

Annex I. Medium-Term Economic Prospects in the MENAP and CCA Regions

Economic growth potential in the Middle East and Central Asia is slowing faster than in other emerging market and developing regions, dampening hopes of reducing persistent unemployment and improving generally low living standards in the region. The reasons go beyond declines of potential growth in the region's advanced and emerging market trading partners; they are related to slowing productivity growth, declining worker participation, and especially in the Arab countries in transition, non-GCC oil exporters, and CCA oil importers, slowing capital investment. Policy priorities center on making the business environment more open and competitive, increasing public investment in infrastructure, reducing obstacles to labor market functioning, and nurturing worker talent. Improved access to finance and greater use of modern technologies play supporting roles. Together, these reforms can boost growth potential by 4 percentage points above current expectations—moving the region's living standards closer to emerging market and developing country (EMDC) levels.

Medium-term economic prospects hinge on the region's ability to expand production of goods and services for domestic and foreign markets. Such potential economic growth depends on how many people are employed in productive activities; on what physical capital they can use, such as buildings and machinery; as well as on the gamut of technological, structural, institutional, and policy factors that affect economic productivity—how many goods and services workers can produce using available machinery and other capital.¹ The use of technological innovations, such as computer and information technologies, is an example of a factor driving economic productivity.

Potential growth is not directly observable but can be estimated through a variety of techniques, including statistical filters and production-function approaches.² Uncertainties surrounding potential growth estimates are significant, especially for MENAP and the CCA, where statistics are incomplete and/or produced with a significant lag. To ensure the robustness of results, this annex uses several techniques to

estimate potential growth. Although estimates vary across techniques, the relative potential growth rates across countries and regions, as well as the direction of their change over time, are consistent across techniques. Methodologies and estimates of potential growth in this annex are also broadly consistent with other recent studies (Cubeddu and others 2014). For oil-exporting economies, the focus here is on potential growth in the non-oil sectors, where such growth is currently driven largely by oil revenues (see Chapter 1). The annex also uses standard techniques to decompose potential growth into its underlying components (capital, labor, and economic productivity).

Potential Growth Is Slowing Faster Than in Other Regions

Potential growth rates vary widely across the MENAP and CCA. In particular, the economically less developed oil importers tend to have the lowest potential growth in the MENAP and CCA region (Figure A1.1)—well below the EMDC average. In contrast, the oil exporters—particularly in the GCC and CCA—have among the world's highest non-oil potential growth, comparable to emerging and developing Asia. In part, high non-oil potential growth rates are driven by oil-financed government spending, often in the nontradable sector, and is not sustainable (see Chapter 1).

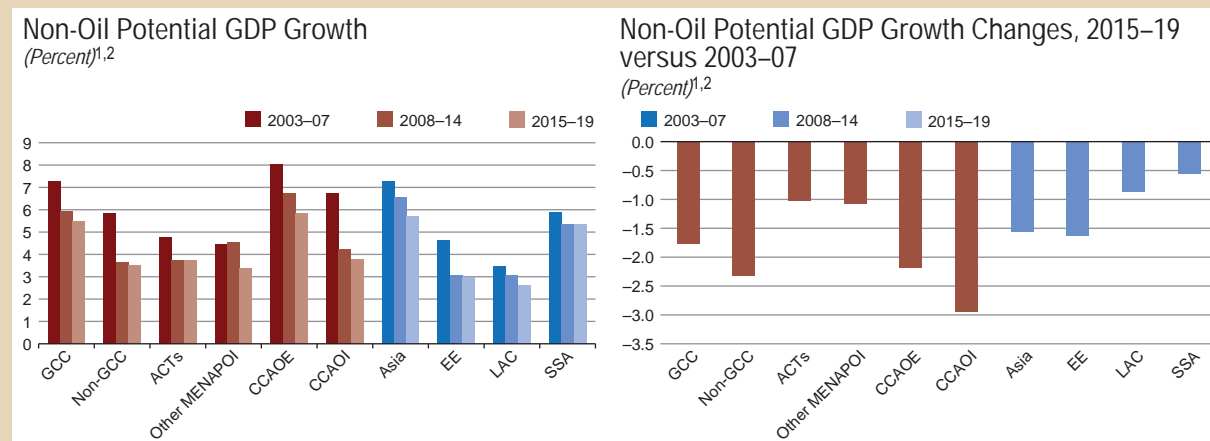
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¹ In this annex, terms such as “productivity” and “economic productivity” are used synonymously with “total factor productivity.”

² Methodological details will be elaborated in Mitra and others (forthcoming).

Figure A1.1

Non-Oil Potential GDP Growth



Sources: IMF, World Economic Outlook database; International Labour Organization, Global Employment Trends; and IMF staff estimates.

Note: Red denotes CCA countries; blue denotes other countries; EE = emerging Europe; LAC = Latin America and the Caribbean; SSA = sub-Saharan Africa.

¹PPP-weighted GDP used to calculate regional averages.

²Average across Hodrick-Prescott and Christiano and Fitzgerald filters and production function estimates. Mitra and others (forthcoming) provides details.

The global financial crisis led to a decline in potential growth in advanced and emerging market economies. Prior to the global financial crisis (during 2003–07), strong investor confidence led to the rapid creation of physical capital, innovation, and productivity growth across the world. As a result, EMDCs' potential growth strengthened. The crisis sharply reversed these trends, and potential growth in both advanced and emerging market economies declined after 2008, as is well documented in earlier studies.³

A novel finding is that MENAP and CCA potential growth rates are slowing by more than in other EMDCs (Figure A1.1). The slowdown in potential growth is especially strong in the CCA oil importers, possibly because of their strong linkages to Russia, where the slowdown in potential growth is pronounced owing to inadequate physical infrastructure, overreliance on commodities, a weak business climate, and negative demographics.⁴ In

³ Cubeddu and others (2014) assesses the factors behind falling historical and prospective growth in emerging markets. Also see Box 1.2 in the October 2013 *World Economic Outlook*.

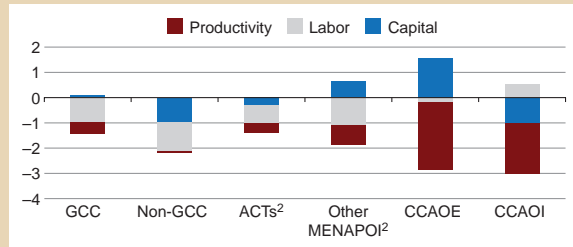
⁴ See Box 1.2 in the October 2013 *World Economic Outlook*.

the MENAP region (except the GCC), further loss of confidence amid intense conflicts in the region and in the aftermath of the Arab Spring in 2011 compounded the effect of the global financial crisis, leading to a sharp drop in potential growth just after 2010. In the GCC, the erosion of non-oil potential growth has been slightly offset by continued physical infrastructure investment financed by savings from high oil prices. Overall, declines in potential growth in the MENAP and CCA regions exceed the respective averages for EMDCs by $\frac{3}{4}$ of a percentage point over the next five years.

Reasons behind Declines in Potential Growth Vary

- **MENAP and CCA oil exporters** (Figure A1.2). Continued infrastructure creation drives non-oil potential growth in the GCC and CCA oil exporters. These benefits are offset by declining contributions of labor and productivity, in part the result of reliance on abundantly available low-skilled foreign workers, cheap energy, and potential weaknesses in public investment quality, and absorptive capacity (IMF 2013).

Figure A1.2
Composition of Recent Non-Oil Potential Growth Slowdown
(Change in contributions from each factor of production, 2008–14 versus 2003–07, percentage points)¹

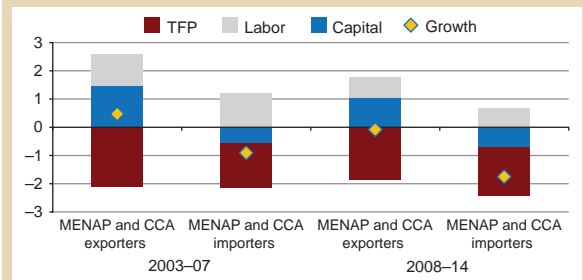


Sources: IMF, World Economic Outlook database; United Nations International Labour Organization; national authorities; and IMF staff estimates.
¹Proportions of factors from production function decomposition applied to average potential growth estimates across methods.
²Compares contributions for each factor of production, 2011–14 versus 2003–10.

In some cases, relevant structural reforms have been initiated but will only bear fruit with long lags. In non-GCC MENAP economies, lower public spending (owing to a decline in oil export revenues in the aftermath of the global financial crisis and intensified conflicts) has lowered capital accumulation, employment, and potential growth.

- MENAP and CCA oil importers** (Figure A1.2). Outdated physical capital; inefficiency in using energy, capital, and talent; as well as weak global ties—inhibiting productivity that would result from adoption of the latest technologies, management techniques, and innovation—already limit potential growth. In the aftermath of the global financial crisis and the Arab Spring, strained public finances and lower investor confidence further reduced investment, in turn reducing the accumulation of physical capital and its contribution to potential growth. Cumbersome regulations, tax codes, and red tape tend to discourage productivity growth. Many countries have recently initiated reforms to address these obstacles, but reforms are frequently opposed by vested interests that have benefitted from highly concentrated private firm ownership (World Bank 2009a). In the MENAP oil importers, the workforce is young and not equipped with the skills needed for private

Figure A1.3
Drivers of Differences in Non-Oil Potential Growth with Emerging Market and Developing Countries
(Percentage points)¹



Sources: IMF, World Economic Outlook database; United Nations International Labour Organization; national authorities; and IMF staff estimates
 Note: TFP = total factor production.
¹Average potential growth of MENAP and CCA less that of emerging market and developing country average.

sector jobs. Combined with the weak economic activity of recent years, this skills gap has raised unemployment so high as to discourage worker participation, lowering potential growth.⁵

What has not varied are the reasons why MENAP and CCA potential growth lags behind that of other EMDCs (Figure A1.3). Both before and after the global financial crisis, oil exporters’ productivity contributions to non-oil potential growth, lower than in EMDCs, have been offset by larger physical capital and worker contributions. Oil importers’ lower productivity has been compounded by lower contributions from physical capital than in EMDCs. These effects offset workers’ positive contributions to potential growth, reflecting young populations and, in the GCC, high availability of low-skilled foreign workers.⁶

⁵ In part, this lower participation contribution reflects workers joining the informal workforce and partly the hysteresis effect, which reduces long-term potential output. In the near and medium term, during the transition to lower long-term potential output, the continuous flow of workers leaving the labor force reduces medium-term potential growth as well. Literature on the hysteresis effect suggests it is very challenging to bring discouraged workers back into the labor force in EMDCs.

⁶ In contrast to the rest of the MENAP region, growth in GCC populations reflects immigrant workers.

Boosting overall MENAP and CCA productivity and MENAP oil importers' investment rates will be key to raising potential growth.

A wide range of plausible annual productivity growth and investment-to-GDP ratio combinations—taking into account maximum plausible workforce growth—could raise potential growth.⁷ For example, ACTs could reach average EMDC growth in five years with their current annual investment-to-GDP ratio (22 percent) combined with an increase in annual productivity growth from zero to 1½ percent (Mitra and others forthcoming). This would be a start to raising employment and living standards; however, over the longer term, much higher potential growth will be needed in the Arab Countries in Transition, and in the rest of the region, to significantly improve the welfare of the majority of the population (Mitra and others forthcoming). Over time, greater female worker participation can also contribute, especially in MENAP economies. In oil-exporting economies, beyond raising productivity in the non-oil sector, it will be particularly important to raise productivity in areas where the sensitivity of non-oil potential growth to oil-related activities can be reduced.

Policies to Raise Potential Growth

A broad range of factors influence potential growth: macroeconomic (e.g., exchange rate, and trade and investment policies) and structural (e.g., reforms in financial and real sectors, labor

and product markets, and political stability).⁸ Initial macroeconomic and sociopolitical conditions can help identify policies most likely to favor potential growth. For example, the results of efforts to increase the CCA workforce would be limited by already low unemployment and high male and female worker participation rates, and the GCC countries already have high rates of capital accumulation.

MENAP and CCA policymakers should focus on fostering worker talent, modernization of production methods, and recalibrating the role of the public sector to promote productivity growth

(Figure A1.4). Cross-country regressions provide useful insights into policy priorities.⁹ Years of schooling have increased, but workers still lack the skills needed for private sector jobs. Adoption of modern production methods, including the use of the latest technologies, management techniques, and innovation,¹⁰ has been slow; low competitive pressures, reliance on low-cost foreign workers, cheap energy, monopolistic markets, or insufficient global integration may be factors. The government often has a dominant rather than supportive role. State-owned enterprises control the energy and banking sectors, whereas excessive red tape hampers private sector growth and perceived

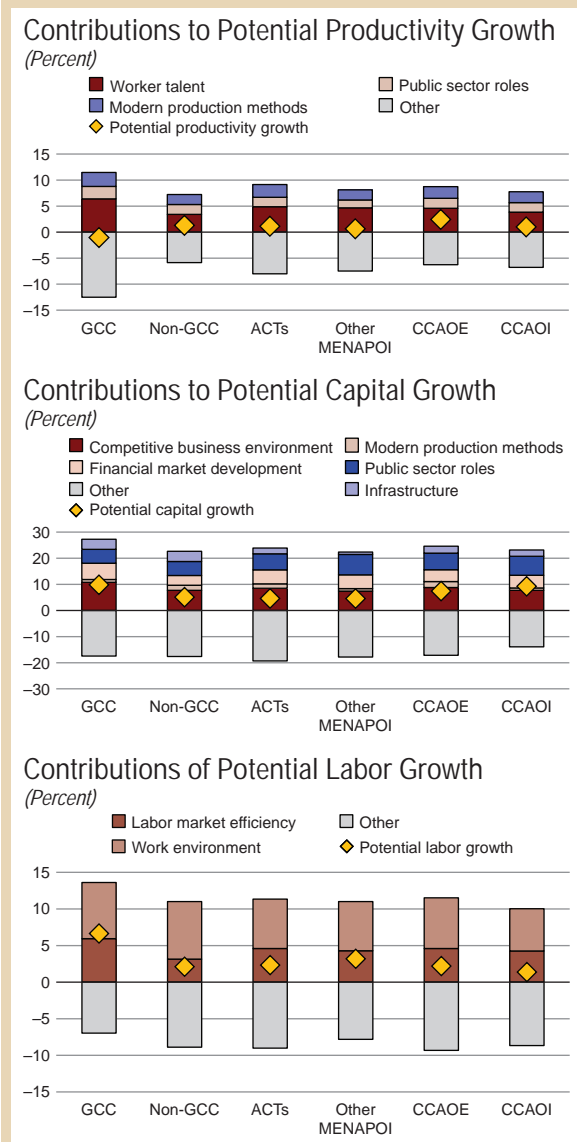
⁷ Investment drives the accumulation or growth of physical capital. While there are no limits to productivity growth, increases in investment are limited by implementation capacity and availability of financing and profitable projects. Historically, investment-to-GDP ratios have rarely expanded beyond 10 percentage points over a five-year period. The detailed assumptions and calculations, and the full range of productivity growth and investment-to-GDP combinations that can raise MENAP and CCA subregions' growth to the EMDC average, are in Mitra and others (forthcoming).

⁸ Barro (1997) and Barro and Sala-i-Martin (2004) provide comprehensive literature reviews.

⁹ Based on cross-country regressions (sample of 107 countries) of productivity growth on a broad set of macroeconomic and institutional variables. See Mitra, Hosny, and Minasyan (forthcoming) for these details as well as a summary of references on how to improve human capital and cumbersome bureaucracies (including paying taxes), burdensome regulations, and customs procedures. The results are consistent with the broad findings of Dabla-Norris and others (2013), who examine the importance of productivity-enhancing reforms in EMDCs.

¹⁰ In more detail, modern production methods can be measured as firm-level technology absorption, foreign direct investment and technology transfer, firms' use of information technology and capacity for innovation, research and development spending, and firms' reliance on professional management; these are found in the World Economic Forum Global Competitiveness Report (2014).

Figure A1.4
Contributions to Non-Oil Potential Growth



Sources: IMF, World Economic Outlook database; United Nations International Labour Organization, Global Employment Trends; World Bank, Doing Business Report; World Economic Forum, Global Competitiveness Report (2014); and IMF staff calculations. Mitra, Hosny, and Minasyan (forthcoming) provide details.

corruption discourages investment. In MENAP and the CCA, key policies that could turn the situation around include:

- Enhancing *worker talent*. Public-private sector coordination in curriculum design can better align education with private sector needs. MENAP and CCA economies can also take advantage of large

diasporas with platforms where emigrants abroad can share their knowledge and expertise with businesses at home. Some successful diaspora networks elsewhere are Foundation Chile, South African Network of Skills Abroad, and Thailand's Reverse Brain Drain project.

- Encouraging *modern production methods* includes applying technologies and management techniques that help firms efficiently use energy, capital, and worker talent, and eliminating policies that hamper innovation. Increased openness to noncommodity trade with fast-growing economies can help by fostering vertically integrated global manufacturing chains,¹¹ which generate substantial technological and management spillovers.¹² Attracting this type of foreign direct investment is facilitated by investment promotion, where information on business opportunities, laws, regulations, and factor costs is more effective than tax incentives and subsidized infrastructure such as energy (Harding and Javorick 2007).
- *A public sector that is supportive rather than dominant*—that delivers basic services efficiently, promotes the rule of law and discourages

¹¹ Details for GCC economies are discussed in Cherif and Hasanov (2014) and the proceedings of the conference “Economic Development, Diversification, and the Role of the State” in Kuwait City, Kuwait, April 30, 2014 (<http://www.imf.org/external/np/seminars/eng/2014/mcd/>).

¹² These chains attract other technology-intensive foreign direct investment, and leak new technologies and management methods to local firms, raising their competitiveness (Organisation for Economic Co-operation and Development 2002; United Nations Conference on Trade and Development 2010). Multinationals benefit from improving local suppliers' product quality through technical assistance and training (Blalock and Gertler 2007; Organisation for Economic Co-operation and Development 2002). As local firms become more technologically sophisticated, it becomes easier for them to adopt new technologies. Export buyers promote technology transfer by sharing production techniques (Pack 2008). Highly qualified technical workers, hired by multinationals, facilitate knowledge spillovers into domestic industries (Todo, Zhang, and Zhou 2009).

corruption and fraud, and streamlines business regulations—would raise private sector productivity. Privatization of large state-owned enterprises could improve the quality of energy provision and banking services while reducing the government’s contingent liabilities.

- High-quality infrastructure and a competitive business environment also foster technology-intensive foreign direct investment and modern production methods (see next section).

MENAP and CCA economies will also benefit from improving their business environments, financial development, and infrastructure—all essentials for physical capital accumulation (Figure A1.4). Globally, the MENAP and CCA oil importers—where investment constrains potential growth—rank low in these areas,¹³ which also pose obstacles for small and medium-sized enterprises across the regions. Key policies for raising investment-to-GDP ratios, and, in turn, physical capital, complementing some policies that also raise productivity (modernizing production and public sector roles, see the previous discussion), include the following:¹⁴

- Creating a sound *business environment* calls for security, political and policy stability, strong protection of property and investors’ rights, and ease in starting a business. Eliminating various forms of corruption, including favoritism in government official decisions, and, in some cases, greater exchange rate flexibility and removal of capital controls, are also important.
- *Financial development* could raise the availability and affordability of financial services that are critical to domestic capital investment, especially for small and medium-sized enterprises. Certain policies, against the

backdrop of a sound banking system, can be potent (Annex III).

- *Public infrastructure investment*, through higher quality and coverage, directly affects capital stock. Indirectly, it fosters private capital investment by providing more affordable and reliable inputs (especially for electricity) into production. Its effectiveness depends on the efficiency of public investment (Annex II). Over the longer term, large-scale investment could require foreign financing, especially in the CCA.

MENAP and CCA workforce growth is most affected by labor market efficiency and the work environment (Figure A1.4).¹⁵ The region’s labor markets are characterized by rigidities that contribute to stifling formal labor markets and fuel large informal sectors. Additionally, many MENAP and CCA economies lack the economic and political stability that is conducive to normal business operations. Policies to help overcome these obstacles include:

- More *efficient labor markets* can increase worker supply and demand. Greater flexibility in wage-setting and hiring and firing policies (with unemployment benefits and protection against discrimination and arbitrary employer decisions) reduces firms’ costs and provides incentives for investment in firm-specific training. Complementary measures are explained in IMF (2014e). Flexibility also encourages worker productivity—it facilitates higher salaries and promotions, reducing incentives for the most talented workers to emigrate.
- A healthy *work environment* that is safe, with reliable public transport infrastructure and economic and political stability, facilitates participation in the workforce.
- Raising *female workforce participation* not only increases the size of the workforce but diversifies it, leading to greater innovation and productivity (*Regional Economic*

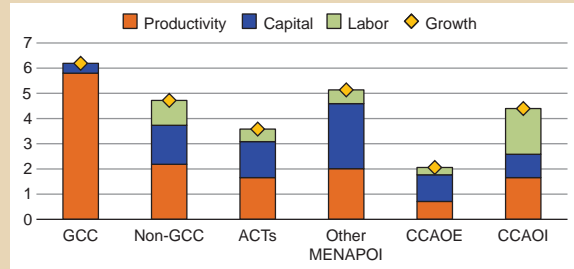
¹³ See the latest World Bank Doing Business report (2014a) and World Economic Forum Global Competitiveness Report (2014).

¹⁴ Based on cross-country regressions (sample of 104 countries) of potential capital growth on a broad set of macroeconomic and institutional variables. See Mitra, Hosny, and Minasyan (forthcoming) for details.

¹⁵ Based on cross-country regressions (sample of 95 countries) of potential workforce growth on a broad set of macroeconomic and institutional variables. See Mitra, Hosny, and Minasyan (forthcoming) for details.

Figure A1.5

Medium-Term Growth above Baseline If Underlying Structural Variables Reach Emerging Market and Developing Country Levels¹



Sources: IMF, World Economic Outlook; and IMF staff calculations.

¹Potential growth derived if each of the factors underlying potential productivity (e.g., worker talent, modern production methods), capital (e.g., business environment, financial development), and labor (e.g., labor market efficiency, work environment) are increased to average emerging market and developing country levels. For simulation details see Mitra, Hosny, and Minasyan (forthcoming).

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November 2013).

Pursuing these policies could reverse declining MENAP and CCA potential growth and help the region converge toward higher EMDC living standards (Figure A1.5). In the GCC, the business environment and public infrastructure investment levels exceed the EMDC average, but some factors underlying productivity growth still fall short; raising their levels can raise productivity and potential growth. In the rest of MENAP and the CCA, potential growth can be raised by a comprehensive approach to these factors—closing large gaps with EMDCs in productivity, physical capital accumulation, and the workforce (e.g., worker talent, competitive business environment, efficient labor markets).