

## NATURAL-RESOURCE RENTS AND POLITICAL STABILITY IN THE MIDDLE EAST AND NORTH AFRICA

KJETIL BJORVATN<sup>1</sup> AND  
MOHAMMAD REZA FARZANEGAN<sup>2</sup>

### Resource rents and political institutions in MENA

The Middle East and North Africa (MENA) has the highest level of dependency on the resource rents in the world. Figure 1 shows the position of the MENA region compared to other world regions. While the share of total resource rents in GDP in an average country in the world is about five percent, this ratio for the MENA and Arab countries is around 31 percent and 34 percent, respectively.

Based on the World Bank (2015) information, the Arab/MENA region has the lowest share of manufacturing added value in GDP. The average ratio for 2010–14 in the Arab world is 10.88 percent, versus a global average of around 16 percent. The total youth unemployment rate in the Arab/MENA region is the highest in the world (around 28 percent), while the average world rate is around 14 percent. These numbers for female youths in the Arab/MENA region are even higher (around 47 percent) compared to the world average of 15 percent. Dependence on resource rents with institutional deficits such as high corruption and rent-seeking, fragile rule of law and property rights and weakness of democratic institutions marginalize the private independent business innovators and entrepreneurs. The Arab world has the lowest new business density (new registrations per 1,000 people ages 15–64) in the world (0.87) while the average world is 3.69 and in East Asia and Pacific (with very low rents dependency) at 5.34 (the highest in the world).

<sup>1</sup> NHH Norwegian School of Economics.

<sup>2</sup> Philipps-Universität Marburg, CNMS and CESifo.

### Resource rents and political stability: A brief literature review

Resource rents can have a destabilizing effect on the political system by marginalizing the population from politics. In resource rent-dependent countries, taxation becomes an insignificant instrument in funding the government administration and national projects. As a result, the state becomes financially independent from the electorates. At the same time, the people, by not contributing significantly to the provision of public goods, may not exercise the pressure on the state for more accountability. This financial independence of the state from electorates in the long run leads to marginalization of civil society. By neglecting the importance of a well-functioning tax system, resource-rich countries are at higher stability risks compared with resource-poor ones (Mahdavy 1970; Bornhorst, Gupta and Thornton 2009). It is shown that resource-rich countries with ethnic fractionalized societies are at higher risk of economic and political instability. Ethnic-based discrimination in allocation of opportunities can marginalize specific groups, which in the long run can lead to political tension within countries (Montalvo and Reynal-Querol 2005; Hodler 2006).

Resource rents also affect the structure of the economy, which, in turn, may have negative effects on political stability. The most well-known argument is the Dutch Disease. Positive shocks in resource rents increase spending on both tradable (e.g., manufacturing and agriculture) and non-tradable (e.g., real-estate and services) goods. Resources thus have to be moved from the tradable to the non-tradable sector, and this process of de-industrialization harms long-term growth. As a result, unemployment rates may increase, which could trigger political protests and eventually destabilize the political system (see van Wijenbergen 1984 for the theoretical basis of this channel and Farzanegan and Markwardt 2009 for the case study of Iran).

The quality of institutions has been found to be an important determinant of whether resource rents are a blessing or a curse (Torvik 2002; Robinson, Torvik and Verdier 2006; Mehlum, Moene and Torvik 2006). Resource-rich countries with a low quality of govern-

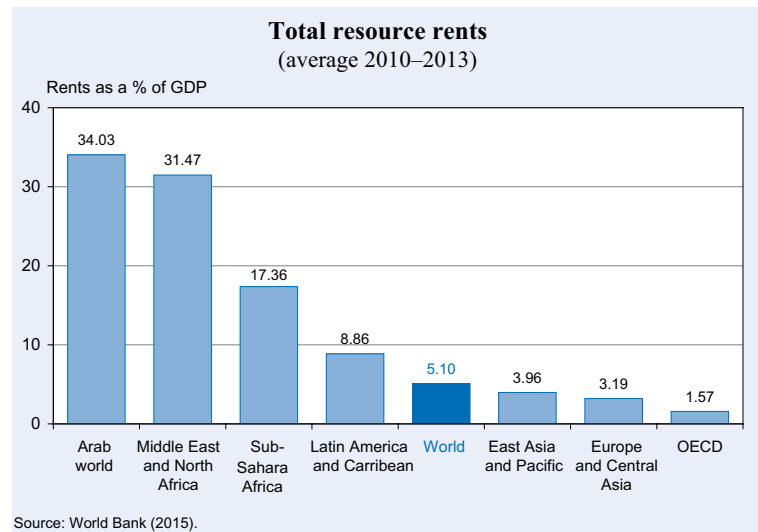


ance (e.g., high corruption, weak rule of law and property rights and lack of democratic institutions and press freedom) suffer more from their natural resource wealth. In a game theoretical model and panel data analysis, Bhattacharyya and Hodler (2010) show that the effect of resource rents on corruption depends on democratic institutions. Extensive corruption and the existence of “grabber friendly” institutions reward rent-seeking behavior and punish entrepreneurship. Farzanegan (2014) conducts an empirical analysis of 65 countries from 2004 to 2011 and shows a negative and statistically significant association between oil rents dependency and entrepreneurship indicators.

The type of government (democracy vs. autocracy) can also determine the effect of resource rents on political stability. Democratic institutions can secure the inclusion of different ethnic groups in policy formulation and distribution of resource rents. Democracies are also allocating a larger part of their resource rents to public goods provision (education and health). By contrast, autocratic regimes represent narrow groups of elites (e.g., military) and thus have a greater tendency to allocate more rents to military and security projects (Dizaji, Farzanegan and Naghavi 2015). Caring more about the population as a whole in democratic systems can increase the feeling of belonging to a system among citizens, establishing a sustainable peace. The index of democratization (Vanhanen and Lundell 2014) shows that the MENA region has the lowest level of political competition and participation. The democracy index for the MENA region over the period of 2002-12 was 7.78 which is lower than average of the index for Eastern Europe and post Soviet Union (20.43), Latin America (18.11), Sub-Saharan Africa (8.60), Western Europe and North America (33.91), East Asia (16.90), South-East Asia (9.75) and South Asia (13.01).

Higher levels of dependency on natural resource rents can not only destabilize the economy as a whole, but can also constrain family formation (Gholipour and Farzanegan 2015) and promote family break-ups (Farzanegan and Gholipour 2015), leading to social crisis. This indirect effect of rents on family structure

**Figure 1**



is shown to work through the rising price of real-estate and housing costs in rent-based economies. Finally, Bjorvatn and Farzanegan (2013) find that the resource rents negatively impact economic growth in cases where countries are in the process of a demographic transition.

#### **An analysis of resource rents, power balance and political stability in the MENA**

In a new study, Bjorvatn and Farzanegan (forthcoming), hereafter BF, highlight the importance of the distribution of political power as a mediating factor between political stability and resource rents. The political stability in their analysis is the assessment of political violence in the country and its actual or potential impact on governance (ICRG 2011). There are three sub-components in the stability index that they use: civil war/coup threat, terrorism/political violence and civil disorder. This index measures the perception of political risk of internal conflict. The higher scores of stability in their analysis mean a lesser perception of internal conflict (i.e., more internal stability) and vice versa. The ICRG index has been used extensively in the literature on this topic ( for instance, Farzanegan, Lessmann and Markwardt 2013; Bjorvatn and Farzanegan 2013).

The data on distribution of power in BF is taken from the database of Political Institutions (Keefer 2010). The lack of power dominance index (*LACK\_POWER*) ranges from 0 to 1 and is defined as “the probability that two randomly picked members of parliament from governing parties belong to different parties” (Beck et al.

2001). In other words, it shows the degree of government fractionalization: the higher this index, the larger the number of small parties and thus the lack of a dominant strong party (see Bjorvatn, Farzanegan and Schneider 2012, 2013 for growth effects of balance of power).

In a theoretical model, BF show that resource rents can buy internal stability when the incumbent is powerful, and destabilize the system in the presence of a less powerful incumbent. They test their theoretical hypothesis by using panel data for over 120 countries from 1984–2009 and show that when the political power is sufficiently concentrated, resource rents can buy stability while resource rents lead to instability when there is a balance of political power. This finding remains robust after controlling for income, quality of institutions (law and order, democratic accountability and corruption), lag of political stability, country and time fixed effects, and the possible endogeneity of rents and power balance to political stability. Earlier studies such as Andersen and Aslaksen (2013) emphasize the moderating role of “type of government” in the stability effects of rents. BF show that not (only) the type of government, but also the *strength* of government is a key moderating factor in the stability and rents nexus.

Here, we focus on the MENA sample and update the data relative to BF.<sup>3</sup> We test the following hypothesis:

*Hypothesis:* The ultimate stability effect of resource rents depends on the balance of power. If the incumbent is powerful, then rents are more likely to have a stabilizing effect. When we have a less dominant incumbent, rents can lead to political instability.

To test this hypothesis, we use panel data for 20 countries in the MENA region from 2002 to 2012. To investigate whether the relationship between stability and rents depends on the balance of power, we use the following specification:

$$STAB_{it} = \beta_1 \cdot RENT_{it} + \beta_2 \cdot LACK\_POWER_{it} + \beta_3 \cdot (RENT_{it} \times LACK\_POWER_{it}) + \beta_4 \cdot Z_{it} + \mu_i + \delta_t + \varepsilon_{it} \quad (1)$$

where *i* refers to the country and *t* to the time period. The political stability index *STAB* in our analysis is Political Stability and Absence of Violence/Terrorism from World Governance Indicators. It captures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means,

<sup>3</sup> We use the political stability index from World Governance Indicators as dependent variable and the Vanhanen Index of democracy (as one of the control variables).

**Table 1**

**Rents, power and political stability in the MENA region**

	(1)	(2)	(3)	(4)	(5)
	<i>STAB</i>				
Rent (-1)	0.012 (1.43)	0.011 (1.56)	0.013* (1.78)	0.014** (2.12)	0.014** (2.12)
Lack_Power(-1)	0.508* (1.77)	0.597** (2.14)	0.482 (1.65)	0.472 (1.57)	0.417 (1.38)
Rent(-1)*Lack_Power(-1)	-0.017** (-2.18)	-0.025** (-2.56)	-0.021** (-2.45)	-0.022** (-2.69)	-0.021** (-2.59)
Log_GDPPC(-1)		1.129 (1.50)	1.104 (1.43)	1.036 (1.44)	1.081 (1.69)
Van_Democracy(-1)			0.011 (0.75)	0.009 (0.58)	0.004 (0.25)
Youth_Unemployment(-1)				-0.016** (-2.25)	-0.016** (-2.32)
Inflation(-1)					-0.009*** (-3.18)
Observations	175	175	157	157	149
R-sq	0.25	0.30	0.28	0.31	0.30

Note: The method of estimation is panel OLS (country and time fixed effects). The constant term is included (not reported). t-statistics shown in parenthesis are based on robust standard errors, \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Source: The authors.

including politically-motivated violence and terrorism and it varies from about -2.5 to 2.5 (higher values mean more stability). The political power index *LACK\_POWER* is as in BF, and described above. *Z* includes a vector of control variables such as a logarithm of real GDP per capita, the Vanhanen index of democracy, the youth unemployment rate and the inflation rate. We also control for country specific characteristics such as a geographical location, ethnical, language, and religious characteristics and historical background. Year fixed effects also control for time-specific shocks such as financial crises, and political shocks (e.g., the Arab Spring). The effects of rents and balance of power and other right-hand side variables may take time to manifest themselves in the internal stability of countries. To take this issue into account, we use a one year lag of all independent variables. In addition, this may reduce the reverse feedback effect from internal stability on the right-hand side variables. The source of data for all variables is the QOG Standard Dataset 2015 (Teorell et al. 2015).

Table 1 shows the results. In Model 1 we start with our main variables of interest (*RENTS*, *LACK\_POWER* and their interaction), adding other control variables until Model 5, in which we have our general specification. It is interesting to see that higher resource rents in countries that have strong states (*LACK\_POWER* close to zero) have positive stability effects. In line with the theoretical predications of BF, we find empirical evidence that within the MENA region, the balance of power also matters for the final stability effects of rents. Rents can buy stability when the state is strong (homogenous). This result is not driven by omitting democracy (which may affect both the balance of power and stability) and income per capita. Youth unemployment rate and inflation are destabilizing factors.

## Conclusion

Can rents buy stability? Following the theoretical predictions of Bjorvatn and Farzanegan (forthcoming), we test the relevance of regime strength (balance of power) in the final stability effects of rents in the Middle East and North African countries (MENA).

Our panel data analysis for 20 MENA countries from 2002 to 2012 shows that rents can buy stability in the MENA region only when the incumbent is sufficiently strong ex ante. In other words, rents are stabilizers when the regime strength is high and factional politics is low,

and works as a destabilizing force in regimes that are weak from the outset.

## References

- Andersen, J. J. and S. Aslaksen (2013), "Oil and Political Survival", *Journal of Development Economics* 100 (1), 89–106.
- Beck, T., G. Clarke, A. Groff, P. Keefer and P. Walsh (2001), "New Tools in Comparative Political Economy: The Database of Political Institutions", *World Bank Economic Review* 15, 165–76.
- Bhattacharyya, S. and R. Hodler (2010), "Natural Resources, Democracy and Corruption", *European Economic Review* 54 (4), 608–21.
- Bjorvatn, K. and M. R. Farzanegan (2013), "Demographic Transition in Resource Rich Countries: A Bonus or a Curse?", *World Development* 45, 337–51.
- Bjorvatn, K. and M. R. Farzanegan, "Resource Rents, Balance of Power, and Political Stability", *Journal of Peace Research*, forthcoming.
- Bjorvatn, K., M. R. Farzanegan and F. Schneider (2012), "Resource Curse and Power Balance: Evidence From Oil Rich Countries", *World Development* 40, 1308–16.
- Bjorvatn, K., M. R. Farzanegan and F. Schneider (2013), "Resource Curse and Power Balance: Evidence From Iran", *Review of Middle East Economics and Finance* 9 (2), 133–58.
- Bornhorst, F., S. Gupta and J. Thornton (2009), "Natural Resource Endowments and the Domestic Revenue Effort", *European Journal of Political Economy* 25 (4), 439–46.
- Dizaji, S., M. R. Farzanegan and A. Naghavi (2015), "Political Institutions and Government Spending Behavior: Theory and Evidence from Iran", *Quaderni - Working Paper DSE* no. 986.
- Farzanegan, M. R. (2014), "Can Oil-Rich Countries Encourage Entrepreneurship?", *Entrepreneurship & Regional Development: An International Journal* 26 (9-10), 706–25.
- Farzanegan, M. R. and H. F. Gholipour (2015), "Divorce and the Cost of Housing: Evidence From Iran", *Review of Economics of the Household*, <http://dx.doi.org/10.1007/s11150-014-9279-0>.
- Farzanegan, M. R., C. Lessman and G. Markwardt (2013), "Natural-Resource Rents and Internal Conflicts - Can Decentralization Lift the Curse?", *CESifo Working Paper Series* no. 4180.
- Farzanegan, M. R. and G. Markwardt (2009), "The Effects of Oil Price Shocks on the Iranian Economy", *Energy Economics* 31 (1), 134–51.
- Gholipour, H. F. and M. R. Farzanegan (2015), "Marriage Crisis and Housing Costs: Empirical Evidence From Provinces of Iran", *Journal of Policy Modeling* 37 (1), 107–23.
- Hodler, R. (2006), "The Curse of Natural Resources in Fractionalized Countries", *European Economic Review* 50 (6), 1367–86.
- ICRG (2011), *International Country Risk Guide*, The PRS Group, Inc., East Syracuse, NY.
- Keefer, P. (2010), *DPI2010 Database of Political Institutions: Changes and Variable Definitions*, Development Research Group, World Bank.
- Mahdavy, H. (1970), "The Patterns and Problems of Economic Development in Rentier States: the Case of Iran", in M.A. Cook, ed., *Studies in the Economic History of the Middle East*, Oxford University Press, 428–67.
- Mehlum, H., K. Moene and R. Torvik (2006), "Institutions and Resource Curse", *Economic Journal* 116 (508), 1–20.
- Montalvo, J. G. and M. Reynal-Querol (2005), "Ethnic Polarization, Potential Conflict, and Civil Wars", *The American Economic Review* 95 (3), 796–816.

Robinson, J. A., R. Torvik and T. Verdier (2006), "Political foundations of the resource curse", *Journal of Development Economics* 79 (2), 447–68.

Teorell, J., S. Dahlberg, S. Holmberg, B. Rothstein, F. Hartmann and R. Svensson (2015), *The Quality of Government Standard Dataset, version Jan15*, University of Gothenburg, The Quality of Government Institute, <http://www.qog.pol.gu.se>.

Torvik, R. (2002), "Natural Resources, Rent-Seeking and Welfare", *Journal of Development Economics* 67 (2), 455–70.

Torvik, R. (2009), "Why do Some Resource-Abundant Countries Succeed While Others do Not?", *Oxford Review of Economic Policy* 25 (2), 241–56.

Vanhanen, T. and K. Lundell (2014), *FSDI289 Measures of Democracy 1810-2012, version 6.0*, University of Tampere, Department of Political Science and International Relations.

van Wijenbergen, S. (1984), "Inflation, Employment, and the Dutch Disease in Oil Exporting Countries: a Short-Run Disequilibrium Analysis", *Quarterly Journal of Economics* 99 (2), 233–50.

World Bank (2015), World Development Indicators, Online Database, World Bank, Washington DC.