Foreword

Knowledge has a fundamental, albeit somewhat nebulous, role in economic thought. The role of knowledge in economics predates Adam Smith’s 1776 treatise on the wealth of nations, and brought to the forefront by Joseph Schumpeter’s focus on the role of innovation and entrepreneurship that causes the evolutionary process of continuous innovation and “creative destruction.” In the early 1990s, knowledge was modeled as economic good, requiring resources to produce. Its production, however, is characterized as being non-rival and only partially excludable. These conditions cause competitive markets and incomplete institutions to under-produce and miss-allocate knowledge goods. The increase in knowledge production and the huge decline in the cost of its transmission is recognized more recently in the writings of Baldwin, Martin and others as playing a fundamental role, starting in roughly the 1960s, in helping to reverse the world’s division between rich and poor nations. Knowledge is embodied in blueprints, technical documents, the new forms of organizational structure of multiple-enterprise firms, more efficient forms of public enterprise for schooling and for managing natural resources, and the design of institutions to create and market intellectual property rights, to mention only a few. Moreover, the transition to a more knowledge-based economy requires an understanding of those knowledge-induced changes that are likely to bear the highest rewards, and to synchronize these changes in society depending upon a country’s major trading partners and level of development. This is the background and subject matter the scholars of this volume address in the context of the Arab economies. This is referred to as “the knowledge economy” and hence the title: Knowledge-Based Economic Policy Development in the Arab World.

With the general objective to characterize the main trends taking place in Arab countries that pertain to the knowledge economy, this volume is divided into four major sections. Section 1 lays out the major research questions, and discusses the conceptual setting of knowledge-based economies and the general empirical methodology employed in later chapters. To benchmark the findings of many of the analyses, comparisons are made with countries in Eastern and Central Europe that faced rapid readjustments starting in the early 1990s. Section 2 is composed for four chapters that provide an overall characterization of the book’s focus on the key elements of the knowledge economy in Arab and EEE countries. The analyses in these chapters are sound empirical contributions. One of the chapters fits country panel data to an aggregate economy-wide production function of labor and capital and variables to account for pillars of a knowledge economy. These pillars are an economic and institutional regime index, educational level, an innovation index, and an information and communication index. These pillars are found to be positive and statistically significant to increasing aggregate output.

The third section is composed of six chapters that focus on various aspects of production, trade, and employment. The chapters consider how the knowledge economy has impacted different sectors, including education with emphasis on its internationalization, trends pursued in production and trade, the energy sector, intellectual property rights, and employment issues. The first chapter is relatively “data
rich.” It focuses on education, links to urbanization, intellectual property rights, and the loss, through migration, of educated workers to other parts of the world. The internationalization of education is also noted and rightly viewed as the export of services by advanced economies. Data on several countries are presented. Another chapter investigates the persistence of unemployment, the risk this poses to the obsolescence of skills, and its impact on the knowledge economy.

The concluding section focuses on economic and social policies for harnessing knowledge for development. This section is important because of the non-rival nature of knowledge as a resource and its non-excludible nature, both of which contribute to a free market’s poor performance in producing and allocating it. The section has four chapters. The first chapter considers the rents from natural resources, some of which can be allocated to support knowledge production and dissemination. The next chapter discusses doing business and the implications to the development of knowledge. Knowledge’s link to economic growth is presented in the following chapter. The last chapter is devoted to a discussion of policy outcomes and what can be learned from the East European countries, as many of them have faced rapid adjustments linked to admission to the European Economic Community. A chapter studying what can be learned from doing business in Arab economies draws upon a number of indexes to directly or indirectly affect the creation of new enterprises. This can be thought of as being in the spirit of Schumpeter’s focus on the role of innovation and entrepreneurship to supply goods and services to meet consumer needs. The descriptive analysis shows that Arab countries exhibit high costs for starting a business. Another cost is the time required to adjudicate commercial disputes. These and other factors are shown to be barriers to the economic application of knowledge.

The book is unique in addressing the topics of knowledge over a relatively large number of Arab countries and to a relatively large number of sub-knowledge related topics. The book is timely because of the fundamental knowledge and communication-based forces driving the globalization of the world’s economy. While these forces have lifted more people from poverty than anytime in world history, they also place social and economic pressures on those countries that are slow to adapt to these knowledge-based forces.

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