

On The Four Pillars of Long-term Economic Growth: The MENA Region Case

By Nabil ADEL

Introduction

The nexus between structural changes and long-term economic growth has been extensively studied, yielding insights that are both profound and practical. These fundamentals, often conceptualized as pillars, constitute the bedrock upon which the edifice of economic development is constructed (Acemoglu, Johnson, & Robinson, 2001; North, 1990; Rodrik, Subramanian, & Trebbi, 2004). Acemoglu et al. (2001) provide a compelling empirical investigation into how variations in institutional structures can dictate comparative economic development. North (1990) articulates a foundational theory, suggesting that the 'rules of the game'—institutions in particular—shape economic performance by influencing the incentives for economic actors. Further empirical support is provided by Rodrik et al. (2004), who argue that the primacy of institutions in economic development outweighs other factors such as geography or integration.

This paper elucidates four critical pillars identified as quintessential for sustained economic growth: access to affordable energy sources, demographic dynamics, institutional construction, and technological maturity.

Each of these pillars plays a pivotal role in shaping the economic trajectory of nations, influencing everything from productivity to innovation. The discourse is particularly relevant to the diverse economic landscapes of the Middle East and North Africa (MENA) region, where varying degrees of engagement with these pillars illustrate a spectrum of economic outcomes. By examining the interplay between these pillars and economic growth, this paper aims to provide insights that are crucial for policymakers aiming to foster robust and balanced economic development.

The First Pillar: Affordable Energy Sources

Access to affordable energy sources is widely recognized as a major driver of economic growth. Energy is crucial for industries such as manufacturing and transportation, as well as for powering technological advancements and heating homes. Many economists agree that there is a strong correlation between energy consumption and economic activity. For instance, a study by Stern in 2004 found a significant link between energy availability, lower costs, and increased economic output.

Historical evidence vividly underscores the pivotal role of energy in economic growth. The availability of coal as an affordable and abundant energy source during the Industrial Revolution was a critical factor that enabled countries like Britain and the United States to industrialize rapidly. These countries significantly increased their

productivity and economic output by leveraging their energy resources to power factories and transport systems. These success stories should inspire confidence in the potential of energy economy. Similarly, China's economic boom has been accompanied by substantial increases in energy consumption, primarily fueled by coal and hydroelectric power. The country has made securing energy resources a central part of its international diplomacy and economic strategy, as evidenced by its investments in energy sectors in Africa and the Middle East.

While affordability is a crucial factor in energy reliance, it cannot come at the expense of the environment and sustainable practices. The rising popularity of renewable energy sources highlights a shift in how we measure energy affordability in the face of climate change and sustainability objectives. Scholars like Fouquet (2016) have explored how past transitions from wood to coal and oil have impacted economic structures and growth patterns. Today's challenge for modern economies, particularly those in developing nations, is to achieve similar growth trajectories while avoiding further environmental harm. This calls for investment in renewable energy technologies such as solar and wind power.

The other main concern is the Dutch disease, which is particularly relevant in the context of the Middle East and North Africa (MENA) region. It highlights the economic distortions that can arise from a heavy reliance on abundant natural resources, primarily oil and gas. This concept was first extensively discussed by Corden and Neary (1982), who explored how natural resource booms could harm other sectors of an economy. In many MENA countries, substantial revenue from oil and gas exports has led to a stronger local currency, which, in turn, makes other domestically produced goods and services more expensive on the global market, thereby reducing the competitiveness of non-oil sectors such as manufacturing and agriculture (Gylfason, 2001).

Additionally, the influx of wealth from energy exports can lead to increased government spending on public sector wages and subsidies. While this can boost living standards in the short term, it may discourage investment in private enterprises and crowd out development in sectors that do not receive similar government support, as detailed by Ross (2007). The focus on energy also attracts a significant portion of the skilled labor force, potentially leading to a neglect of innovation and skill development in other industries. This economic scenario has been observed in several MENA countries where oil and gas dominate the export landscape and play a pivotal role in shaping economic policy and development trajectories, leading to a dual economy where the thriving energy sector exists alongside underdeveloped non-resource sectors (Beblawi and Luciani, 1987).

The availability of reasonably priced energy sources is vital for economic advancement, as evidenced by historical and contemporary cases. To balance economic growth and environmental sustainability, policymakers must collaborate nationally and internationally. The shift to sustainable energy is not just an environmental imperative but also an economic strategy, as countries that invest in green technology are likely to lead in the new economic landscape created by global energy demands. Governments must establish strong policies to facilitate the

transition to more sustainable energy sources while ensuring they remain affordable to promote economic growth. This approach will help ensure long-term economic stability and growth while aligning development with ecological preservation.

The Second Pillar: Demographic Dynamics

The second pillar of long-term economic growth centers on demographic dynamics, encompassing population growth and human capital quality. This pillar underscores the idea that merely having a large population is insufficient for economic prosperity and that the population's skills, health, and productivity are equally critical. Bloom, Canning, and Sevilla (2004) argue that demographic change, particularly through the demographic dividend, can provide a temporary but significant boost to economic growth if it is accompanied by investment in education and health.

The concept of the demographic dividend has been particularly relevant in the Middle East and North Africa (MENA) region. For instance, the demographic transition in Tunisia during the late 20th century saw a significant shift with declining fertility rates and improved health and education. This transition contributed to a surge in the working-age population, which, when coupled with policy reforms in the 1990s focusing on more liberal economic policies and investment in human capital, led to periods of economic growth. The Tunisian case illustrates the potential of harnessing human capital development when demographic trends are favorable (World Bank, 2008).

However, demographic dynamics' positive impacts on economic growth are not automatic. Egypt's case demonstrates that without adequate policy frameworks that focus on education and job creation, a growing youth population can lead to higher unemployment and social unrest, stifling economic growth. Egypt's struggles with youth unemployment have been a persistent challenge despite a large, young labor force that could theoretically drive economic development (Assaad and Roudi-Fahimi, 2007).

The quality and productivity of human capital are as significant as population growth for achieving sustainable economic growth. Countries in the MENA region and beyond must prioritize educational attainment, skill development, and health improvements to capitalize on their demographic potential fully. This strategy addresses the immediate economic challenges and lays the groundwork for long-term prosperity, ensuring that population growth translates into a productive economic force.

On the other hand, demographic transition raises an important point regarding the potential challenges of an aging population, which is a significant concern for many developed and developing countries alike. Increased life expectancy and reduced fertility rates contribute to demographic aging, which can have profound implications for economic growth and sustainability.

- Firstly, an aging population can strain government resources, particularly in the realms of healthcare and pensions. As the proportion of elderly people increases, public expenditures on health and social support systems tend to rise, potentially diverting funds from other critical areas such as education and infrastructure (Lee

& Mason, 2010). These fiscal pressures can challenge the sustainability of public finances and necessitate reforms in pension and healthcare systems to maintain economic stability.

- Secondly, an aging workforce may lead to a decline in overall economic productivity. Older workers often have lower labor force participation rates and could potentially be less adaptable to new technologies, reducing the overall dynamism within the economy (Bloom, Canning, & Fink, 2010). However, this can be somewhat mitigated through policies that promote active aging, such as lifelong learning and retraining programs, and by adapting workplaces to be more inclusive of older workers.
- Additionally, a shrinking population, despite potential increases in per capita productivity, can lead to absolute declines in economic output and a smaller domestic market, which can deter investment and innovation. This demographic trend poses a significant challenge, especially for countries with already low fertility rates, such as Japan and many European nations. Here, immigration can play a role in mitigating the effects of a declining population by supplementing the labor force and fostering a more youthful demographic profile (United Nations, 2015).

While the demographic dividend can provide a temporary boost to economic growth, the long-term challenges posed by an aging population require thoughtful policy interventions. These policies should aim not only to manage the costs associated with aging but also to leverage the potential contributions of the elderly, ensuring that all age groups are integrated into the fabric of economic development.

The Third Pillar: Institutional Construction

The third pillar of long-term economic growth is institutional construction, particularly the efficiency of state intervention. Effective institutions are pivotal for economic development as they set the legal and administrative framework within which economic activities unfold. North (1990) underscores that institutions provide the game's rules, influencing economic performance by shaping incentives, reducing transaction costs, and providing a stable environment that fosters investment and innovation. Have you considered the argument that state intervention may actually hinder economic growth by creating bureaucratic inefficiencies and stifling innovation? How would you address the claim that institutions can only be effective if they are aligned with the interests of powerful actors, such as corporations or political elites, rather than serving the needs of the broader population?

In the context of the Middle East and North Africa (MENA) region, the variation in institutional effectiveness is a key determinant of economic disparities among countries. For example, the United Arab Emirates (UAE) has demonstrated the positive impact of robust institutional frameworks combined with efficient state intervention. Since its formation, the UAE has invested heavily in creating a business-friendly environment, which includes efficient regulatory processes, strong legal protections for investors, and significant infrastructure investments. These efforts have transformed the UAE into a global business hub, attracting foreign investments and diversifying its economy beyond oil (Hvidt, 2009).

Conversely, the lack of efficient institutions can severely hamper economic growth, as seen in Lebanon. Political instability, corruption, and inadequate regulatory frameworks have undermined economic potential, leading to repeated economic crises. The 2019 Lebanese banking crisis is a testament to how weak institutional frameworks can precipitate severe economic disruptions. The crisis was exacerbated by a lack of regulatory oversight and pervasive corruption, eroding public trust and investor confidence, and a prolonged economic downturn (World Bank, 2020).

Thus, the role of institutions in economic development cannot be overstated. Effective institutions facilitate economic activities and ensure equitable growth by managing and mitigating economic and political instability risks. For nations in the MENA region, strengthening institutional frameworks is essential for achieving sustainable economic growth and avoiding the pitfalls seen in less stable economies. The contrast between the UAE and Lebanon illustrates the profound impact of institutional quality on a country's economic trajectory.

While institutional construction is important for long-term economic growth, two critical debates in the study of institutional economics arise. These debates concern the potential downsides of state intervention and the challenge of ensuring that institutions serve the broader public good rather than just powerful elites.

- Firstly, regarding the concern that state intervention might hinder economic growth: indeed, excessive or poorly designed intervention can lead to bureaucratic inefficiencies and can stifle innovation. This occurs when regulations are overly complex, when bureaucratic procedures delay decision-making, or when government actions distort markets more than they correct market failures. For instance, Mancur Olson (1982) in his theory of “institutional sclerosis” argues that over time, stable societies accumulate more collusive groups and lobbies that slow down efficient economic outcomes by protecting their interests at the expense of the general public. To mitigate these risks, it is essential for policies to be well-designed with a clear focus on enhancing economic efficiency, fostering competitive markets, and reducing unnecessary red tape. Additionally, regulatory frameworks should be regularly reviewed and updated to adapt to new economic conditions and technological advancements to ensure they continue to serve their intended purpose without undue interference.
- Secondly, the issue of institutions serving the needs of powerful actors rather than the broader population is a significant concern in political economy. This situation often leads to what Acemoglu and Robinson (2012) describe in their theory of “extractive institutions,” where economic institutions are designed to extract resources from the many by the few, leading to entrenched inequalities and stifling of economic potential. To address this, it's crucial for democratic norms and practices to be strengthened, enhancing transparency, accountability, and public participation in the political process. Ensuring that a broad base of stakeholders has a voice in shaping institutional rules can help align these institutions more closely with the public interest. Moreover, an independent judiciary and free media can play pivotal roles in checking the power of elites and ensuring that institutions operate in a manner that promotes broad-based economic growth.

Addressing both concerns requires designing and implementing institutional frameworks that are not only efficient but also inclusive. These frameworks must ensure they promote equitable economic opportunities and distribute the benefits of economic growth widely across society. Such balanced institutions are more likely to support sustainable economic development and garner public trust and legitimacy, which are vital for long-term stability and growth.

The Fourth Pillar: Technological Maturity

The fourth pillar of long-term economic growth, technological maturity, involves accessing and effectively using information and communication technologies (ICT). This pillar is crucial as it facilitates innovation, enhances productivity, and allows integration into global value chains. According to a study by Cardona, Kretschmer, and Strobel (2013), technological advancements are critical drivers of productivity growth, enabling businesses to optimize operations and engage in more complex, value-added activities. Have you considered that some may argue that technological advancements can have negative impacts on employment and income inequality, and how would you respond to that counterargument?

In the Middle East and North Africa (MENA) region, Israel stands out as a prime example of how technological maturity can drive economic growth. Known as the “Start-Up Nation,” Israel’s emphasis on high-tech industries, coupled with substantial investments in research and development (R&D), has fostered a dynamic and innovative business environment. This focus has fueled domestic economic growth and positioned Israel as a global leader in cybersecurity, pharmaceuticals, and water technology (Senor and Singer, 2009).

Conversely, other nations in the region highlight the challenges of limited technological maturity. For instance, while Egypt has made significant strides in ICT adoption, gaps in technology usage between urban and rural areas and between large firms and SMEs illustrate the uneven distribution of technological benefits. These disparities can hinder broader economic development as sectors and regions that lag technologically become less competitive and innovative (World Bank, 2016).

For the MENA region, the path to technological maturity involves investing in technology infrastructure and human capital development to maximize technology’s use. It also requires regulatory and policy frameworks that encourage innovation and protect intellectual property rights. Successful integration of technology across all sectors will ensure that the benefits of digital transformation are widespread and contribute significantly to sustainable economic growth.

The fourth pillar of long-term economic growth, technological maturity, indeed brings significant benefits through the access to and effective use of information and communication technologies (ICT). This enhancement in technological capabilities is vital as it spurs innovation, boosts productivity, and facilitates integration into global value chains. Cardona, Kretschmer, and Strobel (2013) emphasize that technological advancements are key drivers of productivity growth, empowering businesses to refine operations and undertake increasingly complex, value-added activities.

However, it is essential to acknowledge that alongside these benefits, some argue that technological advancements can also have negative impacts, particularly concerning employment and income inequality, a concern that is especially pertinent in the MENA region. The rapid adoption of technology can lead to labor displacement, as machines and algorithms begin to perform tasks that were previously carried out by humans. This phenomenon, often referred to as technological unemployment, can exacerbate job losses in sectors that are more susceptible to automation (Autor, 2015).

Moreover, the benefits of technology are not always evenly distributed, leading to increased income inequality. Higher-skilled workers who can complement technological innovations tend to reap greater rewards, whereas low-skilled workers may find their skills less in demand if they are unable to adapt to new technological realities (Acemoglu & Autor, 2011). This disparity can be particularly stark in the MENA region, where there is already a significant divide in terms of access to education and vocational training, potentially widening the gap between the technologically proficient elite and the lower-skilled workforce (World Bank, 2016).

Conclusion

In the analysis of the four pillars essential for long-term economic growth—access to affordable energy sources, demographic dynamics, institutional construction, and technological maturity—it becomes evident that each pillar not only supports economic development but also presents unique challenges and complexities. These pillars, when harmoniously aligned, can drive robust economic progress, but they also hold the potential to exacerbate existing issues such as inequality, environmental degradation, and economic volatility if not managed carefully.

Access to affordable energy, while critical for economic activities, can lead to the Dutch disease, where other sectors languish as a result of an overemphasis on natural resources. Similarly, while **demographic dynamics** can offer a demographic dividend, they also pose risks of an aging population, potentially straining public resources and reducing overall economic vitality. **Institutional construction** offers a framework for economic activity but can entrench power structures that favor elites at the expense of broader economic and social development. Lastly, **technological maturity** drives productivity and global integration but can also lead to job displacement and increased income inequality, particularly affecting lower-skilled workers.

The MENA region's economic narratives, ranging from the tech-driven dynamism of Israel to the energy-abundant economies of the Gulf states, underscore the multifaceted nature of these pillars. Effective engagement with these pillars can lead to a virtuous cycle of growth, innovation, and development, while neglect or imbalance among them can precipitate economic stagnation or decline. Therefore, it is incumbent upon policymakers and stakeholders to not only understand these foundational elements but also to strategize their integration into cohesive, forward-looking economic policies. This approach will ensure that the pursuit of economic growth is both sustainable and inclusive, leveraging the unique strengths and addressing the specific challenges of their national contexts.

These insights suggest several avenues for future research. For instance, exploring effective strategies for managing the transition to renewable energy in a way that mitigates the risks of the Dutch disease could provide valuable insights. Additionally, investigating policies that harness the benefits of a youthful population while simultaneously preparing for future aging could offer balanced approaches to demographic management. Further studies could also examine how institutions can be reformed to better serve the interests of a broader population, thus enhancing their effectiveness and the equitable distribution of resources.

Moreover, as technological advancements continue to reshape economies, there is a pressing need to understand better how these changes affect different segments of the population. Research could focus on identifying the sectors most at risk of technological disruption and developing strategies to ensure that the workforce is equipped with the necessary skills to thrive in a digital economy. Additionally, studies that evaluate the impact of technology on income distribution could provide a basis for policies that mitigate inequality.

In conclusion, while the four pillars are foundational to economic growth, their complexities require nuanced approaches that balance benefits against potential risks. Future research in these areas will be critical in guiding policymakers to foster sustainable and inclusive economic development, leveraging these pillars to their fullest potential while addressing the challenges they pose.

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