

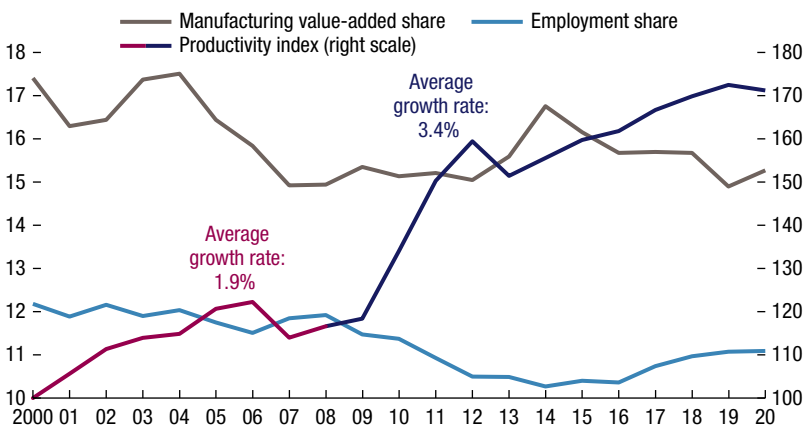
# Drivers of Manufacturing Employment in Morocco

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## INTRODUCTION

Morocco has seen the share of manufacturing in total output and employment decline since the turn of the millennium, together with a worsening in the manufacturing employment trend since the global financial crisis of 2008 (Figure 6.1). Morocco is not alone in experiencing these developments (Dasgupta and Singh 2006; Rodrik 2015). In advanced countries, many consider these trends “normal” given the low income-elasticity of manufacturing products. Moreover, if labor productivity advances more rapidly in manufacturing than in services, the manufacturing share of employment, as well as the relative price of manufactures, would be expected to decline (Baumol 1967; Rowthorn and Ramaswamy 1997).

**Figure 6.1. Manufacturing Indicators in Morocco, 2000–20**  
(Percent, right scale is productivity index 2000 = 100)



Source: High Commission for Planning.

However, in Morocco as in many other developing countries, the contraction of manufacturing raises the specter of “premature deindustrialization”—namely, the concern that manufacturing will not enable Morocco to climb the development ladder as had been the case of early industrializers (such as Great Britain and France over the course of the nineteenth century) and some more recent industrializers in East Asia. Morocco’s high rates of youth unemployment, and underemployment, especially of women, accentuate these concerns.

Against this background, this chapter aims to provide a better understanding of the causes of the recent decline in manufacturing employment in Morocco. The debate over deindustrialization in Morocco gained momentum following the global financial crisis because manufacturing employment had been increasing before (by 1.6 percent a year on average between 2000 and 2008), maintaining its share in total employment. Our analysis thus focuses especially on the comparison between the years before and after the global financial crisis.

We employ a simple accounting framework to show that most of the deceleration in manufacturing employment since the global financial crisis can be attributed to a lower final domestic demand for manufactures in Morocco, only partially offset by increasing intermediate demand. The acceleration of labor productivity in manufacturing also contributed to lower employment in the sector. By contrast, Morocco’s opening to international trade should not be seen as a major cause of lower manufacturing employment in recent years, because Morocco’s trade deficit in manufacturing products did not deteriorate after the global financial crisis.

Although manufacturing continues to be a vital part of the Moroccan economy, and opportunities clearly exist to expand it, Morocco will not be able to rely solely on manufacturing to “pull” labor out of agriculture. Instead, this will require a broad approach to the challenge of diversifying the sources of employment, drawing on opportunities across all sectors of the Moroccan economy.

## THE IMPORTANCE OF MANUFACTURING AS A SOURCE OF EMPLOYMENT AND GROWTH

Nicholas Kaldor was among the first to introduce three “growth laws” expressing the benefits of the manufacturing sector for the entire economy. First, the demand of manufactures tends to expand more rapidly than the demand for other goods. Second, manufacturing is a source of increased productivity within the sector, reflecting the potential for automation, learning, returns to scale, and so forth. Third, manufacturing raises overall productivity by absorbing unused or low-productivity resources from other sectors (Thirlwall 1983).

In the same vein, Dani Rodrik has argued that light labor-intensive manufacturing creates higher productivity jobs than agriculture and can be a crucial source of foreign exchange. He provides evidence that manufacturing productivity tends to catch up to international levels even when many of the other conditions required for broader economic development are barely met, and he

argues that the most successful countries have all relied on rapid industrialization (Rodrik 2015).<sup>1</sup>

Although recognizing that the arguments of Kaldor and Rodrik are broadly supported by available evidence, others have proposed a more nuanced view based on postwar period trends (Dadush 2015). Although all countries rely on manufacturing to some extent, and a few (such as South Korea) have achieved spectacular growth based partly on penetration of world manufacturing markets, many countries have enjoyed less rapid but respectable growth without relying mainly on manufacturing. Dadush (2015) showed that 39 economies (including Chile, Egypt, and Morocco) have been able to double their per capita income over the last 20–30 years and achieved large improvement in other development indicators without exhibiting a comparative advantage in manufactures or relying principally on manufacturing. India is a country that has been especially successful in developing a vibrant export sector mainly based on information technology services, even though manufacturing also played an important role in driving growth (Chakravarty and Mitra 2009).

In a recent review of global manufacturing employment trends, Ait Ali and Dadush (2019) observed that global manufacturing value added has grown rapidly since 2000, at least matching world gross domestic product (GDP) growth, reflecting mainly rising demand for manufactures especially in developing countries. However, manufacturing employment increased at only a slow pace, both before and after the global financial crisis. Manufacturing provided only about 10 percent of the new jobs needed to compensate for losses of jobs in agriculture and the growth of the active population. The vast majority of net job creation in manufacturing was in China, whereas most countries—both developing and developed—saw manufacturing employment fall as a share of total employment, and several, including nearly all advanced countries, saw an absolute decline (with services accounting for the greatest share of employment growth even in the rapid industrializers in East Asia).

Although policymakers must care deeply about the evolution of the manufacturing sector, they must also be realistic about the sector's potential to create jobs, given its relatively small size, its falling share of output relative to services in most countries, and the pressure to automate, which results in high labor productivity growth (Dadush 2015; IMF 2022). By the same token, many service sectors are increasingly capable not only of generating a large number of jobs but also of exhibiting some of the desirable features of manufactures. Manufactures exports contain a high share of imported and domestic services (Cezar and others 2017) and, when exports are measured in terms of value added, it turns out that cross-border exports of services are now larger than exports of manufactures (WTO 2019). An efficient service sector is an essential companion to a competitive manufacturing sector, and the value added of many firms classified as belonging to the manufacturing sectors consists mainly of intangible activities that are, in fact, services.

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<sup>1</sup> Rodrik's most recent positions are more nuanced. He calls for more broader "industrial policy" that aims to foster all sectors of the economy. He considered that "employment de-industrialization is virtually inevitable in middle-income and advanced economies alike" (Aiginger and Rodrik 2020).

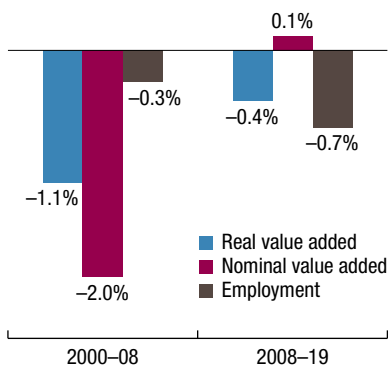
## A FEW STYLIZED FACTS ON THE EVOLUTION OF MANUFACTURING IN MOROCCO

Expressed in current prices, the contribution of Morocco's manufacturing sector to overall value added fell between 2000 and 2009 but has since reversed slightly (Figure 6.2). Expressed in constant prices, the decline continued, although at a slower pace. The relative price of manufactures increased after the global financial crisis, possibly reflecting a shift toward higher value added and capital-intensive manufacturing sectors (such as automotive), in the context of increased trade liberalization and export orientation of Morocco's manufacturing sector.

The decline of the manufacturing share of value added (from 16.3 percent in 2000 to 13.8 percent in 2020) is in line with the trend observed across lower-middle-income countries and is less sharp than that observed in high-income countries (Figure 6.3). By contrast, upper-middle-income countries, which include China and several Asian developing nations, saw their manufacturing share stable at relatively high levels (around 22 percent on average), whereas low-income countries experienced the greatest increase although remaining at relatively low levels (around 10 percent in 2020 from 8 percent in 2000, on average).

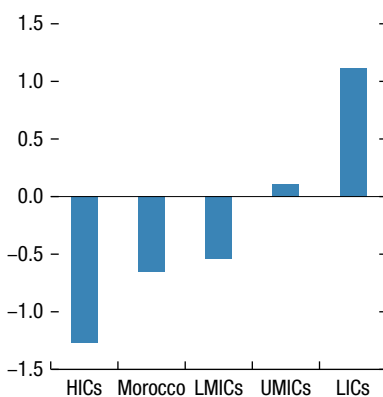
Meanwhile, employment in Morocco's manufacturing sector, which is the focus of this chapter, declined from 12.2 percent to 11 percent of total employment over the 2000–19 period, with an especially sharp decline between 2008 and 2019 (Figure 6.4). Employment in manufacturing as a share of total

**Figure 6.2. Change in Manufacturing Share in Total Value Added and Employment in Morocco**  
(Percentage point)



Source: High Commission for Planning.

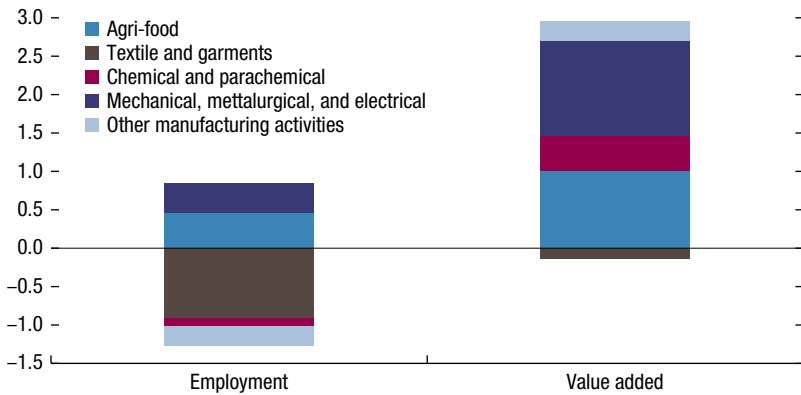
**Figure 6.3. Change in Manufacturing Value-Added Share in GDP, 2000–20**  
(Percentage point)



Source: United Nations Conference on Trade and Development.

Note: HICs = high-income countries; LICs = low-income countries; LMICs = lower-middle-income countries; UMICs = upper-middle-income countries.

**Figure 6.4. Real Value Added and Employment Growth Contribution per Sector in Manufacturing, 2007–18**  
(Percent)



Source: High Commission for Planning.

employment fell by more in the second period than the first, despite the sector's improved relative performance, reflecting increased labor productivity.

This was partly due to a change in mix from labor-intensive manufactures (such as textiles and garments) to capital-intensive manufactures (such as the mechanical sector). Output in the textile and garments sector shrank by over 15 percent in 2009 and never recovered. Meanwhile, the mechanical industry, notably the automotive industry, grew on average by 5 percent a year between 2008 and 2018, above the 3.3 percent average of manufacturing as a whole. The rise of the mechanical, metallurgical, and electrical sectors, and especially the automotive industry, was facilitated by various forms of government support to foreign investment in the sector. Conversely, the textile and garments industry suffered from the end of the quotas set by the European Union on Asian textile exports, especially from China, as the multifiber agreement was phased out.

Labor productivity gains in the manufacturing sector accelerated from 1.9 percent to 3.4 percent per year, with particularly strong growth up to 2015. A 2016 study by the High Commission for Planning estimated that the employment elasticity has been near zero for the industry sector, compared to 0.86 for construction and 0.7 for retail trade.

## WHAT CAUSED THE DECLINE IN MANUFACTURING EMPLOYMENT?

In this chapter, we look at the role played by demand, trade, and productivity factors in explaining the change in employment in Morocco before and after the global financial crisis. Several studies have focused on the role of manufacturing in economic growth and job creation. Gregory, Zissimos, and Greenhalgh (2001) used a multisectoral model to assess how trade patterns, technological

change, and the growth of final demand contributed to the evolving skill structure of employment in the UK. Kletzer (2002) and Tuhin (2015) used an econometric model of labor demand to estimate the relationship among employment changes, trade flows (imports and exports), and domestic demand. Dieppe (2021) used a SVAR (structural vector auto-regression) approach to estimate the impact of technology-driven productivity changes and demand shocks on employment.<sup>2</sup>

In this chapter we propose a simple accounting framework based on Bivens (2004). The analysis is based on two simplifying assumptions: (1) current production equals current demand, and (2) higher demand leads proportionally to an increase in the number of employees, not just the number of hours. We extended the approach to split the domestic demand factor into intermediate and final demand while considering the role of productivity.

We start from two identities. The first is the relation among employment, value added, and productivity:

$$\Delta L_m \equiv \Delta VA_m - \Delta P_m \quad (6.1)$$

where  $VA_m$ ,  $L_m$ , and  $P_m$  denote value added, labor, and productivity in the manufacturing sector, respectively. The second equation is derived from the equality of total resources (value added, sale of intermediate goods to other sectors, and imports) and total uses (final domestic demand, purchases of intermediate goods from other sectors, and exports) in the manufacturing sector as defined in supply and use tables. In this equation, the manufacturing value added is represented in terms of the other resources and uses variables:

$$VA_m \equiv DFD_m + NID_m + (X_m - M_m) \quad (6.2)$$

where  $M_m$ ,  $DFD_m$ ,  $X_m$ , and  $NID_m$  denote imports, final domestic demand, exports, and net intermediate demand of manufacturing goods, respectively. The left-hand side of this identity denotes total supply of manufacturing products that are either produced domestically or imported. The right-hand side captures uses of manufacturing goods, absorbed by domestic demand and exports. The net intermediate demand term reflects the sale of intermediate goods to other sectors, less the purchases of such goods from other sectors.

By substituting equation (6.2) into equation (6.1), we obtain:

$$\Delta L_m \equiv \Delta(DFD_m + (X_m - M_m) + NID_m) - \Delta P_m \quad (6.3)$$

The manufacturing employment change is accounted for by the changes in final domestic demand, net trade balance, net intermediate demand, and productivity. This equation is a purely descriptive identity—that is, it is always true and does not imply causality in any direction. It is nevertheless useful in quantifying the main factors associated with changes in manufacturing employment.

<sup>2</sup> Their model includes the log level of labor productivity, the log of employment per capita, consumption as a share of GDP, investment as a share of GDP, consumer price inflation, and monetary policy interest rates.

This exercise is intended to identify the factors that have contributed most to the changes in manufacturing employment. Intuitively, employment in the manufacturing sector is positively correlated to domestic and foreign demand, but it is negatively correlated to productivity and imports.

- *Domestic demand.* A rise in domestic demand (final and intermediate) for manufacturing products would boost manufacturing employment unless satisfied by more imports; hence, the magnitude of the impact depends on the size of the domestic market relative to imports.
- *Productivity.* Although higher productivity could be associated with lower employment, because fewer workers are required to produce the same amount of output, the ultimate effect depends on technological changes, the prices of competing goods and services, and the price elasticity of demand (Nordhaus 2005). Higher productivity could lead to lower costs and prices of manufacturing goods and thus a higher demand, which could in return enhance employment. Dieppe (2021) found that in emerging market and developing economies as well as in advanced economies, employment falls after technology-driven productivity improvements.
- *Trade.* The impact of international trade on manufacturing employment is also ambiguous because it ultimately depends on whether domestic firms are able to face international competition (Abraham and Brock 2003; Kletzer 2002). If import competition were to cause a decline in manufacturing employment, the labor displaced could be eventually reabsorbed in non-manufacturing sectors, although there is no clear evidence that this has happened. For instance, Menezes-Filho and Muendler (2011) found that labor displaced by trade liberalization in Brazil since 1990 was not fully absorbed by firms with comparative advantage. At any rate, the dynamics between trade and employment are likely to change over time: although trade may reduce employment and/or entail a reallocation of labor within sectors in the short term, over the long term, growth in international trade could boost economic growth, increase wages, and spur employment (Hoekman and Winters 2005; Newfarmer and Sztajerowska 2012). Opening to trade would increase developed countries' demand for unskilled labor-intensive goods and developing countries' demand for skilled labor-intensive goods (Ghose 2000; Kletzer 2002; Revenga 1992). Still, opening to trade has produced concerns in both directions, with developed countries fearing that jobs would be exported to low-wage countries, and developing countries concerned about their lack of competitiveness in relation to countries producing high-technology goods (McMillan and Verduzco 2011).

To quantify the terms in equation (6.3), we use the supply and use tables for Morocco, available annually since 1998. This quantification poses four issues. First, uses are expressed in purchasing prices (that include margins and taxes), whereas total supply is available in basic prices. To express uses in basic prices as well, we allocate margins and indirect taxes across users (sectors) based on their relative shares of total uses (Guilhoto and Sesso Filho 2005). The underlying assumption is that margin coefficients and tax rates on products are the same for all users.

The second issue relates to converting all variables into constant prices. To do so, we have used the consumer price index (CPI) for domestic final demand and the PPI (production prices index) for intermediate consumption. For exports and imports, we used import and export price indexes provided by the Morocco Ministry of Finance (Bettah and Zniber 2019). Doing so yields a small difference between uses and supply (0.7 percent on average per year), which has been reallocated across each component of total uses, based on their weight.

The third issue is that some manufacturing products (less than 3 percent) are produced in the non-manufacturing sector (for example, processed food products originated in the agricultural sector). Similarly, a few products from firms in the manufacturing sector are not classified as manufacturing goods. We included all manufacturing products in the analysis, whatever their source, and excluded non-manufacturing output.

The fourth issue concerns the base year. The available supply and use tables have two different base years (1998 and 2007); hence, the growth rates of manufacturing uses and supply will be overestimated. The High Commission for Planning has a time series of national accounts from 1998 to 2021, with value added by sector adjusted for the change of base years. We thus “adjust” the manufacturing value added from the supply and use tables in 2007 and 2008 (when the base year changes) by applying the growth rates from the valued added series in High Commission for Planning national accounts. The ratio between this adjusted manufacturing value added and the original value added from supply and use tables is applied to all other variables of equation (6.3).

The results of our accounting exercise, reported in Table 6.1, confirm that 2008 represents a turning point for Morocco’s manufacturing sector because the following period coincides with structural changes that have profoundly altered the employment structure and prospects of the sector. In particular

- *Before the global financial crisis, job creation in the manufacturing sector reflected the rapid growth of domestic demand, only partially offset by a higher trade deficit.* Domestic demand for manufacturing goods (final and intermediate) grew at 4.4 percent per year in real terms between 2000 and 2008 and was the sole contributor to the growth of employment in the manufacturing sector. This was a period of rapid economic growth in Morocco, supported by expansive monetary and fiscal policies. The increased openness of the Moroccan economy (that coincided with lower tariff rates as the EU–Morocco Free Trade Area provisions were implemented) coupled with a stable real exchange rate

**TABLE 6.1.**

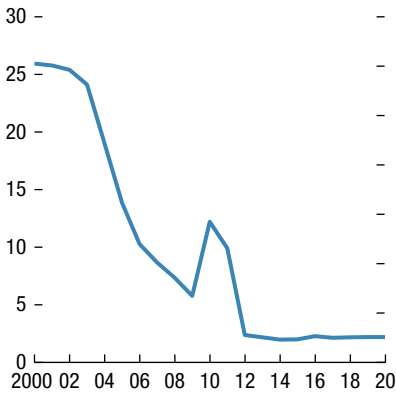
**Contribution to Manufacturing Employment Change**  
(Percentage points, unless otherwise specified)

Periods	Domestic	Net Intermediate	Net International	Productivity	Average Employment Growth
	Final Demand	Demand	Trade		Rate (percent)
2000–08	11.3	−0.9	−8.3	−2.0	2.0
2008–19	4.6	1.5	−3.0	−3.5	−0.8

Sources: High Commission for Planning data; and authors’ calculations.

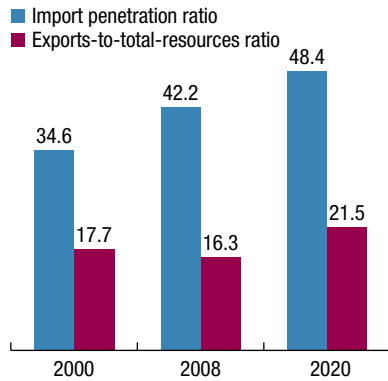


**Figure 6.5. Effectively Applied Tariffs over Morocco's Manufacturing Imports, 2000–20**  
(Percent)



Source: United Nations Conference on Trade and Development.

**Figure 6.6. Manufacturing Imports Penetration and Exports to Total Resources Ratios, Constant Prices**  
(Percent)



Source: High Commission for Planning.

facilitated the penetration of foreign products and widened the manufacturing trade deficit. Effectively applied tariffs on manufactured goods declined from 25.9 percent in 2000 to 7.4 percent in 2008 (Figure 6.5); import penetration increased from 34.8 percent of total domestic demand in 2000 to 42.2 percent in 2008 (Figure 6.6); and the ratio of exports to total resources dropped by 1.5 percentage point. When the contribution to employment was negative, international trade did not prevent a strong expansion of the domestic production of manufacturing goods.<sup>3</sup> Labor productivity increased at a moderate rate and offered a moderately small contribution to the change in manufacturing employment in this period.

- *After the global financial crisis, subdued growth of domestic demand and accelerating labor productivity gains are the main drivers of the decline in manufacturing employment.* Although economic growth in Morocco held up well during 2008–09, the country did not escape the global demand slowdown and was eventually forced to tighten fiscal policy to maintain both internal and external balances. The trade deficit continued to be a drag on employment growth in manufacturing, although far less than before the global financial crisis. Labor productivity growth surged to nearly 4 percent per year until 2015 but has since

<sup>3</sup> The largest deterioration in the trade deficit was with the European Union, Morocco's largest trading partner, and China (see Annex Table 6.1.1), and this reflected increased imports of machinery, especially transport equipment. By contrast, Morocco's trade balance in manufactures improved compared with Brazil and many African and Asian economies, most often because of increased exports of fertilizers. Although many countries saw a similar trend, the deterioration in Morocco's trade deficit was among the largest relative to the size of its economy (see Annex Table 6.1.2).

TABLE 6.2.

Destination of Foreign Direct Investments by Sector (Percent)	2010	2019
Non-automotive manufacturing industries	11.7	17.8
Automobile industry	1.9	19.0
Accommodation and catering	11.4	6.9
Financial and insurance activities	16.9	11.1
Real estate activities	20.7	20.5
Other services	33.1	16.5
Other activities	4.3	8.2

Source: Office des changes.

moderated. Reflecting the insertion in global value chains and increased importance of the mechanical sector, especially automotive, manufacturing became more integrated with the rest of the Moroccan economy, moving upstream of the value chain and increasing its role as a provider of intermediate inputs.

These results suggest that contrary to the prevailing perception, trade has played a lesser role in accounting for job losses in Morocco's manufacturing sector in recent years. Import penetration increased only slightly in the years after the global financial crisis, whereas the export ratio increased.<sup>4</sup> The free trade agreement with Turkey, which entered into force in 2006, led to increased imports from Turkey but had little effect on Moroccan exports. In contrast, the trade balance in manufactures with Europe and North America improved, mainly due to exports of automobiles and fertilizers.

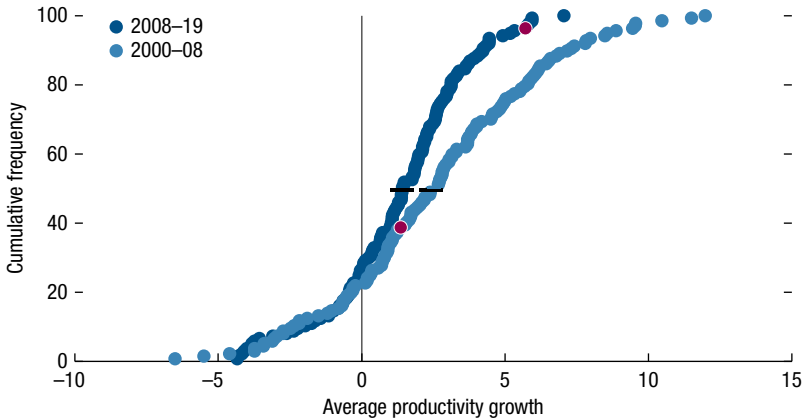
The acceleration of labor productivity since the global financial crisis, which has come hand in hand with the steadily increasing openness of the Moroccan economy, helps explain the manufacturing sector's job-poor growth. This process frequently involves pressure to automate and hire more skilled labor and, as firms serve an international clientele that demands high and predictable quality, on-time delivery, and so forth, they are forced to modernize. At the same time, the attractiveness of the Moroccan economy to manufacturing companies appears to have increased in the last decade, as the inflow of foreign direct investments to manufacturing has grown and outstripped that directed at tourism and real estate. Between 2010 and 2019, the share of the manufacturing sector in total foreign direct investments reached 36.8 percent, driven mainly by the automobile sector (Table 6.2).

The improvement in manufacturing productivity in Morocco is also striking in international comparison. Indeed, in the first period (2000–08), Morocco's manufacturing productivity growth was below the median in a sample of 137 countries. In the second period (2008–19), however, Morocco's productivity was above 97 percent of economies (Figure 6.7).

To assess the extent to which reallocation within the manufacturing sector has contributed to productivity growth, we distinguish between "within" sector

<sup>4</sup> The average applied tariff in manufactures continued to drop, reaching 2.2 percent in 2020, whereas the manufacturing trade deficit with China continued to increase, especially in road vehicles, machinery, and garments and textiles (Table 6.1).

**Figure 6.7. Productivity Growth Distribution across the World**  
(Percent)

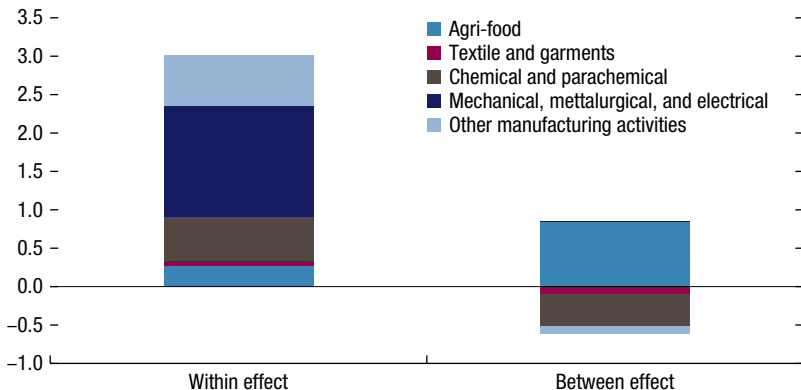


Sources: International Labour Organization, World Economic and Social Outlook database; United Nations Conference on Trade and Development; and United Nations Statistics Division.

Note: The black lines and red dots represent the medians and Morocco, respectively. Initially, the sample included 166 countries. A box-and-whisker plot was used to exclude the outliers within the sample. An outlier is identified as being larger than the third quartile by at least 1.5 times the interquartile range (third quarter to first quarter) or smaller than first quartile by at least 1.5 times the interquartile range.

productivity improvement and that due to moving from low to high productivity sectors, or “between” sectors (McMillan and Rodrik 2011). Most of the “within” productivity increase is explained by improvements in the mechanical, metallurgical, and electrical sectors, followed by chemical industry. The reallocation of labor from textiles and garments and toward the agri-food sector is mainly behind the “between” component of the productivity increase (Figure 6.8).

**Figure 6.8. Decomposition of Productivity Growth in the Manufacturing Sector**  
(Percentage points)



Source: High Commission for Planning.

## CONCLUSION

This chapter analyzed the potential causes of the decline of manufacturing employment in Morocco. The findings are indicative rather than conclusive. For example, the chapter does not delve deeply into the underlying causes of the rapid labor productivity increase in manufacturing, which—even though it means fewer jobs in manufacturing—is an encouraging phenomenon. Nor does it analyze the deeper causes of the decline in Morocco's manufacturing trade balance after the process of trade liberalization. This process can be expected to have important growth-enhancing effects in the long term, especially in the context of continued reforms to improve the investment climate. Insofar as the higher trade deficit in manufactures is the mirror image of inflows of foreign direct investment destined to long-term investment in Morocco, it could represent a promising development. We leave these important questions to future research.

With these caveats in mind, the analysis suggests that Morocco is unlikely to be able to rely only on manufacturing to increase its job-creation capacity and reduce the share of its labor force still in the agricultural sector (about 35 percent of total employment). Demand for manufactures in Morocco is likely to continue to grow in coming years but only at a moderate pace, and there is no indication that labor productivity growth in manufacturing is about to slow sharply—nor would that be desirable.

Importantly, the chapter suggests that the trade deficit in manufacturing is often overstated as a cause of poor job creation in Morocco's manufacturing sector. But that also implies that even a sizable shift in the manufacturing trade balance is unlikely to materially change the prospect for employment growth in the foreseeable future (Lawrence 2020). Even if the COVID-19 pandemic has led to calls for a smaller reliance on foreign supply and more import-substitution policies, such policies are unlikely to change employment trends in Morocco on a sustained basis. The Moroccan economy is too small to support a competitive manufacturing sector mainly through domestic demand.

Relying on the manufacturing sector to expand employment also needs to confront challenging global trends (Ait Ali & Dadush 2019). Nearly all high-income countries saw jobs in manufacturing decline in absolute terms since the global financial crisis, whereas only a handful of middle-income countries have experienced substantial job creation in the manufacturing sector. Although trade is often seen as the culprit, sluggish job creation in manufacturing at the global level cannot be due to trade. Instead, large labor productivity gains are likely to be more of a factor.

That said, the importance of a vibrant manufacturing sector in Morocco remains evident. The analysis underscores the need for policies that enable the manufacturing sector to remain internationally competitive. Fostering competitiveness in the sector goes hand in hand with enabling automation and technology, which often means more sparing use of labor, especially unskilled labor.

The analysis also points to the centrality of policies that enhance the expansion of employment in services. In Morocco, traded and labor-intensive services such as tourism appear to be especially promising. Labor-intensive activities, such as

construction and retailing, that earn no foreign exchange, may not be at the top of any list of priority sectors, but they can be a very important part of a job-creation strategy that rests on multiple pillars. In this regard, Morocco is fortunate in being able to rely on diverse sources of foreign exchange, ranging from migrant remittances to tourism and phosphates. To provide more jobs, Moroccan policies should pay attention to those sectors that employ large numbers of people and where employment is expanding as a result of the ongoing structural transformation of the Moroccan economy. Such a strategy is not a substitute for, but is fully consistent with, continued efforts to enhance the competitiveness of Morocco's manufacturing sector.

## ANNEX 6.1.

ANNEX TABLE 6.1.1.

Morocco's Manufacturing Trade Balance per Economic Partner (Billions of US dollars, unless otherwise specified)								
Country	2000	2008	Change	Country	2008	2019	Change	
			between 2000 and 2008 (percent) <sup>1</sup>				between 2008 and 2019 (percent)	
Top 10 most-widening deficits	Italy	331	-1,911	17.3	China	-2,029	-4,120	41.4
	China	153	-2,029	16.9	Turkey	-873	-1,733	17.1
	France	621	-1,338	15.1	Portugal	-342	-829	9.7
	Spain	541	-1,104	12.7	Germany	-1,307	-1,604	5.9
	Germany	189	-1,307	11.6	Romania	-160	-439	5.5
	Turkey	7	-873	6.8	India	669	397	5.4
	Japan	108	-687	6.2	United Kingdom	70	-183	5.0
	United States	19	-621	4.9	Czech Republic	-84	-277	3.8
	Sweden	187	-375	4.3	Vietnam	-26	-191	3.3
	Korea	77	-453	4.1	Hungary	-70	-217	2.9
Top 10 most-increasing surpluses or most-shrinking deficits	Mexico	-11	34	1.6	Netherlands	-7	62	3.0
	Bangladesh	0	55	2.0	Ukraine	3	178	3.4
	Senegal	-10	49	2.1	Finland	41	-98	3.8
	Singapore	-41	38	2.8	Canada	187	-178	4.0
	Iran	-38	58	3.4	Sweden	41	45	5.3
	New Zealand	-27	83	3.9	United States	73	-109	6.7
	United Kingdom	-111	70	6.5	Japan	108	-249	9.4
	Pakistan	-3	426	15.4	Italy	331	-1,241	16.0
	Brazil	-27	715	26.6	Spain	621	-366	22.3
	India	-320	669	35.5	France	541	-88	26.1

Source: United Nations Conference on Trade and Development.

<sup>1</sup> Represents the share of the change of trade balance between 2008 and 2000 with each partner in the total deterioration of trade balance with the 10 countries between 2008 and 2000.

ANNEX TABLE 6.1.2.

Change in Manufacturing Trade Balance per Country (Billions of US dollars, unless otherwise specified)						
Country	Change between 2000 and 2008	Change between 2000 and 2008 (percent of GDP)	Country	Change between 2008 and 2019	Change between 2008 and 2019 (percent of GDP)	
<b>Top 10 most-widening deficits</b>	United States	-156,604	-1.1	United States	-514,905	-2.5
	Russian Federation	-134,616	-8.0	Canada	-48,180	-2.9
	United Arab Emirates	-77,955	-24.4	Brazil	-37,416	-1.9
	United Kingdom	-71,599	-2.4	France	-19,689	-1.0
	Australia	-70,636	-6.7	Australia	-18,218	-0.7
	Canada	-63,839	-4.1	Ukraine	-15,269	-1.8
	Spain	-46,593	-2.9	Iraq	-12,470	-8.1
	Saudi Arabia	-37,520	-7.2	Chile	-12,172	-5.0
	Brazil	-31,876	-1.9	Colombia	-11,414	-2.7
	Greece	-29,765	-8.4	Egypt	-10,022	-3.3
<b>Morocco</b>	<b>-9,480</b>	<b>-10.2</b>	<b>Morocco</b>	<b>-1,142</b>	<b>-1.0</b>	
<b>Top 10 most-shrinking deficits</b>	Barbados	3	0.1	United Kingdom	9,184	0.3
	Palau	13	6.5	Oman	10,185	13.3
	Palestine	53	0.7	Romania	10,780	4.3
	St. Lucia	127	8.8	Russian Federation	16,548	1.0
	Belize	142	10.5	India	17,126	0.6
	Eswatini	253	7.7	Iran	20,342	3.1
	Zimbabwe	558	8.8	Greece	26,465	12.9
	Luxembourg	689	1.2	Venezuela	27,670	18.4
	Turkey	1,968	0.3	Spain	46,546	3.3
	Israel	4,480	2.1	United Arab Emirates	53,765	12.9
<b>Countries with shrinking surpluses</b>	Philippines	-4,430	-2.4	Japan	-165,663	-3.2
	Malaysia	-4,173	-1.8	Germany	-36,400	-0.9
				Belgium	-26,139	-4.9
				Finland	-16,397	-6.1
				Sweden	-12,411	-2.3
<b>Top 10 most-improving surpluses</b>	Singapore	17,944	9.3	Austria	-10,661	-2.4
	Ireland	24,299	8.9	Italy	9,399	0.5
	Switzerland, Liechtenstein	27,090	4.7	Netherlands	9,754	1.1
	Netherlands	35,453	3.7	Czech Republic	13,176	5.2
	Taiwan	48,508	11.7	Switzerland, Liechtenstein	13,813	1.9
	Province of China			Taiwan	14,551	2.4
	Italy	52,046	2.2	Province of China		
	Korea	76,425	7.3	Singapore	16,123	4.3
	Japan	114,678	2.2	Ireland	22,205	5.6
	Germany	274,732	7.4	Malaysia	23,325	6.4
China	548,712	11.9	Korea	37,375	2.3	
			China	487,817	3.4	

Source: United Nations Conference on Trade and Development.

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