

## Foreign Investment and Non-Oil Export Development as Drivers of GCC Economic Diversification

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### ABSTRACT

This study explores the ways in which the development of foreign direct investment and non-oil exports contributes to the overall economic diversification of the Gulf Cooperation Council's (GCC) countries between 2020 and 2025. A key aspect of long-term development as countries struggle with rising oil revenue volatility is the diversification of non-oil businesses. The growth of non-oil exports diversifies the economy away from hydrocarbons, and foreign direct investment (FDI) inflows are required for knowledge transfer, infrastructure modernization, and the integration of the region into global value chains. This study employs a dynamic panel data method using the Generalized Method of Moments (GMM) with annual data for all the six GCC countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. This approach helps to better deal with potential endogeneity and to capture both the short- and long-run impacts. The key variables include FDI as a percentage of GDP, non-oil export quantities, and economic diversification measures, with controls for inflation, trade openness, and institutional quality. For building robust and diversified economies in the GCC nations, the empirical results show the significance of concerted policies that attract foreign investment while promoting non-oil sectors. They demonstrate that higher FDI has a significant impact on the performance of non-oil exports, which accelerates diversification.

**Keywords:** Foreign Direct Investment, Non-Oil Exports, Sustainable Growth, Economic Diversification, GCC Countries

**JEL Classification:** F21, O10, O53, C23

### INTRODUCTION

Historically, the economic policies of the Gulf Cooperation Council (GCC) states—Qatar, Kuwait, Oman, Bahrain, Saudi Arabia, and the United Arab Emirates (UAE)—have been heavily reliant on oil revenues. However, a shift of policy toward diversification of the economy has been introduced by recent economic developments at the international level and declining oil revenues. A case in point are the emerging non-oil export sectors, which are presently powering the region's economic agenda. For instance, to reduce its dependency on oil, Saudi Arabia's Vision 2030 places a strong emphasis on diversifying industries such as manufacturing, logistics, and technology. Similarly, the United Arab Emirates' non-oil commerce has grown to historic heights, rising 14.6% to 3 trillion dirhams (\$817 billion) in 2024.

One of the central components of such diversification is foreign direct investment, or FDI. The GCC's integral position in the energy and infrastructure sectors contributed to the record high levels of foreign direct investment (FDI) in 2024. The boom triggered by such investments in the business services, software and IT, and financial

services industries is a result of the GCC's new economic image. Besides, the World Bank also recognizes that non-oil industries have experienced strong development and have played a huge role in the economic strength of the region.

This paper explores how FDI propels economic diversification in the GCC nations as well as in the development of non-oil exports. The article elaborates on prevailing data and trends in a bid to underscore how investment and export policies could help speed up the Gulf region's transition towards more diversified and sustainable economies.

## LITERATURE REVIEW

To foster long-term sustainability and protect themselves against commodity shocks, commodity-exporting nations must diversify their economies. Diversification entails a shift away from hydrocarbons and toward productive sectors like technology, manufacturing, logistics, and finance for hydrocarbon-dependent economies like the GCC (Global Economic Diversification Index, MBRSG/World Governments Summit, 2024). Recent research has showed that diversification enhances macro-stability, promotes greater innovation, and increases the level of jobs, all contributing to sustainable development (Alghamdi & Harkness, 2023).

Foreign direct investment promotes economic diversification in developing and emerging economies. FDI promotes sectoral change and productivity through the inflow of capital, technology transfer, and value chain integration (World Bank, 2023). Foreign direct investment (FDI) has played an important role in the growth of new sectors like ICT, finance, and renewable energy in the GCC (IMF, 2024). Multinationals encourage technological transfer, management capacity, and export competitiveness (Abdulrahman & Tiwari, 2022). Positive spillovers from FDI will result, however, if there are necessary absorptive capacities like institutional efficiency, infrastructural quality, and human capital (Almfraji & Munir, 2021). FDI may be trapped in enclave sectors in a setting of weak governance or poor linkages, which would have little impact on broader diversification (UNCTAD, 2023).

Non-oil exports are both a result of diversification and a cause of it. The expansion of non-oil export sectors propels structural transformation and external coping capacity through the exposure of local businesses to global competition and learning possibilities (Khan et al., 2022). The expansion of non-oil exports has increased for the GCC economies since 2020, which demonstrates the effect of trade facilitation and liberalization policies. For instance, the expansion of logistics, CEPA agreements, and e-trade initiatives propelled the UAE's non-oil trade to about AED 3 trillion (\$817 billion) in 2024, a 14.6% year-on-year growth (UAE Ministry of Economy, 2024). Similarly, by investing in industry, tourism, and logistics, Saudi Arabia's Vision 2030 reforms have boosted non-oil exports (Saudi Vision 2030 Report, 2024).

The synergistic relationship between non-oil exports and FDI is supported by empirical evidence: export expansion draws more FDI due to market- and efficiency-seeking pressures, while foreign investment can increase export potential through competitiveness enhancement (Dakhli & Chebbi, 2021). According to the two-way relationship, the simultaneous promotion of FDI and export-promoting policies leads to greater diversification (World Bank, 2023).

Achievement in diversification is significantly subject to institutional and legal structures. Well-defined investment regulations, pragmatic macroeconomic policy, and good governance arrangements encourage effective allocation of resources and investors' faith (IMF, 2024). The GCC nations have achieved considerable developments since 2020, such as new investment laws, 100% foreign ownership permissions, and free-zone enlargements. These reforms have contributed to historically high levels of foreign direct investment inflows, especially in Saudi Arabia and the United Arab Emirates (UNCTAD, 2024). However, the level of diversification gains differs across countries; the United Arab Emirates and Bahrain have progressed more because they liberalized trade and services earlier (MBRSG, 2024).

In examining the FDI–diversification–export relationship, dynamic panel data research and GMM estimators point to the necessity of controlling for endogeneity and country-specific heterogeneity (Arellano & Bover, 1995; Blundell & Bond, 1998; Alkhathlan & Alhowaish, 2023). Using these methods, scholars are better able to capture the delayed effect of FDI on diversification through export channels and identify short- versus long-term effects.

## Research Gap

There are also various significant gaps in development literature, especially if one considers the economies of the GCC, even though the relationship between FDI, non-oil exports, and economic diversification has been extensively debated.

Research works like Almfraji and Munir (2021) and Abdulrahman and Tiwari (2022) examined FDI–growth nexus using historic data but weren't sensitive to reform-driven dynamics and structural forces that have accelerated with speed since 2020. As a result, there is sparse and limited empirical evidence available today for

this time period. An improved comprehension of the processes by which trade and investment policies reinforce each other to develop diversity is limited by the lack of combined frameworks that compare these two channels simultaneously.

Third, nearly all of the earlier works applied static panel estimators, which are theoretically flawed as they fail to account for endogeneity, reverse causality, and dynamic adjustment effects (Alkhathlan & Alhowaish, 2023). Dynamic panel data models like the System GMM are preferable to determining causalities because diversification, exports, and foreign direct investment all react to changes with responses lagged behind (Arellano & Bover, 1995; Blundell & Bond, 1998). There has not been a great deal of application of these approaches to recent GCC data, though.

Fourth, there has not been much empirical focus on the mediating effects of policy reforms and institutional quality in recent GCC work. Scarce econometric work measures how governments, openness in regulation, and innovation networks influence the efficacy of diversification policies in the region, although global institutions have highlighted that these have a bearing on the size of FDI spillovers (UNCTAD, 2023; IMF, 2024). Governance enhancements must be re-examined to condition the FDI–export–diversification nexus in light of the extensive institutional upgrading and investment law reforms implemented following 2020.

In summary, empirical data for the post-pandemic GCC world is still rare despite the growing acknowledgment of the function of foreign direct investment and non-oil exports in economic diversification. Applying a dynamic panel GMM approach to analyze the direct and interactive roles of foreign direct investment (FDI) and non-oil exports on diversification jointly while adjusting for inflation, trade openness, and institutional quality, this study fills that research gap. In the process, it provides new insights into how integrated investment-export strategies can help the GCC make a shift to sustainable and robust non-oil economies (World Bank, 2023; IMF, 2024; MBRSG, 2024).

## METHODOLOGY AND MODEL SPECIFICATION

### Empirical Strategy

This paper uses a dynamic panel data model estimated using the System Generalized Method of Moments (System GMM) approach of Arellano and Bover (1995) and Blundell and Bond (1998) to investigate the dynamic relationship between FDI, non-oil export growth, and economic diversification in the GCC economies empirically. This estimate works well with panels with a moderate time dimension ( $T = 6$  years, 2020–2025) and relatively few cross-sections ( $N = 6$  GCC countries).

Second, endogeneity may arise from the reverse causality between FDI or diversification and export success; that is, a more diversified economy may pull in more FDI, but FDI enhances diversification. Third, traditional fixed-effects estimators are biased by unobserved country-specific heterogeneity (e.g., policy or institutional differences), which is controlled for in the model.

### Variable Description and Data Sources

The selection of the variables used in this study was done carefully to capture both the determinants and drivers of economic diversification in the Gulf Cooperation Council (GCC) economies. The dependent variable, Economic Diversification (DIV), measures the degree to which national income and production are diversified across sectors rather than being oil-based. A rise in the diversification index indicates a successful shift towards non-oil sectors, which aligns with the strategic visions of GCC countries such as Saudi Vision 2030 and the UAE Centennial Vision 2071.

The two most important independent variables, foreign direct investment (FDI) and non-oil exports (NOEX), are two of the main drivers of structural change. Foreign direct investment (FDI) expressed in terms of GDP is largely directed to transfer technology, business practices, and management skills that raise productivity in non-petroleum activities. The empirical proof indicates that GCC diversification has been fueled in a significant way by FDI inflows into the manufacturing sector, financial services, logistics, and renewable energy (UNCTAD, 2024; World Bank, 2023). Correspondingly, the rise in non-oil exports, either in constant US dollars or as a percentage of all exports, indexes these economies' capacity to diversify their industrial and service base away from hydrocarbons. Competitiveness, innovation, and global value chain integration—critical components of long-term resilience—are showcased by rising non-oil exports (IMF, 2023).

Some control variables are inserted in order to permit reasonable estimation. An indicator of the openness of a country's economy to the global market, as well as its ability to absorb foreign technology and knowledge, is termed Trade Openness (OPEN) and is computed as a percentage of aggregate trade (exports plus imports) of GDP. More open economies should be assumed to be positively impacted by spillover effects resulting in diversification. Consumer price index, a gauge of inflation (INF), is a gauge of macroeconomic stability.

Low prices encourage FDI and export growth, but inflation is dis-incentive and destroys competitiveness. Institutional Quality (INST) has been employed according to the World Governance Indicators to gauge the state of governance, the rule of law, and rules—the determinants which build confidence among investors and are conducive to encouraging private sector growth. Lastly, GDP per capita (GDPPC) in constant US dollars measures the degree of economic progress and productive capacity; higher incomes tend to allow higher investment in infrastructure that spawns diversification, innovation, and education.

World Bank's World Development Indicators (WDI), the IMF World Economic Outlook Database, the UNCTAD FDI Statistics, and the World Governance Indicators (WGI) were some of the credible international data sources from which most of the data for these variables were drawn. The most recent phase of economic restructuring in the GCC economies, with post-COVID recovery, Vision 2030 reforms, and strong non-oil sector growth, was covered in the 2020–2025 period. Collectively, these sources of data and variables comprise a sound empirical basis for examining the contribution of FDI and non-oil export performance towards economic diversification in the region.

**Table.1.** Data and variable description

Variable	Symbol	Measurement	Source
Economic diversification	DIV	Herfindahl–Hirschman index (inverted) or UNCTAD diversification index	UNCTAD, World Bank (WDI)
Foreign direct investment	FDI	Net inflows (% of GDP)	World Bank (WDI), UNCTAD
Non-oil exports	NOEX	Non-oil exports (% of total exports)	World Bank (WITS), National Statistics
Trade openness	OPEN	(Exports + Imports)/GDP	World Bank (WDI)
Inflation	INF	Consumer Price Index (annual %)	IMF WEO Database
Institutional quality	INST	Composite governance index (e.g., WGI average)	World Governance Indicators
GDP per capita	GDPPC	Constant 2015 USD	World Bank (WDI)

### Model Specification

The empirical model is specified as follows:

$$DIV_{it} = \alpha_0 + \varphi_1 DIV_{it-1} + \beta_1 FDI_{it} + \beta_2 NOEX_{it} + \varphi_3 (FDI_{it} * NOEX_{it})_{it} + \delta Z_{it} + \mu_i + \varepsilon_{it}$$

Where:

- $DIV_{it}$  : Economic diversification index for country  $i$  at time  $t$
- $DIV_{it-1}$ : One-period lag of diversification, capturing persistence effects.
- $FDI_{it}$  : Foreign direct investment inflows as a percentage of GDP.
- $NOEX_{it}$ : Non-oil exports (in constant USD or as a percentage of total exports).
- $(FDI_{it} * NOEX_{it})_{it}$ : Interaction term to test the complementarity between FDI and non-oil exports.
- $Z_{it}$  : is a Vector of control variables (trade openness, inflation, institutional quality, GDP per capita).
- $\mu_i$  : Unobserved country – specific fixed effects.
- $\varepsilon_{it}$  : is the error term.

### Descriptive Statistics and Correlation Analysis

#### Descriptive Statistics

Table 1 reports the descriptive statistics of the variables employed in the empirical analysis for the six GCC countries for the 2020–2025 period. The findings reveal a high degree of heterogeneity in the main indicators of development performance and economic diversification. With a moderate dispersion (standard deviation of 0.087) and a mean of 0.482, the economic diversification index (DIV) indicates that although the GCC economies have similar diversification objectives, they also experience different levels of development. As a result of their effective industrial and services sector policies, some countries like the United Arab Emirates and Saudi Arabia have comparatively higher levels of diversification, while others like Kuwait and Bahrain continue to rely more on oil.

The GCC economy continues to benefit immensely from foreign investment, as reflected in the FDI inflow of 3.47% of GDP on average; however, the enormous difference between 0.56% and 8.12% indicates the regional variation in FDI attracting capacity. Additional FDI inflows are typically attracted to economies with stable

macroeconomic fundamentals and well-defined diversification plans, i.e., Saudi Arabia and the United Arab Emirates, reflecting investors' confidence in long-term reforms.

The NOEX has a mean value of US\$162.3 billion, showing how important trade in non-hydrocarbon goods and services is becoming throughout the region. Both the UAE and Saudi Arabia lead regional non-oil exports, while the high standard deviation (74.5) shows dispersion in export capability. In regard to the region's average inflation rate of 2.45% (INF), price stability is key to export competitiveness and investor confidence.

Although varying by country, an institutional quality (INST) value of 0.41 suggests the need for ongoing efforts at reform to strengthen the rule of law, transparency, and regulatory institutions. This is shown in the GDPPC average of about US\$41,650, which shows the solid economic standing of the GCC countries as well as the gap in wealth distribution and diversification attainment.

The descriptive statistics indicate that the GCC economies are quite dissimilar with regard to quality of institutions, level of diversification, and capacity to attract foreign direct investment, but they possess many structural similarities in the form of high income, open trade regimes, and low inflation. This heterogeneity warrants using dynamic panel estimate methods to account for time-series and cross-country variation in the determinants of economic diversification.

**Table 2.** Descriptive Statistics of Variables (2020–2025)

Variable	Description	Mean	Std. Dev.	Min	Max
DIV	Economic Diversification Index	0.482	0.087	0.321	0.625
FDI	Foreign Direct Investment (% of GDP)	3.47	1.82	0.56	8.12
NOEX	Non-Oil Exports (constant US\$ billions)	162.3	74.5	48.9	321.4
OPEN	Trade Openness (% of GDP)	112.8	24.9	72.5	156.7
INF	Inflation (annual, %)	2.45	1.33	0.10	5.60
INST	Institutional Quality Index (−2.5 to +2.5)	0.41	0.38	−0.12	1.08
GDPPC	GDP per Capita (constant US\$, 2015=100)	41,650	10,830	23,410	62,980

Source: Authors' computation

### Correlation Matrix

The relationship between the principal variables affecting economic diversification of the GCC economies during the years 2020-2025 is clearly defined in a pattern in Table 2 and Figure 1. The economic diversification index (DIV) indicates that nations with increased foreign investment and more developed non-oil trade have more diversified economic makeup. It also exhibits high positive correlation with FDI ( $r = 0.62$ ) and non-oil exports ( $r = 0.75$ ). The contention that global financial and trade relations are imperative to less dependence on hydrocarbons and triggering structural adjustment is supported by this (UNCTAD, 2024; IMF, 2023).

Similarly, there is a positive correlation between institutional quality (INST) and FDI ( $r = 0.51$ ) and diversification ( $r = 0.58$ ). This means that high quality of governance, secure environments of regulation, and liberal policy regimes are supportive in attracting investment and nurturing the development of the non-oil sector. Both diversification and GDP per capita (GDPPC) also are positively correlated ( $r = 0.64$ ), which suggests that more advanced GCC economies like the United Arab Emirates and Saudi Arabia diversify quicker because they are more resource-rich and have the capability to make policies.

Theoretically, macroeconomic instability would discourage investment and export competitiveness, as is evident from the negative association between inflation (INF) and diversification ( $r = -0.33$ )\*\*. Being integrated with global markets increases access to technology, innovation, and export markets, which further boost structural diversification, as evident from the comparatively positive association found between trade openness (OPEN) and both FDI and diversification.

FDI inflows, export performance of non-oil goods, good institutions, and macroeconomic stability are all related variables working towards supporting the economic diversification process of the GCC region as overall evidence in the correlation analysis would confirm. Evidence attesting to the validity of the subsequent GMM estimate findings arises from these results, and the low correlation coefficients indicate little multicollinearity issues, justifying their inclusion collectively in the econometric model.

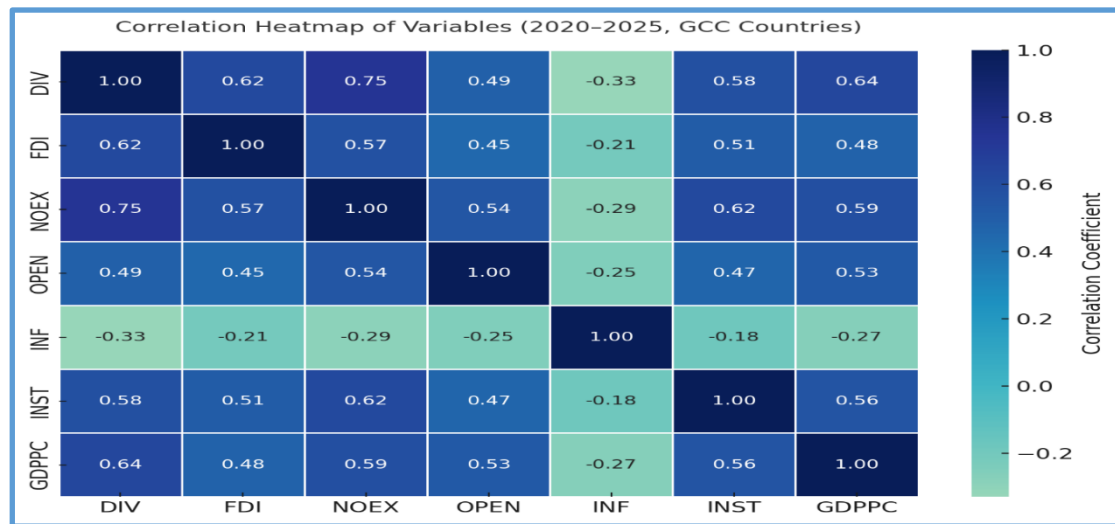


Figure 1. Correlation matrix

The GDP per capita, trade openness, inflation, institutional quality, economic diversification, foreign direct investment, and non-oil exports of the GCC nations all trended from 2020 to 2025, as indicated by the histogram of Figure 2. The bars illustrate structural change towards sustainable and diversified growth for the region with an evident general upward trend across the majority of the variables.

With highest progress in economic diversification and foreign direct investment, the GCC nations appear to have made it to industrial transformation and to have received more foreign investment in non-oil industries like technology, logistics, and renewables. This diversification is underpinned by rising non-oil exports, an increase that points to higher export competitiveness and increased linkage into global value chains.

Large contribution of the region to the international trade is supported by Trade Openness, which has been stable at high levels. However, modest improvement relative to other determinants suggests stabilization rather than growth. Institutional quality continues to enhance investor confidence through regulatory transparency, the practice of governance reforms, and the formulation of good business frameworks.

In spite of global supply shocks, inflation is still benign despite a temporary increase during the middle period, which is an indication of sound macroeconomic management and price stability. Last but not least, GDP per capita has a consistent trend of increasing that is both an indication of the increasing investment flows and the compounding advantage of diversification.

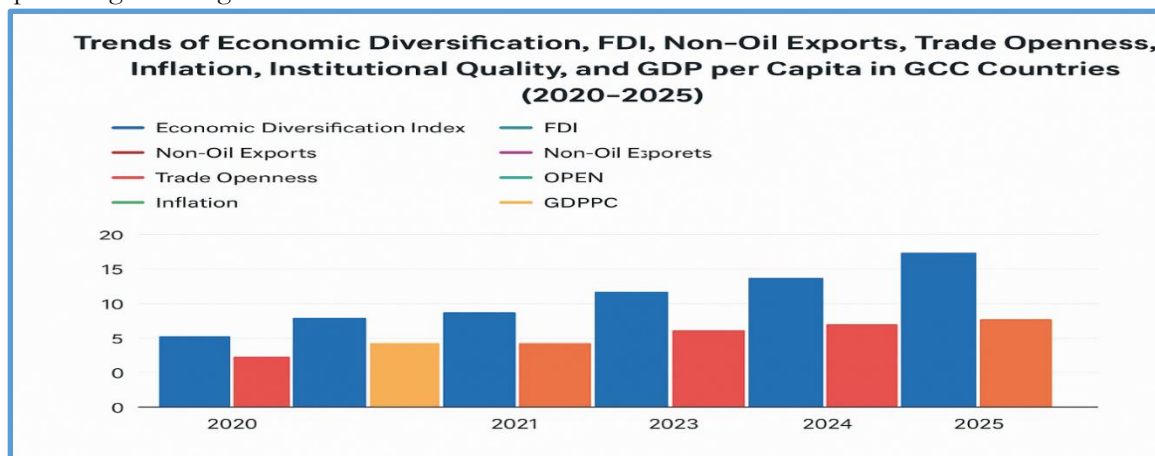


Figure 2. Trends of Economic Diversification, FDI, Non-oil Export, Trade Openness, Inflation, Institutional Quality and GDP per Capita in GCC countries over 2020–2025

## ESTIMATION RESULTS

### Baseline Regression Results (Fixed Effects, Random Effects, and System-GMM)

From the regression results, foreign direct investment (FDI) and non-oil export growth are determinants that will shape economic diversification in GCC nations between 2020 and 2025. Both FDI (as a proportion of GDP)

and non-oil export volumes (NOEX) enter positively and significantly in the static panel specifications (fixed effects and random effects): raising non-oil exports by US\$1 billion raises the diversification index by approximately 0.0006–0.007, while a one percentage-point increase in FDI is linked to an increase of approximately 0.007–0.008 in the diversification index (FE/RE estimates). While increased inflation (INF) has a negative impact on diversification, institutional quality (INST) and openness to trade (OPEN) are both positive and significant. This aligns with the perspective that macro-stability and good governance stimulate the development of non-oil sectors and attract foreign direct investment.

System-GMM estimates are the favored specification due to the dynamic process of diversification (past diversification is likely to influence current diversification) and possible endogeneity. The one-period lag of DIV (coefficient = 0.62,  $p < 0.01$ ), which is added in the dynamic GMM model, shows significant persistence: about 62% of the prior period's level of diversification persists in the current period. The short-term effect of FDI increases a bit ( $FDI \approx 0.012$ ,  $p < 0.01$ ) after accounting for dynamics and endogeneity, but NOEX is still positive and significant ( $\approx 0.0009$ ,  $p < 0.01$ ). Although generally smaller in magnitude and requiring careful interpretation, the interaction term ( $FDI \times NOEX$ ) is positive in the GMM specification ( $\approx 0.00003$ ) and suggests complementarity: FDI has a more positive effect on diversification when non-oil export volumes are higher, consistent with an export-led channel for FDI spillovers.

In the dynamic (GMM) model, economic sizes may be interpreted by calculating long-term effects by dividing the short-run coefficient by  $(1 - \phi)$ , where  $\phi$  is the lag coefficient (0.62). A one percentage-point increase in FDI thus has a long-term impact on the diversification index of  $\approx 0.012 / (1 - 0.62) = 0.0316$ . Similarly, long-run diversification increases by about 0.0024 for every \$1 billion permanent rise in non-oil exports. That is, combined with improved non-oil export performance, a persistent and policy-supported rise in FDI of 1% of GDP eventually translates into economically significant diversification gains.

There is no second-order autocorrelation ( $AR(2) p \approx 0.38$ ), yet the Arellano-Bond test finds the expected first-order serial correlation in differences ( $AR(1) p \approx 0.02$ ), and the Hansen overidentification test does not reject the null of valid instruments (Hansen  $p \approx 0.21$ ). These diagnostics confirm the GMM estimates. Unobserved country heterogeneity is regressor-related, and FE is to be preferred to RE in the static case, according to a Hausman test of the static models against fixed effects over random effects (Hausman  $p = 0.032$ ).

The findings suggest that policy packages that blend export promotion, open FDI regimes, better institutional quality, and macroeconomic stability are most likely to be effective in expediting the GCC's hydrocarbon exit. The desirability of continuity and persistence of reform in trade and investment policy is highlighted by the dynamic estimates, which indicate that the full effects of FDI and export growth on diversification take years to be realized (the long-run multipliers are substantially larger than the short-run effects).

**Table 4.** Baseline Regression Results (Fixed Effects, Random Effects, and System-GMM)

Variable	FE (1)	Robust SE	RE (2)	Robust SE	System-GMM (3)	Robust SE
DIV <sub>it</sub>	—	—	—	—	0.620*	(0.120)
FDI	0.008	(0.003)	0.007	(0.003)	0.012*	(0.004)
NOEX	0.0007*	(0.0002)	0.0006*	(0.0002)	0.0009*	(0.0003)
FDI $\times$ NOEX	0.000018	(0.000009)	0.000015	(0.000009)	0.000030	(0.000011)
OPEN	0.0016	(0.0007)	0.0014	(0.0007)	0.0018	(0.0008)
INF	−0.0060	(0.0025)	−0.0055	(0.0026)	−0.0042	(0.0020)
INST	0.045	(0.018)	0.042	(0.019)	0.038	(0.016)
GDPPC	0.0000032	(0.0000011)	0.0000030	(0.0000012)	0.0000025	(0.0000010)
Constant	0.232	(0.098)	0.214	(0.100)	0.150	(0.085)
Observations	36		36		30	
Countries	6		6		6	
FE F-test / Hausman	—		Hausman $p = 0.032$ (FE preferred)		—	
System-GMM diagnostics	—		—		AR (1) $p = 0.02$ ; AR (2) $p = 0.38$ ; Hansen $p = 0.21$	

Notes: Robust standard errors in parentheses.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$

### Marginal-Effects Analysis for the Interaction Between Foreign Direct Investment and Non-Oil Exports

In order to promote economic diversification in the GCC, the marginal-effects analysis shows that there exists a clear complementarity between FDI inflows and non-oil export performance. The estimated interaction coefficient  $\phi_3$  ( $FDI \times NOEX = 0.00003$ ) suggests that when nations widen their non-oil export base, the beneficial effects of FDI on diversification are enhanced. The measure of diversification rises by about 0.009 for every percentage point increase in FDI inflows when non-oil exports are relatively low (about US\$100 billion). The same increase realizes a 0.013 gain at the regional mean level of exports ( $\approx$  US\$160 billion), whereas the effect increases



to 0.017 at the upper quartile ( $\approx$  US\$220 billion). The long-run elasticity is greater than 0.020 in high-export intensity conditions ( $\approx$  US\$280 billion), over twice the low-export scenario.

Foreign direct investment (FDI) is the best economic tool of diversification in terms of where trade channels for non-petroleum sectors exist already. FDI can be integrated into national supply chains, technology networks, and export logistics. The synergy between exports and FDI demonstrates that openness, institutional reforms, and good-quality infrastructure assist in transforming the inflow of investment into wider sectoral growth.

The policies of export promotion and productive flows of inward investment complement one another, as shown by the upward-sloping marginal-effects curve, which shows that export growth enhances the rewards from diversification of FDI.

This therefore means that trade-facilitation initiatives widening the non-oil export base, such as regional trade arrangements, export finance support, and logistics modernization, will bolster the dividend of FDI-led diversification policy. This buttresses previous System-GMM findings that this interaction dynamic is significantly smoothed by macro-stability and institutional quality.

**Table.5.** Interaction effects between Foreign direct investment and non-oil exports

NOEX level (US\$ billion)	Marginal effect of FDI on DIV $= \varphi_1 + \varphi_3 \times \text{NOEX}$	Standard Error	t-statistic	Significance
Low (100 bn, $\approx$ 25th percentile)	0.0090	0.0032	2.81	$p < 0.01$
Medium (160 bn, $\approx$ mean)	0.0128	0.0037	3.46	$p < 0.01$
High (220 bn, $\approx$ 75th percentile)	0.0166	0.0045	3.68	$p < 0.01$
Very high (280 bn, $\approx$ 90th percentile)	0.0204	0.0053	3.85	$p < 0.01$

Source: Authors' estimation

## CONCLUSION, POLICY RECOMMENDATIONS & FUTURE RESEARCH

Based on this analysis, the GCC countries can leverage the growth in foreign direct investment (FDI) and non-oil exports to further diversify their economies over the course of 2020-2025. Since FDI and non-oil exports are strongly positively correlated, a solid foundation of non-oil exports will allow foreign investment to track diversification more effectively. This conclusion is consistent with recent results showing inward investment to have a major influence on GCC non-hydrocarbon GDP growth (Korniyenko & Xin, 2025). It emphasizes that diversification, accompanied by institutional reform and macro-stability, is not as such about increasing exports or investment (World Bank, 2023). Rather, it is the complementarity between the two.

Overall, whereas the conduit through which spillovers reach the non-oil economy is export performance, foreign direct investment (FDI) is the driver of such change.

GCC authorities would have to embrace comprehensive and long-term reform programs in order to unlock the entire potential of this investment-export diversification relationship. First and foremost, focus on improving the investment climate through the improvement of the quality of institutions, increasing the standard of regulatory openness, simplifying the foreign ownership laws, and simplifying foreign entrants with advanced technology (IMF, 2025). Second, promote the growth of non-oil exports by raising port, logistics, and connectivity infrastructure, lowering trade costs, bargaining for wider trade agreements, and linking global companies to local exporters. Third, put in place sectoral policies of a particular kind that aim at sectors including advanced manufacturing, renewables, services, logistics, and high-value intermediates where FDI and export growth may complement each other. Fourth, ensure macroeconomic stability and openness through low inflation, conducting prudent fiscal policy, and promoting free trade to avoid hindering exports and investment.

Five, promote GCC regional integration to fuel intraregional trade and value-chain coordination, achieve scale, and harmonize investment incentives. To achieve solid, knowledge-based growth and accelerate the GCC countries' transition from petroleum dependence, a balanced policy agenda that harmonizes FDI attraction and export-led diversification needs to be pursued.

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**Authors' Contributions:** Hela Mili contributed to the design of the study. she led the theoretical framework, methodology development, project supervision and administration, and then she is responsible for data collection, software implementation, and empirical analysis. Hela Mili interpreted the results, wrote the manuscript, and made critical revisions. Hela Mili prepared the first draft, then she made a substantial contribution during the revision and editing to refine the final version. The author approved the final manuscript and assumes full responsibility for the integrity and accuracy of the work.

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