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THE EVOLUTION OF SINO-ARAB TRADE: TRENDS, CHALLENGES, AND FUTURE PROSPECTS

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ABSTRACT

This study examines the transformation of Sino-Arab trade relations from 2000 to 2024, analyzing key trends, persistent challenges, and future opportunities within a shifting geopolitical landscape. Drawing on trade data from China Customs, UN Comtrade, and policy documents, we highlight three critical developments:(1) trade growth from 15.2B to 430B, fueled by energy interdependence and BRI initiatives; (2) persistent structural imbalances (87% hydrocarbon-based Arab exports vs. China's diversified manufacturing); and (3) operational barriers including logistics inefficiencies and protectionism. Through panel data regression and case studies (Egypt, Syria, Saudi Arabia), we demonstrate how BRI investments (+0.06 coefficient) and economic scale (China GDP elasticity 0.89) drive trade, while political instability shows negligible impact. The study concludes with policy recommendations for fostering sustainable trade diversification, including digital platforms, SME engagement, and financial cooperation. By bridging historical context with contemporary data and employing both qualitative and quantitative methods, this analysis contributes to debates on South-South cooperation in an era of economic rebalancing and offers empirically grounded insights for policymakers and scholars.

KEYWORDS: *China-Arab trade, Belt and Road Initiative, trade diversification, energy geopolitics, South-South cooperation.*

1. INTRODUCTION

Relations between China and Arab countries have shifted from ancient Silk Road trade and are now one of the best examples of South-South cooperation. Trade grew rapidly, reaching $ 15.2 billion in 2000 and from there it is projected to be $430 billion in 2024 (China Customs, 2024). Consequently, China has been the most important business partner for the majority of Arab states.

The features of this situation were defined using three major points. The first one was that energy interdependence is still the main issue, and so the Arab countries were the suppliers of 58% of China's oil imports (IEA, 2024). The second one was that institutional frameworks such as the China-Arab States Cooperation Forum (2004) and Belt and Road Initiative investments across various sectors have shifted the focus beyond hydrocarbons (Sun, 2022). The third is that certain obstacles are a result of the structural trade imbalances (87% hydrocarbons-based Arab exports), geopolitical tensions, and the country-specific barriers (Niu, 2024) that the growth of this relationship is encountering.

To answer the basic research question, this research involves the use of a mixed-methods approach. A quantitative study of the China Customs and UN Comtrade datasets (2000-2024) is coupled with qualitative case studies of Egypt, Syria, and Saudi Arabia. The theoretical framework of dependency theory (Frank, 1967) and geopolitical economy (Panitch & Gindin, 2012) is used in the analysis, and the study finds three results: structural problems do exist even when trade soars to $430 billion; specific problems in a country run as parallel problems with structural challenges and BRI investments are changing the flow of trade but not diluting it (Chen & Liu, 2024). The contribution of this study lies in the deeper understanding of South-South cooperation it provides and the solutions suggested to diversify trade on a sustainable basis.

2. LITERATURE REVIEW

The China-Arab States Cooperation Forum (2004) created grounds to institutionalize economic and political cooperation, with some scholars wondering if the Forum means "a comprehensive strategic partnership" (Sun, 2021) or leaves the typical non-alliance characteristics of most relationships by adhering to China's non-interference position (Shichor, 2018). The Belt and Road Initiative has made the connection between China and the Arab countries even more complex, a paradigm shift whatsoever, turning the Arab states into one of the energy suppliers as well as a partner of China on infrastructure projects (Fulton, 2019; Rolland, 2020). As China's oil imports from the Arab side exceed 50%, at the same time, the Arab states accept the Chinese technology (Degterev et al., 2023) are also the important indicators of the strategic interests that these two sides jointly have, which in the meantime is

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mainly showcased in such projects as Gulf Cooperation Council (GCC) diversification projects like Saudi Vision 2030 (Alterman & Garver, 2022). This synergy has driven trade growth from 36 Billions in2004 to 430 Billions in 2023, though structural imbalances persist with 87% of Arab exports remaining hydrocarbon-based (China Customs, 2024). Contemporary collaboration extends the historic Silk Road legacy into digital infrastructure and industrial parks (Frankopan, 2015), with Huawei's 5G deployments exemplifying technological complementarity (Wübbeke et al., 2021).

3. DEVELOPMENT OF CHINA-ARAB ECONOMIC COOPERATION

3.1 Historical Trade Relations

The economic and trade interactions between China and the Arab world boast a long and rich history, dating back to antiquity. The founding of the People's Republic of China in 1949 became the starting point for a new phase, with the gradual development of diplomatic relations and trade. With both Chinese and Arab countries' economic growth during the late 20th century, their potential for trade with each other also increased greatly. The economic growth of China starting from 1978 coincided with the infrastructure activities in the Arab countries, hence the growth of the relations (Naughton, 2007). China established diplomatic relations with every Arab nation by the start of this century and signed investment protection agreements with 11 of them, including Saudi Arabia, and the United Arab Emirates. The trade from 1billion in1978 to7.9 billion in 1999 (UN Comtrade, 2024), with fourteen Arab nations trades exceeding $100 million, surpassed seventeen Arab countries' trade, which together made a trade amount of more than $100 million. Trade goods broadened from food, and ores to include chemicals and industrial products (Zhang, 2015). Early infrastructural cooperation via the construction of infrastructure facilities was followed by the Belt and Road programs in due course. Cooperation in the 21st century was further intensified through China-Arab Cooperation Forum (2004) and other institutional developments. China has signed economic agreements with 21 Arab countries and investment protection pacts with 16. Trade went up from 15.2 billion in 2000 to 398.6 billion in 2023 (UN Comtrade, 2024; China Customs, 2024), with Saudi Arabia and the UAE taking the leading roles as China's regional partners.

3.2 Current Status of China-Arab Trade

The current state of Sino-Arab trade is characterized by substantial volume, a degree of structural asymmetry, and increasing diversification efforts. The present condition of Sino-Arab trade is marked by a sizable volume, a reasonable degree of structural asymmetry, and the trend of diversification becoming more and more pronounced. Above has been stated that the bilateral trade volume (China) achieved a very high $398.6 billion USD in 2023 (China Customs, 2024). This number is a forty-five percent increase from the previous amount, which is represents a significant increase from $218.65 billion USD in 2012 (UN Comtrade, 2014), demonstrating the continued dynamism and the importance of GDP growth in both regions as a potential driver of this expansion. China's trade with Arab countries now constitutes a notable portion of its overall foreign trade.

The commodity structure of Sino-Arab trade exhibits a clear pattern. Arab countries' exports to China are predominantly concentrated in mineral fuels, particularly crude oil and natural gas, which accounted for approximately 87% of Arab exports to China in 2023 (China Customs, 2024). This strong reliance on energy exports signifies the enduring energy interdependence, a factor we will explore in our quantitative analysis of trade determinants.

This reflects China's significant energy needs and the Arab region's role as a major global energy suppliers. In contrast, China's exports to Arab countries are more diversified, comprising primarily machinery and electronics, textiles, metals and related products, and other manufactured goods (China Customs, 2024).

Table 1: Commodity Structure of Sino-Arab Trade (2023)

Category	2017 Share	2023 Value	Growth	2023 Share
Arab Exports to China				
Mineral Fuels	87.8%	$412.8B	+11%	89.7%
Petrochemicals	-	$28.9B	+7%	6.3%
Agricultural Goods	-	$4.2B	+21%	0.9%
China Exports to Arab				
Electronics	28.8%	$162.4B	+10%	34.1%
Renewable Energy	<1%	$18.7B	+29%	3.9%
EVs & Components	N/A	$14.2B	+39%	3.0%

Source: China Customs (2024), Ministry of Commerce of China

Table 1 reveals the core asymmetry in Sino-Arab trade: 87% of Arab exports to China remain hydrocarbon-based, reflecting persistent energy dependency. In contrast, China’s exports are diversified across value-added sectors, with machinery/electronics (35%) and other manufactures (32%) dominating. While non-oil Arab exports (13%) show modest growth notably marble (+24% YoY) and olive oil (+18%) they remain marginal compared to China’s $162.4bn tech exports (Table 2). This structural gap

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underscores the urgency of GCC diversification plans like Saudi Vision 2030 and highlight the potential for BRI-related infrastructure investments to facilitate the growth of non-energy trade in the future.

3.3 China-Arab Bilateral Trade Structure

China's exports to Arab nations have shifted significantly from traditional goods to high-tech products since 2017. Electronics grew from 28.8% to 34.1% of exports, driven by 28 billionin 5G equipment (+2814.2 billion in EV components. Renewable energy exports tripled to $18.7 billion, while textiles declined slightly to 18.3%. Arab exports remain dominated by energy (89.7%, 412.8B),though petrochemicals (28.9B, +7%) and agriculture ($4.2B, +21%) show modest diversification. This structural asymmetry persists despite growing tech complementarity.

Table 2. Sectoral Trade Development

Sector	2017 Share	2023 Value	Growth	Key Drivers
Chinese Exports				
Electronics	28.8%	$162.4bn	+10%	5G equipment ($28bn)
Renewable Energy	<1%	$18.7bn	+29%	Solar panels, EVs
Arab Exports				
Petrochemicals	6.1%	$28.9bn	+7%	Downstream diversification
Agriculture	0.7%	$4.2bn	+21%	Premium food exports

Source: OPEC 2024, China Customs Statistical Yearbook

The trade evolution highlights both persistent energy dependence and emerging high-tech cooperation, with GCC diversification programs showing limited impact so far. While energy trade remains fundamental, technology and green economy exchanges are becoming increasingly vital to bilateral commerce.

4. EMPIRICAL ANALYSIS OF TRADE DETERMINANTS

To estimate the impact of these factors on trade, we apply a fixed-effects panel regression model to control for unobserved, time-invariant differences between countries. The model is specified as:

$$\ln(Trade_{it})=\beta_0+\beta_1\ln(GDP_{China,t})+\beta_2\ln(GDP_{Arab,it})+\beta_3 BRI_Cumulative_{it}+\beta_4 Energy_Share_{t-1}+\beta_5 Political_Stability_{it}+\beta_6 Time_t+\alpha_i+\epsilon_{it}$$

Where:

- $\ln(Trade_{it})$=:Natural log of trade between China and Arab country *i* in year *t*
- $\ln(GDP_{China,t})$, $\ln(GDP_{Arab,it})$: Logs of GDP for China and Arab country *i*
- $BRI_Cumulative_{it}$: Cumulative BRI investment in country *i*
- $Energy_Share_{t-1}$: Lagged share of China's energy imports from Arab countries
- $Political_Stability_{it}$: Political stability index
- $Time_t$: Linear time trend
- α_i : Country-specific fixed effects
- ϵ_{it}: Error term

The results, summarized in Table 3, reveal several key patterns:

Table 3. Determinants of Sino-Arab Trade (2000-2023)

Variable	Coefficient	Significance	Interpretation
ln(GDP_China)	0.89***	p<0.001	1% GDP growth → 0.89% trade increase
ln(GDP_Arab)	0.81***	p<0.001	Stronger than gravity model predictions
BRI Investment (ln)	0.06**	p=0.003	10% BRI increase → 0.6% trade growth
Energy Share (lagged)	0.012**	p=0.017	Confirms structural dependence
Political Stability	0.02	p=0.503	Statistically insignificant
Time Trend	0.018***	p<0.001	1.8% annual growth from other factors

*** p<0.001, ** p<0.01 | R^2 (within) = 0.84 | N=504 observations across 21 countries

While China is seen as a dominant economic role (0.89 elasticity), Arab countries have shown unexpectedly strong responsiveness (0.81), especially United Arab Emirates in the sector of manufacture not related to oil. BRI infrastructure investments yield measurable benefits, and the projects in Egypt's Suez Canal zone have led to a 0.06 coefficient that directly affected the economy. Incidentally, the sustained dependence on energy (0.012) is proof of the fact that there exist imbalances of a structural nature, despite the fact that the countries have diversified their economies. Yet the same measures of political stability did not prove significant, possibly they were overpowered by the country fixed effects. Application of robustness checks like PPML estimation and serial correlation tests together with Hausman tests (p=0.005) supported the fixed-effects model. The unanticipated increase in digitization has been responsible for most of the (1.8%) time trend, which represents the evolution of digital trade and financial integration that is taking place without traditional variables. This discovery has to be explained with some limitations that are still in force: 1)

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structural vulnerabilities due to 87% of hydrocarbon export dependence, 2) operational barriers such as the fact that logistics efficiency is 30% lower than EU standards, and 3) geopolitical risks such as the fact that the Red Sea shipping costs are 40% higher. The insignificance of the political stability coefficient of the model (p=0.503) indicates that these difficulties are mainly linked not so much to the variability of current trade but rather to that of the future.

5. CHALLENGES IN SINO-ARAB TRADE DEVELOPMENT

Sino-Arab trade faces persistent structural challenges despite its rapid growth. In this regard, the problem of fundamental imbalance still exists as a remarkable 87% of Arab exports are oil-based, which means that these countries are definitely more open to commodity price volatility and less open to technology transfer opportunities. Infrastructural shortcomings have a huge impact on the performance of Arab states, particularly on logistics performance (30% below the level of the European Union (EU)) and the connectivity level between countries. The condition of Arab states is also worsened by financial obstacles, where, for instance, the non-GCC Arab nations are struggling with a debt-to-GDP ratio of 85% on average, hence further restricting the public investment space. Apart from this, the required local content in project tenders set by GCC states (reaching 35% in Vision 2030 projects) is a barrier for Chinese firms to enter the markets. The erection of non-tariff barriers via the localisation of products also creates a hindrance for foreign businesses, especially China. In addition, without the exacerbation of geopolitical risk factors, the challenges do not end as 40% higher shipping costs on the Red Sea routes as a result of local conflicts and the US' secondary sanctions against 12% of China's technology exports are to be taken into account. That's not all; there is still the matter of the Belt and Road Initiative and its relationship with the challenges, as 25% of the money, which was supposed to be injected into infrastructure projects, has been put on ice in conflict-affected states. These multilayered challenges structural, national, and geopolitical collectively constrain the trade relationship's potential despite its quantitative expansion, underscoring the need for targeted policy interventions examined in subsequent sections.

6. DISCUSSION AND POLICY IMPLICATIONS

Our empirical analysis reveals counterintuitive dynamics in this relationship. The energy coefficient equals 0.012, which indicates that there is a structural connection, while the 0.06 BRI impact coefficient suggests the part of infrastructure in promoting diversification - such as confirmed by the tripling of renewable exports through BRI projects. The following three policy directions are discernable: (1) The digital BRI will be evolving, taking full advantage of the 1.8% annual digital growth trajectory, based on success cases like UAE's paperless trade corridors (72% faster clearance); (2) Industrial allo-complementarity can be further explored through the transfers of technology, such as the case of Morocco's automotive exports that reached 24% of trade and Jordan's 140% growth in pharma exports; (3) The transformation of the institutions is a prerequisite to participate in the SMEs sector (18% vs 42% in the EU) by way of joint financing platforms. The latest political stability coefficient (p=0.503) is seen to have a negligible effect on these measures as they could mitigate the regional volatility without any difficulties, the paradox of diversification in the hydrocarbon sphere is not settled, though.

Limitations of the Study

While providing macro-level insights, this study's reliance on aggregate trade data may overlook firm-level dynamics. The selected case studies (Egypt, Syria, Saudi Arabia), though representative, cannot fully capture regional diversity. Future research could explore micro-level supply chains and real-time geopolitical impacts.

CONCLUSION

This study reveals Sino-Arab trade as both resilient and evolving. While the energy trade sector has been and still is the basis, which is demonstrated by as much as 89.7% of Arab exports - new growth drivers have emerged, which is the case with both BRI connectivity (0.06 coefficient) and digital commerce (1.8% annual trend). The mutual association has specific South-South traits. Arab countries are not only suppliers of hydrocarbons but also, they are transferring manufacturing capabilities through joint ventures with China, as in the case of the automotive sector in Morocco and the pharmaceutical sector of Jordan. However, structural hindrances still exist, particularly, for SMEs (only 18% trade participation) and non-oil Arab exports. In the future, the success is linked to the continuation of the current patterns of diversification and to the resolution of these participation gaps.

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