Do large-scale events boost and sustain economic diversification in GCC Countries? Evidence from Qatar and Saudi Arabia

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Outline

- introduction
- Economic Diversification Context in Qatar and Saudi Arabia
- Literature review
- Econometric analysis
- Conclusion

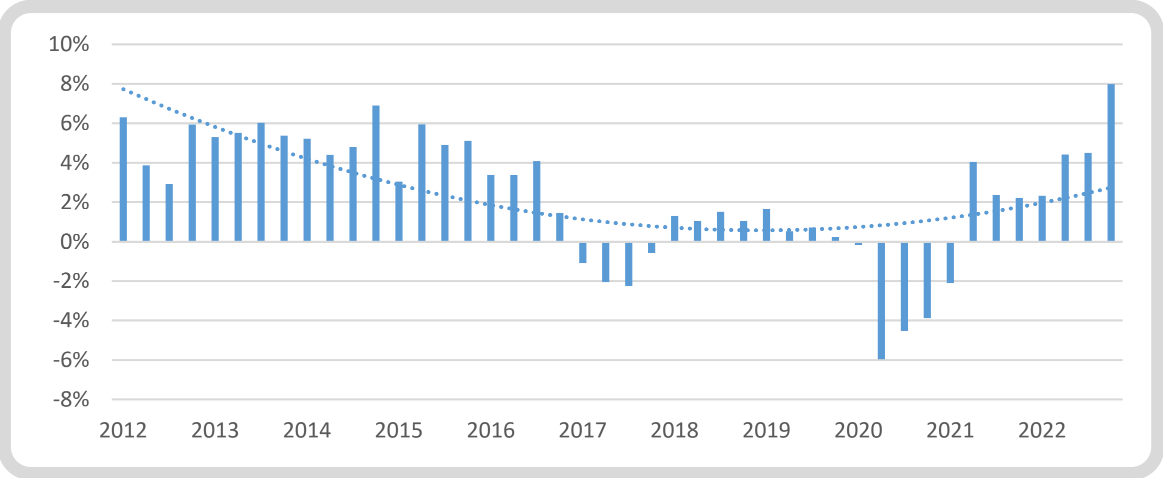
Introduction

- GCC countries rely on the hydrocarbon sector' revenues to finance their economic and social programs.
- Fluctuations in oil and gas prices has led to challenges in maintaining fiscal stability and achieving the sustainability of the current account.
- Both countries implemented long-term visions (Qatar Vision 2030, Saudi Vision 2030) to strategically transform economies away from overdependence on oil
- Mega events and investments seen as catalysts for diversification, e.g. Qatar hosting 2022 World Cup, Saudi projects like NEOM City
- This research examines the impact of such mega events on economic diversification in GCC countries.
- The analysis includes an assessment of real economic growth in the non-hydrocarbon sector and the hydrocarbon sector.

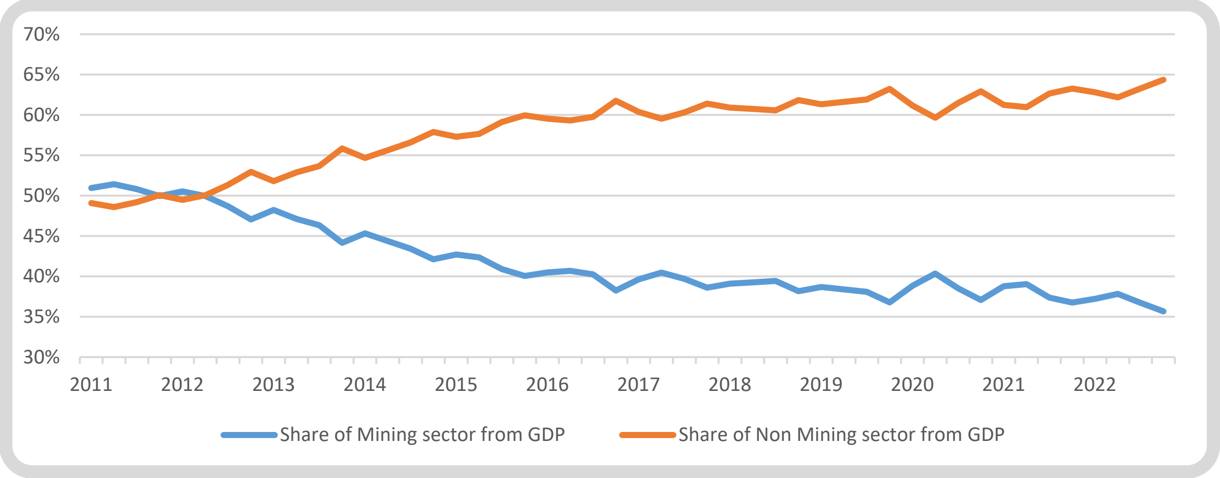
Share of oil and non-oil sectors: Economic Diversification!

1) Context in Qatar

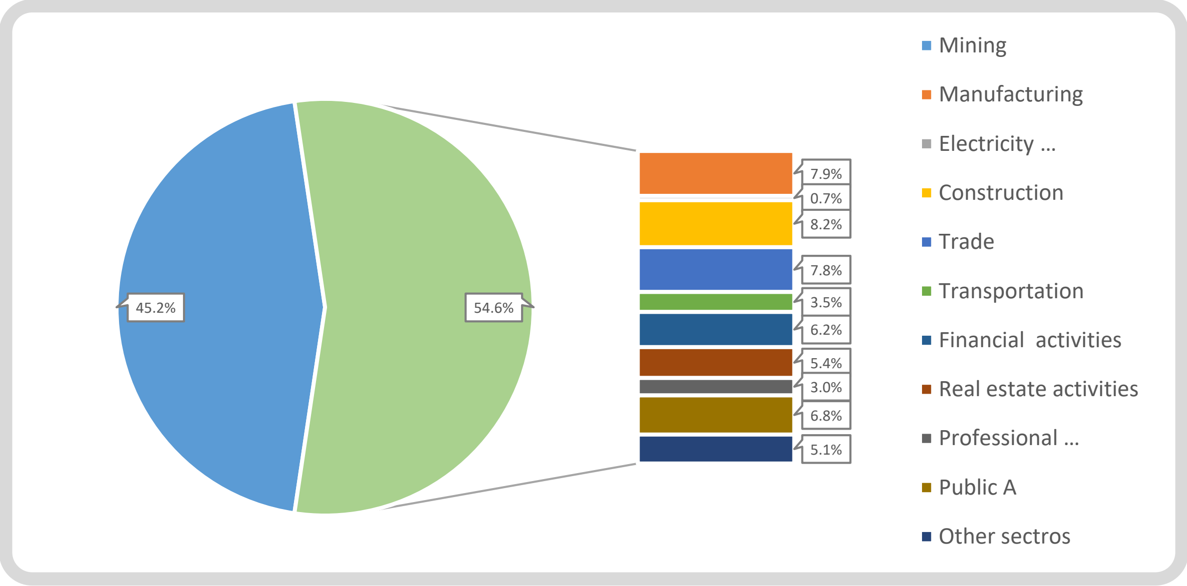
Evolution of real GDP growth in Qatar from 2012-2022



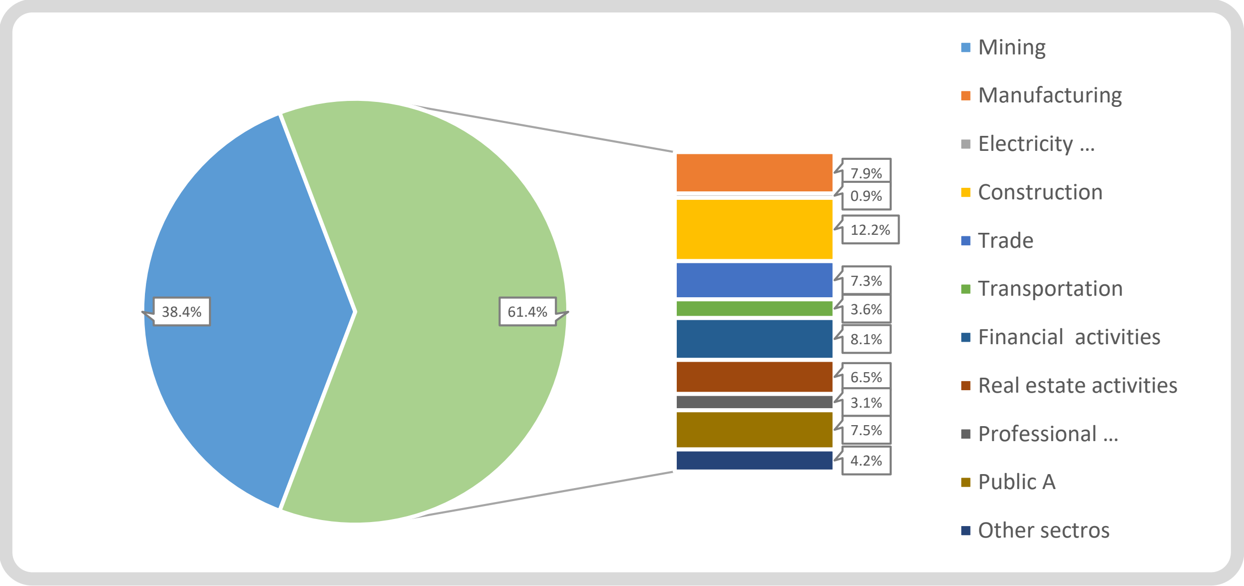
Share of oil and non-oil sectors in Qatar's total real GDP



Sectoral distribution in Qatar's real GDP for the period 2011-2016



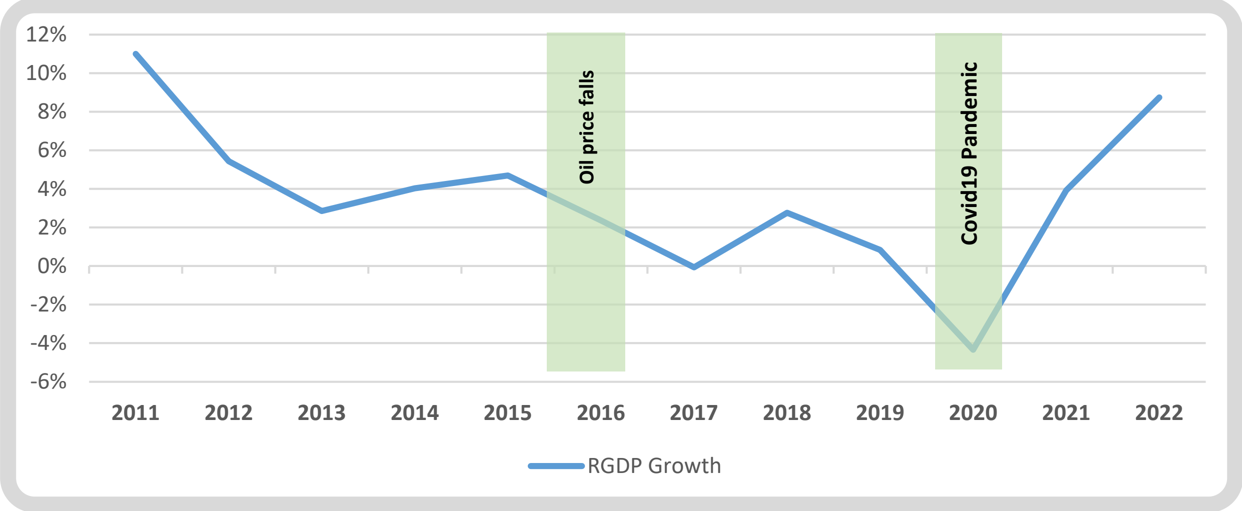
Sectoral distribution in Qatar's real GDP for the period 2017-2022



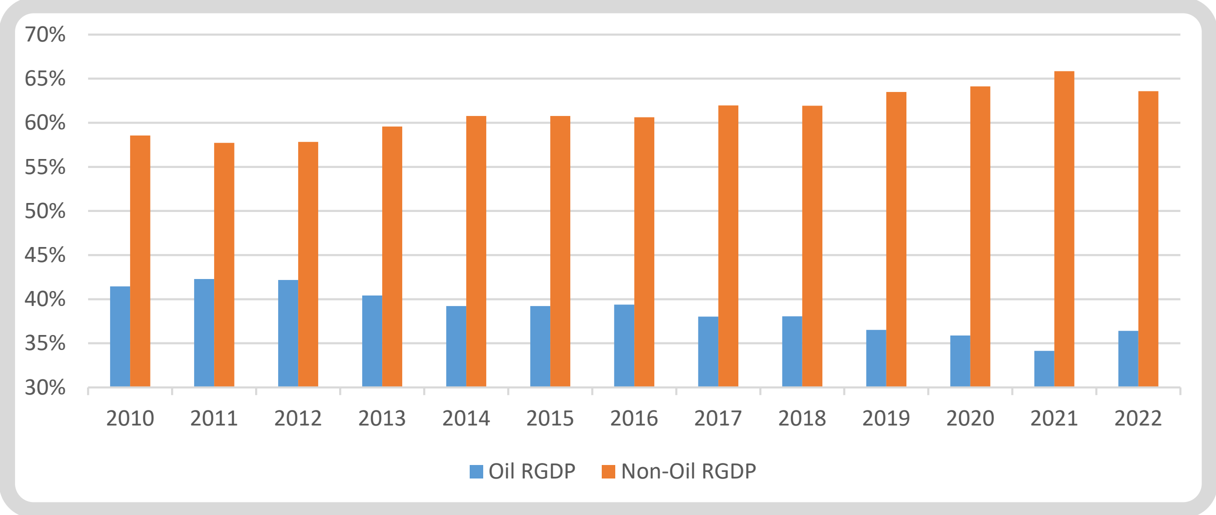
Share of oil and non-oil sectors: Economic Diversification!

1) Context in Saudi Arabia

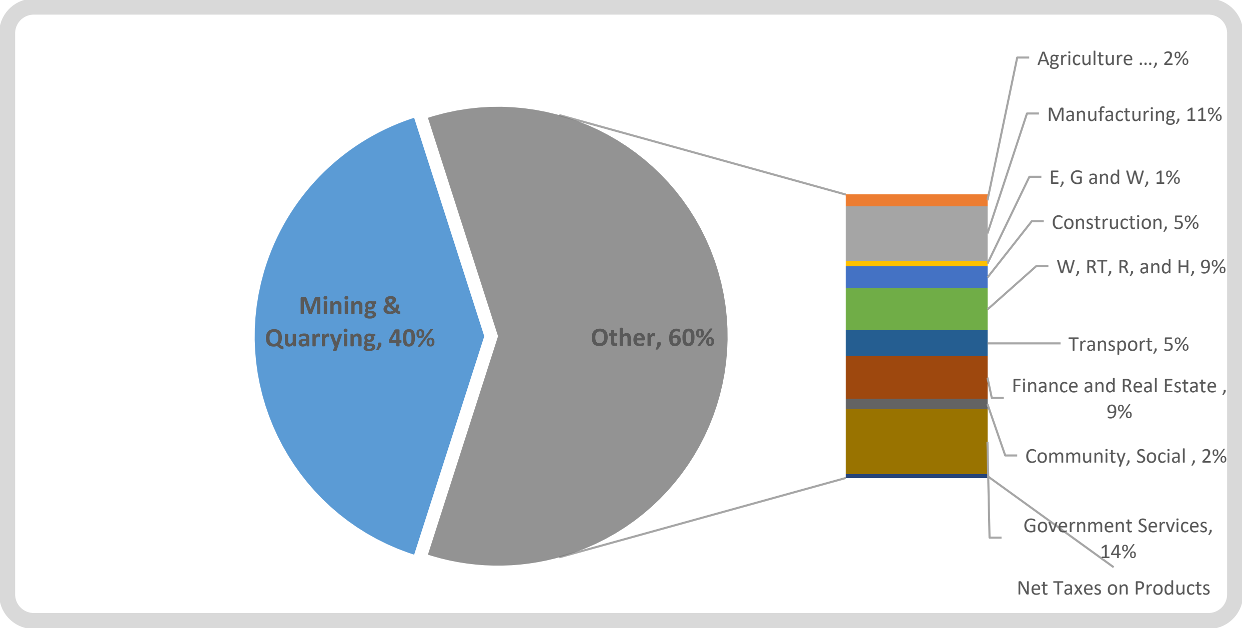
Evolution of real GDP growth in Saudi Arabia from 2012-2022



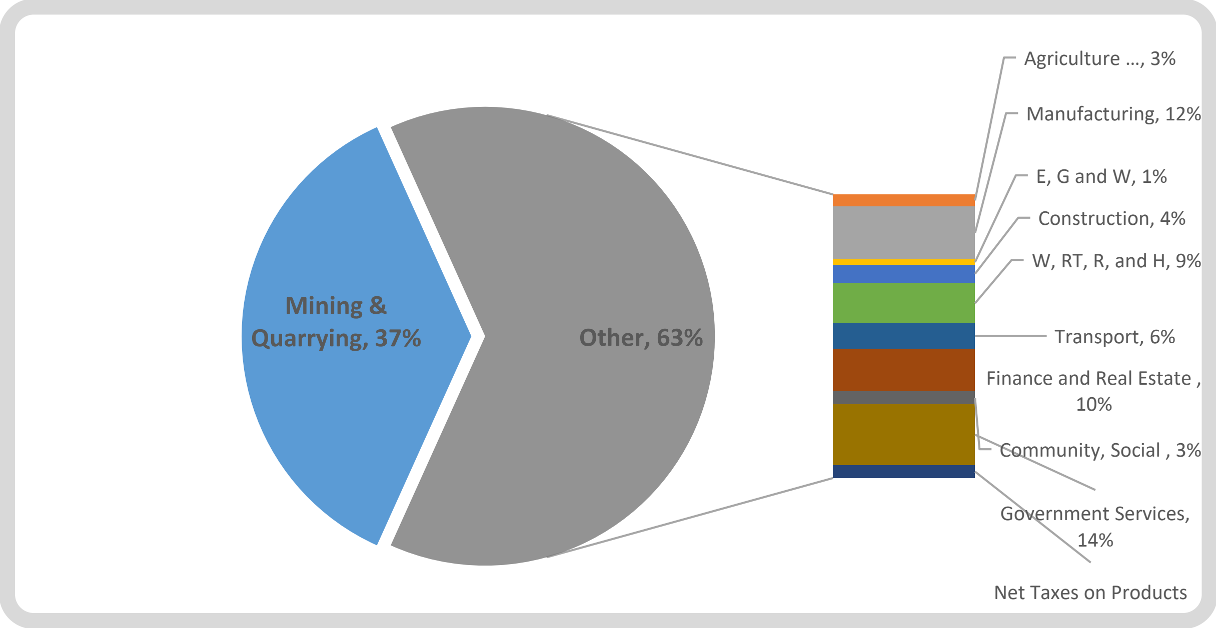
Share of oil and non-oil sectors in Saudi Arabia 's total real GDP



Sectoral distribution in Saudi Arabia 's real GDP for the period 2011-2016



Sectoral distribution in Saudi Arabia 's real GDP for the period 2017-2022



Literature Review

- The literature is mixed but overall suggests impacts are case-specific and countries should carefully assess costs vs potential benefits before deciding to host large scale events.

- Studies finding positive impacts on GDP, investments, tourism revenues, infrastructure improvements, skills development, and enhanced country reputation. (Koch, 2022; Azzali, 2016; Wan and Song 2019; Borowski et al., 2013)

- EURO 2012 football championship hosted by Poland - A dynamic CGE model by Borowski et al. (2013) estimated Poland saw a cumulative 2.1% increase in GDP versus 2009 levels due to investments in transport infrastructure like airports and railways spurring productivity.

Literature Review

- 2012 London Olympics - Wan and Song (2019) argued London benefited from hosting this event due to existing infrastructure, benefiting the British economy in the short term.

- In contrast, the second strand consists of scholars who contend that the benefits of hosting mega-events vary depending on whether the hosting country is developed or developing (Zawadzki, 2022; Ferris et al., 2022; Muller, 2015; Matheson, 2012).

- According to these researchers such events may be more of a financial burden than an economic growth driver, as the benefits may not outweigh the costs incurred to host the event .

Methodology

- Production function model to examine determinants of economic growth

- Addition of dummy variables to capture structural breaks from mega events

$$Q_t = c + \alpha L_t + \beta K_t + \gamma GE_t + \delta dum_t + \theta GE_t * dum_t + \tau_t$$

- Error correction model and Granger causality tests employed.

Results from ARDL Model

Table 1: ARDL estimation with exogenous structural break (2010 for Qatar and 2016 for Saudi Arabia)

	Saudi Arabia		Qatar	
	Non-oil GDP	**Oil GDP**	**Non-oil GDP**	**Oil GDP**
Long run estimation				
K	0.37***	-0.07	0.42***	0.21***
GE	**0.17*** **	**0.41*** **	**0.39** **	**0.26*** **
L	4.17***	-3.21***	-1.83***	-3.21***
dum	0.002*	0.02*	0.12*	1.7*
GE*dum	**0.015***	**-0.01***	**0.08** **	**-0.01***
Short run estimation				
C	-1.16**	4.29**	1.2**	1.65**
NOGDP(-1)	-0.10***		-0.05*	
OGDP(-1)		-0.18***		-0.14***
K(-1)	0.04***	-0.01	0.023***	0.03***
GE(-1)	0.02	0.08**	0.022***	0.032***
L(-1)	0.42**	-0.001	-0.10**	-0.36**
GE*dum(-1)	0.0016	-0.59	0.0048	-0.068***
D(NOGDP(-1))	0.52***		0.47***	
D(OGDP(-1))		0.57***		0.27***
D(OGDP(-2))		0.24**		0.17**
D(OGDP(-3))		0.072		
D(K)	0.11***	0.11	0.028	0.1***
D(K(-1))	-0.08*	0.02	-0.007	-0.05**
D(K(-2))	-0.03	0.23*		-0.04**
D(GE)	0.04	0.41***	0.025*	
D(GE(-1))	-0.01	-0.30**	-0.03	
D(L)	4.66***	2.05	3.9***	
D(L(-1))	-1.56*	-1.46	-2.13*	
D(L(-2))	-0.48		0.13	
D(GE*dum)	0.001***	-0.0018	0.001	-0.06***
D(GE*dum(-1))	0.0004	0.001	0.0024	-0.002**
D(GE*dum(-4))	0.001*			0.005***

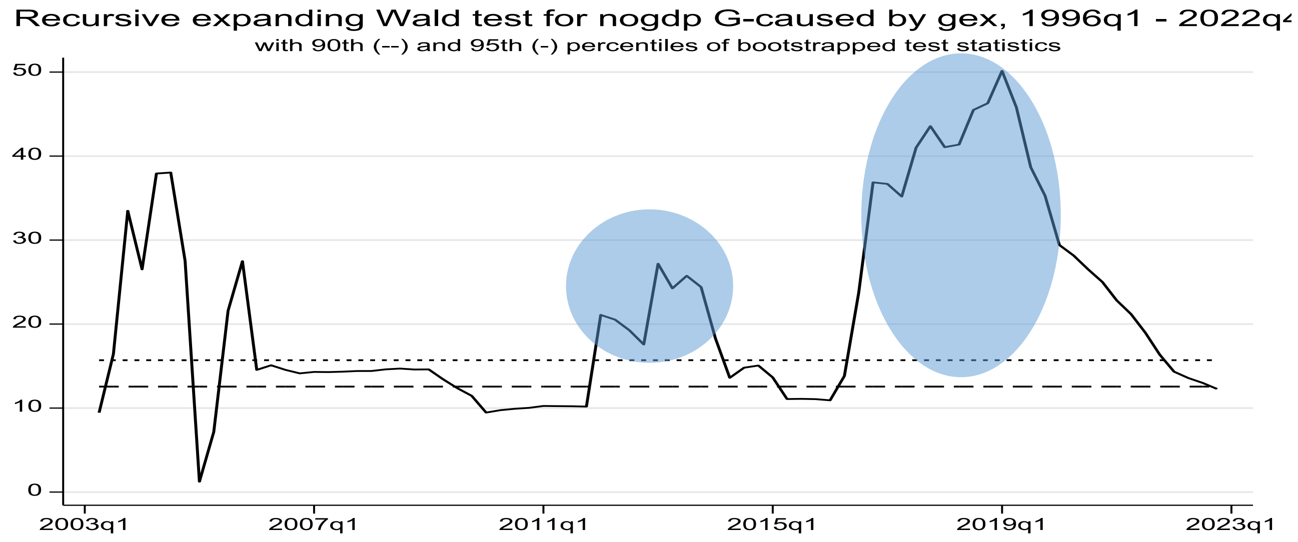
Time-Varying Granger Causality Analysis

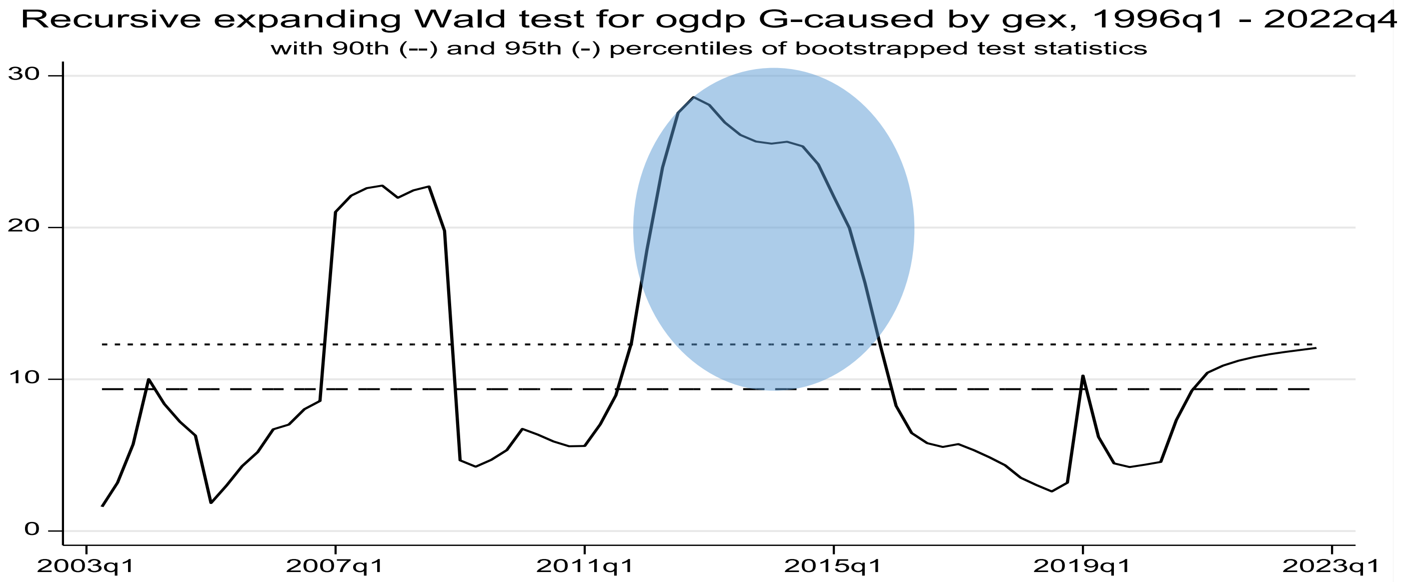
- This study uses the technique developed by Shi et al. (2018, 2020) to evaluate how the Granger causal relationship between GDP growth and its determinants varies over time in Qatar and Saudi Arabia.

- We opt for the recursive-evolving algorithm, which better accommodates structural breaks such as mega events.

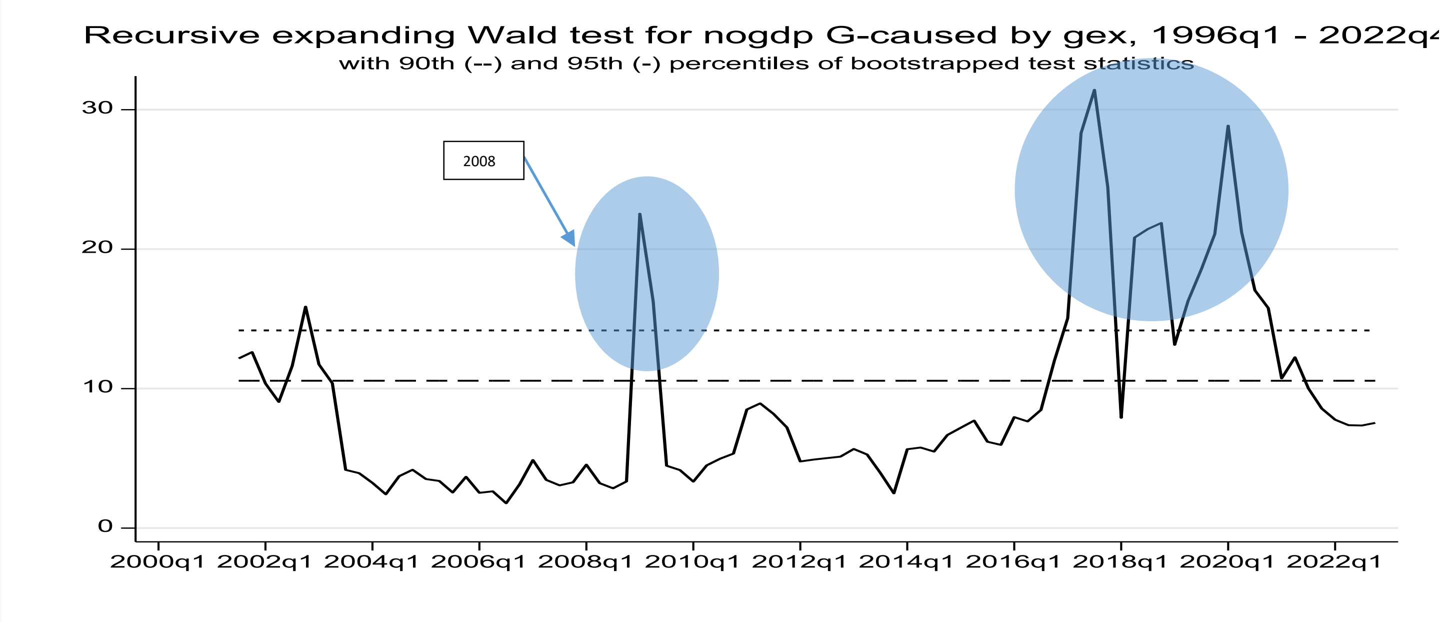
- The causality is significant when the Wald test statistics exceed critical values for a specific time period

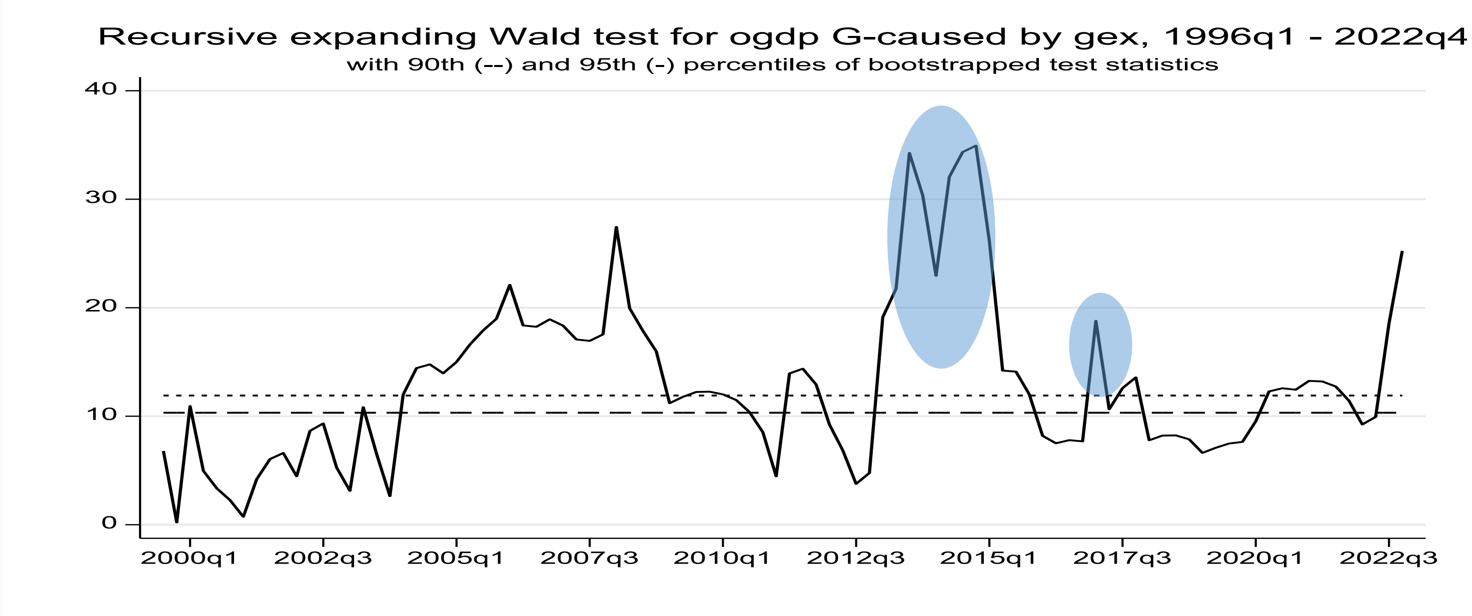
Time-Varying Granger Causality Analysis- Qatar





Time-Varying Granger Causality Analysis- Saudi Arabia





Conclusions

- Based on the analysis presented in the research, the economic diversification and transition away from dependence on the oil sector in Qatar and Saudi Arabia has been rather in progress over the past decade.

- In Qatar and Saudi Arabia, despite substantial efforts to diversify the economy, the oil and gas sector remains the dominant sector in the economy. The two countries still finds their government expenditure in non-oil sectors closely tied to oil and gas revenues.

- It is essential to recognize that the positive outcomes of hosting mega events and undertaking diversification initiatives may take time to yield their full benefits. Therefore, both Qatar and Saudi Arabia must adopt a long-term approach where they adapt their strategies to evolving economic conditions and global events.

- Moreover, beyond organizing sports event, both Qatar and Saudi Arabia should strategically invest in new sectors with more product complexity and high diversification potential including technology and renewable energy.

THANK YOU