Title: Becoming a Knowledge Economy: the Case of Qatar, UAE and 17 Benchmark Countries

Abstract

This paper assesses the performance of Qatar and the UAE in terms of their achievements towards becoming knowledge-based economies. This is mainly done through a comparison against a group of 17 benchmark countries and using a four pillars' framework – i.e., (1) information and communication technology, (2) education, (3) innovation and (4) economy and regime. It appears that overall the UAE ranks slightly above the median rank of the 19 compared countries while Qatar lies somewhat below. However, it is clear that both countries are still well behind the leaders (e.g., Finland and Singapore); particularly evident in the innovation pillar.

If Qatar and the UAE intend to get close to the stage where the leaders are today some improvements will be needed. The two countries need to focus on two complementary developments. Firstly, they need to improve incentives aimed at attracting top quality researchers as well as highly talented workers. Secondly, it is imperative to create a genuine research culture among the locals, where research ultimately gets the deserved status and leads to high responsibility as well as decision-making positions.

Qatar and the UAE are very rich young countries and culturally as well as location-wise similar. Their independence from the UK came as late as 1971. At that time Qatar and the UAE were very underdeveloped, but by 2011 they respectively rank as the 6th and 26th richest economies in the world (World Bank WDI). The two countries are highly dependent on hydrocarbons with oil and gas as percentage of export earnings reaching 91% and 69% in Qatar and the UAE respectively (Hvidt, 2013).

Moreover, the pattern of development chosen by both countries is also similar. They are highly dependent on expat workers – 88% and 91% of the total workforce of Qatar and the UAE. Both use public employment as part of the welfare state package for the locals (Qataris and Emiraties respectively). Not surprisingly, the large majority of locals choose to work for the public sector where wages are sometimes "several factors higher than those elsewhere" (Forstenlechner and Rutledge, 2010, page 48). Indeed, the number of locals working for the private sector as for 2014 was 1% and 0.5% in Qatar and the UAE (De Bel-Air, 2014 and Arabian Business, 2014). However, both countries have become aware that the capacity to absorb locals by the public sector have been exhausted. Consequently, localization programs, called Emiratization and Qatarizarion respectively, are being implemented that provide incentives for the private sector to absorb higher proportions of the local labor force growth. Lastly, and as stated in the Qatar Vision 2030 and the UAE Vision 2021, both countries share the ambition to diversify their production systems away from oil and to become knowledge-based economies as well as leading regional/global players.

Knowledge and innovation have always played a crucial role in production and society in general. However, with the technological revolution and globalization process of the last few decades societies have been entering a new postindustrial era, where knowledge and its rapid change have clearly become the key driver of competitiveness and social interaction. In this new scenario the role of manufacturing has been diminished to give space to a growing service sector with particular strength in the information and communication technologies. In most economically advanced countries, investments in intangibles – defined as including R&D, software, and training—are now more important than investments in capital goods, World Bank (2007, page 12).

Many definitions of a knowledge-based economy are available and the World Bank (2007) suggests the following one (page 14):

"[The] knowledge economy … meaning is broader than that of high technology or the new economy, which are closely linked to the Internet, and even broader than the often-used information society. Its foundations are the creation, dissemination, and use of knowledge. A knowledge economy is one in which knowledge assets are deliberately accorded more importance than capital and labor assets, and where the quantity and sophistication of the knowledge pervading economic and societal activities reaches very high levels."

This same source considers four pillars for a knowledge-based economy, which will be the main frame for our analysis – i.e., (1) information and communication technology (ICT), (2) education, (3) innovation and (4) economy and regime. For each of these pillars this paper assesses the performance of Qatar and the UAE through a comparison against a group of benchmark countries. Still, the very much distinctive labor market conditions in Qatar and the UAE clearly affect each of the four pillars and so the final section will be devoted to their discussion.

Given Qatar and the UAE's stated high ambitions, it does not make sense to benchmark them against very low performing countries. Similarly, little can be learned by comparing them against long-ago stablished and highly developed economies. Thus, the approach adopted here is to benchmark them against a few relatively similar countries, which allows a better focus on country specificities as well as interesting anecdotal contrasts. Besides, the latter approach is also adopted on practical reasons, given the lack of data availability for many of the indicators of interest.

How well positioned Qatar and the UAE are in relation to other comparable countries is largely unknown. Even though a few previous assessments are available, they typically benchmark among the Gulf Cooperation Council countries (GCC) or a sub-group of Arab countries and mainly focus on education or labor market regimes – e.g., Muysken and Nour (2006), Karoly (2010) and Lightfoot (2011). We differentiate from these studies by benchmarking against a larger but still comparable group of countries in relation to four pillars considered to be crucial in order to become a knowledge-based economy. In particular, we benchmark Qatar and the UAE

against 17 countries – i.e., Australia, Bahrain, Chile, Costa Rica, Finland, Israel, Kuwait, Malaysia, Norway, Oman, Poland, Saudi Arabia, Singapore, South Africa, South Korea, Tunisia , and Turkey.

World Bank (2007). Building Knowledge Economies : Advanced Strategies for Development. Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/6853 License: CC BY 3.0 IGO.