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Economic Diversification in MENA Oil Exporters: What about the Main Binding Constraints Facing This Process?

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1. Introduction

The governance-natural resources nexus has been intensely debated in recent decades, and many economists have highlighted the intrinsic role played by institutions and good governance practices in escaping the resource curse (Barro 1991; Sachs-Warner, 1995; Barro and Sala-i-Martin, 1995; Sala-i-Martin, 1997; Mehlum et al., 2006; Robinson et al, 2006). According to Elbra (2013) the resource curse can be perceived as *"the paradox by which mineral-rich states fail to keep pace, economically, with their non-mineral-rich peers"*.

2. Theoretical and Empirical Review on Resource Curse and Good Governance and the Links with Economic Growth

A- The Natural Resource Trap: How Much Do Governance and Institutions Matter?

B- Diversification: A Way Out of The Resource Curse, But What About The Main Binding Constraints Facing This Process?

C- The Triptych Good Governance-Diversification-Economic Growth: Is Natural Resource Wealth a Boon or a Bane?

Table 1. **Empirical Evidence on the Link between Resource Curse, Institutional Quality and Economic Growth**

Authors	Sample	Empirical approach	Results
Bulte et al., (2005)	90 countries 1970-2001	Ordinary Least Squares (OLS) regression	The resource abundance negatively affects institutions concerned with government effectiveness and rule of law.
Bhattacharyya and Hodler (2010)	124 countries 1980-2004	Game-Theoretic Model	The link between resource rents and corruption counts on the quality of democratic institutions.
Tsani (2013)	27 natural resource-rich countries 1996-2007	OLS, Newey-West standard errors, Panel Corrected Standard Errors (PCSE)	Poor institutional quality aggravates the tendency for resource dependence.
Libman (2013)	72 Russian regions 2000-2006	Ordinary Least Squares (OLS) regression	Good institutional quality is the main driving force behind the positive effect of natural resources on growth rates.
Oskenbayev et al., (2013)	Kazakhstan 2001-2009	2SLS model, GMM method	Resource abundance is often associated with corrupt practices and weak institutions.
Papyrakis and Gerlagh (2004)	47 countries 1975-1996	Ordinary Least Squares (OLS) regression	Corruption appears to significantly dampen economic growth.

<u>**Source:**</u> *Constructed By Authors*

Table 1. **Empirical Evidence on the Link between Resource Curse, Institutional Quality and Economic Growth**

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Carmignani (2013)	84 countries 1970-2010	Ordinary Least Squares (OLS) regression	High-quality institutions promote human development through reducing income inequality.
Hooshmand et al., (2013)	17 countries 2002- 2010	System-GMM (SGMM) dynamic panel	Good governance has a positive and statistically significant influence on financial development.
James and Aadland (2011)	3092 counties in the United States 1980-1995	Two-stage generalized least squares (GLS), OLS	Natural resource abundance tends to reduce real income per capita.
Boyce and Emery (2011)	50 U.S. states 1970–2001	Ordinary Least Squares (OLS) regression	Resource abundance displays a negative impact on economic growth.
Bjorvatn and Farzanegan (2013)	120 countries 1982-2006	Generalized Method of Moments (GMM), OLS regression	Resource rents crowd out the manufacturing sector and lead to lower real GDP per capita.
El Anshasy and Katsaiti (2013)	32 resource-abundant countries and 47 non-resource countries 1984-2008	OLS regression, 2SLS model	Good governance, stronger democratic institutions, and low levels of corruption significantly enhance economic growth.

<u>**Source:**</u> *Constructed By Authors*

3. Oil Rents, Economic Growth and Good Governance in Oil-Abundant MENA Countries

## *3.1. Oil Rents and Challenges Confronting Oil-Abundant MENA Countries*

Figure 1. **Oil Rents (% of GDP) in Oil-Abundant MENA Countries, 1996-2016.**
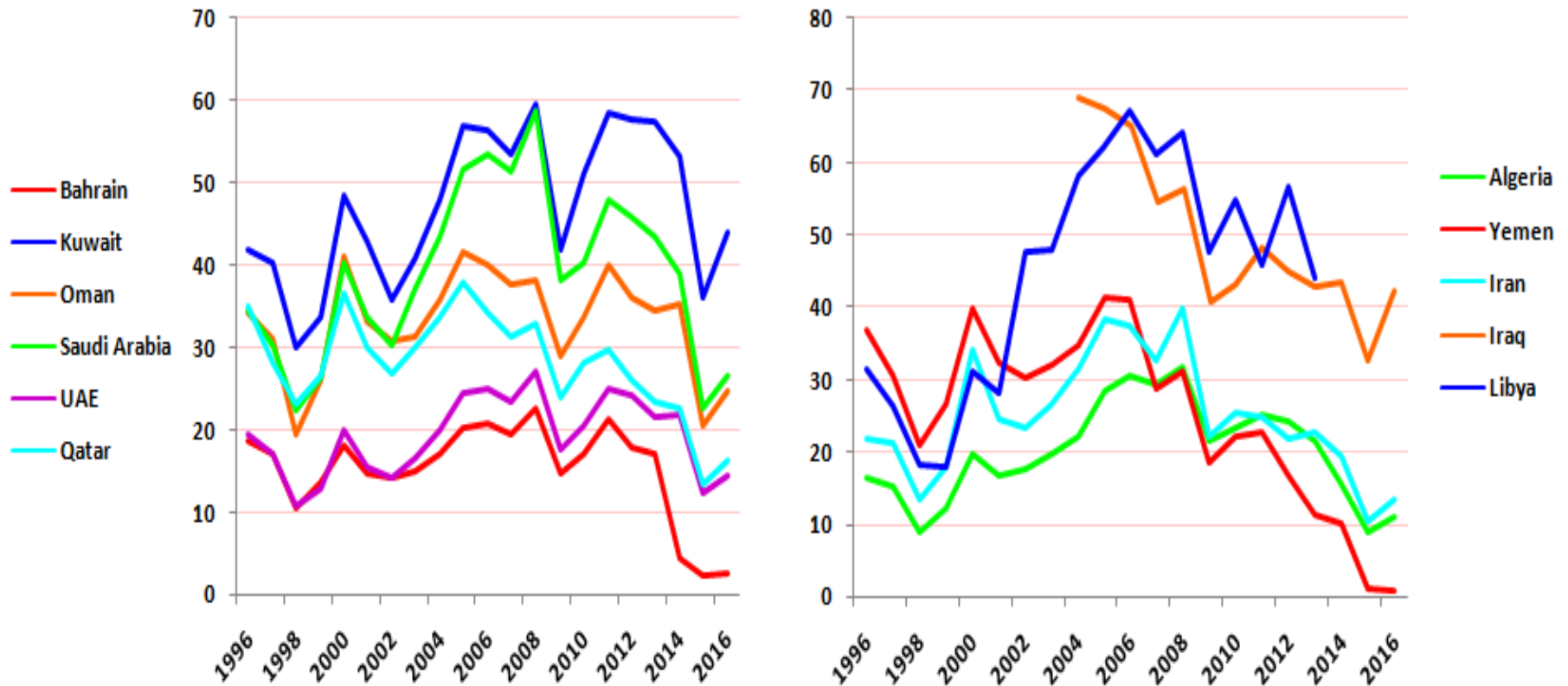
Source: World Bank, World Development Indicators, the data are available online at: http://data.worldbank.org (accessed 19/10/2018).

## 3.2. *Economic Growth in Oil-Abundant MENA Countries*

Figure 2. **Gross Domestic Product, Constant Prices (percent change) in Oil-Abundant MENA Countries, 1996-2019.**
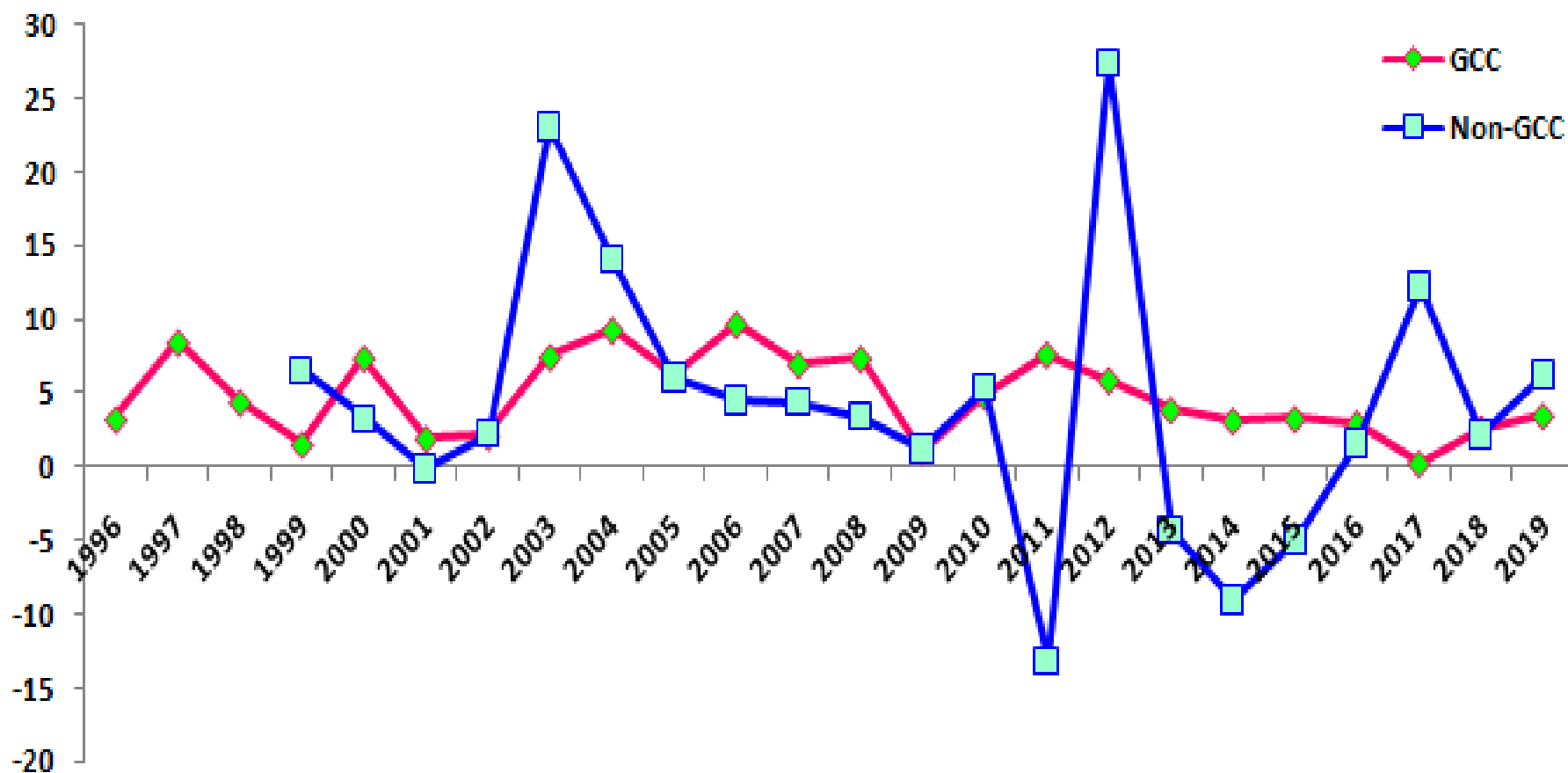
Source: IMF, World Economic Outlook (WEO) database, the data are available online at: http://www.imf.org/ (accessed 19/10/2018).

3.3. Good Governance in Oil-Abundant MENA Countries
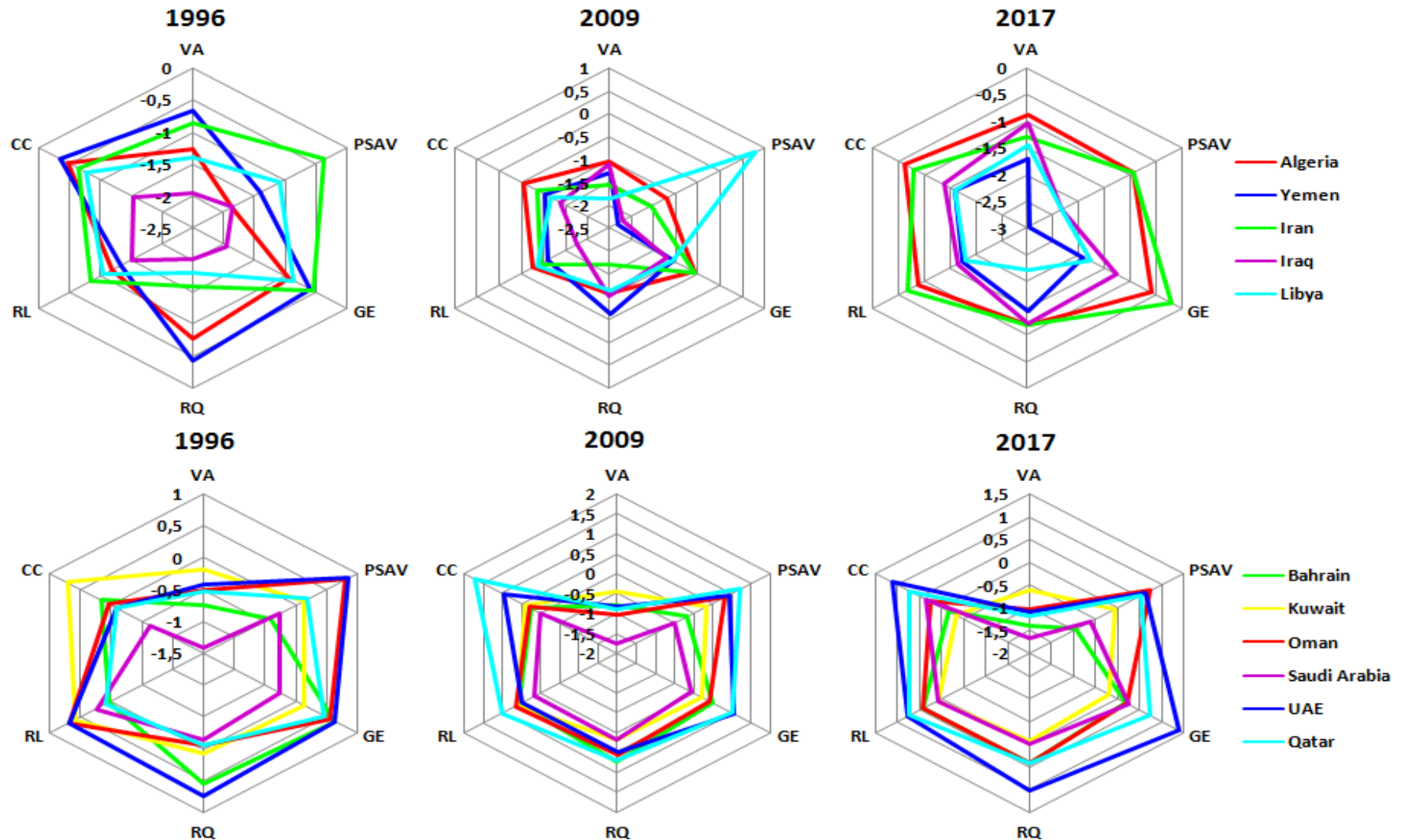
Figure 3. **Governance Index (The Simple Average of Six Worldwide Governance Indicators) in Oil-Abundant MENA Countries, 1996-2017.**
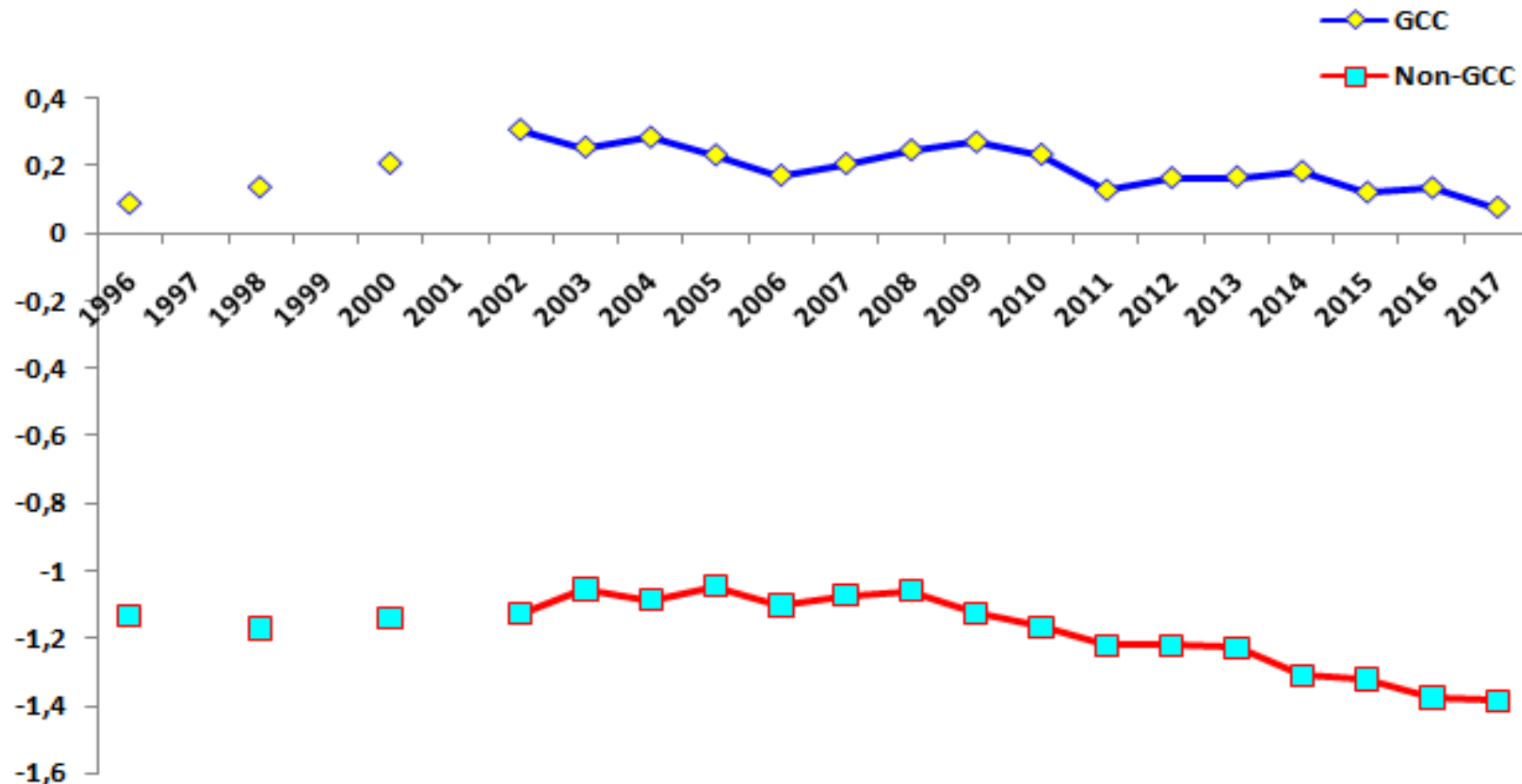
Source: World Bank Governance Indicators, the data are available online at:
http://info.worldbank.org/governance/wgi/index.asp (accessed 19/10/2018).

Figure 4. Governance Indicators in Oil-Abundant MENA Countries, 1996, 2009, 2017.

4. Data and Empirical Results

A. Data

The present paper aims, on the one hand, to test the impact of oil rents on economic growth and examine the main symptoms of the resource curse phenomenon in oil-abundant MENA countries, and on the other hand, to investigate the role of governance in avoiding the resource curse and turning oil rents into a tool for economic diversification in 11 MENA oil exporters (Algeria, Bahrain, Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen) over the period 1996-2017, this time period has been chosen on the basis of data availability for the following variables:

GDP: GDP per capita growth (annual %) is used as a proxy for economic growth, from the World Development Indicators database.

OILR: Oil rents (% of GDP) (they represent the difference between the value of crude oil production at world prices and total costs of production), from the World Development Indicators database.

AGR: Agriculture, value added (% of GDP), from the World Development Indicators database.

IND: Industry, value added (% of GDP), from the World Development Indicators database.

SER: Services, etc., value added (% of GDP), from the World Development Indicators database.

DIV: The export diversification index indicates whether the export structure of each country or country grouping differs from the world patterns, this index takes values between 0 (a high degree of diversification) and 1(a low degree of diversification), the data are from UNCTAD's database.

CONC: The export concentration index shows how exports of individual countries or country groupings are concentrated on several products or otherwise distributed in a more homogeneous manner among a series of products, this index takes values between 0 (minimum concentration) and 1 (maximum concentration), the data are from UNCTAD's database.

GI: presents the Governance Index which is constructed as a simple average of the following World Bank's Worldwide Governance Indicators: Voice and Accountability (VA), Political Stability and Absence of Violence (PSAV), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), Control of Corruption (CC), these indicators range from -2.5 (bad) to 2.5 (good), the data are from the World Bank's Worldwide Governance Indicators (WGI) database.

EF: Economic Freedom is used as a proxy for economic institutions, introduced by Heritage Foundation and Wall Street Journal, this indicator is graded on a scale of 0 (repressed) to 100 (free).

B. Analysis of Empirical Results

Table 1. Regression Results for 11 Oil-Abundant MENA countries

	(a) OLS FE	(b) OLS FE	(c) OLS FE	(d) OLS FE	(e) OLS FE	(f) OLS FE	(g) OLS FE
Dependent Variable	GDP	GDP	DIV	CONC	CONC	GI	EF
Constant	-2.501444 (0.0125)**	-0.214595 (0.8886)	0.683822 (0.0000)***	0.489699 (0.0000)***	0.227382 (0.0008)***	0.469171 (0.0000)***	61.74720 (0.0000)***
AGR		0.061377 (0.2535)			0.000536 (0.8926)		
IND		-4.00E-11 (0.3576)			-1.19E-12 (0.1166)		
SER		-0.015410 (0.6417)			-0.004406 (0.1631)		
OILR	0.112991 (0.0004)***	0.045987 (0.0607)*	0.002851 (0.0201)**	0.004544 (0.0000)***	0.007519 (0.0000)***	-0.003227 (0.0191)**	-0.084652 (0.0596)*
R^2	0.163638	0.268128	0.329555	0.855658	0.899741	0.945929	0.927816
Prob (F-statistic)	0.000148	0.028180	0.000000	0.000000	0.000000	0.000000	0.000000

Significant at 1% (***), 5% (**), 10% (*). P-values are in parentheses.

Source: *Author's Computation Using Eviews 8.0.*

Table 2. **Regression Results for 11 Oil-Abundant MENA countries**

Dependent Variable: DIV

	(a) Panel GMM-FE	(b) Panel GMM-FE	(c) Panel GMM-FE	(d) Panel GMM-FE	(e) Panel GMM-FE	(f) Panel GMM-FE	(g) Panel GMM-FE	(h) Panel GMM-FE
Constant	0.439646 (0.0002)***	0.873457 (0.0000)***	-0.118625 (0.7331)	0.598834 (0.0000)***	0.542990 (0.0000)***	0.539970 (0.0000)***	0.511540 (0.0000)***	0.334893 (0.0326)**
GI	-0.138088 (0.0393)**							
GI*OILR	-0.006232 (0.0015)***							
VA		-0.086775 (0.0000)***	-0.535839 (0.0175)**					
VA*OILR			-0.015176 (0.0072)***					
PSAV		-0.021404 (0.0000)***		-0.120746 (0.0149)**				
PSAV*OILR				-0.002956 (0.0642)*				
GE		-0.019594 (0.1449)			-0.090175 (0.0076)***			
GE*OILR					-0.004863 (0.0000)***			
RQ		-0.060549 (0.0000)***				-0.091347 (0.0090)***		
RQ*OILR						-0.005322 (0.0001)***		
RL		-0.064091 (0.0066)***					-0.146678 (0.0033)***	
RL*OILR							-0.005092 (0.0001)***	
CC		-0.021266 (0.0073)***						-0.197473 (0.0097)***
CC*OILR								-0.007861 (0.0043)***
OILR	0.010861 (0.0030)***		0.025725 (0.0084)***	0.004418 (0.0001)***	0.007508 (0.0003)***	0.007779 (0.0003)***	0.007961 (0.0005)***	0.013913 (0.0067)***
R^2	0.765992	0.949137	0.412233	0.231420	0.570230	0.809545	0.791734	0.589723
J-statistic [p-value]	0.318882 [0.572280]	0.229636 [0.631794]	1.397898 [0.497107]	2.592296 [0.273584]	1.423273 [0.232865]	1.592580 [0.206958]	0.324586 [0.568865]	0.628382 [0.427949]
N instruments	4	7	5	5	4	4	4	4
N countries	11	11	11	11	11	11	11	11
N observations	149	165	148	148	149	149	149	149

Significant at 1% (***), 5% (**), 10% (*). P-values are in parentheses.

Source: *Author's Computation Using Eviews 8.0.*

5. Conclusion

In a nutshell, the enhancement of MENA oil-exporters' good governance capabilities is the way out of the resource curse because it is the only mediator that can reconcile the twin goals of diversifying economic activity and yielding benefits from oil endowment, hence turning oil wealth into a boon, or more simply put, the building up of good governance can offer these oil-abundant countries more opportunities for economic diversification and give them much greater immunity to resource trap and thereby can enable them to generate robust and sustainable economic growth.

Thank You