

CHAPTER 1. TRADING WITH CHINA AND INDIA

The rapid economic integration of China and India in the world economy is changing trade and investment flows in important ways, presenting both challenges and opportunities for the rest of the world. China and India's trade with MENA is a small proportion of MENA's total trade. But it has grown very rapidly in recent years: if present growth rates are sustained, the likely future impacts may be substantial. This chapter describes the evolution of trade relations between MENA, China, and India. The main findings indicate that the region as a whole has benefited from improved terms of trade, significant increases in oil and gas exports, and cheaper imports. However, producers of industrial goods have been negatively—and in a few cases severely—affected by competition with the two Asian countries in both third and domestic markets.

CHINA, INDIA, AND MENA ARE INTENSIFYING THEIR TRADE RELATIONS

1.1 The rapid economic growth of China and India has received enormous attention. Winters and Yusuf (2007) compare growth rates since China's takeoff in 1979 with those of previous large industrializations in the UK and US and conclude that the latter rates were much lower than China's. The nearest parallel to China was the US over the period 1820–70, during which incomes in the US more than doubled in a single generation. At the current growth rates and life expectancies, incomes in China would rise manifold in a generation. Even though China and India are not the dominant force in the world economy, their industrialization has given an unprecedented shock to the world economy. Trade linkages with Asia, both direct and indirect, are transforming patterns of world trade. A key feature of the economic growth of China and India has been even more rapid growth in their trade—arguably the strongest and most direct channel through which China's, and more recently India's growth are affecting other developing countries.

1.2 Only fifteen years ago, China and India jointly produced less than 3 percent of world GDP, just above MENA's share (table 1.1). By 2005–07 they produced 7 percent of world GDP, nearly triple MENA's 2.5 percent. The MENA region as a whole has a population of 310 million, less than 5 percent of world total. It has vast desert areas and scarce water resources, and enormous oil and gas resources, phosphate rock, cobalt, and manganese. Because of these resources, MENA's GDP per capita (in PPP) has been high, and is higher than both India's and China's. During the last five years, the region has enjoyed strong economic growth, driven by high oil prices, greater integration in the region and with the rest of the world, and acceleration in market-oriented reforms. The rise in oil prices from \$25 in 2002 to almost \$140 in mid-2008 bestowed unprecedented windfall for the oil exporters. And the spillovers from resource rich to resource poor countries have been strong, with rising trade flows, worker remittances, tourism, and intraregional investment, particularly from Saudi Arabia and the United Arab Emirates.

MENA countries are heterogeneous but share the challenge of creating employment

1.3 The MENA region is heterogeneous, comprising 19 nations with different socioeconomic and political characteristics. Yet, the similarities are many. Now, as in the past, oil is providing the basis for economic growth, either directly in oil-producing countries or indirectly in the rest of the region through investment and services, aid and remittances. Most countries in the region adopted the same state-led economic development policies in the 1950s and 1960s, and all have been affected, though at different levels, by conflict and regional instability. Most importantly, as a result of past demographic trends, they all face the dramatic challenge of providing employment for a labor force that is growing at four percent a year, the highest in the world. Unemployment is high, 12–13 percent of the labor force, despite recent declines, and falls disproportionately on the region's youth. While each country is different and would deserve to be analyzed on its own, information availability is an issue. Thus, the bulk of the analysis in

this report will focus on the entire region, when appropriate, and on two sub-groups: the six resource-rich Gulf Cooperation Countries (GCC) and the remaining countries, which are labeled as ‘labor-abundant countries.’¹ The remainder of this section presents information on merchandise trade, with special attention to changes in trade patterns over the last ten years.

Table 1.1: Selected economic indicators

	MENA		China		India	
	1990-91	2005-07	1990-91	2005-07	1990-91	2005-07
Population, in millions	231.1	310.4	1150.3	1313	866.3	1109
Population, in % of world	4.3	4.8	21.6	20	16.2	17
GDP at current market price, in US\$ bn	510.6	1,532	383.1	2461	276	802.6
GDP real growth, in %	3.6	5.4	8.2	11.2	4.6	9.1
GDP, in % of world*	2.2	2.5	1.7	5.1	1.2	1.8
GDP per capita (PPP)	5,424	7,639	1,146	4,971	1,197	2,532
Trade in % of GDP	70.3	92.0	38.8	70.3	17.2	43.5
Exports in % of GDP	33.5	54.1	20.9	38.5	8.3	20.0
Share in world exports, in %*	3.8	4.5	1.5	5.8	0.5	1.1
Manufactured exports, in % of total*	12.2	9.3	82	83.2	56.2	43.2

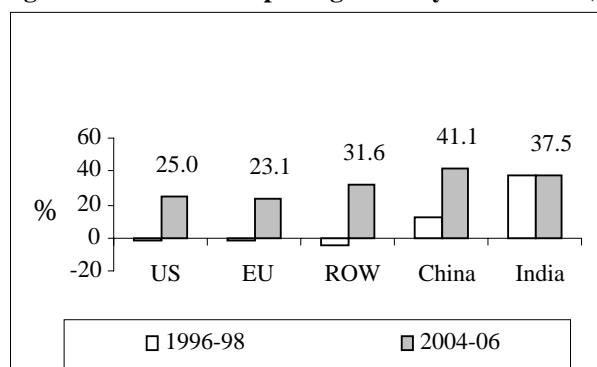
Source: WDI; 2008 MENA Economic Developments and Prospects

*Refers to averages for 2005-06

China and India are becoming strong trading partners for MENA

1.4 MENA’s share of world exports, 4.5 percent in 2005–06, is significantly higher than India’s and only slightly below China’s, reflecting the predominance of energy exports, which represent half of total exports. Manufacturing, typically the most labor-intensive sector, is small in MENA and one of the lowest in the world. Thus, MENA’s share of manufactured products in total exports is 9 percent, China’s is 83 percent, and India’s about 43 percent. Moreover, as shown in table 1.1, this share has decreased from the early 1990s. The region’s weak performance in manufactured exports reflects the weaknesses of the private sector and its inability to support economic growth in a sustained manner.²

Figure 1.1: MENA’s exports growth by destination (%)



Source: IMF, Direction of Trade 2007

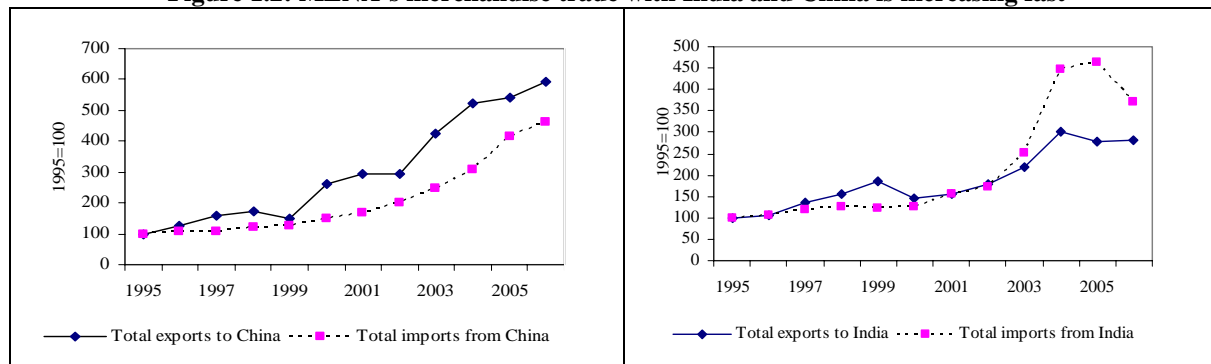
1.5 MENA’s exports have been highly concentrated not just in terms of products but also in terms of markets. The traditional partners for MENA continue to be the EU and the US but there has been a move toward Asian markets. Total merchandise exports to China and India accounted for more than 15.5 percent of total MENA exports in 2006, up from 4.7 percent in 1995. These exports are growing at an impressive speed, rising 41 percent to China in 2004–06 and 37 percent to India, almost twice the growth of exports to the US and EU (figure 1.1).

¹ GCC = UAE, Saudi Arabia, Bahrain, Kuwait, Oman, and Qatar. Labor-abundant countries = Algeria, Djibouti, Egypt, Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, West Bank and Gaza, and Yemen. However, for lack of data and information, some countries, such as Iraq, Iran, West Bank and Gaza, and Libya, are not included in some of the tables and analysis.

² See World Bank (2008c).

1.6 Strong growth between MENA, China and India, together with the complementary nature of trade flows, largely explains the surging exports and imports in recent years. For example, MENA's merchandise real exports to China and India have increased by six and three times respectively during 1995–2005 (figure 1.2). MENA countries are indeed looking East.

Figure 1.2: MENA's merchandise trade with India and China is increasing fast



Note: The increase in MENA's imports from India in 2004 and 2005 are mainly due to the rapid increase in the UAE's imports from India.
Source: UN Comtrade.

India is the predominant trade partner for MENA

1.7 Trade links with India have always been more important, but China's importance is growing rapidly, particularly for Iran, Oman, and Yemen. For the labor-abundant countries the share of exports to China and India account for 1–4 percent of all exports. Imports from China represent 7–10 percent of total imports. Except for Djibouti, imports from India represent only 1–4 percent of total imports for most MENA countries.

Dubai and Abu Dhabi are becoming re-exporting centers

1.8 There is one important characteristic that differentiates trade with China and India between the GCC and the labor-abundant countries. The share of products that are imported and re-exported is extremely high in some GCC countries, representing, for example, 85 percent of manufactured exports in the Emirates and 56 percent in Qatar (table A1.8 in Annex I). These are goods that originate in third countries, but are routed through GCC ports, particularly Dubai. This confirms the increasingly important role of "regional hubs" for cities like Dubai or Abu Dhabi. By contrast, re-exports are insignificant in the labor-abundant countries. Three-quarters of total re-exports in the GCC countries concern machinery and transport equipment.

Energy is key

1.9 Historically, Chinese oil imports from the Middle East (mainly Persia) can be traced back over a millennium, to the Tang and Song dynasties. However, imports increased significantly only in the late 1980s as China's growth picked up. They initially came from Oman and Yemen because of the low-sulfur content of the crude oil streams, which could be refined in China. Chinese refining facilities improved significantly in the 1990s and China is now able to process high sulfur content crude oil from Iran and Saudi Arabia.

1.10 MENA holds more than 60 percent of the world's proven oil reserves and nearly half of gas reserves; and 40 percent and 17 percent of the global production of oil and gas respectively. China and India are poor in energy resources and therefore their growing economies depend critically on the

availability of energy imports. Consumption rates of oil and gas in the two Asian countries are expected to continue growing at more than twice the global average, despite increased efficiency use. This is on account of fast urbanization and industrialization rates, which are reflected, for example, in rising ownership rates of vehicles. More than half of China and India’s energy imports come from MENA (up from a third ten years ago). Assuring adequate oil and gas supplies is therefore a top priority for the Asian countries. On the other hand, the abundance of energy reserves in MENA, which are mostly located in the Gulf region, as well as their proximity to Asia, has made the development of a strategic relationship mutually beneficial. Both China and India have pursued, in recent years, an aggressive energy market diversification strategy, moving into countries with easier access to equity (for example, in Africa) or in countries that have just discovered new fields in Latin America or the Caspian region. Access to oil and gas equity has traditionally been either closed or very limited in MENA countries, and Asian companies have therefore focused on developing the downstream industry (see chapter 4).

1.11 In January 2006, Saudi King Abdullah bin Abdul-Aziz al Saud visited China and India—the first foreign trip since assuming power in August 2005—marking the beginning of a strategic shift in Saudi’s foreign policy. At the conclusion of that visit a new partnership was created, where Saudi Arabia agreed to open up its upstream oil sector to China and China agreed to open up its refining and marketing sectors to the Saudis. Following Saudi Arabia’s example, individually or as groups, the GCC countries have embarked on the development of economic and cooperation agreements with the Asian countries. In many cases these agreements have included the timely investments to increase oil and gas production capacity to meet the rising demand from Asia. Trade and investment relations in other sectors are being fostered as natural, complementary extensions to energy relations.

1.12 The impact of China’s and India’s growing demand for oil and gas on the global demand for these commodities has been sustained (table 1.2). China contributed 45 percent and 11 percent to the increase in global demand for oil and gas in 2005–07, up from 26 percent and 3 percent respectively in 2000–03. India’s contribution to the increase in global demand for oil and gas was less than 15 and 5 percent respectively in 2005–07. Thus, China and India’s energy demand growth has contributed to the rise in energy prices in recent years, through there have been other factors. In turn, the surge in energy prices has greatly benefited the MENA region, generating rents for companies in the extractive industries and for resource-rich countries and—most likely—contributing to a long-term change in international energy prices.

Table 1.2: China and India have contributed significantly to the rise in global energy demand

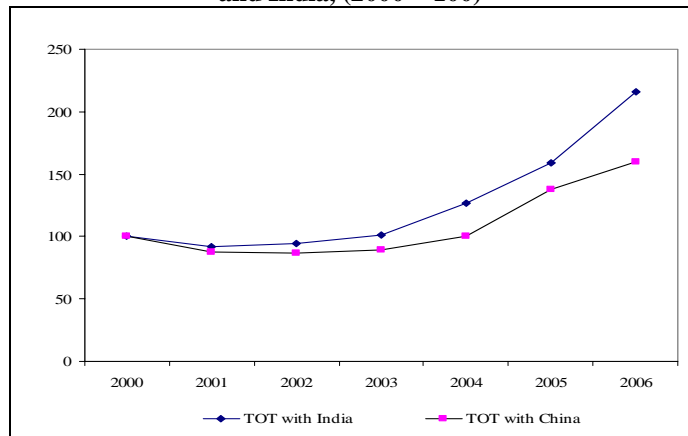
Export commodity	International price change		China effect		India effect	
	2000-03	2005-07	2000-03	2005-07	2000-03	2005-07
Oil	19.8	31.8	26.5	44.7	7.4	14.8
Gas	30.9	18.2	3.1	11.4	2.2	4.6

Note: Oil price data refer to US refiner acquisition, the cost of imported crude oil. Gas price data refer to the price of US natural gas imports, in US\$ per thousand cubic feet. Gas consumption data refer to the latest available 2006 projections.

Source: Energy Information Administration, US government.

1.13 Higher prices of oil and gas have significantly improved the region's terms of trade (figure 1.3). MENA's export prices to China and India almost doubled in 2000–06, spurred by the rise in oil prices for fuel commodities, while import prices rose by 25–30 percent. Region wide averages hide country differences and resource-poor countries have suffered because of the high oil import bill. The macroeconomic consequences of a rise in the price of oil are well-known. An increase in the price of natural resources raises Dutch disease concerns, that is, the possibility that the expansion of the natural resource sector will de-industrialize the economy—by attracting resources away from the non-oil sectors and raising the prices of non-tradables in the economy (thus further lowering the competitiveness of tradables). Typically however, governments try to raise competitiveness, through measures such as technological improvement. This may have indeed happened in many resource-rich countries. Oil-importing countries that are also exporters of manufacturers are likely to have suffered from the added costs of oil imports and the competition of China and India in both export markets and domestic import markets, as discussed in the next section.

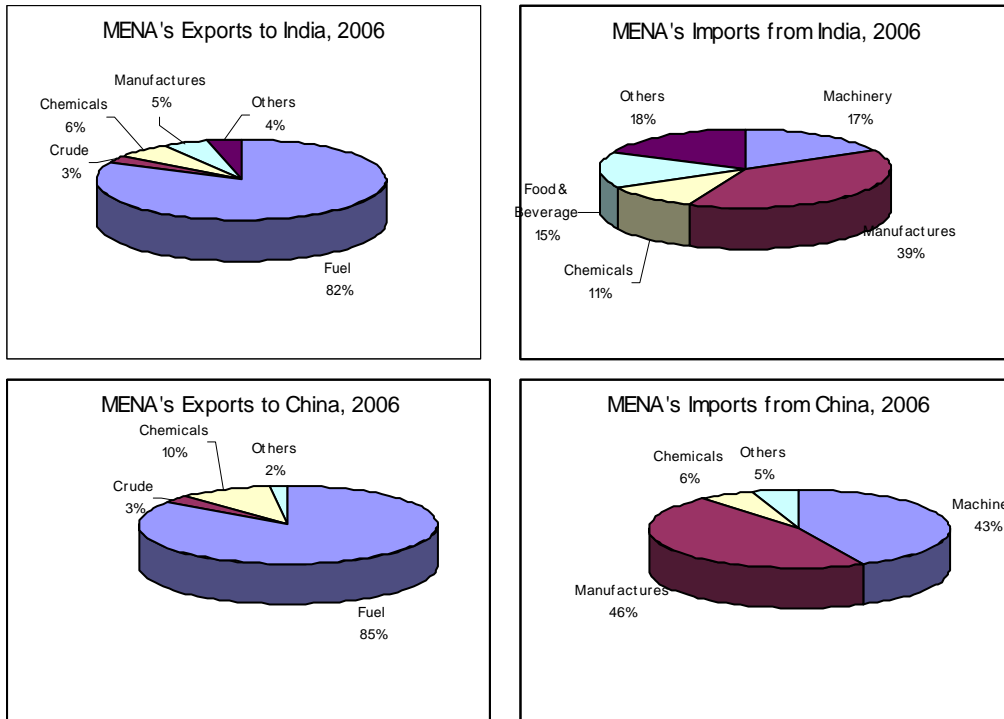
Figure 1.3: MENA's rising terms of trade with China and India, (2000 = 100)



Source: UN Comtrade, World Bank, and US Department of Labor.

1.14 MENA's non-oil exports to China and India are small. In 2006 oil and gas accounted for 85 percent of MENA's merchandise exports to China and 82 percent to India (figure 1.4). (Table A1.5 in Annex I shows the evolution of imports and exports to China and India in the last 10 years). Non-oil exports to China include manufactures, chemicals, and crude products. Exports to India have become more diversified, with manufactured goods and machinery-related exports increasing. MENA's imports from China are mostly manufactures and machinery. Those from India include rice, tea, fresh vegetables, chemicals, textile, garments, telecommunication equipment, and toys.

Figure 1.4: MENA's composition of trade with China and India, 2006



Source: UN Comtrade.

The impacts of China and India on MENA trade

1.15 The acceleration of trade relations with China and India has spurred debate in the Middle East. The 2007 Pew Global Attitudes Survey found that China's image has slipped significantly among the public in Europe, Japan, Russia, and India. But in Egypt some 65 percent of the people express favorable views. China's economic power is also viewed positively by Jordan, Kuwait, and Lebanon. But perceptions are decisively negative in Morocco, which fears the competition. Anecdotal evidence point to rising perceptions of unfair competition from the Asian countries (particularly in the Maghreb countries), leading to losses in foreign markets, lower wages, and unemployment. The aim of the remaining sections of this chapter is to assess how export growth in China and India has affected MENA countries and how these countries have adjusted to the growing competition. We discuss three main ways in which the growth of China and India may affect the trade flows of MENA countries: greater competition in third markets, greater competition in MENA domestic markets, and greater exports to China and India (box 1.1).

Box 1.1: Impact of China's and India's growth on trade flows: A review of the literature

Greater competition in third markets

Many countries fear more competition in third markets from China and India (Freund and Ozden 2006; Hanson and Robertson 2006). Lederman, Olarreaga, and Perry (2006) found this to be so in industrial and electrical machinery, electronics, furniture, textiles, and transport equipment in Mexico and in Central American countries. How large can this effect be? The answer depends on how exports overlap. Traditional trade models suggest that labor-abundant countries like China and India will manufacture and export labor-intensive goods, so developed economies have little reason to be concerned but other labor-abundant developing economies may be threatened. But China produces an export bundle very similar to that of the developed countries (Schott 2007). India's large number of skilled workers also implies that there may be a lot more competition than suggested by its relative endowment shares.

China has relied primarily on exports of final manufactured products, frequently as part of an East Asian production sharing network, while India has focused much more on exports of intermediate inputs (Dimaranan, Ianchovichina, and Martin in Winters and Yusuf 2007). India's exports are frequently capital and skill intensive, China's labor intensive, if increasingly sophisticated (Rodrik 2006). China's rank in the similarity of its export bundle with the OECD jumped from 19 in 1972 to 4 in 2001. China's export growth has been accompanied by tremendous expansion in product variety. China was in 9 percent of all manufacturing product categories in 1972, and 70 percent in 2001 (Schott 2007). An important concern for MENA and other countries will be how China and India move up-market into their "product space." Dimaranan, Ianchovichina, and Martin (in Winters and Yusuf 2007) find that adjustment pressures in particular sectors are likely to be much greater if growth is driven by technical change biased toward particular sectors than if by broad-based and relatively neutral technical change.

Greater competition in domestic markets

China and India's trading partners can benefit economically from imports of lower priced and higher quality goods. Amiti and Freund (2007) find that the prices of China's exports to the US fell by 1.6 percent a year between 1997 and 2005. Devlin, Estevadeordal, and Rodríguez-Clare (2006) show how imports of high-technology goods have partly displaced low-tech goods in manufactured exports. This upgrading reflects imports of more sophisticated products and local improvements in product quality (Branstetter and Lardy 2006). China and India's trade growth involves fragmentation and global production sharing, where part of the production process is undertaken in one economy and subsequent stages in another (Ando and Kimura 2003; Gaulier, Lemoine, and Unal-Kesenci 2004). This makes participants in the process beneficiaries from, rather than victims of, improvements in the competitiveness of their partners. And the new trade theory now recognizes that export expansion does not involve just increases in exports of the same products. Rapidly growing economies expand the range of products, improve the quality, and export to additional markets as their exports grow (Evenett and Venables 2002; Hummels and Klenow 2005). These developments generate direct benefits to the trading partners of the emerging economies. If policy settings allow imported inputs in partner countries, improvements in the variety and quality of imported inputs can be a source of dynamism in manufacturing (Amiti and Konings 2007).

Greater exports to China and India

China has become an important destination for exports of other countries' primary products. In metals and coal China ranks first, with shares of 15 to 33 percent of world consumption. In energy China ranks second or third after the US (Streifel 2006). India and China are important consumers of agricultural commodities, with India leading the world sugar and tea, and China in wheat, rice, palm oil, cotton, and rubber. The International Energy Agency 2007 outlook forecasts that energy use will be 55 percent higher in 2030. Oil will continue its leading role for many years, despite alternative sources of energy and improvements in energy efficiency. Most scenarios would predict an oil demand growth of at least 1.5 percent a year through 2030. In all scenarios China and India will account for more than half of the total increment in demand. MENA oil-exporting countries are expected to satisfy an increasing share of this demand.

Box 1.2: World Bank studies on Latin America and Africa

A recent study concerning the impact of China and India on Latin America and Caribbean (LAC) region (Lederman, Olarreaga, and Perry 2006) reached interesting findings. The analysis of the data finds that the growth of China and India has not been a zero-sum game for LAC countries, and that there is significant heterogeneity in effects across LAC sub-regions. First, the growth of the two Asian economies, particularly China, offers a growing opportunity for LAC exporters to these markets, although it has not yet been fully exploited. China and India also represent a growing source of financing. As China liberalizes its financial sector, the potential for becoming an important source of financing for LAC economies is great. In terms of innovation, the scope for bilateral cooperation is large and exemplified by the Chinese-Brazilian agreements on satellite development which have led to the joint production of remote sensor satellites used for space imaging. China provided 70 percent and Brazil 30 percent of the financing and technology. Bilateral agreements also exist between China and Chile in the areas of mining and geosciences, plant quarantine, and forestry (Dominguez and others 2006).

Moreover, there is evidence of positive overall effects for LAC economies associated with the larger presence of China and India in third markets. For example, there appears to be a correlation between the growth of the two Asian economies and LAC economies (with the exception of Central America and the Caribbean), driven mainly by demand externalities and higher prices for commodities where LAC's comparative advantage lies. The growing presence of intraindustry trade, production networks, and the production opportunities facilitated by cheaper imports, lower cost of capital, and innovation are some additional channels through which trade, FDI, and innovation externalities may have positively affected LAC economies.

Lederman, Olarreaga, and Perry (2006) also report that aggregate gains have been accompanied by some pain as some industries, firms, and sub-regions have been negatively affected by the rapid growth of the two Asian economies. However, most of the deterioration of LAC exports in third markets has to do more with domestic supply-side conditions than with lower demand for LAC products due to China and India's increase in market shares. In terms of FDI, there is also some weak evidence of inflows of FDI into LAC's manufacturing sector being substituted for FDI in China and India's manufacturing sector, particularly Central America and the Southern Cone. But these effects are not statistically robust and complementarities are the norm even in manufacturing.

In the service sector India has outperformed Latin America in terms of export growth over the last decade. However, LAC's exports of services to the United States (its main export market) are seven times larger than China and India's exports to the United States. This partly reflects one large advantage of LAC over China and India for the delivery of services to American consumers: proximity. This is particularly important in the tourism sub-sector, where LAC has been performing relatively well when compared to the rest of the world, but also in health and retirement services. In terms of displacement of LAC service exporters by India, only one of the eight service sub-sectors examined (other business, professional, and technical services) offers robust evidence of India's export of services displacing LAC exports. For other sub-sectors the impact of India's growth on LAC exports of services is not robust across specifications.

The opportunities and challenges posed by China and India for Africa were studied in a recent World Bank report by Broadman (2007). Specifically, the volume of African exports to Asia is growing at an accelerated rate: while exports from Africa to Asia grew annually by 15 percent between 1990 and 1995, they have grown by 20 percent during the last five years (2000–05). Indeed, Asia is now a major trading partner of African countries. Asia accounts for 27 percent of Africa's exports, an amount that is almost equivalent to the EU and US share of Africa's exports, 32 percent and 29 percent, respectively. As Broadman (2007) reports, the recent growth of African exports to Asia largely reflects an upturn in its exports to China and India. Ten percent of Sub-Saharan exports are now to China and some 3 percent are to India. China has overtaken Japan as the leading importer of African products in Asia. The growth in African exports to China and India in the last few years is largely driven by unmet domestic demand for natural resources, reflecting growing industries as well as increasing consumption by households.

Broadman's (2007) study also reports that Asian exports to Africa are increasing. Over the last five years, they have grown at an 18 percent annual rate, higher than that of any other region, including the EU. Asia's exports to Africa are reported to be largely manufactured goods. Some goods are intermediate inputs for products assembled in Africa and shipped out to third markets, such as the EU and United States and others are capital goods (machinery and equipment) for African manufacturing sectors themselves. At the same time, the study reports significant imports of consumer non-durables from Asia (which compete against Africa's domestic products).

Finally, Broadman (2007) reports that while African-Asian FDI flows are growing rapidly, the volume of such flows is modest compared to trade. While there is some African FDI in China and India, this investment is "dominated by the flows of Chinese and Indian FDI in Africa. As of mid-2006, the stock of China's FDI to Africa is estimated to be \$1.18 billion. The vast majority of Chinese and Indian FDI inflows to Africa over the past decade have been largely concentrated in the extractive industries. Because such investments are typically capital intensive, they have engendered limited domestic employment creation. However, in the last few years, Chinese and Indian FDI in Africa has begun to diversify into many other sectors, including apparel, agro-processing, power generation, road construction, tourism, and telecommunications, among others. Chinese and Indian FDI in Africa has also become more diversified geographically."

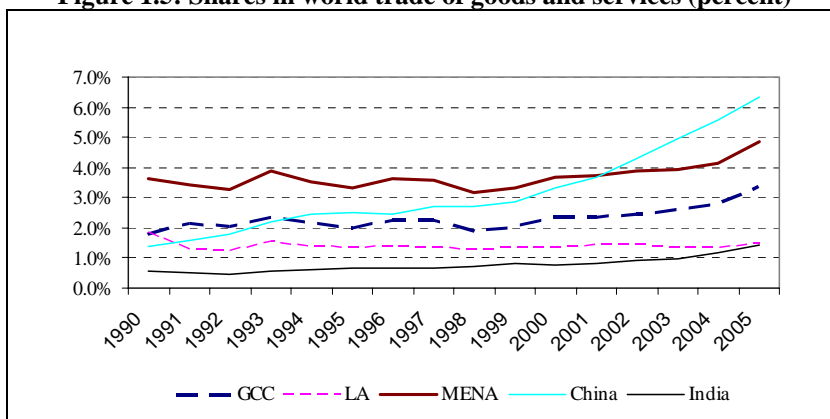
Using statistical analysis at the country level, Broadman (2007) finds that “in both Africa and Asia, there are strong complementary relationships between FDI and trade; in particular, a greater inward stock of FDI is associated with higher exports. For the African countries taken together as a group, these country-level complementarities are more muted than they are for the Asian countries. However, among nonoil-exporting African countries, the complementary effects are actually larger than they are for the Asian countries. Similar results are obtained from a comparison of FDI per GDP and exports per GDP among African countries.”

Overall, Broadman’s (2007) analysis suggests that China and India’s growth has provided significant opportunities for Africa, but notes that heterogeneity of country characteristics within Africa implies that the challenges and opportunities offered by India and China might vary equally and substantially within Africa.

ARE EXPORTS FROM CHINA AND INDIA DISPLACING MENA EXPORTS IN THIRD MARKETS?

1.16 The MENA region increased its share in world trade by 1 percentage point between 2000 and 2005, less than China but more than India. At a first glance there is thus no indication for MENA countries to worry about a growing presence of the Asian countries in third markets. A closer look, however, reveals considerable heterogeneity in the outcomes of the oil-rich GCC countries and of labor-abundant MENA countries. Only the GCC countries gained market shares, mostly because of higher energy exports. By contrast, the labor-abundant countries lost shares (see chapter 2). The bulk of China and India’s exports are manufactured products, which compete with exports from the Maghreb. So, have MENA’s non-oil exports been displaced in third markets as a result of China’s and India’s growing presence?

Figure 1.5: Shares in world trade of goods and services (percent)



Source: World Bank, World Development Indicators and staff calculations based on $index = (X_{mena} + M_{mena}) / (X_w + M_w)$.

Chinese and Indian exports have displaced some of MENA’s non-oil exports

1.17 The question is investigated econometrically,³ using a regression specification that explains the export growth of MENA countries in world markets in terms of either China’s or India’s exports as well as import growth to the same markets. Only non-fuel products are included in the analysis and we distinguish between industrial products (steel, textile, apparels, electronics) and nonindustrial products (agricultural products, minerals, raw materials). The exercise is essentially a test of whether China and India are affecting MENA’s exports to a greater extent than exports than other countries, controlling for the overall exporter supply growth. Table A1.6 in Annex I reports the results from the regression analysis.

³ We follow Freund and Ozden (2006) and estimate the following regression equation:

$$dexports_{ijkt} = \alpha_{it} + \beta_0 dimports_{jkt} + \beta_1 dchina_{jkt} + \beta_2 dindia_{jikj} + \varepsilon_{ijkt}$$

where $dchina_{jkt}$ is growth of China (India) in country j in sector k . The advantage of this specification is that we are exploiting both cross-section and time series variation to estimate how MENA countries are affected by China and India. The growth of China’s (India’s) exports is weighted by the country’s lagged market share in that sector and market. The intuition is that China’s (India’s) export growth will matter only if the country is a significant supplier. If China and India have roughly the same effect on all exporting countries, the coefficient yielded from the regression on imports will be close to one and the coefficient on China and India will be zero. A negative coefficient on China or India indicates that Chinese or Indian export growth is correlated with a decline in MENA export growth in a given industry. We estimate this equation using data from 1985 to 2005 with the 4 digit classification excluding fuels but keeping other crude materials. The reason for excluding fuels is that we want to focus on how non-oil exports of both GCC countries and labor-abundant countries are affected.

The coefficient for MENA countries is lower than one (around 0.4), confirming that export growth has been slower than that of the world without China and India. The negative coefficients on China and India exports suggest that on average MENA's export growth is low when Chinese and Indian exports are large and growing. The results also suggest that Chinese exports are displacing MENA exports more than Indian exports are. Industrial products such as textile and apparels are more affected by China's export growth than are nonindustrial products like crude materials, particularly in 2000–05 (figure 1.6). India's market presence affects MENA's exports of crude material but not of agricultural products. India also affects MENA's manufacturing exports, but less than China does, and only in the unskilled labor-intensive and high technology-intensive industries. Medium technology-intensive exports are little affected.

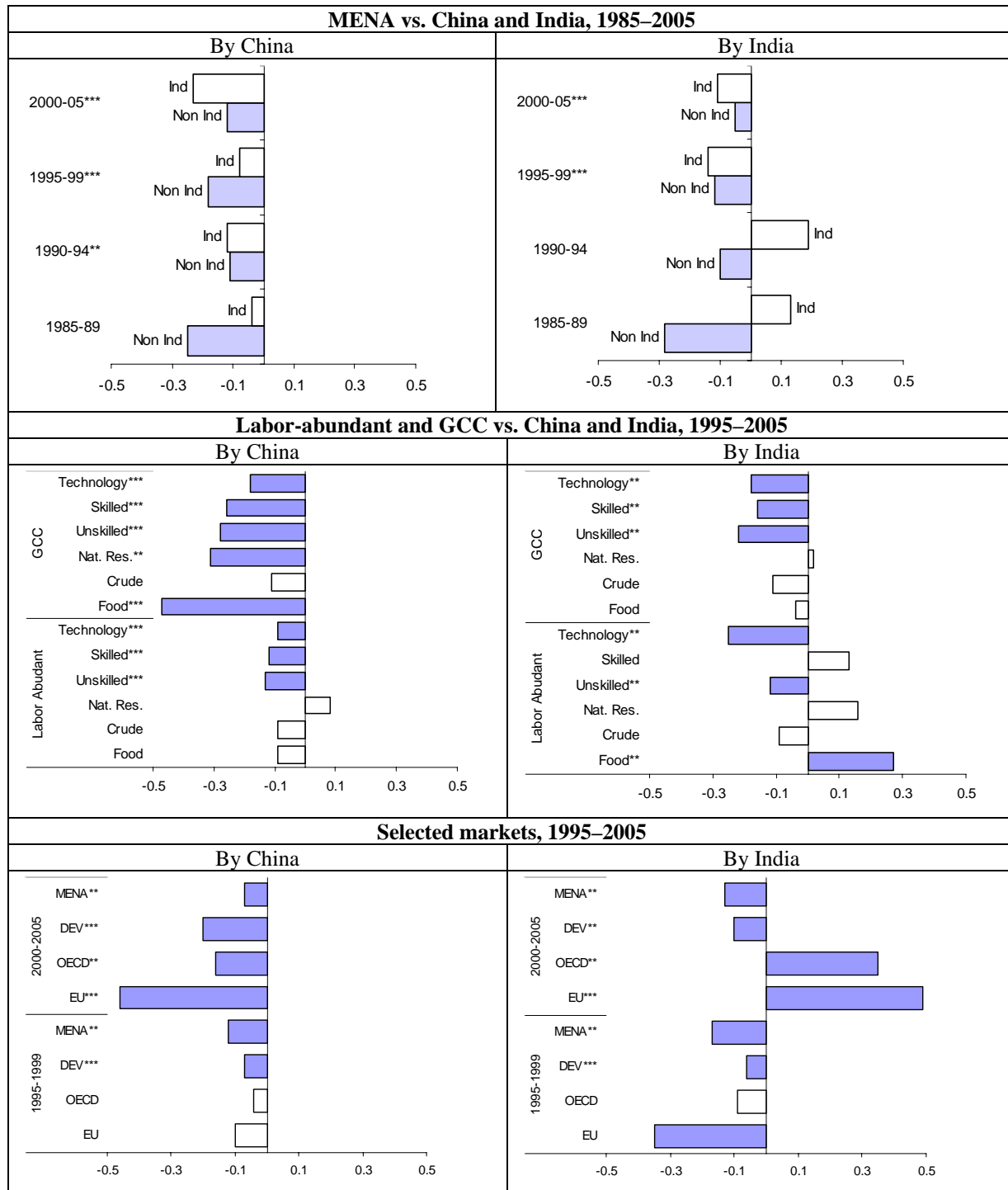
The China effect is much stronger than the India effect

1.18 China had a displacing effect throughout the period of analysis, 1985–2005, for both the GCC and the labor-abundant countries. India became a strong competitor only after 1995. And in the last five years competition from India has been declining but becoming fiercer from China. China's export growth has hurt MENA's exports since the early 1980s, but the effect became stronger in the 1990s. The China effect appears to be solely responsible for the negative impact on MENA's export growth in nonindustrial products because India's effect diminished over the time.

Labor-abundant countries were better able to withstand competition than GCC countries overall

1.19 Exports from labor-abundant MENA countries may have been hurt less than those from GCC countries, likely because they have a stronger comparative advantage in products competing with China and India. Moreover, a number of MENA countries enjoyed preferential market access to their major markets, the EU, and the US. By contrast, exports from GCC countries that competed with China and India appear to have been deeply affected, with some vanishing. However, given the limited and declining importance of the industrial sector in the GCC economies relative to the oil sector, the overall impact on employment and welfare may have been relatively small.

Figure 1.6: Displacing MENA exports



Note:

a. On the horizontal axis, the figures show the regression coefficient. If the coefficient is negative, MENA export growth is low when Chinese/Indian export growth is large and growing. A coefficient of -0.5 implies that for a product with a Chinese/Indian market share of 10 percent and Chinese/Indian export growth of 20 percent, the export growth in MENA would be reduced by $(0.5 \times 0.1 \times 20) = 1$ percentage point.

b. (Ind: Industrial; Non Ind: Non Industrial; DEV: Developing countries, Skilled: Skilled labor intensive; Unskilled: Unskilled labor intensive; Nat. Res.: Natural Resources intensive; Crude: Crude materials; Food: Food products)

*Significant at 10 percent; ** Significant at 5 percent; *** Significant at 1 percent.

Source: Staff calculations based on UN Comtrade.

MENA is retreating from competition with China and India

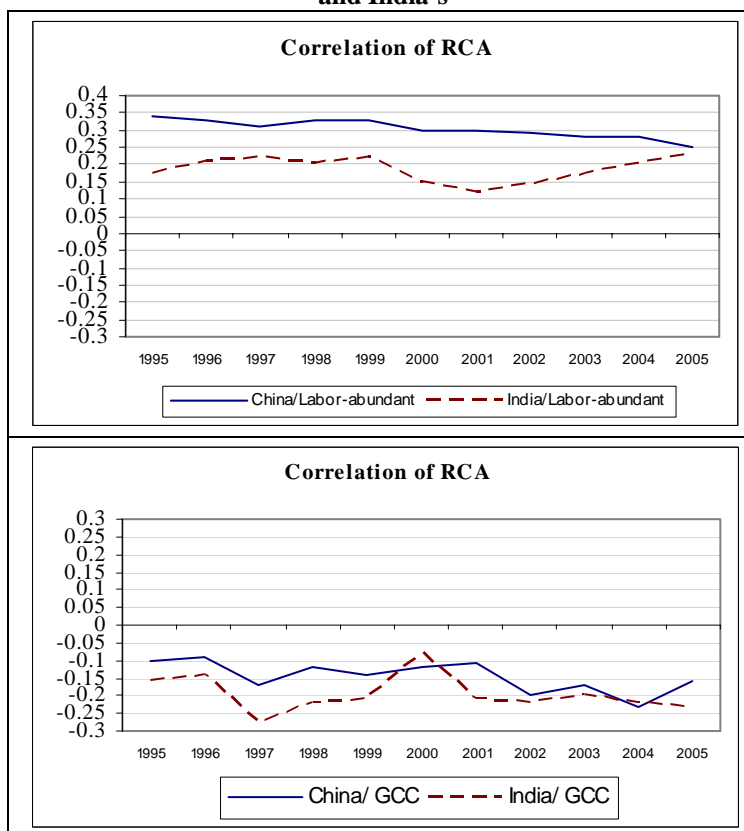
1.20 The emergence of China and India has altered in significant ways production location decisions in the international economy. Technological progress in these economies combined with the large availability of low wage labor has made them an attractive location in which to undertake production. This raises important questions for MENA countries concerning the pattern of specialization and trade in these economies. Did MENA countries shift their trade specialization because of competition from China and India? The answer to this question is important. Changes in specialization patterns will indicate how policies may accommodate or leverage these changes with policy instruments, such as education, technical training, innovation policies, and perhaps trade-adjustment assistance programs for workers.

1.21 To compare how China and India's growing presence in world markets may be affecting the specialization pattern of MENA economies, we follow closely the analysis of Lederman, Olarreaga, and Rubiano (2006) and proceed as follows. We construct an index of revealed comparative advantage (RCA) at the global level that accounts for exports, but also imports, as well as the relative size of world markets to capture the overall competitiveness of each country by sector. The RCAs are normalized by country/year mean to allow comparisons (Vollrath 2001). A positive RCA index indicates that a country's net export share of a particular product within its export portfolio is larger than the global share of the same product in world exports. In other words, if a country has a positive RCA index for a specific product, it exports more of the product relative to other countries on average but also relative to its own export portfolio.

1.22 The analysis is conducted at the sectoral level for both GCC and labor-abundant countries (contrary to the analysis in the previous section), fuel exports are included. The distinction between oil (and more generally the natural resource) sector and other sector is clearly made, country by country. A comparison of RCA measures for MENA with those for China and India will permit inferences concerning the (dis-)similarity of comparative advantage patterns across these countries at a given point in time. The correlation between MENA's RCA on the one hand, and Chinese and Indian RCAs on the other hand will provide an idea of the extent to which MENA is competing in the same markets as China and India, as well as whether Chinese and Indian markets represent opportunities for MENA exports.

1.23 The evolution of the correlation between Chinese and Indian RCAs for the labor-abundant countries between 1995–2005 is shown in figure 1.7. Labor-abundant countries have a stronger specialization pattern with China, but the correlation has decreased, especially in recent years. Interestingly, the correlation with India's RCAs has increased, suggesting that India is specializing, to a modest extent, in the same products of the labor-

Figure 1.7: Correlation of MENA's RCA indexes with China's and India's



Source: UN Comtrade, Revision 2, 3 digits

abundant countries. By contrast, there has traditionally been negative correlation between exports of China and India with the exports of Gulf countries indicating a strong complementarity. If anything, this trend has intensified in recent years, probably due to the disappearance of exports similar to those from China and India as discussed in the previous section.

1.24 Following Lederman, Olarreaga, and Rubiano (2006), we then analyze whether labor-abundant and GCC countries' specialization patterns with China and India exhibit substitutability or complementarity (table A1.7 in Annex I). In the case of China, there is some substitutability—and therefore competition—for skilled-labor and technology-intensive products in both labor-abundant and GCC countries. In the case of India there appears to be substitutability in both skilled- and unskilled-labor products, suggesting that together, the two Asian countries are putting pressure on both skilled and unskilled labor. Strong complementarities are observed only in the case of primary goods.⁴

THE GROWING PRESENCE OF CHINA AND INDIA IN MENA MARKETS

1.25 MENA countries have partially opened their markets to products from China and India. And in some countries these products have gained popularity and increased the perception that they have taken over markets previously dominated by local suppliers. Domestic competition with China and India was highlighted as one of the major challenges of trade integration during a regional conference in Tunisia in 2007. Fears that local producers and industries might be hurt are rising. But how serious is the threat? In absence of firm-level data and industry data beyond 2004, we rely on international trade data to have an insight on import-competing sectors. The results should therefore be treated with caution as they are merely suggestive rather than conclusive.

Labor-intensive industries are most exposed to competition

1.26 Comparing MENA imports from China and India that exhibit a higher than average import growth with the same products exported by MENA helps identify industries potentially in competition with China and India on the domestic market (table 1.3).⁵ For example, both the GCC and the labor-abundant countries specialize in food products (24 and 15 products show positive RCAs). However, food imports from the Asian countries have grown at a rate that is higher than average in 20 products of the labor-abundant countries and 11 of the GCC. Thus, it is likely that the food sector is under strong competition from China and India. More generally:

⁴ The empirical methodology is straightforward. We explain the RCAs of MENA with the RCAs of China and India, as well as the bilateral exports of each MENA economy with China and India, controlling for country-year effects. This empirical model can be written as:

$$RCA_{c \in MENA, s, t} = \beta_0 + \beta_{c \in MENA, t} + \alpha_1 RCA_{China, s, t} + \alpha_2 RCA_{India, s, t} + \alpha_3 XN_{China, s, t} + \alpha_4 XN_{India, s, t} + \varepsilon_{c \in MENA, s, t}$$

where is the RCA of country c (belonging to our 15 MENA countries) in sector s , at time t , XN are net bilateral exports of each MENA economy to either China or India depending on the variable, and ε is an error term where we allow for clustering of the error term within each industry every year. We estimated these models for the pooled sample of 15 MENA countries, but also for the 2 country groups (labor-abundant and GCC). All estimations include country effect and year effects. We estimate this equation using data from 1985 to 2005 on the 3 digit classification. The advantage of this specification is that we are exploiting both cross-section and time-series variation in order to estimate how MENA specialization is affected by China and India. A positive coefficient on the RCA of China or India would indicate that MENA's specialization pattern is similar to the one observed in China and India, whereas a negative coefficient would indicate that the specialization pattern of MENA is complementary to the specialization pattern of China and India. A positive coefficient on the bilateral net export variable would indicate that exports to China or India are concentrated in sectors where MENA's comparative advantage lies, and that at least through this direct channel the growth of China and India is shaping the specialization of MENA economies.

⁵ Notice that here the implicit assumption is that the exported products are or could be sold domestically. Tables A1.11 and A1.12 in Annex I show a number of products (at SITC 3 level) for labor-abundant and GCC countries with the following characteristics: they are all exported and they have positive RCAs; their product categories are also those that have registered an average annual import growth from China and India that is higher than those imported from the rest of the world between 2000–05.

- In labor-abundant countries the manufacturing sector does indeed face competition, significantly so in food, resource intensive and unskilled labor sectors, including textiles, leather, or furniture. Skilled-labor and technology-intensive manufacturing are less affected, but they also play a smaller role in domestic production. At a higher disaggregated level (5-digit SITC), 798 manufactured products face competition from China and India on the domestic market, so about 94 percent of total manufacturing is potentially at risk.
- In GCC countries, Chinese and Indian products appear to be more complementary. Competition seems to be more prevalent in industries GCC countries succeed in internationally. For others, competition is more moderate. Again, manufacturing industries are generally less important for GCC countries.

Table 1.3: Competition on MENA’s domestic markets

		Food	Crude materials	Natural resources	Unskilled labor	Skilled labor	Technology
Labor-abundant countries	Total	35	28	17	25	41	63
	RCA<0	19	11	5	8	36	51
	Contested	15	11	4	8	33	51
	RCA>0	24	23	16	20	11	15
GCC	Contested	20	17	13	17	8	12
	Total	35	27	17	26	38	58
	RCA<0	28	12	10	18	34	46
	Contested	24	11	8	16	27	40
	RCA>0	15	22	11	10	13	20
	Contested	11	16	9	10	11	18

Source: Staff calculations based on UN Comtrade.

LOOKING EAST—IS MENA SEIZING OPPORTUNITIES IN TRADE WITH INDIA AND CHINA?

Opportunities for exports to China and India have not been fully exploited

1.27 MENA countries export a wide range of products to the two Asian countries (table A1.5 in Annex I). Are they seizing all existing export opportunities? The issue will be further investigated in Chapter 2. As a first assessment, we review the RCAs of MENA exports and filter out those products with a positive RCA, for which average growth in exports to China and India was lower than the average growth rate of Chinese and Indian imports of the same products from other countries. The idea is to find MENA products of demand in India and China which are not being exported in sufficient quantities despite the fact that they grew strongly in other markets (table 1.4). The analysis, performed at the 3 digit level, yields the following results:

- In labor-abundant countries 20 of the 109 product categories with positive RCAs have relatively weak growth and underperformed in the China market. These 20 product categories include fertilizers, vegetables, and confections (chocolates). For India 31 of 109 product categories show lackluster growth, among them wood, aluminum, chemicals, and yarns.
- For GCC countries, India and China do not present many opportunities in product categories other than crude materials. Here, however, there still seems to be room for more exports, especially in chemicals, paper, skins and stone, sand, and gravel.⁶

⁶ See tables A1.13 and A1.14 in Annex I.

Table 1.4: MENA exports that underperformed in China and India

		Food	Crude materials	Natural resources	Unskilled labor	Skilled labor	Technology
Labor-abundant	RCA>0	24	23	16	20	11	15
	Under perform in China	7	4	5	1	0	3
	Under perform in India	4	5	5	11	2	4
GCC	RCA>0	15	22	11	10	13	20
	Under perform in China	1	12	5	1	2	2
	Under perform in India	6	7	2	1	2	5

Source: Staff calculations based on UN Comtrade.

CONCLUSIONS

1.28 The rise of China and India has sustained high global demand and prices for such primary commodities as oil, gas, and minerals, presenting huge opportunities for MENA countries—but also significant threats for non-oil exports in both domestic and third markets. Natural resource booms tend to increase national income in resource-rich countries but hurt the competitiveness of their industrial sectors. Indeed, in some resource-rich MENA countries, there appears to be a further movement in favor of natural resources and an even more concentrated bundle of exports.

1.29 The competition with China and India may have displaced some non-oil exports on third markets. China appears to be a much bigger competitor than India, where non-oil exports largely complement MENA's. GCC countries have been more severely affected by competition with the Asian countries than labor-abundant MENA countries, in the few products that are exported. This could be because labor-abundant countries have privileged access to EU markets (and partially to the US markets). However, over the years we observe a shift in specialization with MENA's labor-abundant countries positioning away from China.

1.30 MENA's integration with China and India is increasing. This brings benefits to MENA countries such as higher revenues through more exports, more variety, higher consumer welfare through lower prices for consumption goods and greater competitiveness through lower input prices in manufacturing. But wider integration brings increasing competition for domestic producers, sometimes with job losses and bankruptcies if producers cannot withstand the competitive pressures. Competitive pressures did increase, especially for unskilled and resource-intensive manufacturing and food items in labor-abundant MENA countries. But it is not yet clear how this competition led to actual losses. The biggest gains in trade integration with China and India were realized through exports to both markets. Oil and gas exports increased massively in recent years. However, there is a significant and as yet unexploited potential for non-oil exports from labor-abundant countries.