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Natural resources, volatility, and inclusive growth: Perspectives from the Middle East and North Africa

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# Natural Resources, Volatility, and Inclusive Growth: Perspectives from the Middle East and North Africa

# Rabah Arezki Mustapha K. Nabli

CESIFO WORKING PAPER NO. 3818
CATEGORY 6: FISCAL POLICY, MACROECONOMICS AND GROWTH
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# Natural Resources, Volatility, and Inclusive Growth: Perspectives from the Middle East and North Africa

# **Abstract**

This paper takes stock of the economic performance of resource rich countries in the Middle East and North Africa (MENA) over the past forty years. While those countries have maintained high levels of income per capita, they have performed poorly when going beyond the assessment based on standard income level measures. Resource rich countries in MENA have experienced relatively low and non inclusive economic growth as well as high levels of macroeconomic volatility. Important improvements in health and education have taken place but the quality of the provision of public goods and services remains an important source of concerns. Looking forward we argue that the success of economic reforms in MENA rests on the ability of those countries to invest boldly in building inclusive institutions as well as high levels of human capacity in public administrations.

JEL-Code: D740, D630, F320, Q330.

Keywords: natural resources, volatility, inclusive growth, Middle East and North Africa.

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#### I. INTRODUCTION

Countries endowed with natural resources such as oil and gas are faced with important economic challenges. Those challenges are both of a short- and long-term nature (Frankel, 2012). In the short term, resource-rich countries face highly volatile revenues derived from resource exports, rendering difficult the conduct of macroeconomic stabilization policies. In the long term, resource-rich countries have, on average, experienced a lower rate of economic growth compared to resource-poor countries. The Middle East and North Africa (MENA) region is not immune from those challenges. The region is both the locus of abundant reserves of natural resources and is economically dependent on them. Indeed, 55 percent of global oil reserves and 29 percent of natural gas reserves are located in the MENA region (Oil and Gas Journal, 2009). The hydrocarbon sector also dominates many of these economies, contributing to large shares of government and exports revenues.

For instance, in 2008, Algeria's hydrocarbon revenues represented 38 percent of government revenues and 98 percent of total goods exports (see IMF, 2012). Studying the specific experience of the MENA region with respect to the management of natural resources revenues is thus important. The objective of the present paper is to take stock of the economic performance of resource-rich countries in the MENA region over the past 40 years. To do so, we review the developmental outcomes of resource-rich countries in the MENA region and how this experience fits into the international experience, drawing from the recent developments in the literature related to the economics of resource-rich countries. We then offer some specific policy prescriptions to help inform the debate on how to address the challenges faced by MENA resource-rich countries.

The ongoing political and social developments in the MENA region have contributed to put inclusive growth—and not solely the rate of output growth—on top of the policy and research agenda. The World Bank (2004) has documented that MENA's total labor force has been experiencing an unprecedented expansion—from 104 million workers in 2000 to an estimated by 146 million by 2010 and to an expected 185 million by 2020. By all accounts,

<sup>&</sup>lt;sup>1</sup> We refer to inclusive growth as a growth that provides rapid and sustained poverty reduction to allow people to contribute to and benefit from economic growth (see Ianchovichina and Gable, 2012). Warner (2012) also discussed the concept of growth inclusiveness and provides evidence of the lack thereof for selected resource-rich countries.

the region has so far failed to create the millions of jobs needed to absorb this rapid expansion of the work force, resulting in the region experiencing the highest level of unemployment in the world (International Labor Organization [ILO], 2012). The youth bear the brunt of the unemployment problem. ILO (2012) estimates that the ratio of youth to adult unemployment in 2011 was exceptionally high—4.0 for the MENA region compared to 2.8 globally. In spite of MENA's rapid economic growth performance over the last decade, the lack of economic inclusiveness has certainly been a key factor driving the ongoing social instability in the MENA region.<sup>2</sup> In principle, resource-rich countries in the region are well placed to mobilize their public finances to ignite long-term economic growth that will benefit all the citizenry. The track record of MENA resource-rich countries has been poor, however, as we document in this paper.

Beyond economic outcomes, natural resources may also shape political outcomes as well as the choice of developmental policies. Among others, Ross (2012) argued that oil hinders democratization and could even yield a "political curse" as it, for instance, allows the political elite to cultivate a culture of patronage. More specifically, Awadallah and others (2011) and Ross and others (2011) have argued that the root of the current instability in MENA lies in the nature of the regional economic development model, which consists of inefficient state interventions and redistribution financed through external windfalls. Nabli and others (2006) have provided an historical account documenting that oil and strategic revenues have allowed the region to maintain old-style industrial policies far longer than other regions. In this paper, we fully recognize the critical importance of the political economy factors in explaining the adoption of specific policies, including industrial policies, and discuss the consequences of those policy choices in shaping economic outcomes.

Not all the countries in the MENA region are alike with respect to the importance of natural resources in their economies. Some of those countries have large reserves of natural resources and relatively small populations. Others have relatively large reserves but also

<sup>&</sup>lt;sup>2</sup> A nascent literature provides evidence that resource abundance leads to higher level of inequality (see Ross, 2007, and Goderis and Malone, 2008, among others). The data quality on income distribution in the MENA region however remains quite low. Within these data limitations, Bibi and Nabli (2009) provided evidence of moderately high levels of inequality in terms of household expenditure compared to other regions of the world and of significant variation across MENA countries. More research is, however, needed to specifically document the evolution of income distribution in MENA resource-rich countries.

large populations. Some countries are oil and gas net importers. To capture those differences, we classify MENA countries into three groups. First, the GCC (Gulf Cooperation Council) group is composed of natural resource—rich, labor-importing countries that are Bahrain, Kuwait, Oman, Saudi Arabia, United Arab Emirates, and Qatar. Second, the non-GCC group comprises natural resource—rich, labor-abundant countries such as Algeria, Iraq, Libya, and Syria. Third, the emerging group comprises natural resource—poor countries such as Egypt, Jordan, Morocco, and Tunisia. For additional comparison, a fourth non-Arab group is also included, namely other natural resource—rich countries comprising Iran and Venezuela.

In this paper, we document that while resource-rich countries in MENA have maintained high levels of income per capita, they have performed poorly when going beyond the assessment based on standard income level measures. They have experienced relatively low and non inclusive economic growth, as well as high levels of macroeconomic volatility. Important improvements in health and education have taken place, but the quality of the provision of public goods and services remains an important source of concerns. Looking forward, we argue that the success of economic reforms in MENA rests on the ability of those countries to invest boldly in building appropriate and strong institutions as well as high levels of human capacity in public administrations. We then discuss the overall developmental outcomes in resource-rich MENA countries and propose a set of critical policy prescriptions.

#### II. MENA DEVELOPMENTAL OUTCOMES

### A. Rising Income Levels, but Declining Overall Wealth

Overall, resource-rich countries in MENA have experienced large gains in income. Between 1970 and 2008, real gross national income (GNI) per capita increased 18 times in the GCC group, 9 times in the non-GCC group, and about 10 times in the emerging group, as shown in Figure 1. For resource-rich countries, these gains are almost entirely due to improvements in terms of trade, with little gains due to increased production in the nonresource sector. This evidence suggests that countries of the region have reaped major benefits from the increase in their terms of trade when looking at standard income level measures. However, resource-rich

non-GCC countries have not achieved higher rates of growth in income over the long term compared to the resource-poor countries of the region, as shown in Figure 1.

In spite of the higher levels of income in resource-rich MENA countries, they have achieved lower levels of wealth, in turn raising concerns over the sustainability of their economies. Conceptually, Hartwick (1977) provided a canonical rule for sustainability in resource-dependent economies that can help consumption to be maintained indefinitely, even in the face of finite resources and fixed technology. The rule consists in setting "genuine" savings to zero at each point in time; this sets traditional net savings just equal to resource depletion.<sup>3</sup> The so-called Hartwick rule suggests that countries should invest rents into other types of assets. In the case of Arab resource-rich countries, their wealth is mostly concentrated in natural capital as shown in Figure 2.4 Adjusting for depletion of resources would in many cases imply a negative saving rates. Figure 3 shows that the MENA region has indeed experienced negative genuine savings and thus a decline in wealth between 1975 and 2005 as opposed to East Asia, where wealth increased significantly over the same period. Notwithstanding the relatively large but recent financial savings accumulated by some countries in the region in the context of sovereign wealth funds, the trend in the overall wealth raises serious concerns about the viability of the regional economic development process.

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<sup>&</sup>lt;sup>3</sup> Genuine savings differ from standard national accounts calculations in that they deduct the value of depletion of natural resources, among other things.

<sup>&</sup>lt;sup>4</sup> Albeit the Hartwick rule is a commonly used benchmark, it could be seen as restrictive. Indeed, it fails to take into account the potential yield on investments made out of "rent savings." If these are high, there can be considerable consumption out of rents on a sustainable basis. Resource-rich countries with large populations may, however, not afford such a "rentier state" model and thus need to foster domestic private sector development to create the kind of wealth and jobs that can in turn help sustain those economies.

4.5

Bid 4.2

BO 3.6

BO 3.6

BO 3.6

BO 3.7

2.4

1970

2008

Emerging countries

GCC

Non-GCC

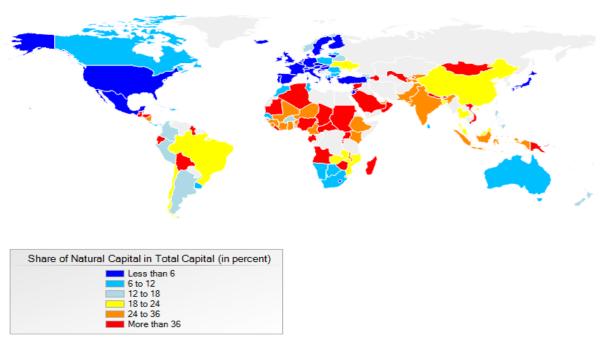
Other RR countries

Figure 1 Average GNI per capita, PPP (current international \$)

Source: World Bank (2010).

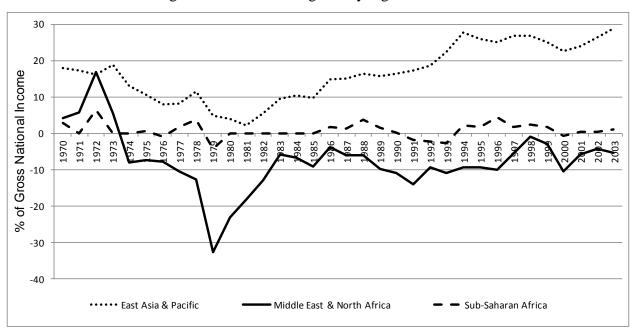
Note: PPP = purchasing power parity; GCC = Gulf Cooperation Council; RR = resource rich.

Figure 2 Share of natural capital around the world



Source: World Bank (2011).

Figure 3 Genuine saving rate by regions



Source: World Bank (2006).

# B. Low Growth and High Levels of Volatility

The so-called natural resource curse literature has focused specifically on the effects of natural resource endowments on the economic performance of natural resource—rich countries. This literature emphasizes several channels through which resource windfalls may affect economic performance, including the Dutch disease, the deterioration of institutions, and excess volatility, to name a few (for a survey, see Frankel, 2012). Sachs and Warner (1995, 2001), Auty (2001), and Gylfason (2001) provided early evidence of a significant negative correlation between natural resource abundance and economic growth. Overall, this negative relationship was subsequently confirmed, albeit there remains some controversy about its existence. The MENA region illustrates to the extreme the low growth and high volatility nexus for resource—rich countries. As shown in Figure 4, over the last five decades, both GCC and non-GCC natural resource—rich countries' average per-capita GDP growth was almost zero, and the volatility of their output growth was twice as high as resource—poor countries in the region.

10.0 9.0 8.0 7.0 6.0 Percent 4.0 3.0 2.0 1.0 0.0 **Emerging countries** GCC Non-GCC Other RR countries Mean ■ Std. Dev.

Figure 4 GDP per-capita growth and volatility, 1961 to 2008

Source: World Bank (2010).

Note: GCC = Gulf Cooperation Council; RR = resource rich; Std. Dev. = standard deviation.

Macroeconomic volatility has adverse consequences on economic growth. Aghion and Banerjee (2005) explored the various causal connections between the growth trend of output and the volatility of output around the trend, concluding from empirical cross-country evidence that volatility hurts growth. Along similar lines, Ramey and Ramey (1995) provided evidence that volatility in economic growth diminished average growth in a sample of 92 countries as well as in a sample of Organization for Economic Co-operation and Development countries. Indeed, the presence of volatility complicates saving/investment decisions by governments, firms, and households, and, in turn, affects long-term economic performance. Increased volatility in government revenues may thus call for higher levels of

precautionary saving.<sup>5</sup> In the specific case of resource-rich countries, Arezki and Gylfason (2012) argued that revenues derived from natural resources transit directly to the government coffers (e.g., through state ownership, taxation, or export tariffs) and thus may be prone to rent-seeking behavior and not be saved or invested appropriately. In that context, Arezki and Gylfason provided evidence that institutions that can prevent misappropriation of natural resources and promote good policies play a crucial role in moderating the impact of volatility on economic growth in resource-rich countries. We shall return to the implication of these findings for MENA in the following section.

# C. Mixed Outcomes in Financial Sector Development

One potential other avenue of the resource curse in MENA countries is the potential lack of financial development which in turn could explain, at least in part, the difficulties faced by the private sector in MENA. There are few systematic studies of financial deepening in resource-rich countries. Among the very few studies on this topic, Beck (2011) found no differential effect of natural resource wealth on the effect of financial development on economic growth. On the other hand, he found evidence of a resource curse in financial sector development disproportionately hurting firms rather than households. Specifically, Beck discovered that while banks in resource-rich countries are more liquid, better capitalized, and more profitable, they give fewer loans to firms, and that evidence of significant supply constraints in the offering of bank loans to firms in resource-rich countries compared to resource-poor countries.

Within the MENA region, there is evidence that the degree of financial development varies widely (Creane and others, 2004). In the case of the GCC countries, financial sector development has been quite rapid but is subject to pronounced boom and bust cycles tightly linked to oil price fluctuations. For instance, Figure 5 shows how bank deposits in GCC surged during the 1970s followed by a sharp decline. There is also evidence that stock markets in the GCC are also subject to boom and bust cycles (Al-Hassan and others, 2007).

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<sup>&</sup>lt;sup>5</sup> This is especially the case in the presence of incomplete markets that may incapacitate governments in commodity-exporting countries trying to hedge against volatility using financial instruments.

Financial deepening in GCC countries has not for the most part helped spur economic diversification as discussed in the following subsection. While the experience of individual resource-rich labor-abundant MENA countries varies widely, for the group financial deepening (measured by the importance of credit to the private sector) has lagged compared to resource-poor countries, as shown in Figure 6. In spite of recent attempts at financial liberalization in countries such as Algeria, the financial systems in many non-GCC countries in the region remain dominated by ineffective public banks.

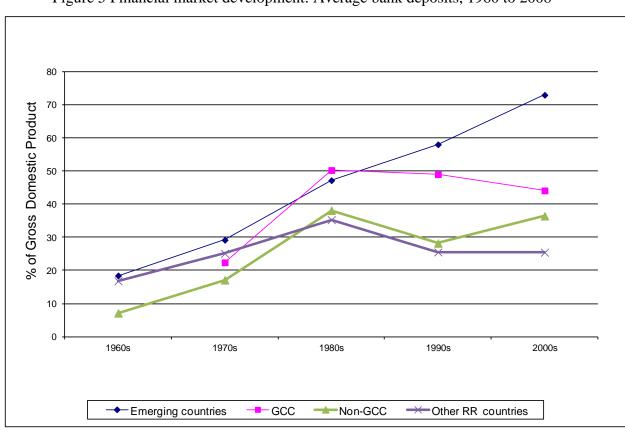
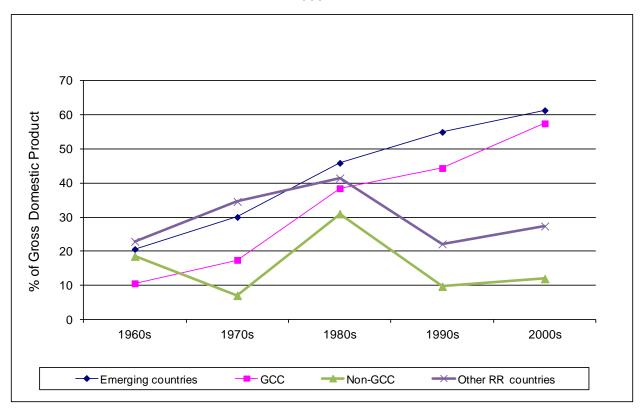


Figure 5 Financial market development: Average bank deposits, 1960 to 2008

Source: World Bank (2010).

Note: GCC = Gulf Cooperation Council, RR = resource rich.

Figure 6 Financial market development: Mean domestic credit to private sector, 1960 to 2008



Source: World Bank (2010).

Note: GCC = Gulf Cooperation Council, RR = resource rich.

## **Limited Economic Diversification**

Another channel of the resource curse is the so-called Dutch Disease. Diversified economies tend to perform better over the long term (Gelb, 2011). Resource-rich countries are however facing challenges that hinder their ability to diversify difficult. The most basic static Dutch disease models distinguish two effects, namely the spending effect and relocation effect (van Wijnbergen, 1984). First, the spending effect relates to higher domestic incomes as a result of the boom leading to extra-expenditure on both traded and nontraded goods. In a small open economy, the price of traded goods is determined by international market conditions and so does not rise despite the extra domestic spending; in contrast, the price of nontraded goods is set in the domestic market and thus does rise. The higher relative price of nontraded goods makes domestic production of traded goods less attractive, and so their output declines. A second effect emerges if, in addition, the booming sector shares domestic factors of

production with other sectors so that its expansion tends to bid up the prices of these factors. The resulting resource movement effect reinforces the tendencies toward appreciation of the real exchange rate (i.e., a rise in the relative price of nontraded goods and services) and a squeeze on the tradable goods sector, a result commonly termed Dutch disease.

The experience of the MENA region shows clear signs of the Dutch disease. Figure 7 shows a dramatic decline in the share of agriculture and manufacturing in GDP, while the resource-poor countries in the region experienced an increase in the share of manufacturing. Similar results can be shown using exports data. It should be noted that the flexible nature of labor markets in GCC countries and the high level of unemployment in populous resource-rich countries may contribute to dampening the relocation effect. The spending effect is certainly the dominant feature at play in MENA resource-rich countries. The presence of widespread price controls, including those on domestic fuel and food products, in MENA countries may also render difficult the finding of empirical evidence supportive of the Dutch disease when using real exchange rate and consumer price data. The burden of adjustment in the latter case is however falling on public finances rather than prices, which may endanger the fiscal sustainability of those countries over the long term.

Beyond the standard Dutch disease channels, there are several political economy factors explaining the failure of policies to diversify MENA resource-rich economies. Nabli and others (2006) have described the emergence of state-dominated vertical industrial policy, where traditional sector–selective and sector-specific policies have been used extensively. Nabli and others have also explained the failure of industrial policy to evolve during the 1980s and 1990s. While the developing world has moved toward more market-oriented policies and production systems that are dominated by the private sector and rely on market signals, MENA has maintained much of the old-style industrial policies and high state intervention in the economy that characterized much of the developing world in the past. Despite the mounting strains on MENA's economic development models, oil revenues have allowed the region to maintain industrial policies far longer than other regions.

Equally important is the failure of interest groups to emerge and press for changes, which has hindered the region's move toward more functional, market-friendly policies for growth—a phenomenon that is closely linked to the weaknesses in the governance arena, which are addressed in the following section. In addition, while in the initial industrialization

stage in MENA countries used industrial policy to create new activities and support the development of new (infant) firms, during the second stage (1980s to 1990s), those countries played a more passive role, that of preserving the existing structures. From a political economy perspective, this preservation of structures can be explained by the need of governments to seek support to remain in power by continuing to offer rewards to a set of supporters to deter the formation of opposition groups. All those political economic factors have played a large role in limiting, or preventing in some cases, the emergence of striving and genuine private sector in those economies.

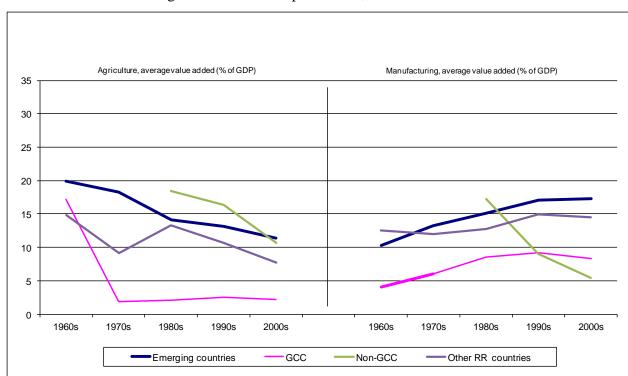


Figure 7 Structure of production, 1960 to 2008

Source: World Bank (2010).

Note: GCC = Gulf Cooperation Council, RR = resource rich.

## **Policy Prescriptions to Harness the Power of Natural Resources**

To avoid the natural resource curse, MENA countries ought to diversify their economies and create the kind of jobs that are needed to face the unprecedented expansion of the labor force. The so-called Arab Spring is also a stark reminder that job creation is crucial to maintaining social stability in the region. We propose four policy directions: (1) Resource-rich countries

should avoid or limit boom-bust cycles; (2) the region should invest in human capital and other public goods while maintaining quality; (3) those countries should adapt "new" industrial policies, correcting for market failures and distortions created by the resource wealth; and (4) the countries in the MENA region should build appropriate and strong institutions.

# **Limiting Boom-Bust Cycles**

Fiscal policy in natural resource-rich countries in general has tended to be procyclical, and the recent period has been no exception, as shown in Arezki and others (2011), including MENA resource-rich countries. The evolution of output in countries of the MENA region illustrates the typical and severe boom-bust cycles experience. As shown in Figure 8, the bust of the 1980s was of extreme severity, and the growth collapse lasted almost two decades. This observation is consistent with those of Isham and others (2005), who have provided evidence that mineral and energy exporters are plagued with weaker economic performance and, in particular, weaker recovery. Macroeconomic stability remains a priority, and to achieve such an outcome, governments in the MENA should limit fiscal policy procyclicality. However, political economy and institutional issues in the MENA region are daunting. Arezki and others (2011) have provided evidence that the adverse effects of resource windfalls on macroeconomic stability and economic growth are moderated by the quality of political institutions. In other words, democracies tend to be less subject to macroeconomic instability and grow faster following resource windfalls.

To address issues of macroeconomic instability, many resource-rich countries have set up fiscal institutions over the past decade<sup>8</sup> in the forms of stabilization funds or fiscal rules. A relevant question here is whether countries that have implemented fiscal rules

<sup>6</sup> Point based as opposed to diffuse natural resources are indeed seen as more subject to rent-seeking behavior. It thus harder to monitor governments over how much they receive and how much they spend in countries endowed with point based as opposed to diffuse resources.

<sup>&</sup>lt;sup>7</sup> Monetary policy has been mostly geared toward exchange rate targeting, with a strong dollar peg in the case of the GCC, which has at time contributed to fuelling the business cycle in those latter countries.

<sup>&</sup>lt;sup>8</sup> Funds for future generations or loosely labeled sovereign wealth funds have also been set up in many resource-rich countries to address the issue of intergenerational equity.

defined as numerical targets to constrain budget aggregates have had greater macroeconomic stability. Arezki (2011) provided evidence that fiscal rules have not had any significant effect on the degree of procyclicality of resource-rich countries. One explanation could be that it is simply too early to tell. Indeed, as documented by Ossowski and others (2008), many of those fiscal institutions in resource-rich countries were only put in place in the early 2000s. An alternative explanation could be that fiscal rules are not necessarily effective since they can be circumvented, especially in weak institutional environments. If that is true, the design of fiscal rules in resource-rich countries should perhaps be revisited to adapt them to the challenges posed by a weak institutional environment. One country that has successfully implemented a fiscal rule, Chile, has targeted a structural budget balance set by an independent panel of experts with binding recommendations. This could certainly be a source of inspiration for MENA countries (Frankel, 2011).

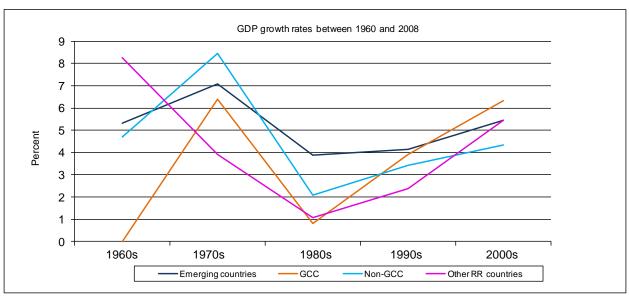


Figure 8 Output fluctuations

Source: World Bank (2010).

Note: GCC = Gulf Cooperation Council, RR = resource rich.

<sup>9</sup> In the following, we interchangeably use the terms fiscal rule and fiscal institutions.

<sup>&</sup>lt;sup>10</sup> Arezki and Ismail (2010) found that fiscal rules in selected oil-exporting countries have forced the adjustment on capital spending in bust times, raising some concern over the consequences on economic growth. This raises the issue of the design of fiscal rule to account for the asymmetrical adjustment of the composition of spending during booms and busts.

# **Investing in Human Capital and Infrastructure: The Quality Imperative**

Overall, resource-rich countries in MENA have invested heavily in infrastructure and human capital. As shown in Figures 9 and 10, indicators of life expectancy, mortality rates under age 5, and average years of schooling have all significantly improved over the past decades. However, two observations can be made. First, the improvements achieved by the MENA resource-rich, labor-abundant countries were not superior to those of resource-poor countries in the region. The GCC countries have, however, achieved better results than the non-GCC countries. Second, the investment in human and physical capital was not of the magnitude and quality to offset the depletion of natural resources. Indeed, resource-rich countries face physical and human capital deficits and thus need to rebalance their economies away from natural resources, as relying solely on revenues derived from the resource sector may not be sustainable. To illustrate the extent of the needed rebalancing act, Figure 2 shows that the share of natural capital in developing countries in the MENA amounts to over 30 percent of overall wealth as opposed to below 10 percent for advanced countries. The picture would appear even bleaker if one were to consider indicators that take into account the quality of education and public infrastructure.

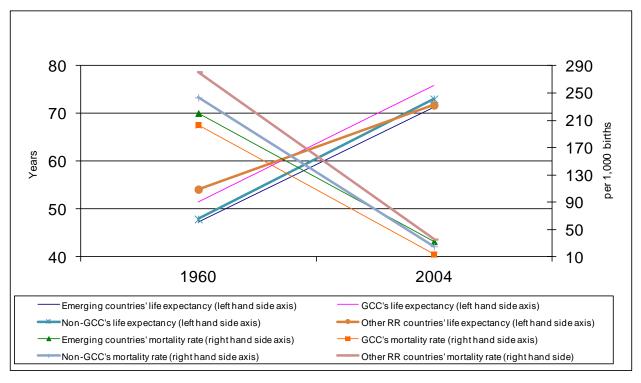
Gelb (1988) provided careful case studies showing that governments in many resource-rich countries, including in the MENA region, embarked on large investment projects following commodity price booms during the 1970s and early 1980s. He argues that those investment projects were plagued by inefficiencies and also contributed to resource misallocation. In addition, those disproportionally large investment projects depreciated quickly or even became obsolete as governments were unable to cover the associated high maintenance costs due to lack of continued financing. More recently, Gelb (2012) provided evidence that education scores in MENA countries are notably lower compared to countries from other regions. Overall, resource-rich countries do not seem to have learned from past mistakes and thus need now to spend carefully so as to ensure the quality of their public investment.

Theoretically, Arezki, Dupuy, and Gelb (2012) have provided a framework to help understand how the optimal level of public investment in countries experiencing resource windfalls should depend on the initial quality of institutions faced by the public and private sectors. To do so, they augmented the traditional permanent income framework with a

production function featuring a scaling factor that captures business climate conditions and public investment faced with adjustment costs, thereby capturing the extra cost associated with the existing administrative capacity and ongoing rent seeking activities. A key assumption is that the higher are natural resource windfalls the higher are the adjustment costs associated with public investment. The latter assumption is motivated in part by the fact that rent seeking activities become more lucrative in presence of higher windfalls in turn increasing the cost of undertaking public investment.

The main result of the model developed by Arezki, Dupuy, and Gelb (2012) is that weaker administrative capacity lowers the level of optimal public capital. They also found that better business climate conditions reduce the degree of de-investment in public capital triggered by weaker administrative capacity. They further extended their basic model to allow for "investing-in-investing" (e.g., building up administrative capacity) by endogenizing the adjustment cost in public investment. Their results suggest that a higher initial stock of public "know-how" commands a higher level of optimal public investment. Looking forward, these results suggest that the decision to conduct public investment in resource-rich countries, including in the MENA region, needs to be thought through in light of countryspecific constraints related to the business climate and the level of administrative capacity. Kyobe and others (2011) have provided evidence that, on average, the quality of the public investment captured by the public investment management index in resource-rich countries is lower than in resource-poor countries and that MENA has one of the lowest levels of public investment management index. Investing in building the administrative capacity in the region, including through fighting rent seeking and building high-level human capital in public administration, is of paramount importance for the MENA region.

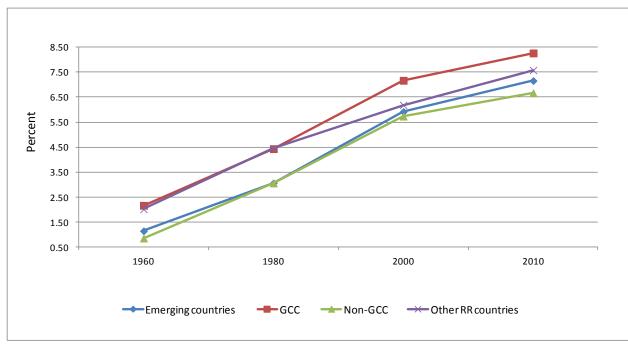
Figure 9 Average life expectancy at birth and mortality rate under 5 years



Source: World Bank (2010).

Note: GCC = Gulf Cooperation Council, RR = resource rich.

Figure 10 Average years of schooling (15 years of age and older)



Source: World Bank (2010).

Note: GCC = Gulf Cooperation Council, RR = resource rich.

## "Industrial" Policies for Diversification

As stated earlier, the Arab Spring is a stark reminder that job creation is crucial to maintaining social stability in the region. Indeed while there are many arguments to be made as to why resource-rich countries need to diversify and not follow their comparative advantage; that is, specializing in natural resource exports (Gelb, 2011), we suggest here that the most important argument is the need to create the kind of jobs that are needed to absorb the large and rapidly increasing labor force as shown in Figure 11. Indeed, the natural resource sectors, especially the oil and gas sectors, are capital intensive and have very low labor intensity. In turn, this raises the following questions: Could the labor force be employed in the nontradable sector, which tends to be more labor intensive, and is productivity in these nontradable sectors high enough to provide high-quality and sustainable jobs that will use the existing human capital accumulated over the years? Those questions regarding the nontradable sector are difficult to answer and will need to be evaluated on a country-bycountry basis. There seems to be a consensus among development economists, however, on the strategic importance of developing a strong tradable sector, which tends to be a high productivity sector whose expansion is not limited by the size of the domestic market as opposed to the nontradable sector. But what specific role should the public sector play to ignite the development of the tradable sector? To attempt to answer this question, we now turn to the issue of industrial policies.

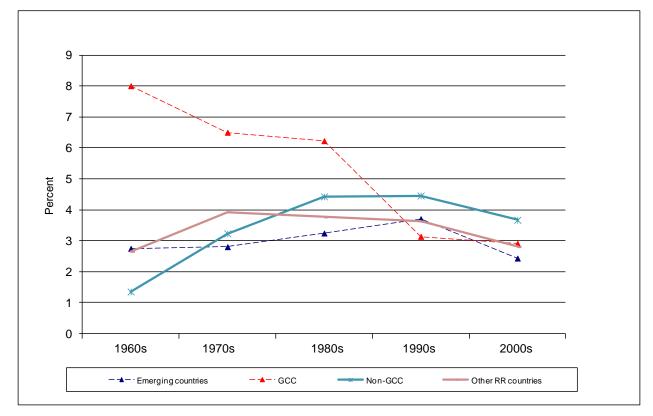


Figure 11 Labor force growth rate, 1960 to 2008

Source: World Bank (2010).

Note: GCC = Gulf Cooperation Council, RR = resource rich.

Is there a role for industrial policies to achieve diversification? The region should avoid old-style industrial policies, which target favored sectors and protect losing sectors and entrenched interests. The achievements in terms of diversification and structural transformation are very weak in the region. The industrial policies that have been pursued have been ineffective. The region should orientate itself toward new-style policies that try to deal with market and coordination failures. It is paramount to do it in an open trade and investment environment, albeit perhaps with a gradual approach. Indeed the low level of trade and financial integration within the MENA region and between the MENA region and the rest of the world suggest that MENA countries should take advantage from the opportunities that may result from further economic integration. For instance it seems mutually advantageous for sovereign wealth funds (SWFs) to invest in resource poor but labor abundant MENA countries. SWFs also have long term investment horizons which are consistent with developing countries' development needs. There are however important

obstacles to those investments which call for domestic structural reforms to improve investors' perception toward destination countries. The question now becomes what specific new policies or reforms could be effective for avoiding the pitfalls of rent seeking and inefficient specialization. Making the wrong choices will mean wasting the existing limited resources and limited foreign investments. This is a major area where progress needs to be made.

#### **D.** Institutions and Governance

Throughout this paper, a common thread has been the paramount importance of strong institutions to ensure the success of economic policies. Strong institutions and democracy are critical for harnessing the power of natural resources for development. Indeed, an important strand of the literature has stressed the importance of political institutions in achieving better policy outcomes (see, for example, Persson, 2002). In their seminal contribution to the growth and institutions literature, Acemoglu and others (2001, 2002) have shown that political institutions are key determinants for long-term economic development. These results suggest that democracy, through promoting accountability and consensus, reduces the perverse effects that resource windfalls may have on the nonresource sector. Governments that are more accountable may exercise less discretion in the conduct of fiscal policy, in turn leading to less macroeconomic instability and promoting long-term economic growth in resource-rich countries (Arezki and others, 2011). Also, Melhum and others (2006) have argued that the natural resource curse does not exist in resource-rich countries with good institutions such as Botswana and Norway.

Historically, MENA countries, both resource rich and resource poor, have had markedly lower scores in governance and democracy indicators compared to other regions, as shown in Figure 12. This is one critical challenge that will condition the economic and social developmental success of the MENA region. Ensuring sufficient checks and balances and increasing transparency and accountability should help citizens in resource-rich countries reap the full benefits of resource revenues. Reforms that allow powerful groups to be checked by the rest of society are thus crucial. In a recent book Acemoglu and Robinson (2012) discuss the historical critical junctures that shape modern polities: the processes of institutional drift that produce political and economic institutions that can be either inclusive — focused on power-sharing, productivity, education, technological advances and the well-being of the nation as a whole; or extractive — bent on grabbing wealth and resources away from one part of society to benefit another. The current waves of political transformation in MENA countries constitute a critical juncture to reform institutions in those countries so as to make them more inclusive and a rampart against rent seeking and nepotism.

Practically, there exist important international initiatives aimed at enhancing transparency in the management of natural resources revenues as well as at enhancing the effectiveness with which those revenues are spent. For instance the Extractive Industries Transparency Initiative (EITI) constitutes a set of global standard for transparency in the oil, gas and mining extractive industries. The Natural Resource Charter which builds on EITI represents a more comprehensive set of principles for governments and societies on how to best harness the opportunities created by extractive resources for development. Those initiatives could serve as anchors for propping up domestic reforms to improve transparency and accountability in MENA countries. However, it is essential to recognize that civil society and political actors will ultimately be the drivers of domestic reforms in resource-rich countries (Heuty, 2012).

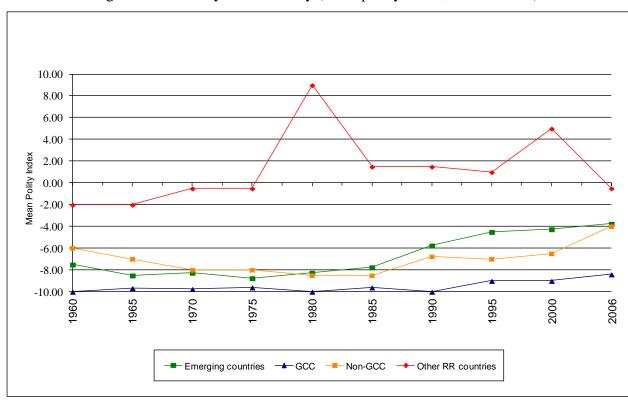


Figure 12 Tendency of democracy (mean policy index, 1960 to 2006)

Source: Marshall and Jaggers (2010).

Note: GCC = Gulf Cooperation Council, RR = resource rich.

#### III. CONCLUSION

The most striking features of the policy agenda for natural resource—rich countries are (1) the complexity and multidimensionality of what needs to be done and (2) the need to adapt to specific circumstances and conditions. The priority issues we have identified are (1) better macro-economic management to avoid procyclical policies, (2) larger and better quality investments in human and physical capital, and (3) innovative policies to achieve diversification and economic transformation of the economies to meet the employment challenge. The three components are highly interrelated and call for major institutional and governance reforms. This clearly requires a very strong capacity to not only manage and design rules and regulations, but to implement and enforce them. This capacity requires inclusive institutions with the appropriate enforcement mechanisms and also a high level of human capacity in public administrations. One of the most important investments a country rich in natural resources can make is to develop and keep such capacity of high-level managers in both the public and private sectors. That is one of the lessons from the oftencited example of Chile.

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