

# Chapter 16

## Natural Resource Dependency and Innovation in the GCC Countries

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### ABSTRACT

*Whether the current strong performance displayed by the Gulf Cooperation Council (GCC) countries proves sustainable for the long term will cast new light on the extent to which natural resource abundance can be turned into a “blessing”, rather than a “curse”, and then the requirements for that. This chapter synthesizes new evidence on the conditions for innovation in these economies, including through examination of innovative performances at firm level, collected through the first Community Innovation Survey (CIS) carried out in the GCC countries. Whereas strengths are recorded in some respects, e.g., Information and Communication Technology (ICT), education and some conditions for start-up activity, challenges remain in others, including with regard to governance. The chapter ends with recommendations what further action is required to enable better conditions for innovation both in the natural resource sector itself, and broadly in the economy.*

### INTRODUCTION

Explaining the determinants of cross-country variation in economic growth has proven a severe challenge for economists. The availability of capital, land or labour contributes only marginally

to the productivity performance of a particular country relative to others. Although there has been somewhat more convincing outcomes of the analysis of education and human capital, the unexplained residual in studies of productivity growth has continued to account for the bulk of cross-country variation. This residual, or so-called

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total factor productivity growth (TFP)<sup>1</sup>, has been interpreted as associated with “technical progress” (Solow, 1957).

Economists traditionally viewed natural resources as an essential building bloc for development. Once systematic empirical work was undertaken, however, most evidence pointed to a significant *negative* impact. A good deal of research has subsequently been devoted to further substantiating whether such a “curse”, as opposed to a “blessing”, actually exists, and what then might explain it, worsen it, or make it go away. The conditions that may create such a negative relationship will be further reviewed below.

Gradually, however, the performance of several so-called Natural Resource-Rich Economies (NRE), has led to questioning whether it is actually correct to speak of a curse for growth. At least, it has been demonstrated that no universal negative relationship exists. The starkest examples of exceptions are now to be found within the category of the oil & gas producers, notably among the GCC countries<sup>2</sup>. This is because this country grouping, despite exceptional dependence on their natural resource base, has displayed very high economic growth over the last couple of decades. Over a relative short time span, they have all moved beyond the middle-income economy status. A few of them now rank among the richest and most stable economies in the world.

On the whole, these countries have advanced from a state of hardly populated “Middle Age desert land” into an era marked by modern infrastructure and institutions, notably in urban areas but also, in several cases, with wealth diffused to the countryside as well. The GCC region now stands out as the world’s second most important source of excess savings and capital exports, after East Asia. Although there are also significant downsides to their development, and yet outstanding challenges, the performances displayed must be viewed as nothing short of spectacular.

This development would clearly not have been possible, had it not been for their oil & gas

richness. This is despite the fact that the prime initial outlier in terms of economic expansion in the region, the Emirate of Dubai, is basically lacking a natural resource base. More recently, on the other hand, Dubai has been saved from the outlook of economic collapse, brought about by the radically altered conditions for real estate investment, by the helping hand of the oil-rich Emirate of Abu Dhabi, which also represents the capital of the United Arab Emirates (UAE).

The question remains, however, whether the economic surge of the GCC countries is sustainable, and what wider implications their record will have for our understanding of the role played by natural resources in economic growth. The answer to such questions will much depend on their ability to create conditions that are conducive to innovation in a genuine sense, beyond reliance on already established winners and brand names, both as a basis for furthering their performance in and around the incumbent (natural resource related) industry, and for the rise of new high-value added goods and services.

According to mainstream perspectives, innovation is the more or less linear output of expenditures on Research and Development (R&D). With the recent exception of Qatar, the GCC countries are known to have invested only scanty resources in R&D thus far. It cannot be taken for granted, however, that R&D is the main source of innovation, neither in these countries nor elsewhere. On the contrary, there is by now plenty of evidence that innovation does not emanate from investments or actions undertaken by individuals or firms in isolation, but that, linkages between different kinds of often complementary actors and competencies are greatly important.<sup>3</sup> So far, the lack of data has prevented any systematic examination of the situation in the GCC countries when it comes to innovative performance beyond R&D.

In this chapter, after having reviewed more general aspects of the link between natural resource abundance and economic performance, we take stock of relevant conditions and policies related

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