The patterns of economic diversification in the states of the Gulf Cooperation Council: Natural resources, democracy and Islam

Results from an empirical comparative study

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Introduction

Scholars of Middle Eastern studies mostly deal with social and political consequences of rentier wealth. (Beck 1993, Pawelka 1993, Schlumberger 2006, Smith 2005, Smith/ Kraus 2005) One of the most prominent issues is the influence of oil wealth on the persistence of autocratic regimes. (Ross 2001, Herb 2002, 2005).

The question if oil wealth has an impact on economic growth of the non-oil economy and the mostly empirical analysis of this question, however, is usually left to economists. (Sachs/Warner 1997, 1999, 2001, Neumayer/ Soysa 2005, Neumayer 2004) The latter have tried for decades to prove the negative impact of natural resources on economic growth in regressions of large and heterogeneous samples of countries. The results are mixed and some researchers have come to admit that the resource curse is not an inevitable fate, but rather the result of path dependence (Auty 2010) which is not grasped by regressions. Depending on further circumstances, natural resources may harm or boost the economy. Such a relationship can be analyzed by configurational comparative methods, such as fuzzy set Qualitative Comparative Analysis (fsQCA). (Rihoux/ Ragin 2008, Ragin 1987) Using fsQCA, I have analyzed the impact of oil wealth and several control variables on economic growth of the non-oil sector ("diversification") in the states of the Gulf Cooperation Council (GCC). This analysis was part of a bigger study based on methodological triangulation: I used regressions of large samples (182 cases), fsQCA analyses of different samples sizes (6, 7 and 25 oil exporting countries) and case studies (of the GCC states). This paper, however, can only dwell on a small part of this study, namely the fsQCA analysis of the small sample of the GCC states.

Theory

While the wealth in natural resources was thought to be a cause of the successful industrialisation in the US and several European countries, researchers have come to speak rather of a course than of the fortune of natural resources. As an economic explanation, Dutch Disease theory predicts that natural resource windfalls cause a weakening of the manufacturing sector due to currency appreciation and the attractive high profits in the resource sector. (Cordon/ Neary 1982). Political scientists rather argue on the basis of incentives. A government with sufficient income from natural resource rents has little incentives to invest in education, institutions, industries or other economic sectors because it does not need to live from taxes. (Gylfason/ Herbertsson/ Zoega 1999, Gylfason 2000, Gylfason/ Zoega 2006, Robinson/ Torvik/ Verdier 2006) And even if there is a clear will to develop the non-oil sector, rentier state theory argues that the distribution of rents by the government leads to a "rentier mentality". Rather than earning their living by productive work, people would try to get a share of the oil wealth by rent-seeking activities. (Beblawi 1987)
Nevertheless, resource rich economies show a heterogeneous picture. Norway or Canada both dispose of enormous natural resources and show few signs of a resource curse. Among the GCC states, three countries have diversified quite successfully (UAE, Bahrain and to a lesser extent Oman), while the other three have rather performed weakly (Saudi Arabia, Kuwait, to a lesser extent Qatar). Hence, if negative effects of natural resource abundance exist, they can probably be contained.

Also democracy's influence on growth is disputed. Optimists argue that economic institutions are sounder in democracies (North 1989, Kormendi/ Meguire 1985, Knack/ Keefer 1995), while pessimists point to the potential costs of elections (Keech 1995). People in power would shy away from necessary measures or distribute privileges and "election goodies" to stay in power. Frequent government changes could also lead to disruptive policies. (Nordhaus 1975) Theories, thus, are conflicting and it is not astonishing that empirical analyses have failed to produce clear results. Some authors have looked for intervening factors, such as political stability (Quinn/Wolley 2001), while others tried to specify the theoretical concept. (Evans 1995)

The influence of Islam on economic growth is a sensitive issue. The comments of Max Weber on Islam have often been reduced to the"fatalist" Muslim mindset precluding any entrepreneurial spirit, even if

Weber's remarks are much more complex. (Huff/ Schluchter 1999) On the other hand, famous writers such as Maxime Rodinson (1966) argued that not Islam but colonialism has precluded the development of a capitalist economic system. Starting from the end of the 1960s, a growing Muslim literature on Islam and the economy praises Islamic values as the foundation of a just and functioning economy. (Philipp 1990)

More recently, Timur Kuran (1997, 2008a, 2008b) approached this topic from an institutionalist perspective. To him, the prevalence of certain economic institutions explains why capitalism and industrialisation did not develop in predominantly Muslim first. These institutions concern the nature of Islamic law, the lack of the concept of legal personality, the ban on interest, but also the educational system. If these institutions are still present, they may be a hindrance to economic growth, not because of themselves, but because they do not harmonize with today's capitalist world economy. From such an angle, a predominantly Muslim country can display several Islamic economic institutions or none, depending on previous policy decisions.

Method and model

Modeling with fsQCA seems to resembles common regressions: an outcome is explained by so called conditions. The following conditions were tested: investments per capita (INVESTCAPITA, Penn World Table), regulatory quality, rule of law, absence of corruption and governance (averaged: INSTITUTIONS, World Bank governance indicators), political stability (POLSTAB, World Bank governance Indicators), democratic institutions (PARLIAMENT, Freedom House), Islamic institutions (ISLAM)and four different measures for a country's resource wealth. These conditions were averaged from 1973 to 2005. Two natural resource measures are proxies for resource *dependence*:This is, firstly, SXP which corresponds to the share of natural resource exports in GNP as of 1970. (Sachs/ Warner 1995/1997) Furthermore, RENTIER measures the percentage of natural resource rents in total government revenue taken from Michael Herb (2002, 2005). Two further measures are proxies for resource *abundance*. I calculated myself the conditions RENT, which is the annual average resource rent per capita averaged from 1993 to 2005 and RESERVES, which is the amount of natural resource reserves per capita (nationals only) as of 2008 (BP).

The outcome is non-oil growth per capita, averaged from 1973 to 2006 (NDGROWTH). Growth rates were calculated from a non-oil GDP: GDP (PENN World Table) minus rents from natural resources (World

Bank Green Accounting Program).[1]

The conditions and the outcome were not used as raw data, but calibrated into fuzzy sets based on theoretical considerations. For each condition a country received a value between 0 and 1 (Table 1).

Table 1: Fuzzy values

	NDGROWTH	INVESTCAPITA	PARLIAMENT	POLSTAB	INSTITUTIONS
Abu Dhabi	0.2	0.25	0.17	0.9	0.95
Bahrain	1	0.65	0.17	0.06	0.94
Dubai	1	1	0.17	0.8	0.95
Kuwait	0	0.08	0.59	0.55	0.71
Oman	0.8	0.83	0.18	0.85	0.93
Qatar	0.1	0.23	0.09	0.9	0.86
Saudi Arabia	0	0.14	0.05	0.45	0.28
UAE	*1*	*0.98*	*0.17*	*0.91*	*0.95*
	ISLAM	RENT	RESERVES	SXP	RENTIERII
Abu Dhabi	0.2	1	1	0.95	0.86
Bahrain	0	0.39	0.23	0.18	0.25
Dubai	0	0.35	0.3	0.2	0.2
Kuwait	0	0.99	0.97	0.88	0.94
Oman	0.2	0.2	0.4	0.99	0.84
Qatar	0.1	1	1	0.95	0.93
Saudi Arabia	1	0.49	0.43	0.6	0.82
UAE	*0.2*	*1*	*0.9*	*0.9*	*0.89*

Contrary to regressions, fsQCA does not analyze the statistical correlation of single variables and the outcome. It asks for necessary and sufficient conditions or configurations of conditions. If a condition is necessary for an outcome, it is always present when the outcome is present. A condition is sufficient for the outcome when the presence of this condition always results in the presence of the outcome. However, one single condition will rarely be sufficient for an outcome. Mostly, several conditions combined are “sufficient solutions”.

At this point, it should be noted that immense problems arose from the poor data quality and the fact

1 This method, of course, leaves a lot to desire. There are more complex methods, for example proposed by Stauffer and Lennox (1984), but even with a more complex method it remains impossible to calculate a truly oil-independent GDP.

that commonly used measures for variables turned out to be inappropriate for highly resource dependent economies as the GCC states. The closer look at cases also revealed that there is no reason why the UAE should be treated as a case. The emirates pursue their own economic policies. Therefore, the UAE were split up into their most important emirates: Dubai and Abu Dhabi. Due to a lack of data for the single emirate, the fuzzy sets had to be estimated based on qualitative sources (Davidson 2008, 2009)

Analysis

FsQCA analyses start with a test for necessary solutions. Testing for NDGROWTH and ~NDGROWTH (~absence indicates the absence of the outcome or a condition), three conditions had sufficient consistency to be called "necessary".

Table 2: necessary conditions

Condition	Consistency	Necessary for
INSTITUTIONS	0.96	NDGROWTH
~ISLAM	1	NDGROWTH
RENTIERII	0.92	~NDGROWTH

In words, this means that the states that diversified successfully were all assigned a sound institutional environment. However, this condition – as in Qatar – did not lead automatically to a successful diversification. Furthermore, all good performers had mostly abolished their traditional Islamic institutions, even if some vestiges remained. Looking at the dataset, it becomes clear why both ~ISLAM and INSTITUTIONS are necessary: They are roughly covariant. In this sample, therefore, it is impossible to distinguish between a general weakness of institutions and the presence of Islamic institutions. Furthermore, the states that failed to diversify successfully were all extremely resource dependent.

The test for sufficient conditions is more complex. INVESTCAPITA, POLSTAB, PARLIAMENT and INSTITUTIONS were tested four times, each time adding a different resource condition. (Table 3)

Table 3: Sufficient solutions for ndgrowth (consistency in brackets)

	→NDGROWTH	Cases covered

RENT	INVESTCAPITA*~PARLIAMENT*~RENT	Bahrain, Dubai, Oman [0.93]
RESERVES	INVESTCAPITA*~PARLIAMENT*~RESERVES	Bahrain, Dubai, Oman [0.92]
SXP	INVESTCAPITA*~PARLIAMENT*~SXP	Bahrain, Dubai [0.88]
RENTIERII	INVESTCAPITA*~PARLIAMENT*~RENTIERII	Bahrain, Dubai [0.9]

Interestingly, the absence of a meaningful parliament is part of the sufficient solution for ~NDGROWTH. low. At least in this very narrow sample, the pessimists of democracy's effect on economic growth seem to be confirmed. Looking at the sample and the calibration, however, it is noteworthy that there is no perfect democracy, but only Kuwait as a "liberalized autocracy" and the only parliament with meaningful rights. And in this case, critics argue that members of parliament use their mandate for rent-seeking purposes or the implementation of Islamic laws rather than for the sake of the economy. (German Trade and Invest 2010/11, Roula Dashti July 6th 2010)

Furthermore, it is of interest that the resource conditions are all part of the sufficient solutions and that they are all negated. Thus, the absence of high resources is an important ingredient of the sufficient solution, even if it is not necessary and only sufficient within the context of further conditions. However, while the four solution terms are similar, Oman is not covered when RENTIER and SXP are added. Oman has relatively low reserves, but, having initiated development very late, its non-oil economy is still small. Here, high SXP and RENTIER values do not stem from an extreme resource abundance, but from late development. Hence, it becomes clear that SXP and RENTIER can stand for different situations: Either extremely high reserves and resource production, which makes the country appear resource dependent even if the non-oil economy is fairly developed. Or modest reserves and resource production in a truly non-developed economy. Table 4 summarizes these heterogeneous backgrounds. SXP and RENTIER are therefore not appropriate for this study. Moreover, theory actually relies on resource abundance and not resource dependence.

Table 4: The heterogeneous background of resource dependence in the GCC states

High SXP and high RENTIER, but rather low RENT and RESERVES (per capita)	Oman, to a lesser extent Saudi Arabia
High SXP and high RENTIERII ***and*** high RENT and RESERVES	Qatar, Kuwait, Abu Dhabi

It is also interesting that political stability did not appear in the first analyses: Surprisingly, it appears in

the solution terms for a rather bad diversification result (table 5). Here, we find two equifinal solution terms. Combined with rather low investments, also a good institutional environment and high political stability do not lead to a positive outcome. It is also noteworthy that all these countries have extremely high rents. In the case of Saudi Arabia relatively low rents and reserves in per capita (!) terms, however, are not enough to improve the diversification. The key element of Saudi Arabia's negative outcome is ~INSTITUTIONS: A necessary condition, which is not fulfilled. Low investments add their share to the negative outcome:

Table 5: Sufficient solutions for ~ndgrowth (consistency in brackets)

	~NDGROWTH	Cases covered
RENT	RENT*INSTITUTIONS*POLSTAB*~INVESTCAPITA	Abu Dhabi, Kuwait, Qatar
	~RENT*~INSTITUTIONS*~POLSTAB*~INVESTCAPITA	Saudi Arabia
	[0.98]	
RESERVES	~INVESTCAPITA*POLSTAB*INSTITUTIONS*RESERVES	Abu Dhabi, Kuwait, Qatar
	~INVESTCAPITA*~POLSTAB*~INSTITUTIONS*~RESERVES	Saudi Arabia
	[0.98]	

Conclusion

A small sample of seven cases is not enough to allow for theory formation, but existent theories can be specified or restricted by new results.

First of all, the resource curse if confirmed. However, most authors have hitherto used measures of resource dependence even if all theoretical concepts point to the importance of resource abundance if not natural resource windfalls. Resource dependence measures have one advantage: Developed countries appear “resource poor”, even if they are enormously resource rich, because the non-oil part of their economy makes the resource economy appear smaller. Non-developed countries, on the other hand side, easily appear resource “abundant”, even if their resource wealth is smaller. Thus, such a measurement eliminates contradictory cases: resource rich, developed countries with a sound growth performance. In my fsQCA analysis of a larger sample of oil-rich countries, the developed countries turned out to be a sample in their own right: Their path to development was simply DEMOCRACY* POLSTAB – their degree of resource abundance did not matter.

It is more difficult to draw theoretical conclusions from these results: annual average resource rents per capita are revenues which really pour into the economy and could reflect a Dutch Disease phenomenon. Reserves stand for the incentives argument: If there are still enough resources for the generations to come, it is not urgent to diversify. However, looking more closely at Dutch Disease theory, it becomes clear that the neo-classical assumptions of Dutch Disease are not given in the GCC states: the state is far to much involved in the economy and went against Dutch Disease effects. Hence, incentives seem to be the key explanation, which is confirmed by qualitative studies. An analysis of the development plans of the GCC states revealed that the wealthiest opted for modest diversification, while those with less resources tackled diversification more aggressively (Hvidt 2010).

It is also interesting that political stability is part of a solution for the negative outcome. Can political stability have negative effects on the economy? Probably not. But it can stand for different backgrounds. In democracies, political stability stems from a basic consensus in the society with the political system. In autocratic monarchies of the Gulf, the citizens enjoy costly privileges and their contentment is bought at the high price of economic inefficiency.

Furthermore, democracy turned out to be too broad a concept to be used as a variable for economic growth. In my analysis of the larger sample, democracy was part of the solution for the set of developed countries. Obviously, nearly perfect democracies are a fertile ground for a thriving economy. In Kuwait (and many other non-Western countries), there may be a parliament and elections, but Kuwait's liberalized autocracy is far from perfect. In such a constellation, apparently democratic organs can be used for undemocratic purposes such as self-enrichment or patron-client relationships. It seems that democracy as a concept needs to be qualified instead of quantified in order to study its influence on economic growth. Evans (1995) postulates that governments need to have an embedded autonomy: They need to be informed on economic issues and thus embedded, but they must not be dependent on the groups who inform them and be able to implement policies also against the will of interest groups. The as-Sabah of Kuwait have reluctantly ceded this autonomy, while the other Gulf states still shy away from using it as long as they have enough rents to afford economic inefficiency. The exception is Bahrain: The pressure of declining oil rents has caused the government to push through unpopular measures such as a very low income tax in 2007.

The last issue are institutions. My condition on institutions reflects the ability of the government to decide policies and to implement them, as well as the rule of law and the absence of corruption. This, of course, is paramount in the GCC states where governments plan development from above and try to

attract foreign investors. Interestingly, the only country which is assigned rather weak institutional quality for all indicators is Saudi Arabia. It is probably no coincidence that Saudi Arabia is also the only country where Islamic institutions play a significant role in the economy. More than in the other Gulf states, the policies of the Saudi Arabian government are restricted by the fear to violate Wahhabi doctrines. The result has often been an inconsistent economic policy between Western models and the respect of Wahhabi doctrines such as the overall priority of the sharia or the extremely restricted role of women in public life. Such an analysis, however, needs further investigation.

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