activity. However, the instability gradually eased after 2018, supported by IMF-backed stabilization programs introduced in late 2016, contributing to the restoration of macroeconomic stability and investor confidence (International Monetary Fund [IMF], 2021). As illustrated in Figure 2, these macroeconomic adjustments are reflected in Egypt's manufacturing indices, which exhibit a pronounced post-2023 upward trajectory that appears to be synchronized with Türkiye's industrial output indices.

Türkiye's manufacturing index (IPI) has followed a sustained upward trajectory since 2009, nearly tripling from its base value to reach approximately 150 by early 2026. This upward trend has been associated with the expansion of industrial capacity and a steady increase in total exports to Egypt (represented by the shaded bars), peaking during the 2022 post-pandemic recovery. In contrast, Egypt's manufacturing performance (indicated by the trend line) exhibits a more volatile historical trajectory, broadly corresponding to the periods of political and macroeconomic instability noted above. The sharp contractions observed in 2011 and 2013 weakened the apparent co-movement between Egypt's industrial output and Türkiye's industrial production cycle for an extended period. A gradual shift is nonetheless evident in the post-2023 period, as Egypt's manufacturing index has entered a robust recovery phase, narrowing the historical gap with Türkiye's IPI. This narrowing gap coincides with an expansion in bilateral trade volumes driven by the sustained post-2021 surge in imports from Egypt.

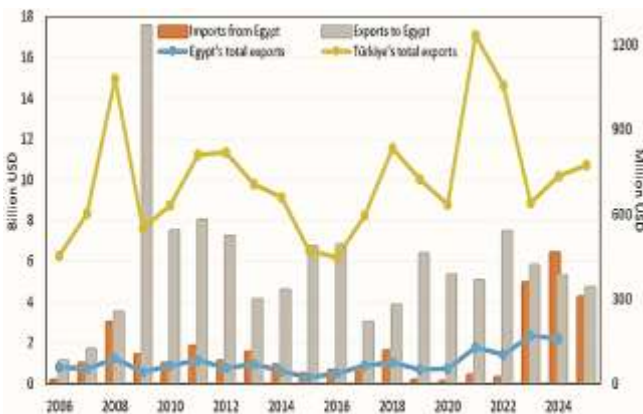
At the sectoral level, iron and steel (HS 72) provides a particularly illustrative case of this evolving relationship. The 2008 surge, which accounted for 24.1% of Türkiye's total imports from Egypt (see Table 4), proved to be a transient phenomenon, followed by a prolonged period of stagnation, as subsequent data confirmed. Conversely, Türkiye's imports from Egypt in this category, which remained negligible until 2020, expanded markedly during 2023–2024, as reflected in the peak of the orange bars in Figure 3. This development is broadly consistent with Egypt's global export performance in iron and steel, which remained elevated, averaging USD 2.33 billion in 2023 and USD 2.21 billion in 2024 (ITC Trade Map, 2025).

Figure 2: Manufacturing Industrial Production Index (IPI) and Bilateral Trade Between Türkiye and Egypt (monthly, 2009–2025)



Source: Data are compiled from UNIDO and TurkStat. **Note:** The Industrial Production Index (IPI) is seasonally adjusted.

Figure 3: Bilateral Trade and Global Exports in HS 72: Türkiye and Egypt (2006–2025)



Source: TurkStat and ITC Trademap.

The rise in Egypt's share of Türkiye's imports in this category from 0.2% in 2020 to 8.0% in 2025 reflects this shift. This ambiguity is further underscored by the high coefficient of variation ($CV = 1.07$) reported for this category in Table 4, indicating a historical tendency toward substantial trade volatility. Consequently, a definitive assessment of whether this recent surge represents a structural realignment or a temporary cyclical phenomenon will require observation over a longer time horizon.

4. Conclusion

This study suggests that the Türkiye–Egypt Free Trade Agreement (FTA), which entered into force on March 1, 2007, has been associated not only with a substantial quantitative expansion of bilateral trade but also with

significant realignments in the sectoral composition of trade. The findings indicate that the trade relationship, initially shaped by raw materials and basic manufactured goods, has gradually evolved toward a more diversified and industrially oriented structure, accompanied by increasing production-related interactions between the two economies. To illustrate, the pronounced increase in Türkiye's exports to Egypt in sectors such as HS 84 (machinery and mechanical appliances) and HS 85 (electrical machinery and equipment) indicates a qualitative upgrade in the export composition. The fact that the combined share of these two chapters reached approximately 18.3% of total exports by 2025 demonstrates that Türkiye has strengthened its position in relatively technology- and capital-intensive segments of the Egyptian market, establishing a stable supply of industrial capital inputs. On the import side, while trade flows remain concentrated in a limited number of sectors, particularly HS 27 (mineral fuels and oils) and HS 39 (plastics), the post-2021 period shows notable shifts in the sourcing of intermediate industrial goods. Specifically, the marked expansion of iron and steel (HS 72) imports from Egypt—from 0.2% in 2020 to 8.0% by 2025—suggests a reorientation in bilateral trade patterns. Rather than reflecting a static asymmetry, the simultaneous expansion of Türkiye's capital-good exports and Egypt's intermediate-good exports indicates a more dynamic structure of bilateral industrial trade. In this respect, recent developments in bilateral trade are consistent with a gradual shift away from a structure dominated by final consumer goods toward one increasingly shaped by intermediate inputs and production-related linkages.

A further dimension of these shifting sectoral dynamics is reflected in the evolution of manufacturing performance in

the two countries, as illustrated in Figure 2. Türkiye's Manufacturing Production Index (IPI) shows a sustained upward trend since 2009, indicating a substantial expansion of industrial capacity, accompanied by a marked increase in exports to Egypt during the 2022 post-pandemic recovery. In contrast, Egypt's manufacturing performance, historically more volatile due to episodes of economic and political instability, shows signs of stabilization in recent years. Following a temporary slowdown around 2020, Egypt's manufacturing index entered a period of sustained growth from late 2023 onward. Although these developments should not be interpreted as evidence of long-term macroeconomic convergence, the narrowing gap between the two IPI series coincides with the recent expansion of bilateral trade. In particular, this pattern has been accompanied by a sustained increase in imports from Egypt during the latter part of the sample period.

Beyond aggregate trade flows, the findings point to the growing importance of foreign direct investment (FDI) and cross-border production activities as complementary dimensions of bilateral economic relations. According to recent official declarations, cumulative Turkish investments in Egypt have approached USD 4.0 billion, while more than 200 Turkish-owned manufacturing facilities operate across the country, primarily in labor-intensive sectors such as ready-made garments and apparel. In the broader institutional context of the Türkiye–Egypt FTA, the Pan-Euro-Mediterranean (PEM) system embedded in the Agreement's architecture warrants attention, as it reflects a broader Euro-Mediterranean integration logic that goes beyond conventional tariff reduction. Through its diagonal-cumulation-of-origin provisions, the PEM framework provides an institutional setting that may facilitate intermediate-goods trade and cross-border production linkages among participating economies, thereby offering a relevant reference point for analyzing contemporary trade patterns and potential production-network formation.

Finally, the deterioration in the bilateral trade balance observed during the 2023–2024 period must be contextualized within these shifting sectoral dynamics, alongside real exchange rate movements and global commodity price shocks. However, given the high historical volatility documented in specific heavy industrial sectors—exemplified by the high coefficient of variation for HS 72 imports—whether this recent deficit represents a durable, permanent structural realignment or a transient cyclical anomaly driven by external factors remains an open empirical question. From a policy perspective, these shifting dynamics suggest that optimizing the FTA's future utility will depend less on traditional tariff-reduction negotiations and more on harmonizing cross-border logistics, institutional standards, and investment protections to support prospective regional value chains. While these developments point to a gradual deepening of economic integration, the extent to which they contribute to a sustained structural transition will require empirical monitoring over an extended time horizon.

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