Knowledge-Based Economic Policy Development in the Arab World

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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>Foreword</td>
<td>xvi</td>
</tr>
<tr>
<td>Preface</td>
<td>Preface</td>
<td>xvii</td>
</tr>
<tr>
<td>Acknowledgment</td>
<td>Acknowledgment</td>
<td>xxiii</td>
</tr>
</tbody>
</table>

## Section 1
### Introduction and Methods

#### Chapter 1
Knowledge Economy in the Arab World: Towards New Economic Development Policies

*Ahmed Driouchi, Al Akhawayn University, Morocco*

#### Chapter 2
Why a Benchmarking with EEE Countries?

*Cristina Boboc, Bucharest University of Economics, Romania*
*Emilia Titan, Bucharest University of Economics, Romania*

## Section 2
### The Overall Characterization of Knowledge Economy in Arab and EEE Countries

#### Chapter 3
School Attainment, Knowledge Economy in Arab Countries, and Comparisons with EEE Economies

*Ghita Bentouila, Al Akhawayn University, Morocco*
*Alae Gamar, Al Akhawayn University, Morocco*

#### Chapter 4
The Situation of Knowledge Economy in the Arab and EEE Regions

*Daniel Pele, Bucharest University of Economics, Romania*
Chapter 5
Knowledge, Local Development, and Urbanization in Arab Economies ............................................. 104
Nada Zouag, Al Akhawayn University, Morocco
Ahmed Driouchi, Al Akhawayn University, Morocco

Chapter 6
How Local Development is Achieved in Relation to Knowledge in EEE Countries ......................... 124
Cristina Boboc, Bucharest University of Economics, Romania
Emilia Titan, Bucharest University of Economics, Romania

Section 3
Production, Trade, and Employment

Chapter 7
Production, Trade, Knowledge Economy, and ICTs in Arab Countries ........................................... 147
Nada Zouag, Al Akhawayn University, Morocco
Amale Achehboune, Al Akhawayn University, Morocco

Chapter 8
The Oil and Gas Sectors, Renewable Energy, and Environmental Performance in the Arab World .................................................................................................................. 172
Hajar El Alouani, Al Akhawayn University, Morocco
Ahmed Driouchi, Al Akhawayn University, Morocco

Chapter 9
Harnessing Knowledge for Sustainable Development: Challenges and Opportunities for Arab Countries ......................................................................................................................... 229
Abdelkader Djeflat, Université de Lille 1, France

Chapter 10
Intellectual Property Rights, Innovation, and Knowledge Economy in Arab Countries .................... 245
Nada Zouag, Al Akhawayn University, Morocco
Molk Kadiri, Al Akhawayn University, Morocco

Chapter 11
Unemployment Persistence, Risks of Skill Obsolescence, and Impacts on the Knowledge Economy in Arab Countries .................................................................................................... 273
Amale Acheboune, Al Akhawayn University, Morocco
Ahmed Driouchi, Al Akhawayn University, Morocco

Chapter 12
Education Attainment and Feminization of Labor Markets in Arab Countries with Comparisons to Eastern and Central European Countries .............................................. 292
Fatima-Zohra Filali Adib, Al Akhawayn University, Morocco
Amale Achehboune, Al Akhawayn University, Morocco
Section 4
Economic and Social Policies for Harnessing Knowledge for Development of the Arab World

Chapter 13
Rents from Natural Resources and Relations to Knowledge Economy in Arab Countries .................. 313
  Ahmed Driouchi, Al Akhawayn University, Morocco

Chapter 14
Doing Business and Imperfections in the Development of Knowledge Economy in the Arab Countries ........................................................................................................................................... 335
  Ahmed Driouchi, Al Akhawayn University, Morocco

Chapter 15
Knowledge Governance and Economic Growth in Arab Countries .................................................. 364
  Antonio Rodriguez Andrés, Al Akhawayn University, Morocco

Chapter 16
Policy Outcomes and What Can be Learned by Arab Countries from EEE Economies .................. 394
  Cristina Boboc, Bucharest University of Economics, Romania
  Emilia Titan, Bucharest University of Economics, Romania

Compilation of References .................................................................................................................. 411

About the Contributors ...................................................................................................................... 433

Index ................................................................................................................................................. 437
Detailed Table of Contents

Foreword ........................................................................................................................................... xv

Preface ............................................................................................................................................. xvii

Acknowledgment ................................................................................................................................. xxiii

Section 1
Introduction and Methods

Chapter 1
Knowledge Economy in the Arab World: Towards New Economic Development Policies ............. 1

Ahmed Driouchi, Al Akhawayn University, Morocco

This chapter introduces the content of the overall book and its relations to similar publications on the knowledge economy in Arab countries. It is composed of two major parts, where the first one is a synthesis of the publications realized up to 2013 with emphasis on the major economic and development issues facing the economies of the Arab world. The second part introduces the rationale of the book, the new areas investigated besides the methods used and the expected policy outcomes. This book places a major emphasis on the need to accelerate the implementation of new economic and social policies that are likely to be enhancing the contributions of the knowledge economy to a more inclusive economic growth and development.

Chapter 2
Why a Benchmarking with EEE Countries? ....................................................................................... 22

Cristina Boboc, Bucharest University of Economics, Romania
Emilia Titan, Bucharest University of Economics, Romania

This is a chapter that introduces the major arguments for selecting EEE countries for comparisons with Arab economies. The focus is placed on the neighborhood, with the European Union and the similarities related to the transition processes experienced by EEE countries while moving from centralized and administrated to open and market-driven economies. The series of international collaborative frameworks developed with the EU, with Arab countries, and within the Mediterranean region are also among the reasons behind selecting the comparisons between Arab and EEE economies.
Section 2
The Overall Characterization of Knowledge Economy in Arab and EEE Countries

Chapter 3
School Attainment, Knowledge Economy in Arab Countries, and Comparisons with EEE Economies

Ghita Bentouila, Al Akhawayn University, Morocco
Alae Gamar, Al Akhawayn University, Morocco

The most important avenues emphasized in this chapter relate to the progress in school attainment as an important indicator of the knowledge position of a country. The descriptive statistical analyses besides other assessments are devoted to show the pertinence and the importance of education attainment. Barro and Lee 1950-2010 data are used in this chapter. The opportunities lost with the low level of school attainment are introduced and discussed. The relatively slow speed of recovery in schooling is already expressed by the lowest knowledge performances achieved between the economies of North Africa, Sudan, Yemen, and the Gulf countries. In addition, the description has shown a higher attainment in schooling of EEE economies in comparison to Arab countries.

Chapter 4
The Situation of Knowledge Economy in the Arab and EEE Regions

Daniel Pele, Bucharest University of Economics, Romania

This chapter introduces different knowledge components and indices and attempts to show their impacts on different economic and development indicators with focus on EEE and Arab economies. It uses mainly descriptive statistics and regression analysis to globally assess these performances. The sets of data used for EEE show already the data limitations faced by Arab economies.

Chapter 5
Knowledge, Local Development, and Urbanization in Arab Economies

Nada Zouag, Al Akhawayn University, Morocco
Ahmed Driouchi, Al Akhawayn University, Morocco

In the absence of local knowledge measures, this chapter looks at how local universities and research centers could explain the potential for local development in territorial communities. This chapter also assesses the links between urbanization and development. It is mainly based on the review of literature, descriptive statistics, and regression analysis using data on local development, urbanization, global knowledge measures, and human development indices. The focus here is on Arab economies. The current situation and development prospects are discussed in relation to the role of knowledge economy in local development but also in further urbanization. Smart, livable, and inclusive cities are discussed.

Chapter 6
How Local Development is Achieved in Relation to Knowledge in EEE Countries

Cristina Boboc, Bucharest University of Economics, Romania
Emilia Titan, Bucharest University of Economics, Romania

Local and regional development is an increasingly important issue for researchers and politicians. The challenge of enhancing prosperity, improving wellbeing, and increasing living standards has become acute for localities and regions with developing economies. Moreover, questions about the implications
of globalization for local and regional development in transition economies are of strong interest. The present chapter looks at how EEE countries have been developed at regional and local levels during the transition period and identifies some examples for Arab countries using a series of indicators and statistical methods.

Section 3
Production, Trade, and Employment

Chapter 7
Production, Trade, Knowledge Economy, and ICTs in Arab Countries

Nada Zouag, Al Akhawayn University, Morocco
Amale Achehboune, Al Akhawayn University, Morocco

This chapter introduces, respectively, the issues related to production, trade with a focus on the degrees of concentration and diversification besides the relationships to innovation, and knowledge with a focus of information and communication technologies (ICTs). The link between innovation and the value added in diverse sectors of the overall Arab economies is then addressed and discussed. Links between ICTs and other sectors are also discussed for the development of Arab economies.

Chapter 8
The Oil and Gas Sectors, Renewable Energy, and Environmental Performance in the Arab World

Hajar El Alouani, Al Akhawayn University, Morocco
Ahmed Driouchi, Al Akhawayn University, Morocco

As most Arab countries produce and export a large share of oil and gas to world markets, it is important to focus in this chapter on these sectors to find out about the economic effects on these economies. In addition, with the development of non-renewable energies and with the major debates and actions undertaken to promote greener economies, this chapter aims to characterize the main trends affecting both renewable and non-renewable energy in Arab countries. The question related to the promotion of greener activities in this part of the world is tackled through the use of Environmental Performance Index in relation to the use of energy. Promising results are attained based on descriptive statistics, trends, and regression analyses. They show that Arab countries need to further account for the knowledge economy to diversify their use of energy and promote better environmental performance.

Chapter 9
Harnessing Knowledge for Sustainable Development: Challenges and Opportunities for Arab Countries

Abdelkader Djeflat, Université de Lille 1, France

Arab countries face two major challenges resulting from increasing competition from the rest of the world and persistent reliance on mineral resources for their growth. At the same time, sustainable development is increasingly becoming a major concern for world development. In this respect, and from a sustainability point of view, knowledge economy opens up new and more accessible opportunities through the 'substitution' of physical resources by immaterial resources. This situation raises two fundamental questions: the first one relates to the opportunity of ensuring sustainable development while the knowledge
base remains rather weak and policies often short-sighted. The second one is how an integrated approach based on knowledge can strengthen existing knowledge bases and create new ones to further sustainable development. Looking at a sample of advanced countries and Arab countries, this chapter argues that sustainability of growth rests fundamentally on the capability of properly harnessing knowledge.

Chapter 10
Intellectual Property Rights, Innovation, and Knowledge Economy in Arab Countries

Nada Zouag, Al Akhawayn University, Morocco
Molk Kadiri, Al Akhawayn University, Morocco

Access to knowledge economy, as well as progress in this area, is continuously assessed by the expansion of the Intellectual Property Rights (IPRs) in any economy. Development and enforcement of IPRs is likely to protect rights to innovation and creation and contribute thus to further production and use of knowledge. This chapter describes how Arab countries protect the rights to innovation through patents, copyrights, geographical indications, models, labels, and other distinctive measures. Issues related to lack of enforcement and limited implementation of IPRs are not absent from Arab economies.

Chapter 11
Unemployment Persistence, Risks of Skill Obsolescence, and Impacts on the Knowledge Economy in Arab Countries

Amale Acheboune, Al Akhawayn University, Morocco
Ahmed Driouchi, Al Akhawayn University, Morocco

This chapter looks at the unemployment problem in Arab economies. It shows how unemployment has been persisting during the last years with the implied risks of knowledge obsolescence and other economic and social implications. Under the absence of policy actions that are likely to reduce the effects of knowledge obsolescence, Arab economies with high unemployment rates lose in terms of competitiveness and efficiency but also in the development of knowledge economy. Special training programs, besides more business oriented educational sessions, are likely to minimize the impacts of knowledge obsolescence. Descriptive statistics as well as regressions analyzes are used to show most of the dimensions of the unemployment problem in Arab economies.

Chapter 12
Education Attainment and Feminization of Labor Markets in Arab Countries with Comparisons to Eastern and Central European Countries

Fatima-Zohra Filali Adib, Al Akhawayn University, Morocco
Amale Achehboune, Al Akhawayn University, Morocco

The feminization of labor markets through the role of education is among the means that enhance the participation of women to development and ensure further involvement of human resources in the growth and development processes. While this is a process that is highly pursued in most developed economies, it is not clearly seen to be pervasive in most developing countries. The Arab economies are among those countries where lower participation of women is observed but where education can be an important leverage for further feminization of labor markets. These issues are discussed in the present chapter to underline the role of education in Arab economies.
Section 4
Economic and Social Policies for Harnessing Knowledge for Development of the Arab World

Chapter 13
Rents from Natural Resources and Relations to Knowledge Economy in Arab Countries
Ahmed Driouchi, Al Akhawayn University, Morocco

As some of the Arab countries are already facing the post-oil era in relation to the trends taking place in mining and in the oil and gas industries, with future possibilities of exhaustion of oil and gas reserves, diversification of economic activities has been emerging in some of these economies. However, the creation of new portfolios has not been expanded outside the traditional spectrum of economic activities. Besides that, governments and of public sovereign funds are still playing an important role both domestically and internationally, implying that rents from natural resources are still promising sources for economic development. This chapter addresses a series of issues related to how rents are driving the development path in relation to access of most world countries to the gains from the new economy. It also shows how knowledge variables have been related to the rents obtained from natural resources. Finally, the hypotheses in relation to natural resources as a curse to knowledge development are tested in the present chapter.

Chapter 14
Doing Business and Imperfections in the Development of Knowledge Economy in the Arab Countries
Ahmed Driouchi, Al Akhawayn University, Morocco

As underlined in the previous chapter, rents may reduce the capacity of Arab economies to accelerate its adoption of knowledge economy. Major imperfections in these economies at the levels of markets, governance, and enterprises are discussed in this chapter. The limited business and enterprise creation in relation to the high unemployment of skilled labor are among the issues analyzed and discussed. As the prevailing political, macroeconomic, and business components are inter-related, imperfections are identified in almost all areas of the Arab economies. The chapter shows clearly that shifts to further knowledge economic and social policies are needed.

Chapter 15
Knowledge Governance and Economic Growth in Arab Countries
Antonio Rodriguez Andrès, Al Akhawayn University, Morocco

The present chapter deals with three interdependent components related to knowledge governance. The first one examines the effect of knowledge governance on medium term growth. Using the software industry as benchmark, the authors’ findings suggest that poor knowledge governance reduces economic growth over the medium term, but the relationship is non-linear. The second one analyzes the impact of formal institutions on economic knowledge and its related variables. In particular, the role of various governance indicators is examined. The results show that institutional quality plays an important role in the relative performance of MENA and African countries in building up the knowledge economy. The last aspect analyzed in this chapter is to establish the status of Arab economies in terms of their transformation to knowledge economies and empirically examine the impact of knowledge and its related variables on economic performance. Policy implications are also discussed.
Chapter 16
Policy Outcomes and What Can be Learned by Arab Countries from EEE Economies .................... 394

Cristina Boboc, Bucharest University of Economics, Romania
Emilia Titan, Bucharest University of Economics, Romania

This chapter starts with a short literature review about the opportunities and challenges facing Arab countries. The lessons learnt from EEE countries are then discussed. A synthesis of strengths, weaknesses, opportunities, and threats to the Arab region is also introduced. Based on the conclusions from previous chapters, major inclusive economic policies are developed for the Arab economies. Furthermore, the present chapter devotes a large part to the overall economic and social policies that might be useful in generating additional insights to further the knowledge economy, social inclusion, enterprise creation, and a new environment for better well-being of the population. This could be used by policy makers to formulate coherent reforms for the sustainable development of the region based on knowledge economy principles and according to the particularities of each country and to the previous experiences of other developing countries.

Compilation of References ............................................................................................................ 411

About the Contributors .................................................................................................................. 433

Index............................................................................................................................................. 437