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THE LACK OF PRODUCTIVE EMPLOYMENT IN THE MIDDLE EAST AND NORTH AFRICA: A COMPARISON WITH EAST ASIA

Shanta Devarajan and Howard Pack¹

In a Nutshell

- *East Asian countries have achieved structural transformation, whereas MENA countries have yet to do so—to provide jobs for their large youth populations.*
- *East Asian countries succeeded because they adopted a package of: openness to exports, FDI, focus on technical higher education, and high investment with macroeconomic stability.*
- *The Arab social contract, with guaranteed public sector jobs, subsidized food and fuel, and free basic education, coupled with inward-looking trade and investment policies, prevented MENA countries from pursuing many of the East-Asian policies, much less the whole package.*
- *The need to shift to a more open trade and investment policy, technology-oriented education, and greater reliance on private-sector jobs is great, especially since high youth unemployment in MENA may have contributed to the violence and instability in the region recently.*

Introduction

In 1960, Korea, Taiwan, Syria, Tunisia, Morocco, Jordan, and Egypt were in roughly the same economic position. Average per capita income was about 1,500 USD in 1995, and none of these countries had significant manufacturing capacity or exports. China was much poorer than any of these countries. In addition, Middle Eastern economies had a geographical advantage; being much closer to Europe and the U.S. than their East Asian counterparts. Today, the contrast between East Asian countries and those of the Middle East and North Africa (MENA) could not be more striking. Korea and Taiwan are high-income countries and China a rising middle-income one. They – and most of their neighbors such as Malaysia and Thailand – have achieved structural transformation and become export powerhouses, with manufacturing registering about 30 percent of GDP. In 2015, manufactured exports in MENA accounted for 18 percent of all exports, many of which were oil-based. In contrast, in East Asia and the Pacific, manufactured goods accounted for 81 percent of all

¹ World Bank and University of Pennsylvania, Wharton School, respectively. The views are the authors' own and not necessarily those of their institutions.

exports and manufactured exports were six times those of MENA (World Development Indicators, 2017). Importantly, they have all succeeded in creating jobs for their workers during the peak of their working age population in the demographic transition.

Some MENA countries such as Egypt, Morocco, and Tunisia achieved respectable per capita income growth of two percent a year during the same period, following a different path. Oil-rich nations such as Kuwait and Saudi Arabia enjoyed a rapid ascension in the 1970s when oil prices rose, followed by a precipitous decline beginning in the mid-1980s when oil prices fell. The oil-importing countries' fortunes were tied to oil prices too, as workers' remittances and foreign aid from Gulf states fueled their economies. None of the MENA countries developed a substantial manufacturing export sector. Moreover, when the public sector – which was the main source of formal sector employment – could no longer expand, MENA failed to create substantial private sector jobs – precisely at the time when the largest number of young people was entering the labor force. The result was the highest unemployment rate (11 percent) in the developing world, with the rate for youth and women about double the average. This unemployment was a major factor behind the Arab Spring protests of 2010-11, not to mention their aftermath of civil wars and the spread of violent extremism (Devarajan and Ianchovichina, 2017).

How did East Asian countries succeed in exporting manufactures and creating jobs just when they needed to, whereas MENA countries failed to do either? This paper contends that the difference has to do with specific policy choices undertaken by East Asian governments; the combination of which generated a virtuous cycle of job-creating growth. MENA countries, on the other hand, chose a different development model, sometimes referred

to as the Arab social contract. Although it had elements of some of the same policy choices, this development model did not have the combination to trigger the virtuous cycle.

Since the publication of *The East Asian Miracle* (World Bank, 1993), much has been written about the causes of the region's success. While there are disagreements at the margin, a consensus has emerged that the proximate sources of rapid growth included the following: (i) export orientation; (ii) openness to imports and foreign direct investment; (iii) quality education; (iv) infrastructure investment; (v) innovation and technology transfer; and (vi) macroeconomic stability. In contrast, Arab governments since independence adopted a development model based on a social contract that guaranteed jobs in the public sector for university graduates² and provided free health and education as well as subsidized food and fuel. In return, citizens kept their voices low lest they threaten the state's largesse (Devarajan and Mottaghi, 2015; Muasher et al., 2016). As we point out below, while this social contract delivered modest growth, poverty reduction, and human development, it could not generate manufacturing-led, job-creating growth at the pace achieved by East Asia. In particular, MENA countries focused more on the domestic economy rather than on openness to foreign trade and investment. Likewise, their focus on universal primary education meant that quality higher education was underemphasized, which made technology transfer difficult. Subsidies drained the government's resources, leaving little

2 In oil-rich, low-population countries such as Kuwait, UAE, and Qatar, the guarantee is explicit. In other countries, there used to be an implicit guarantee that university graduates would be employed in the public sector. In any event, over 80 percent of formal-sector workers in MENA are in the public sector. Also, Gallup Poll data show that, in most countries, more than 50 percent of people aged 34-15 prefer public sector employment (Gatti et al., 2013).

room for public investment. In addition, the lack of accountability made it possible for politically connected domestic firms to capture rents; further reinforcing the bias against exports.

Most studies on the Middle East have considered a subset of the six policies identified in the East Asian miracle but, as that document noted, all needed to be pursued simultaneously – they were a package that could not be broken apart. For instance, pursuing greater education, particularly in engineering and science, had to be accompanied by expanding sectors that required such educated graduates. While some of the graduates could have been channeled into domestic sectors, the rapid growth of more advanced sectors, whether autos or electronics, permitted new graduates to be remunerated in a manner which led them to remain in the country. In contrast, as late as the 1970s, graduates in both Korea and Taiwan often emigrated, particularly to the U.S. Only after there was a considerable agglomeration of highly trained graduates did multinational corporations (MNCs) place these nations on their own radar screens for the location of new plants. Conversely, MENA countries have followed few of the components of the Asian package, and even before the disruptions beginning in 2003 their growth was barely above that of sub-Saharan nations.

The purpose of this paper is to provide a framework for comparing and contrasting the East Asian and MENA experiences with structural transformation. The framework is intended to guide researchers in analyzing particular country cases in MENA, with a view towards helping these countries address the severe employment challenges they face. The next section examines the six elements of structural transformation that East Asia adopted (and MENA did not). The final section looks at the synergies and complementarities among the six areas and explores how the Arab model can be adapted to promote greater manufactured exports and job creation.

One note of caution needs to be raised before any detailed discussion begins. We will put an emphasis on the need to engage in exports of manufactures in order to absorb the many graduates streaming into the labor market. This assumes that a market for developing country exports will be stable and grow. However, some of these exporters are being increasingly forced by inexorable economic forces to relocate to the U.S. or other industrial nations. Growing labor productivity makes inexpensive labor less important than it was during the early days of export in East Asia. Firms such as Foxconn, a primary supplier to Apple, and other electronics firms are locating billion dollar plants in the U.S. Simultaneously, the bricks and mortar outlets for East Asian manufacturers in the 1960s and 1970s are increasingly marginalized and offer stagnant or slowly growing buyers. Thus, manufacturing firms face decreasing demand in their traditional markets and an increasingly competitive product market. It is not unthinkable that the closure of major non-web retailers will leave developing country suppliers with razor-thin margins. Some developing nations may thus revert to where they were before exporting became an important lifeline. Being late to the party, MENA countries may require exceptional ingenuity, and embedding themselves within MNC supply chains may be the best alternative. New opportunities will undoubtedly present themselves, or more precisely be discovered or invented, but the extraordinary set of options open to developing countries in the post-WWII period are rapidly closing.

Before entering into the details of our argument, we note that we concentrate on the period before 2000. The 2001 September 11 attack in the U.S. was an inflection point as many of the MENA nations faced an imminent Western response; world opinion soured on MENA with serious consequences for potential export markets in manufacturing and other non-oil products, and the continuity of both the political process and the fate of individual

national leaders was very uncertain. On these dimensions, the MENA nations were the opposite image of the East Asian nations, which had decades of political stability even during the crisis of the late 1990s. Moreover, the economic data are very uncertain – one cannot even guess the components of GDP of nations such as Libya, Syria, Yemen, and others. Finally, even if peace can be restored, the appropriate data for these countries may not be recoverable; it is unlikely that agricultural and most manufacturing data were collected or could be transformed into correctly defined national accounts data.

Elements of Structural Transformation

As mentioned above, East Asian countries followed policies that could be divided into six categories. We will now examine each of these individually, pointing out the relationships among them.

1. Export Orientation

Perhaps the single most important feature of the East Asian miracle was each country's emphasis on exports. The reasons for this orientation are many. First, exports represented a massive source of demand, much larger than a domestic market could provide. Second, exports, along with the related openness to foreign direct investment, enabled these countries to absorb productive technology from rich nations. They were taking advantage of their "relative backwardness." Rather than having to develop techniques *de novo* through the R&D process, with all the huge expenses and false starts inevitably encountered, borrowing these technologies was much less expensive and risky. But this route required local absorptive capacity: the existence of a minimum level of domestic institutional and industrial capacity to enable late starters to take advantage of the potential for catching up. This local capability depended on public and private competence: infrastructure,

education, the financial system, and the quality of government institutions. Although measuring these abilities is difficult, it is likely to be exceptionally productive in analyzing individual nations.

By contrast, MENA countries exhibited a greater orientation to domestic markets and often a resistance to foreign domestic investment. Consider exports of manufactured products; despite the huge increase in international trade in manufacturing, most Middle Eastern nations barely participated in this growth. This resulted from the pursuit of economic policies that discouraged imports, which had the unanticipated consequence of simultaneously reducing exports. Given no need to compete in export markets, firms could ignore those potential technology transfers that facilitated gains in productivity that were so avidly exploited by the Asian nations. Not only did Asian nations increase their manufactured exports to an extraordinary degree; they increasingly shifted the structure to high technology goods. This has augmented the demand for imported equipment and knowhow that could produce goods of the requisite quality for advanced country markets.

Another aspect of the export orientation of East Asian countries was their real exchange rate strategy, which was geared to maintain a slightly undervalued exchange rate in order to maintain competitiveness. MENA countries followed a different strategy; maintaining fixed exchange rates possibly because they feared runaway inflation with greater flexibility in the exchange rate. This strategy led to periods of real exchange rate overvaluation that undermined export competitiveness.

Although much has been made of the alleged crucial importance of "industrial policies" in the manufacturing sector by some observers, an exhaustive review of the literature on the poster countries Japan, Korea, and Taiwan, finds little (if

any) support for the assumption that these policies were quantitatively important for the success of these countries.³

As a result of limited exports, MENA countries also had to restrict imports; giving rise to the problems associated with import-substitution policies. Even when these countries opened up, the non-tradable part of the economy remained captured by political elites. For instance, in Tunisia, Rijkers et al. (2016) showed that the Ben Ali family had interests in the telecom, transport, and financial services sectors, all of which enjoyed protection from domestic and foreign investment. Consequently, prices for these services were exceptionally high; making exporting firms that relied on these services uncompetitive in world markets.

A relevant question is whether the underlying politics of MENA countries can support the kind of export-promotion strategies of pre-2000 East Asia. However, the biggest political problem in MENA today is youth unemployment. It contributed to the Arab Spring, as well as the turmoil and violent conflict that followed. Hence, the question can be posed in another way: given the political imperative to create jobs, can MENA countries afford *not* to adopt export-oriented strategies, since these have been shown to be the most powerful way of reducing unemployment, especially youth unemployment?

In the following we will concentrate on the manufacturing sector as the vector of absorbing young labor force entrants. An alternate strategy would be to concentrate on services, but these present many problems, especially the need for higher education. Income-elastic export growth would have to occur in finance and business services, and perhaps medical tourism. Lower end

services would be possible, call centers for example. However, in each of these services fairly high levels of education are required; in the case of call centers, employees are required to be fluent in widely-used international languages such as English. Though not impossible, potential teachers would have to be trained to help their students master English. Even compressing the two-generation training would require more than a decade. The problem is even more severe in more lucrative areas such as financial services, where requirements are computer literacy and mastering of fairly complex programs whether in accounting or finance. Although it has now become more education-intensive than when Korea and Taiwan could profitably produce copies of clothing designed in the West, manufacturing offers more opportunities, especially if firms can succeed in embedding themselves within production chains⁴.

2. *Foreign Direct Investment*

Multinational firms setting up plants in developing economies or buying existing firms and revitalizing them import new equipment, implement advanced managerial practices, and provide a marketing network. These skills are important insofar as they are difficult to purchase in arms-length transactions, though consulting firms can help. Rapid changes in logistic practices, manufacturing technology,

4 Noland and Pack (2003) review the studies as of 2003 and include some of their own estimates of the maximum quantitative effect such policies could have exerted, typically less than one percent of GDP growth of roughly 10 percent per annum in the periods covered. The research summarized ranges from econometric studies to growth accounting. Some authors have argued that exchange rate policy was critical; exchange rate protectionism a possibility first pointed out by Corden. However, this requires skillful suppression of domestic demand and almost surely exceeds the administrative capacities of most MENA countries. Moreover, even successful manipulation of the RER would still require the other elements of the Asian policies such as technological upgrading.

3 Noland and Pack (2003).

and computer and information technology in the last quarter of a century allow multinational firms to disaggregate their production process into separable activities, each of which can be undertaken in a different location that depends on the cost of production and political stability. Estimates by the United Nations Conference on Trade and Development suggest that 70 percent of international trade in the latter half of the 1990s was attributable to MNCs, underlining the importance of FDI.

FDI permits local production to take place along the world's best-practice production function by complementing local factors with foreign knowledge and specialized human and physical capital. While there may not be an immediate productivity augmentation of the skills of local firms, their productivity will increase if foreign firms introduce new technologies or management methods that leak out to domestic companies. For example, workers initially employed by MNCs may be hired by local firms or establish their own enterprises, thus disseminating knowledge that is proprietary and an improvement upon that initially possessed by local firms.

Comparing the ratio of FDI to gross domestic product reveals that only in China and Singapore has there been a major reliance on FDI to bring in knowledge. Singapore is the poster country for the role of FDI as a critical factor in catalyzing otherwise good economic policies into rapid and sustained growth. As noted earlier, not all the vectors of technology transfer were used by all of the countries in Asia, but each of them used one or two intensively and all of them imported knowledge embodied in intermediates and capital goods. MENA countries have received very low FDI as a share of GDP and the absolute levels have been quite small. In the period 1980-2000, Thailand, which is roughly the size of Egypt, received more

total FDI than all of the MENA countries combined. Until this year, Algeria for instance required 51 percent domestic ownership of all foreign investments. An analysis in each country of the role of FDI and incentives (or disincentives) for FDI is likely to be fruitful as, especially after the upheaval of recent years, foreign firms could relatively rapidly establish plants that could then rapidly increase employment.

One cannot easily explain the low levels of manufacturing FDI in MENA countries, as it depends both on how the country's conditions are viewed by potential investors as well as the receptivity of policymakers and the local business community to FDI. In some countries, such as India, there was a conscious effort to keep FDI out, which stemmed from the reigning view among influential politicians that FDI was a new form of colonialism. Many countries, regardless of early positions that learning is best achieved by keeping FDI out, have reversed this policy – Japan, Korea, and recently China and India are obvious examples. Despite the fact that an ideological anti-FDI position was never a particularly important part of the worldview of either intellectuals or policymakers in the Arab countries, FDI in sectors in which learning may be great has remained low, although it has been slowly increasing.

3. Quality Education

Technological inflows depend on the ability to identify relevant foreign technologies, decide how best to access and negotiate for them, and finally how to incorporate technologies new to the firm or the nation within the production routines of local firms. A primary effect of education is to facilitate the ability to deal with rapid change. If technology is changing slowly, the payoff to education will be low – education has a payoff only in the presence of rapid technological change. For example, a Korean cotton spinner in 1960, who

was a high school graduate but tended spindles not much different in design from those of 1900, would not have benefited much from her education. In contrast, her education would have led to an increase in productivity if she had to adjust to the complexities of then recently developed open-end spinning. Flexibility and problem-solving abilities conferred by more education yield a reward when technology is changing, but education may have little payoff in the absence of technological change. Thus, Asian nations derived a huge benefit from the complementarity between their high and growing education and their large technology imports.

High levels of education in the absence of imported technology, whether equipment, intermediates, or production engineering knowledge, often leads to the expensive local replication of knowledge that is already present abroad. For Arab countries, simply increasing education without an increase in technology imports is unlikely to have much of an effect on economic growth. Conversely, firms that purchase the most modern equipment may obtain much lower productivity than firms adopting the same technology in industrially advanced countries. While in principle such knowledge is codified and set out in manuals and is transmitted by the manufacturers of the equipment, it is necessary to have managers and technicians versed in engineering to successfully implement the requisite routines.

In 1960, Arab countries indeed had lower levels of education than Asian ones. But the common image of super-education in Asian nations is not confirmed by the data. Average years of education show the Korean average in 1960 was about 4.5, higher than Jordan for example, but still strikingly low by Western standards. For our purposes, a more important measure is the presence of highly skilled workers; those having gone through tertiary education, particularly in technical subjects such as science and engineering. This level of education became relevant for Asian countries particularly as they entered a

transition from lower-skill, labor-intensive sectors such as wig production, simple clothing, and sporting goods.

There are no systematic time series on both tertiary enrollment and the percentage of those students who are enrolled in science and engineering programs. But data that are available for various years in the mid-1980s indicate the vast difference in achievement between Korea, typical of the fast growing Asian nations, and a number of Arab countries. In 2005, more than 20 percent of university-age students in Korea were receiving tertiary education in science and mathematics compared to less than five percent in most of the Arab countries. Even in the 1980s, Korea and Taiwan had ratios not much different from those prevailing in 2005, while Singapore's was considerably greater. Moreover, such measured differences understate the true differential insofar as many of the Asian universities – Seoul National, National Taiwan, and the National University of Singapore are internationally recognized for their quality, whereas no Arab university is ranked among the 500 top research universities in the world.

Domestic knowledge generation can partly substitute for foreign technology. It is possible to construct many measures of potential effort (e.g. R&D expenditures and patents granted or applied for). On both measures, MENA countries fare poorly; their R&D spending is currently very low and much lower than Taiwan exhibited a quarter of a century ago. Patents granted by the U.S. Patent Trade Office have averaged less than six per year for Egypt, contrasted with 74 for Malaysia and very high levels for some of the other Asian nations. As in other indicators of technical activity, on a per capita basis MENA countries' activities are very low. As early as 1981, Taiwanese residents were applying for much larger numbers of patents than current applications by Egyptian residents. Whatever the lacunae and imprecision in these indicators, the ineluctable image is one of nations in which little or no innovative activity of a

formal type is going on. It is possible, of course, that some effort on enhancing productivity is occurring but does not get reported in formal measures of effort. However, if a major source of potential productivity growth stems from the productive absorption of foreign technology inflow, its absence implies that absorptive levels are low. Moreover, unlike Korea, Taiwan, and many Latin American countries of the 1960s and 1970s, there are no case studies to suggest that this global picture is not valid.

4. Infrastructure Investment

East Asian countries were characterized by high rates of investment (around 40 percent of GDP) in plant, equipment, and infrastructure. The important point is that these rates were maintained for a long period of time without either macroeconomic instability (that is, the investment was largely financed by domestic savings) or diminishing returns setting in. The endogenous growth literature may have an application in the latter. These high rates of investment enabled countries to benefit from foreign technology and investment, thereby creating a virtuous cycle of growth, exports, and employment. Arab economies had considerably lower rates of investment, which – coupled with low growth and inward orientation – made it more difficult to finance higher investments and hence higher growth and employment. The problem of financing public investment was exacerbated by the high levels of subsidies for fuel and food (amounting to 10 percent of GDP in some countries), which left little room for capital spending.

5. Technology Transfer

Greater imports of raw and intermediate goods increase the productivity of plants – for example, manufacturers of simple machinery can import steel that has more appropriate properties to allow better tolerances during the production process. Newer imported machinery exhibits greater speeds and safety features, allowing greater output per hour.

Both intermediates and machinery embody great amounts of R&D undertaken by firms in OECD countries, and considerable research finds that greater amounts of foreign purchases yield greater productivity in the purchasing nation.

The most comprehensive indicators of interactions that may lead to the transfer of technology are imports of intermediate manufactured goods that enter into further processing, M_I/GDP , and imports of capital equipment relative to GDP, M_E/GDP (measures of these are available from various World Bank sources). Asian countries generally have ratios of M_I/GDP that are 50 percent more than those in MENA nations, though there are exceptions in recent years, such as Jordan and Tunisia. Additionally, the typical Asian country in 1990 had much higher ratios than those that MENA countries exhibited a dozen years later. For the few countries for which data are available, the Asian pattern by 1970 exceeded that of the Arab nations in 2002.

A similar picture unfolds when imports of machinery relative to GDP (M_M/GDP) are examined. In general, the M_M/GDP levels of the MENA countries as late as 2002 are less than those in the high-performing Asian economies in 1990. Moreover, data for earlier years suggest similar ratios in Asian countries as far back as the 1970s for Korea and Taiwan. The absence of the technology transfers of the largest type, embodied in intermediate goods and services, explains part of the differential in the success of the nations in raising per capita income.

Another use of technology transfer is as an alternative to FDI for acquiring foreign knowledge. For example, the licensing of proprietary technology can serve as a substitute for FDI; if foreign firms cannot export to a country because of tariff barriers and believe the policy environment is too uncertain to undertake major plant investment, they may license new production processes or provide information

on their proprietary knowhow in order to obtain profits in the local market. However, the act of licensing also poses a greater possibility of loss of control of knowledge than FDI. While technology licensing may be especially helpful as countries shift to technology intensive sectors, it can be useful even in the early stages. Firms in Japan and later in Korea and Taiwan utilized such knowledge in their early industrialization efforts, yet MENA countries did not avail themselves of this alternative source of foreign knowledge until the 1990s. In the 1990s, Egypt and Morocco accounted for all of these payments. Thus, most countries had little FDI and few royalty agreements; clearly not a stance for facilitating a move towards higher productivity levels.

In contrast to FDI, the data on royalty payments for technology licenses are more uncertain in scope and definition and are available for only shorter periods of time. Nevertheless, the virtual non-existence of royalties in Arab nations as late as 2005 is surprising. Even in the 1970s and 1980s, Korea and Taiwan already had a large number of technology contracts. For example, in the five-year period centered on 1980, both nations were paying around 90 million USD per year, roughly 300 million USD in 2005 prices, and these numbers were growing rapidly. This can be contrasted with Egypt's 180 million USD and Morocco's 45 million USD in 2005. Moreover, the current period of increasingly competitive international markets requires greater technological sophistication than in 1980. This difference explains part of the slower growth of productivity in the two regions and is simultaneously an indicator of the very limited shift to new industrial sectors.

6. Macroeconomic Stability

Finally, East Asian countries were able to maintain their high investment, open trade regime without endangering macroeconomic stability. In particular, they were able to keep inflation low. This was especially important for attracting foreign investors while keeping domestic peace. MENA countries, by

dint of their link with world oil prices, faced major macroeconomic fluctuations reinforced by pro-cyclical fiscal policies (Slimane and Tahar, 2010). This made it harder for these countries to embark on a higher investment path, much less attract technology-transferring FDI. Indeed, macroeconomic stability continues to be a challenge today in the wake of low oil prices.

A particular aspect of macroeconomic stability in East Asia was that high investment rates were accompanied by high savings rates. Meanwhile in MENA, savings rates are quite low. Although a consensus on why savings rates are low anywhere remains elusive, it would be useful to examine the various factors – such as income growth, access to finance, interest rates, inflation, political uncertainty – that contributed to MENA's savings rates, with a view towards orienting policy to relieving the binding constraints.

Finally, the comparison between East Asia and MENA on macroeconomic stability may appear limited since the latter includes a large number of resource-dependent countries such as Algeria, Iran, Iraq, and Yemen. However, the mineral exporters of East Asia, such as Malaysia and Indonesia, also followed prudent macroeconomic policies that enabled them to adjust to terms of trade shocks. For instance, when petroleum, tin, and palm oil prices fell in 1986, Malaysia (which exported all three commodities) was able to turn its current account deficit into a surplus in two years. Similarly, Indonesia devalued the rupiah in 1986 and absorbed the sharp drop in oil prices that persisted for about four years.

Synergies and Complementarities

This review of the proximate factors behind East Asia's remarkable structural transformation and MENA's lack of one reveals the delicate nature of such accomplishments. Several aspects of the

economy had to be pulling in the same direction for East Asia to succeed: export orientation, reinforced by an openness to foreign investment, which in turn was supported by quality education and high investment rates to facilitate the technology transfer needed to promote manufactured exports and job creation. In MENA, the particular development model chosen made it difficult for most of these features to be emphasized individually, much less as a package. Furthermore, aspects of the Arab social contract worked against structural transformation. For instance, with jobs in the public sector guaranteed, students had little interest in specializing in engineering, science, or technology, whereas having specialists in these fields is what made technology transfer possible in East Asia. Similarly, the high levels of subsidies in MENA crowded out the public investment necessary to attract foreign investment. Finally, the creation of rents in the domestic economy (many of which accrued to political elites) made it difficult to shift to an export orientation, where the rents would be dissipated.

The question is how MENA countries can learn from the East Asian experience and transition to growth creation and manufactured exports to enable their young people to be productively employed. The elements of what needs to be done are clear: quality education, openness to FDI and exports, infrastructure investment – but how these things can be done under the current climate of civil wars, terrorist attacks, and instability is less clear. However, if we remember that youth unemployment was a major cause of the current turmoil, then at least there is political pressure for the system to deliver on jobs for young people. To succeed, the current system of rent distribution will have to change, or it will be changed.

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Address: 21 Al-Sad Al-Aaly St., Dokki, Giza, Egypt
Telephone: 00 202 333 18 600 - 603 | **Fax:** 00 202 333 18 604
Email: erf@erf.org.eg | **Website:** <http://www.erf.org.eg>

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21 Al-Sad Al-Aaly St. Dokki, Egypt

P.O.Box: 12311

Tel: (202) 333 18 600 - 603

Fax: (202) 333 18 604

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