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**STRUCTURAL TRANSFORMATION  
AND INDUSTRIAL POLICY IN MOROCCO**

**Lahcen Achy**

**Working Paper No. 796**

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## Abstract

The manufacturing sector in Morocco emerged in the sixties and early seventies with the support of import substitution policies. Manufacturing firms took advantage of the high protection rates as well as non-tariff barriers. Since the early eighties, Morocco's policymakers, faced by internal and external macro-economic imbalances, gradually shifted to trade openness and privatization. The process of market-oriented economic reforms accelerated in the nineties with the aim of putting the economy on a higher efficiency track through exposure to stronger domestic and international competition. Three decades later, Morocco's economy had not achieved the expected progress. Morocco's manufacturing sector continues to suffer from structural weaknesses stemming from its excessive specialization in a few industries that are either natural resource based or use intensive unskilled labor. Exports remain mostly undiversified, exhibit low technological content and depend heavily on a few markets.

The purpose of this paper is to examine the links between industrial policies implemented in Morocco and such inadequate outcomes. The paper first investigates the process of structural change in Morocco and the evolving importance of the manufacturing sector. It also measures the degree of export diversification and sophistication. The role of factor accumulation versus total factor productivity is also covered. The paper provides, in a second part, an overview of the instruments and processes of industrial policies adopted since the nineties with reference when relevant, to earlier periods. It also investigates the extent to which the outcomes can be related to those instruments or the way in which they were implemented. A specific emphasis is put on identifying policy-shifts and the role of political economy factors in triggering them.

Morocco offers an interesting case of how industrial policy has been smoothly transformed in the context of liberalization and privatization in order to continue to serve the purpose of rent-distribution, private sector control and the exercise of power. Resources and regulatory functions of some government institutions may have shrunk or weakened in the era of economic liberalization. Nevertheless, the State's role in regulation and control has mutated over the years and now it is directly involved in new spheres of power.

**JEL Classification:** D72; L52; O14; O25; O38

**Keywords:** Structural Transformation, Industrialization, Industrial Policy, Political Economy

## ملخص

الغرض من هذه الورقة هو دراسة الصلات بين السياسات الصناعية المنفذة في المغرب ومثل هذه النتائج غير كافية. تحقق هذه الورقة أولاً في عملية التغيير الهيكلي في المغرب وأهمية التطور في قطاع الصناعات التحويلية. وتقوم أيضاً بقياس درجة تنوع الصادرات والرقى. تتناول أيضاً دور عامل التراكم مقابل إجمالي إنتاجية عوامل الإنتاج. وتقدم الورقة، في الجزء الثاني، لمحة عامة عن الصكوك والعمليات السياسات الصناعية التي اعتمدت منذ التسعينات مع الإشارة عند الاقتضاء، إلى فترات سابقة. كما تتطرق إلى نتائج التي يمكن أن تكون ذات صلة إلى تلك الصكوك أو الطريقة التي نفذت فيها. يتم وضع التركيز بشكل خاص على تحديد-التحولات في السياسة ودور عوامل الاقتصاد السياسي في التسبب فيها.

## **1. The Moroccan Experience: An Overview**

The manufacturing sector in Morocco, similar to other South Mediterranean countries, emerged in the sixties and the seventies with the support of import substitution policies. Manufacturing firms took advantage of the high protection rates as well as non-tariff barriers such as import licenses, import quotas and exchange rate overvaluation. Since the early eighties, Morocco's policymakers, faced by internal and external macro-economic imbalances, have gradually shifted from import substitution and public sector led growth to trade openness and privatization. The process of market-oriented economic reforms accelerated in the nineties along the lines of the Washington consensus with the objective of putting the economy on a higher efficiency path through exposure to stronger domestic and international competition.

In addition to its commitments to liberalize trade under the WTO, Morocco entered into various regional and bilateral trade agreements such as the Association Agreement with the European Union signed in 1996 and implemented since 2000 with the objective to achieve a free trade area by 2012. Morocco has also joined the Greater Arab Free Trade Agreement (GAFTA), the Agadir Agreement and has signed important bilateral free trade agreements such as those with the United States and Turkey. Consequently, the country reduced tariffs and other obstacles to trade such as non-tariff barriers (NTBs). A liberal attitude towards FDI was also adopted to stimulate their involvement in the economy. In the same vein, the authorities reformed the foreign exchange regime in the late 1980s and early 1990s towards market-based exchange rate determination and established current account convertibility since 1993.

Policymakers hoped that such reforms would ultimately foster economic growth, promote industrialization, stimulate exports and provide job opportunities for Morocco's rapidly growing labor force. Three decades later, Morocco's economy had not achieved the expected progress. The country's economic growth lagged behind most developing and emerging economies. The importance of the manufacturing sector in the economy has been shrinking over the years and its position in its traditional markets has been shaken because of more dynamic competitors. Morocco's manufacturing sector continues to suffer from structural weaknesses stemming from its excessive specialization in a few industries that are intensive in unskilled labor or are natural resource-based. Meanwhile, exports remain mostly undiversified; they exhibit low technological content and depend heavily on a few markets.

The purpose of this paper is to examine the links between industrial policies implemented in Morocco over time and such inadequate outcomes.

The paper first investigates the process of structural change in Morocco and the evolving importance of the manufacturing sector. It also measures the degree of export diversification and sophistication. The role of factor accumulation versus total factor productivity is also covered.

In a second part, the paper provides an overview of the instruments and processes of industrial policies implemented since the nineties, with reference, when relevant, to earlier periods, and investigates the extent to which the outcomes uncovered can be related to those instruments or the way in which they were implemented. A specific emphasis is put on identifying policy shifts and the role of political economy factors in triggering them.

Morocco offers an interesting case of how industrial policy has been smoothly transformed in the context of liberalization and privatization in order to continue to serve the purpose of rent-distribution, private sector control and the exercise of power. Resources and regulatory functions of some government institutions may have shrunk in the era of economic

liberalization. Nevertheless, the State's role in regulation and control has mutated over the years and now it is directly involved in new spheres of power.

## **2. Morocco's Missing Structural Change**

A structural change in the economy refers not only to the shift from primary production, such as agriculture and mining, to manufacturing but also to a shift from manufacturing that is resource-based to more sophisticated, skill-intensive and technology-intensive activities<sup>1</sup>. Some developing economies have been able to become part of the worldwide industrialization process with their manufacturing sector boasting higher growth rates than agriculture. Others countries, like Morocco, remain on the margins of the industrialization processes.

The purpose of this section is to analyze the structural patterns of production in Morocco and assess to what extent it has shifted from primary to more sophisticated and elaborated activities. The aim pursued here is also to put Morocco's experience in a regional and international perspective by comparing it to a sample of developing and emerging countries.

### ***2.1 Slow structural change with a recent shift towards services***

During the period 1965-2011, Morocco's productive structure, assessed through sectoral GDP decomposition, has overall witnessed little change. One can divide the period covered into three relevant sub-periods. The first sub-period from the late sixties to the mid-seventies is characterized by a relative stability of Morocco's GDP decomposition with the share of agriculture, industry and services around 20, 30 and 50 percent of GDP respectively. The second sub-period, which runs from the mid-seventies to the late nineties, shows a relatively stable share of industry of above 33 percent of GDP and more fluctuations in both agriculture and services. Finally, the third sub-period begins in the late nineties with a rapidly growing service sector and a steady decline of both industry and agriculture.

The share of agricultural value added in total GDP has remained high and has oscillated between 15 and 18 percent depending on weather conditions<sup>2</sup>. Agriculture's contribution to GDP has averaged 17 percent during the 2000s. The sector has provided jobs for more than 4 million individuals, which is equivalent to 40 percent of Morocco's workforce. Three factors seem to be crucial in explaining the role of agriculture in job provision in Morocco. First, the unsecure property rights of agricultural land that stems from a complex ownership structure with a mixture of customary, religious and modern legal rules. The second is the high fragmentation of land as seven out of ten farmers own, on average, no more than two hectares. Both factors prevent farmers from obtaining loans or from properly benefiting from government subsidies, and make it difficult for them to sell their properties on the market. The third factor is high illiteracy rates in rural zones, which limits mobility of the rural workers out the unskilled jobs in agriculture. The share of the agricultural sector in total employment usually occurs as a result of technological advances that improve agricultural productivity and shift the factors of production towards manufacturing and services. Unsurprisingly, the three factors are largely policy-related.

The share of industry, on the other hand, represented one third of GDP in the eighties and remained relatively stable through the nineties. However, with trade liberalization and intensive penetration of imports, its contribution to GDP declined to 27 percent of GDP on average in the last decade. Conversely, the share of the service sector grew from an average of 50 percent of GDP in the early eighties to 56 percent currently. Most of the change took place in the last decade and was driven largely by the boom in telecommunication and

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<sup>1</sup>Memedovic (2009).

<sup>2</sup>Nearly 85 percent of the agricultural land is rain-fed. Nearly three-quarters of arable land is used for growing cereals, with an average output of \$250 per hectare per year.

financial services. As these activities are characterized by their relatively high labor productivity, the shift in GDP's contribution between industry and services was achieved without any noticeable change in their employment shares in the total workforce, which stood at 24 and 36 percent respectively. The challenge for Morocco is to make use of the progress achieved in services to enhance productivity and efficiency in both agriculture and manufacturing.

In addition to addressing institutional deficiencies in the design and implementation of industrial policies, the structural change in Morocco would require from policymakers to put more emphasis on education and the quality of human capital.

## ***2.2 The manufacturing sector: Is Morocco a paradox?***

Unlike other developing and middle income countries, the share of Morocco's manufacturing value added in GDP has witnessed a constant decline since the mid-nineties. While, manufacturing value added represents on average 25.4 percent of GDP in the Middle income countries (MICs) and 21.6 percent in developing countries (LDCs)<sup>3</sup>, it has always remained under 20 percent in Morocco's recent history. More worrying, the manufacturing sector's contribution to GDP has been hovering around 15 percent in recent years.

The manufacturing sector also fell short of expectations in terms of job creation. On average, the sector contributed by an average of 10,000 jobs out of more than 120,000 new jobs created every year in the whole economy during the last decade<sup>4</sup>. Its share in total employment, which accounted for 16 percent in the early eighties, decreased to 11 percent by 2010.

Since the eighties, the manufacturing sector's real value added has grown at a rate either close to or below 3 percent. Unlike in Morocco, the manufacturing sector has been the key driver of economic growth in many developing and emerging countries in Asia, Latin America as well as in the MENA region as portrayed in figure 3. Average yearly growth of the manufacturing sector value added reached 7 percent during the period 2000-2010 in the group of middle and low income countries and exceeded 4 percent in the group of Arab countries.

To assess the extent to which factor accumulation (capital and labor) or total factor productivity (TFP) is the source of the poor performance of Morocco's manufacturing sector, the classical growth accounting approach is used. The approach decomposes the manufacturing sector's real value added growth into three components: capital, labor and TFP, which is also known as Solow's residual, obtained once capital and labor contributions are accounted for.

The estimation of the capital stock is based on the perpetual inventory method (PIM), which accumulates real investment series. The validity of this approach requires the availability of real investment series longer than the expected lifetime of assets, the stability of investment deflator used to deflate current price of investment series and a reasonable estimate of the depreciation rate. As the series of investment in the manufacturing sector are only available since 1985, the initial capital stock could not be neglected. Therefore, the 1985 capital stock for Morocco's economy is computed using gross fixed capital formation series available since 1960. The initial capital stock is then derived on the basis of the average share of the manufacturing sector value added in GDP. Finally, contributions of capital, labor and TFP are computed using the 2003 Morocco's Ministry of Finance estimate of capital elasticity in the

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<sup>3</sup> Based on the UNIDO data and the World Bank's World Development Indicators

<sup>4</sup> Author's calculations based on employment data provided by Morocco's High Commissariat for Planning (2011).

manufacturing sector (0.37)<sup>5</sup>. The results are presented in the table (2) for three sub-periods: 1985-1988; 1990-1999 and 2000-2011.

The contribution of labor to the manufacturing value added growth has sharply declined over time. The share of growth generated by labor amounted to 11 percent in the most recent period compared to 42 percent in the nineties. Conversely, capital accumulation is increasingly emerging as the key source of the manufacturing sector's growth. The relative contribution of capital increased from 27 percent in the late eighties to 37 percent in the nineties before it jumped to 64 percent in the most recent sub-period. The appreciation of the Moroccan currency may have also favored imports of capital equipment, increasing the capital-labor ratio to the detriment of labor<sup>6</sup>. Similarly, the relative contribution of TFP has been growing over time. While TFP had a negative contribution in late eighties, it accounted for one quarter of the manufacturing value added growth in the last decade.

### ***2.3 What do these results mean?***

On one hand, the magnitude of the manufacturing sector growth is low and it underperforms when compared to regional and developing countries' averages. On the other hand, the content of this growth has evolved from one mostly triggered by labor accumulation to one with stronger contribution of capital and TFP.

In the eighties, the manufacturing sector in Morocco benefited from massive outsourcing with Europe in the apparel sector. This trend fostered substantial unskilled jobs creation but minimal capital accumulation. The entry of other more competitive cheap labor countries in the global market and the dismantling of the Multi-fiber agreement shifted part of the European demand away from Morocco.

Over the past decade, the private sector in Morocco became more dynamic, with the share of private sector investments in the GDP exceeding 25 percent up from less than 20 percent in the nineties. The manufacturing sector, however, hardly created new jobs and the number of firms has been shrinking due to high exit rates<sup>7</sup>.

At the same time, a number of firms such as the American Boeing, the French Safran and other leading aviation companies have entered Morocco's manufacturing sector and built increasingly sophisticated factories. More recently, the French company Renault has invested \$1.5 billion in a factory in the North of Morocco with the capacity to produce some 147,000 cars per year<sup>8</sup>.

In addition to its geographical proximity with Europe and the multiple free trade agreements Morocco has implemented, these companies have also been attracted by the generous incentives provided to them by the state. To what extent such allocations of public resources is worthwhile depends on the externalities these leading international companies will exert on the rest of the economy (transfer of technology, demand on domestic products and services and creation of new jobs). Such issues need to be properly investigated in future research.

### ***2.4 Limited product diversification and sophistication***

The recent wave of investments in relatively sophisticated industries has shifted the content of the manufacturing sector growth but did not fundamentally change its specialization

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<sup>5</sup>Ministère des Finances (2003)

<sup>6</sup> Different reports and articles have emphasized the issue of Morocco's exchange rate: overvaluation among which: The World Bank (1999), The World Bank (2006), Achy and Sekkat (2003).

<sup>7</sup> A relevant question is why private investors choose to invest in other sectors instead of manufacturing. Is there any policy bias against the manufacturing sector (incentive schemes, transactions costs, labor quality and cost, etc...)?

<sup>8</sup> <http://www.bbc.co.uk/news/world-africa-16967027>



patterns. The latter represents a key factor to account for the divergence in growth performance between Morocco and other developing and emerging countries.

Morocco's manufacturing sector is less diversified and geared towards industries that are intensive in unskilled labor or alternatively based on natural resources. The industries of food and beverages, tobacco, textiles, apparel, leather and non metallic mineral products together represent approximately 60 percent of the manufacturing value added in Morocco and less than 30 percent, on average, in developing countries—not including China. On the other hand, radio, TV and communication equipment industry in Morocco represents less than one percent of the manufacturing value added, whereas it accounts for 10 percent in developing countries. Motor vehicle and other transport equipment industries represent 10 and 3.1 percent of the manufacturing value added in developing countries and in Morocco, respectively. Finally, the industry of electrical machinery and equipment, which is usually seen as Morocco's engine for industrial diversification, accounts for 4.6 of the manufacturing value added compared to 6 percent in the benchmark of developing countries.

A more sophisticated measure of diversification frequently used in the literature is the Herfindahl-Hirschman Index (HHI), which sums the square of the share of each industry's value added in the total manufacturing sector's value added. To compute such an index for Morocco, we rely on 4-digit level industrial data (220 industries) based on Morocco's Ministry of Industry data (2011).

In relative terms, the degree of diversification has first declined in the early nineties (higher values of HHI), remained quite stable from the mid-nineties to early 2000 and has exhibited no clear trend since then. The key message of HHI values as shown in the figure is that the degree of diversification of Morocco's manufacturing sector has not gone through any significant change over the last two decades.

The absolute values of HHI seem to indicate somehow that the manufacturing sector in Morocco is fairly diversified. Such finding, however, can be misleading due to the extreme low value added of a large number of industries and the dominance of a few industries. The 10 largest industries based on 4-digit level data accounted for 50 percent of the total manufacturing value added in 2010 and the 20 largest industries accounted for two thirds. On the other hand, the value added of the 110 smallest industries hardly accounted for 4 percent of the total manufacturing value added. Such figures clearly confirm the strong specialization and the poor diversification of the Moroccan manufacturing sector which was uncovered earlier based on 2-digit level data.

In order to further investigate the pattern of diversification in Morocco, we identified the industries (at the 4-digit level) that achieved the largest progress in terms of their value added and those that performed worst during the period 2000-2010. The first group of industries (*high progress industries*) accounted for 14 percent of the manufacturing sector's value added in 2010 up from 7 percent in 2000. The most remarkable industries in the group are: aircraft and spacecraft industry, electrical equipment and pharmaceutical products.

The second group made of industries that have shrunk significantly (*high regress industries*) accounted for 2.6 percent of the manufacturing value added in 2010 down from 8.1 percent a decade earlier. In addition to textiles, leather and related industries that one would expect to decline due to the fierce competition from cheap-labor countries, a number of other relatively sophisticated industries have also shrunk such as optical instruments and photographic equipment; manufacturing of television and radio receivers, sound or video recording; pesticides and other agro-chemical products; and finally pulp, paper and paperboard.

Apart from these two groups (high progress industries and high regress industries), the bulk of the manufacturing value added, which accounts for more than 80 percent, has not changed between 2000 and 2010.

The propensity of manufacturing firms to engage in innovation activities remains extremely weak in Morocco. The Investment Climate Assessment (ICA) survey that took place in Morocco in 2004 revealed that less than 10 percent of the manufacturing firms have an ISO certification, and only around 5 percent are using a technology under foreign license. On the other hand, approximately 45 percent of the firms declared that they are engaged in product innovation and one third in process innovation. Product innovation is mostly undertaken internally except for 17 percent of the firms who have developed new product lines with their clients, 5 percent with their suppliers and only 1 percent with universities.

### **3. Morocco's Exports: Size, Concentration and Diversification**

Exports are a key factor in structural change. The ability to export reveals the capacity of a country to compete on international markets. The literature has shown that what matters most for sustainable growth, structural change and people's welfare is the composition of exports and the extent of their diversification. A country exporting just a few primary commodities—such as oil, mining products or agricultural produce—can exhibit, a high ratio of merchandise exports to GDP but poor economic and social performance. There are at least three channels through which exports diversification can boost economic growth. First, export of every new variety can be linked to an innovation that requires knowledge and creative effort. Such knowledge produces externalities that improve productivity. Second, export diversification through new industries boosts growth by enhancing output growth of other industries via backward and forward linkages. Third, export diversification fosters economic growth over long periods of time as it reduces the swings in export revenue and curbs macroeconomic volatility that can hold back investment decisions. To account for the extent of export diversification, we suggest a variety of indicators used in the literature.

#### ***3.1 Size of Merchandise exports***

During the three most recent years, the behavior of merchandise exports to GDP ratio has been erratic driven by the rise of the price of commodities on the international markets, including phosphates and its derivatives<sup>9</sup> in 2008 and the impact of the economic and financial crisis since 2009.

These years put aside, the share of merchandise exports in GDP increased from 13 to 18 percent in the eighties and remained broadly stagnant hovering around 20 percent since the mid-nineties. In absolute value, Morocco's merchandise exports amounted to US\$17.7 billion in 2010. In comparison, with only one third of Morocco's population, Tunisia value of merchandise exports reached a roughly similar value (US\$16.5 billion).

#### ***3.2 The share of manufactured exports***

One important dimension of diversification can be elicited from the share of transformed products through the manufacturing sector in total merchandise exports. Some products may be originally from agriculture or mining but undergo a process of transformation before they are sent abroad. In the early eighties, the share of manufactured exports stood below 30 percent of total merchandise exports. It increased steadily during the eighties and approached 60 percent by the mid-nineties and then began to decline between 1995 and 1997. In comparison, while the share of manufactured products has continued to rise in both Tunisia and Turkey it has stagnated in Morocco during the last decade.

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<sup>9</sup> According to the Morocco's foreign exchange office, the average price of fertilizers increased by 138 percent in 2008 compared to 2007 and declined by 66 percent in 2009 compared to 2008. The average price of phosphoric acid increased by 250 percent and declined by 70 percent in 2008 and 2009, respectively.

The jump that occurred in 1998, however, reflects a change in the method used by Morocco's foreign exchange office in recording trade data. Since 1998, all re-exports of imports under temporary admission (TA) are counted as exports<sup>10</sup>. The share of re-exports of temporary admitted imports accounted for 70 percent of Morocco's merchandise exports in 2010 up from 40 in 1997. The issue with this category of exports is that they have low domestic value-added and generate only limited backward linkages with domestic industries. Once manufactured exports are adjusted to account for the 1998 change, as shown in figure 7, it appears that the content of Morocco's exports in manufactured products has actually decreased from 50 percent in 1997 to 43 percent in 2010. Such finding lends support to Morocco's processes of de-industrialization emphasized earlier.

Another indicator that reveals the erosion of the Morocco's manufacturing sector dynamism is the share of the firms engaged in the activity of exports. Figure (8) shows that, roughly three firms out of ten have directed at least part of their production to external markets during the early nineties. During the last two decades, this share has been steadily decline and stood below 20 percent by 2010.

### ***3.3 Export concentration***

An alternative way to assess the extent of export diversification is to examine the share of the major export products in merchandise exports. A low export diversification would occur if only a few products dominate the composition of exports, which also indicates a high export concentration. The value of exports of the major categories are added up and calculated as a percentage of merchandise exports for each year. Figure 9 depicts the share of the most important 5, 10, and 20 products in Morocco's merchandise exports during the period 1980-2010.

The three versions of export concentration indexes provide, roughly, similar patterns during the last three decades. From the figure, one can divide the whole period into three relevant sub-periods. During the eighties, the concentration of Morocco's exports declined indicating a clear trend towards diversification. The share of the most important 5 products declined from 60 to less than 40 percent in a decade. The behavior of export concentration changed in the early nineties with export indexes going up. The sudden decline in export concentration in 1998 is due to a shift in the method used by Morocco's foreign exchange office in recording trade data. As indicated earlier, all re-exports of imports under TA have been counted as exports since 1998. By expanding merchandise exports, such a shift has led mechanically to lower concentration indexes. During the third sub-period, which began in 1999, the magnitude of export concentration seems stagnant<sup>11</sup>.

The HHI based on export data at the 4-digit level tells a similar story. The degree of export diversification has first increased in the eighties (declining HHI index), increased in the early and mid-nineties and remained relatively stagnant since early 2000. The HHI values as shown in figure 10 corroborate previous findings based on the manufacturing sector's value added.

The degree of diversification of Morocco's exports has not experienced any significant change over the last two decades. Clothing, crustaceans and mollusks (seafood), phosphoric acid, electronic devices (transistors) and phosphate emerged as the five key Morocco's export products in 2000. In 2010, the list was not significantly changed. The five highest contributing products appeared in the following order: clothing, phosphoric acid, wires and cables for electricity, fertilizers and phosphates.

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<sup>10</sup> For exports produced under the regime of "temporary admission", raw materials are temporarily imported and processed and final outputs are re-exported.

<sup>11</sup> The erratic behavior in the last three years is essentially driven by the high volatility of the price of phosphate and its derivatives on international markets.

### ***3.4 Technological composition of exports***

The changes in the composition of Morocco's exports by technological intensity are portrayed in figure 11. Merchandise exports are divided into low, medium and high technology-based according to the OECD approach (1997).

Since the early nineties, the share of low technology products in total exports fell from 59 percent of exports to 37 percent. Exports of medium technology content, on the other hand, rose steadily in the share of total exports from 40 to 60 percent over the same period. Despite, this gradual substitution of low technology products with medium technology products, the process remains slow and limited compared to Morocco's competitors on its traditional markets (the European Union). The share of exports with high technological content, which stand as the most dynamic market worldwide, went up to 6 percent in 2000 from 1 percent in 1993. Paradoxically, however, this share declined to 3 percent at the end of 2011.

### ***3.5 Exports of services***

The positive part in Morocco's structural change process comes from the service sector. The increase in the service sector's contribution to GDP was largely driven by modern, relatively high value added, non-commodity tradable activities such as information and telecommunication, financial services, business services, transportation and tourism related activities. As a consequence, Morocco's exports of services increased steadily in the past two decades. The share of services in Morocco's total exports (merchandise exports and services) went up to more than 45 percent from less than 30 percent in the early nineties<sup>12</sup>. Morocco earned US\$12 billion from exporting commercial services in 2010. Its market share in the world export services of 0.32 percent is three times higher compared to its market share in the worldwide merchandise exports.

Although, it declined from more than 70 percent in the late nineties to 54 percent in 2011 more recently, Morocco's exports of travel services (tourism revenues) remain the key component of services exports. International transportation services, on the other hand, generate roughly 20 percent of services exports and their contribution has been relatively stable over the last two decades. Finally, the category of "other non commercial services" appears as the most dynamic component of Morocco's services exports. This category, which includes communication services, computer and information services, financial and insurance services and construction services accounted for more than 26 percent of services exports in 2010 up from 13 percent a decade earlier. This contrasts significantly with emerging countries. In South Asia, for instance, information and communication technology and finance are the leading exports in services, making up to 68 percent of total services exports<sup>13</sup>.

## **4. Industrial Policies: Instruments, Processes and Politics**

Morocco achieved meager outcomes in terms of structural change; the country has been lagging behind in its industrialization process with modest product and export diversification. There was a turning point in Morocco's industrialization policies in the late eighties and early nineties. In the nineties GDP growth was modest at 2.26 percent and manufacturing sector growth at 2.16 percent. During the last decade (2000-2010), GDP growth reached 4.55 percent but growth in the manufacturing sector did not exceed 2.71 percent.

The purpose of this section is to examine industrial policy (IP) instruments administered in Morocco since the nineties, with reference when relevant to earlier periods, and to investigate

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<sup>12</sup> The erratic behavior recorded in the last years can be attributed to the impact of the financial crisis and the Arab spring.

<sup>13</sup> African Development Bank (2013).

the extent to which the outcomes can be related to those instruments or the way they were implemented.

Based on Morocco's experience one can distinguish four categories of IP instruments: (a) policies that alter ownership of capital such as the Moroccanization implemented in the seventies and the privatization of public enterprises that started in Morocco in the late eighties;(b)trade policies and other related regulations that can differ from one sector to the other to reflect policy preferences;(c)fiscal incentives granted to investors of which some are horizontal and other are more specific to sectors, regions or related to the size of the investment; and finally (d) direct grants and subsidies allocated to a selected number of firms based on a set of criteria.

While the impact of trade policies in Morocco received some empirical interest, very few studies have been devoted to political economy motivations for industrial policies and their impact on the manufacturing sector.

Based on the shifts in industrial policies implemented in Morocco since the beginning of the nineties, the whole period can be divided into three sub-periods.

The first covers the nineties with a clear focus on the privatization policy. It was also a period of tumultuous dynamics in Morocco's state/business relations.

The second sub-period started in early 2000 and ended in 2007 with investment promotion and tax exemptions schemes that appear to be dispersed, overlapping and non-focused. Yet, such schemes were costly and often ignored in public discourse. At the same time, the authorities designed a double track system of direct support to firms. The first, which operates through Hassan II Fund for Economic and Social Development, directed to large firms and draws on privatization revenues. The second track managed by the SMEs' National Agency (ANPME) through industrial upgrading programs is devoted mainly to small and medium-sized enterprises (SMEs) and relies mostly on EU funding.

The third sub-period that began in the mid-2000s was an attempt to endow the state with a more active and visible role in promoting and administering industrial policies. Many instruments that had existed before were repackaged and re-defined in order to fit within a comprehensive framework called Emergence Program (Take-off Program) with a direct endorsement by the Moroccan king. For instance, the upgrading policy, labeled "competitive modernization" under the new program was revisited and endowed with more funding from the state budget. A new version of the Emergence Program has been approved in 2009 and has been one of the key government's policy pillars.

#### ***4.1 The Nineties: A decade of reforms and new dynamics in state/business relations***

The Moroccan authorities decided in the early nineties to accelerate the reform process and move towards sectoral and microeconomic reforms. The eighties was the decade of Macroeconomic stabilization policies. Morocco managed in less than a decade to drastically reduce both its budget and current account deficits. It had also increased its manufactured exports and private sector investment<sup>14</sup>.

However, two factors need to be accounted for in assessing the performance of the eighties. The first is the impact, on the Moroccan economy, of favorable external shocks stemming from better weather conditions starting from 1984, and lower oil prices starting from 1986. The second is more policy driven as Morocco maintained a strong support to the manufacturing sector through trade protection (tariffs and licenses) and exchange rate devaluation. In its 1999 report on the private sector, the World Bank acknowledged that the

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<sup>14</sup>The World Bank (2000).

40 percent real depreciation of the Moroccan dirham in the early 1980s was crucial in strengthening the competitiveness of Moroccan products.<sup>15</sup>

Understating the role of both factors, Morocco's experience was referred to by the IMF and the World Bank as having real chance of becoming a success story. The World Bank recognized later that it was excessively bullish in its assessments of Morocco's economic future.

Trade barriers were reduced; quota coverage went down from 66 percent to 15 percent of imports, the range of import levies was substantially decreased, and most export taxes were eliminated. Foreign exchange controls were relaxed, achieving full convertibility of the current account in early 1993. Price and margin controls were lifted for many goods, and, after a slow start, the privatization program took off in 1993. In the same year, it was also decided that directing credit to exporters was no longer necessary. The government's program of financial sector reform was seen as sufficiently advanced and that the country can rely on an efficient, market-determined allocation of financial resources<sup>16</sup>.

In the 1990s, Morocco's manufacturing sector and the economy overall exhibited a weak performance. In addition to policy related factors, Morocco had to face a number of external challenges. First, the EU, the major market for Moroccan exports, experienced an economic slowdown that reduced its capacity to import. Second, the opening of Eastern Europe provided the West of Europe with new opportunities to invest in countries with cheap labor closer to the EU markets. Third, cheaper Asian textiles also began to compete with Moroccan exports.

Many countries, on becoming richer, are driven out of labor-intensive sectors because of rising wages. Yet, they manage to sustain exports growth by producing more sophisticated products that use higher technology and skilled labor. Morocco failed to generate a similar response due to its poor human capital and modest investment in research and development. A steady appreciation of the real effective exchange rate estimated at 22 percent between 1990 and 2000, worsened Morocco's competitive position. Meanwhile, many of the countries that compete with Morocco have seen real devaluations of their respective currencies. As a result, Morocco's real exchange rate appreciated by 42% in comparison to China's and 64% relative to India's in the nineties<sup>17</sup>.

Economic reforms and the shift from the state as a key player to a market-led economy imposed a number of political reforms to adapt to the new era. Until the mid-nineties, the private sector had been operating under the umbrella of the state as a follower or a loyal supporter of the regime and until that time Morocco's business association (CGEM) was as an apolitical organization that was close to the state<sup>18</sup>.

The growing role of the private sector in the economy, the dismantling of trade protection and the erosion of rents and favors to which large entrepreneurs had access, pushed the CGEM to take a different shape. The new bureau elected in 1994, signaled a different tone with a strong emphasis put on the need for a private sector that is structured, organized and strong<sup>19</sup>. The CGEM emerged as an outspoken business association with independent positions from the

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<sup>15</sup>The World Bank (1999).

<sup>16</sup>The World Bank (undated).

<sup>17</sup>The World Bank (2000).

<sup>18</sup>Boussaid (2010).

<sup>19</sup>Sater (2002).

state. It became more active and called publicly for a level playing field and more transparency in the process of awarding public procurement contracts<sup>20</sup>.

For the first time, it appeared that the interests of the regime and the business association may no longer be converging. Ironically, the change within the business association was first promoted by the state seeking to weaken those within the CGEM who opposed liberalization reforms as it threatened their privileged economic positions. King Hassan II in person urged the CGEM to restructure and become more representative of the whole spectrum of business interests, including more members from small and medium-sized enterprises<sup>21</sup>.

To counteract the emergence of the private sector as autonomous social force, the state used a double-track strategy in which it combined coercion and cooptation.

First, the state (through the Ministry of Interior) conducted an anti-corruption campaign in 1995-1996 referred to by the authorities as the “clean-up campaign”. The campaign started as a campaign against drug trafficking and smuggling, but soon companies and businessmen became targets of the campaign. The tacit pact, under which businesspeople can enjoy virtual immunity from prosecution, as long as they are politically loyal, could no longer be taken for granted<sup>22</sup>. The campaign ended in June 1996 with a “gentlemen’s agreement” between the CGEM and the Minister of Interior. The agreement offered amnesty and in exchange the CGEM committed to strive for a more ethical environment within the business community<sup>23</sup>. The key message sent by the “anti-corruption campaign” was that the regime could not tolerate the fact that the private sector which it has nurtured and supported has become an independent and strong social force. Through its coercive campaign, the central state showed that it was in control and could not be challenged even in the era of market reforms.

Second, in addition to the gentlemen’s agreement, the business association was granted a place within the political process through the 1996 constitutional amendment by the adoption of the (*bicameral legislature*) with two chambers. The lower chamber or Chamber of Representatives was elected by popular vote, and the upper chamber or Chamber of Counselors was made up of representatives elected by professional and business organizations, labor unions, communal councils and chambers of commerce. Three-fifths (3/5) of the “upper chamber” members were elected by regional electorate colleges and two-fifths (2/5) were selected by electoral colleges of representatives of professional associations. The bicameral system provided the legal basis to institutionalize a system of representation and participation of business interests in the law making and social negotiations. Ultimately, such arrangement allowed the central power to co-opt the emerging business leaders and guarantee their formal participation in the policy-making process.

As a consequence, CGEM evolved to become more representative of the private sector in its dialogue with the government. It opened its doors to smaller firms and to federations of companies outside the manufacturing sector and regional offices<sup>24</sup>. Yet, its margins to maneuver were strictly regulated. Beyond the political economy scope, this episode seemed to have produced lasting effects on the development of the manufacturing sector. The period was characterized by a rapid erosion of protection and incentives. The lack of trust in the state and the fear of its arbitrariness (as appeared in the “*clean up campaign*”) pushed domestic investors to commercial and real estate businesses with shorter life cycles and much lower transaction costs at the expense of manufacturing activities.

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<sup>20</sup>Denoeux (2007).

<sup>21</sup>Boussaid (2010)

<sup>22</sup>Denoeux (2007).

<sup>23</sup>Stater (2002).

<sup>24</sup>The World Bank (1999).

## ***4.2 The episode of redeployment of public action***

The sub-period that started in the late nineties and continued through the 2000 decade was characterized by the emergence of new forms of state intervention. The assumption that more market means by default less state did not apply to Morocco.

Instead of heavy state intervention policies, the authorities implemented multiple schemes for investment promotion that appear to be dispersed, overlapping and non-focused.

At the same time a double track system of direct support to firms was implemented. The first, which operates through Hassan II Fund for Economic and Social Development, is directed to large firms and draws on privatization revenues. The second, which is managed by the SMEs' National Agency (ANPME) through "industrial upgrading" programs is devoted mainly to small and medium-sized enterprises (SMEs) and relies mostly on the EU funding.

### *4.2.1. Multiple incentive schemes with no comprehensive vision*

Despite the existence of a large number of regulations that qualify as IP instruments, the government had no explicit and comprehensive vision of what the country wants to achieve. Overall the arsenal of regulations was costly as shown in table 6 and ineffective in promoting a dynamic process of productive diversification.

Resources and regulatory functions of some government institutions may have shrunk or weakened in the era of economic liberalization. Nevertheless, the state power's entry points for regulation and control mutate and expand and new spheres of power emerge. A prominent example is provided by The Hassan II Fund for Economic and Social Development established in 2000 which receives 50 percent of privatization revenues. The fund provides investment subsidies in some industrial sectors<sup>25</sup> up to 10 percent of the project's cost. The subsidy cannot, however, exceed DH20 million (the equivalent of US\$2.5 million). Between 2000 and 2005, the Fund contributed to 111 projects with over DH4.5 billion. Most of the projects were concentrated in the textiles sector (51 percent) and sub-contracting in the automotive sector (31 percent)<sup>26</sup>.

The Hassan II Fund, which was initially a special account, was a vehicle that moved privatization proceeds out of the budget with no governmental or ministerial control. The Fund was transformed in January 2002 into a public establishment with legal personality and financial autonomy. The Fund allowed the central state to have a powerful tool of distribution of public money with no oversight. Arguments of sophistication of public policy and need to overcome administrative bureaucracy are often used to justify the reliance on technocratic structures at the expense of a more classical political process of decision-making.

In the absence of a complete database of firms that benefited from the various incentives and no assessment of either their relevance or effectiveness, anecdotal evidence points to waste, discretion and discrimination.

### *4.2.2 Upgrading of SMEs: too many tools, too little impact*

Upgrading the manufacturing firms in Morocco was initially very intimately linked to the Association Agreement (AA) with the European Union signed in 1996 and effective since 2000. For most Moroccan stakeholders, the logic behind upgrading is straightforward. The AA implies a shift in Morocco's relationship with the European Union from "preference" to "reciprocity". Under the AA, Morocco granted tariff concessions on industrial products for

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<sup>25</sup> Since 2008, the sectors have been limited to: textiles-clothing and made-up textile goods; manufacture of equipment for the automotive industry; manufacture of components for electronic assemblies and sub-assemblies; manufacture of equipment for the aeronautics industry; nanotechnology-related manufacturing; and microelectronics and biotechnology.

<sup>26</sup> WTO (2009), Morocco: Trade Policy Review, page 66.



the EU according to the schedule presented in table 7. In exchange, through MEDA funds and other sources of funding, the EU agrees to support the process of manufacturing firms' upgrading to be able to face competition. There were arguments at the time that without upgrading only one third of the manufacturing firms would survive with AA entering into force.

Unlike its attitude towards large enterprises, Morocco's state refrained from becoming too involved in the upgrading process and limited its role to correcting market imperfections, improving the business climate, providing adequate infrastructure, and modernizing the financial sector. Officially, this approach stemmed from a simplistic diagnosis of the manufacturing sector's weaknesses that put too much focus on access to finance as the major obstacle to firms' competitiveness. In other words, access to finance barriers constrains investments and prevents the upgrading process. Therefore, the government needed to improve credit supply by promoting banking sector competition, mobilizing external funds and setting up guarantee funds.

The government's approach evolved over time to better meet the request of firms for modernization and upgrading. Since the enactment of Law No. 53-00 forming the Charter for Small and Medium Enterprises, SME promotion has been a public policy priority, at least in the official discourse. The SMEs charter<sup>27</sup>, issued in 2002 defines an SME as any enterprise with a maximum permanent payroll of 200, an annual turnover (excluding tax) of less than DH75 million and with a total annual balance sheet that does not exceed DH50 million. In addition, the SME should be run directly by natural persons who own it, co-own it or have shares in it, provided that not more than 25 percent of its capital or voting rights are held by non SMEs. For newly created SMEs (those in existence for less than two years) to be eligible, they must have undertaken an overall initial investment program not exceeding DH25 million and complied with an investment/job ratio not exceeding DH 250,000.

The authorities admitted that they needed to abandon their liberal approach and adopt a more proactive approach by being involved in the process of the upgrading including the establishment of an appropriate institutional framework for the promotion, coordination and support of firms. The establishment, in 2002, of the National Agency for the promotion of SMEs (ANPME), and the establishment of the National Committee of Upgrading (CNMN) in December 2002, consisting of representatives of public and private sectors reflect a new attitude on the part of the Moroccan government vis-à-vis the upgrading of enterprises.

Since its creation in 2002, the ANPME aimed at facilitating access to credit for SMEs by providing its assistance through a number of general and sectoral financing schemes.

The main program of upgrading was a component of modernization of SMEs business support program financed by the European Union through the MEDA fund. This program was endowed with an operational budget of 13 million Euros, of which more than 11 million Euros were allocated to directly support enterprises, and the rest to general studies. The program supports 90 percent of the cost of the action of technical assistance. The rest (10 percent) is financed by the beneficiary and must be paid before the start of the operation support.

The National Upgrade Fund (FOMAN) that was set up in 2003 provided financial support for business upgrading programs through co-funding physical investment and technical assistance projects by the ANPME and the banks. Financing physical investment is provided for up to 40 percent of the project's cost with 2 percent interest rate (excluding VAT) with a ceiling of DH5 million. Financing non-physical investment is available for up to 80 percent of the cost of the assistance and advice, with a ceiling of DH 400,000. To be eligible it is

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<sup>27</sup>Achy et al. (2009)

necessary to operate in industry or services related to industry with at least three years of activity and a balance sheet that do not exceed DH70 million and DH25 million, respectively. The Restructuring of Textiles and Clothing Sector's Fund (FORTEX) created in 2002 provided support to the textiles and clothing subsector. Until 2008, upgrading programs in Morocco fully relied on external funding. For the first time, the 2008 state budget allocated DH100 million to support SMEs upgrading<sup>28</sup>.

The survey conducted on a sample of 84 firms that have benefited from upgrading programs (Euro Maroc Enterprise) over the period 2002 and 2004 shows that the financial support provided represented between 3 and 5 percent of turnover for small firms (those with less than 50 employees) and between 0.5 and 3 percent for middle-sized firms (between 50 and 200 employees).

Overall, the Moroccan upgrading policy during the period 2003-2007 lacked cohesion and consistency. It was a patchwork of some thirty different support services with diverse eligibility criteria set by the specific objectives and areas of intervention of each of the donors. The ANMPE, which was in charge of the upgrading policy, had limited human and financial resources.

There are very few studies that empirically attempted to assess the firm-level impact of upgrading programs implemented in Morocco.

Achy et al. (2009), using a stochastic frontier model to estimate the technical efficiency, revealed that the difference between upgraded firms and non-upgraded ones is very small. The paper showed that such difference existed years before the implementation of the upgrading programs and remained over the whole period under study. The unexpected stability of technical efficiency over the years for both upgraded and non-upgraded firms seems to explain why upgrading programs failed to attract a large number of firms.

The trade-off between constraints imposed on firms that wish to join upgrading programs (in terms of adjusting their positions with the tax administration and social security and opening their accounts to the ANPME) and the modest outcome they can achieve measured in terms of technical efficiency gains, led to a lack of interest in the program in general. For those firms that joined, subsidies appear to have been too small to exert a substantial and significant impact on their technical efficiency. In five years, the upgrading programs covered some 1,400 firms. More than 55 percent of the firms benefited from two programs (SMEs Modernization and FOMAN technical assistance), and received an average subsidy of roughly US\$ 25 000. This is incommensurate if compared to grants allocated to large firms under Hassan II Fund for Social and Economic Development that reached as much as US\$2.3 million for each firm.

The government decided later to shift towards a much more proactive support policy within a comprehensive sectoral strategy (the Emergence Program) to boost the industrial sector's competitiveness via the creation and promotion of tech parks, a new generation of industrial zones, trade facilitation measures and provisions of training and skilled labor.

#### ***4.3 The most recent period: the Emergence Program***

The Emergence Program<sup>29</sup> adopted by the government aims to improve Morocco's technological infrastructure, as well as its investment and trade support facilities. The

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<sup>28</sup> On average, the government allocates directly or indirectly (through different exemptions) the equivalent of DH5 billion. The state budget allocated to upgrading would then represent no more than 2 percent of the public resources allocated in various forms to the private sector.

<sup>29</sup> The Emergence Program, according to the government, is expected to boost GDP growth by 1.6 percentage points over ten years, creating some 440,000 direct and indirect jobs and reducing the trade deficit by 50 percent.

program focuses on offshoring<sup>30</sup> and industrial sector modernization to make the sector more competitive. Eight sectors have initially been selected as drivers of growth: French and Spanish-language offshoring/near-shoring, the agro-food industry, the seafood industry, textiles, the automotive, aeronautics and electronics sectors through the establishment of free zones<sup>31</sup>, and industrial crafts.<sup>32</sup>

Investment incentives (to foreign and domestic investment) may be granted under the general investment incentives regime (Investment Charter and its implementing decree), under Hassan II Fund for Economic and Social Development and under the agreement regime<sup>33</sup>.

Under the Emergence Program, the ANPME is in charge of administering two key support schemes: the first one is “Excellence” (*Imitiaz*) and the second is “Support” (*Moussanada*). The ANPME changed the process and eligibility conditions based on its past experience and began to set quantitative targets for its action.

#### 4.3.1 *Imitiaz* scheme: “Picking winners”

The purpose of *Imitiaz* is to provide direct financial support of the most promising SMEs and allow them to expand in terms of size, profitability and value added by subsidizing their investment programs that can span over three years. The government subsidy can amount to as much as DH5 million (approximately \$600,000) for each selected firm, representing a maximum of 20 percent of the project’s cost (all taxes included). The beneficiary firms are selected through a national competitive call for tenders’ process. The selection is taken care of by a special committee made of public and private sector representatives. The application needs to be first approved by one of the banks sponsoring *Imitiaz* and then sent to the ANPME. The government’s target is to provide support to 50 firms every year under the *Imitiaz* scheme. In 2010, only 33 applications were granted *Imitiaz* subsidy. Three factors explain such lack of interest in the *Imitiaz* scheme. The first is the insufficient dissemination of information across the country. The second is the inability of many firms to write a viable funding proposal. The third factor is the unwillingness of a large number of firms to have transparent accounts (for fiscal and social misconduct).

Thirty-three projects were approved in 2010 with a total investment of DH666.4 million. The projects are expected to create an additional turnover of DH9.98 billion over five years, an additional valued added of DH 3.08 billion and provide some 1,964 new jobs. The total government’s subsidy offered to them amounted to DH113.3million, which is on average DH3.43 million per project. In 2011, 47 projects were approved for a planned total investment of DH1.028 billion. The projects are expected to create an additional turnover of DH15.3 billion over five years, an additional valued added of DH4.7 billion and more than DH1 billion in terms of corporate taxes. The 47 projects are also expected to generate 4,519 new jobs. The total government’s subsidy granted to them amounted to DH174 million, which is on average DH3.7million per project. Out of the 80 projects approved in 2010 and 2011, 75 are in manufacturing and only five projects belong to the service sector.

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<sup>30</sup> A Strategic Offshoring Council was established and tasked with following up on the program.

<sup>31</sup> The “MED Zones” program is designed to speed up the development of industrial outsourcing to Morocco’s border areas with a view to supplying the European market. It concerns the automotive, aeronautics and electronics industries.

<sup>32</sup> The strategy for the crafts sector revolves around the emergence of five to ten leading export oriented operators, specialized by sector and having production, innovation and marketing capacities, and around the modernization of local distribution.

<sup>33</sup> Agreements are concluded in the case of large-scale investments (DH200 million and higher). The 2011 Budget Act introduced a National Investment Support Fund in the form of a specially funded account that essentially replaces the support provided by the Hassan II Fund.

#### 4.3.2 *Moussanada scheme*

The purpose of Moussanada is to subsidize SMEs and to improve their productivity through three forms of support. The first form is functional programs that benefit firms regardless of their sectors and cover strategy elaboration, business and marketing, finance, quality control, and organization and management. The second is more technical and sector specific. The third includes production processes, supply management, design, R & D, etc. Three sectors have been given priority: textiles and leather, agro-food and automobiles. SMEs can choose from a pre-set menu of support packages that best fit with their specific needs. For both functional and technical support, the state subsidy can account for up to 60 percent of the cost of the support within a limit of roughly \$70,000 for each firm. The third form of SMEs support is the sector-specific information technology (IT) program. It can cover up to 60 percent of support cost within a limit of roughly \$47,000 per firm. As firms apply for different subsidies, each one may be granted up to US\$ 117,000. This is more than four times the limit of subsidies under the former program.

The goal of Moussanada is to provide support for 500 firms every year. Paradoxically, due to limited interest from the firms, only 258 firms benefited from Moussanada in 2010. In 2011, the number increased to 341 firms but was still below the target. Taking both years together, the ANMPE has been able to achieve 60 percent of its goal (599 firms instead of 1000).

The most recent figures show that up to the end of May 2012, 634 firms had benefited from Moussanada: 18 percent in textiles, garment and leather, 15 percent in services related to industries, 14 percent in chemicals, and 12 percent in metallic and mechanical industries. Some 62 percent of the grants went to firms located in Casablanca region and 9 percent to firms in Rabat region. One third of all support interventions focused on quality and labeling, 26 percent focused on information systems and 11 percent focused on development strategy and investment. Only 4 percent of interventions were concerned with productivity and cost reduction and 3 percent with human resource management. There are so far no available data that allows us to assess the impact of these recent programs.

### **5. Conclusions**

During the period 1965-2011, Morocco's productive structure viewed through sectoral GDP decomposition has broadly witnessed little change. The share of industry represented one third of GDP in the eighties and remained relatively stable through the nineties. However, with trade liberalization and intensive penetration of imports, its contribution to GDP declined to 27 percent of GDP on average in the last decade. Conversely, the share of the service sector moved upward from an average of 50 percent in the early eighties to 56 percent of the current GDP. Most of the change has taken place during the last decade and was driven largely by the boom in telecommunication and financial services. As these activities are characterized by their relatively high labor productivity, the shift in GDP's contribution between industry and services was achieved without any noticeable change in their employment shares in the total workforce, which stood at 24 and 36 percent respectively.

Based on the shifts in industrial policies implemented in Morocco since the beginning of the nineties, the whole period can be divided into three sub-periods. The first covers the nineties with a clear focus on the privatization policy. It was also a period with tumultuous dynamics in Morocco's state-business relations. The growing role of the private sector in the economy, the dismantling of trade protection and the erosion of rents and favors to which large entrepreneurs had access, pushed the business association to become more active and called publicly for a level playing field and more transparency. To counteract the emergence of the private sector as an autonomous social force, the state resorted to a double-track strategy in which it combined coercion and cooptation.

The second sub-period started in early 2000 and ended in 2007 with multiple investment promotion and tax exemption schemes that appeared to be dispersed, overlapping and non-focused. At the same time, the authorities designed a timid intervention program for industrial upgrading that was restricted to SMEs and that relies mostly on EU funding. With regards to the upgrading process, Morocco's government limited its role to correcting market imperfections, improving the business climate, providing adequate infrastructure, and modernizing the financial sector. The government approach stemmed from a simplistic diagnosis of the manufacturing sector's weaknesses that put too much focus on access to finance as the major obstacle to firms' competitiveness.

The third sub-period that began in 2007 was an attempt to endow the state with a more active and visible role in promoting and administering industrial policies. Many instruments that had existed before were repackaged and re-defined in order to fit within a comprehensive framework called the Emergence Program (Take-off Program). The upgrading policy, labeled competitive modernization under the new program was revisited and endowed with more funding from the state budget. A new version of the Emergence Program was approved in 2009 and has been one of the key government's policy pillars.

In the absence of a complete database of firms that benefited from the various incentives, it is hard to conduct a rigorous analysis of the relevance or effectiveness of industrial policies in Morocco. A number of outcome indicators reveal, however, that the process of structural transformation has been slow and has fallen short of expectations. Unlike other developing and middle income countries, the share of Morocco's manufacturing value added in GDP has been constantly declining since the mid-nineties. While manufacturing value added represents on average 25.4 percent of GDP in the MICs and 21.6 percent in LDCs, it has always remained under 20 percent in Morocco's recent history. More worrying, the manufacturing sector's contribution to GDP has been hovering around 15 percent in recent years.

Although the private sector became more dynamic, with the share of private investments in the GDP exceeding 25 percent in the last decade up from less than 20 percent in the nineties, the manufacturing sector hardly created new jobs and the number of firms has been shrinking due to high exit rates. The sector provided only 10,000 out of more than 120,000 new jobs created every year in the economy in the last decade. As a consequence, the share of manufacturing sector in total employment, which accounted for 16 percent in the early eighties, dropped to 11 percent by 2010.

In the meantime, a number of firms such as the American Boeing, the French Safran and other leading aviation companies entered Morocco's manufacturing sector and built increasingly sophisticated factories. More recently, the French company Renault has invested \$1.5 billion in a factory in the North of Morocco with the capacity to produce some 147,000 cars per year. In addition to its geographical proximity to Europe and the multiple free trade agreements Morocco has implemented, these companies have also been attracted by the generous incentives provided to them by the state.

The recent wave of investments in relatively sophisticated industries has boosted the manufacturing sector growth but has not fundamentally changed its specialization patterns. The latter is a key factor in accounting for the divergence in growth performance between Morocco and other developing and emerging countries. Morocco's manufacturing sector is less diversified and more specialized in industries that are intensive in unskilled labor or are alternatively natural resource based.

The propensity of manufacturing firms to engage in innovation activities remains extremely weak in Morocco. Less than 10 percent of the manufacturing firms have an ISO certification,

and only around 5 percent are using a technology under foreign license. On the other hand, approximately 45 percent of the firms declared that they are engaged in product innovation and one third in process innovation. Product innovation is mostly undertaken internally except for 17 percent of the firms who have developed new product lines with their clients, 5 percent with their suppliers and only 1 percent with universities.

The degree of diversification of Morocco's exports has not experienced any significant change over the last two decades. Clothing, crustaceans and mollusks (seafood), phosphoric acid, electronic devices (transistors) and phosphate emerged as the five key Moroccan export products in 2000. In 2010, the list had not significantly changed. The five top export products appeared in the following order: clothing, phosphoric acid, wires and cables for electricity, fertilizers and phosphates.

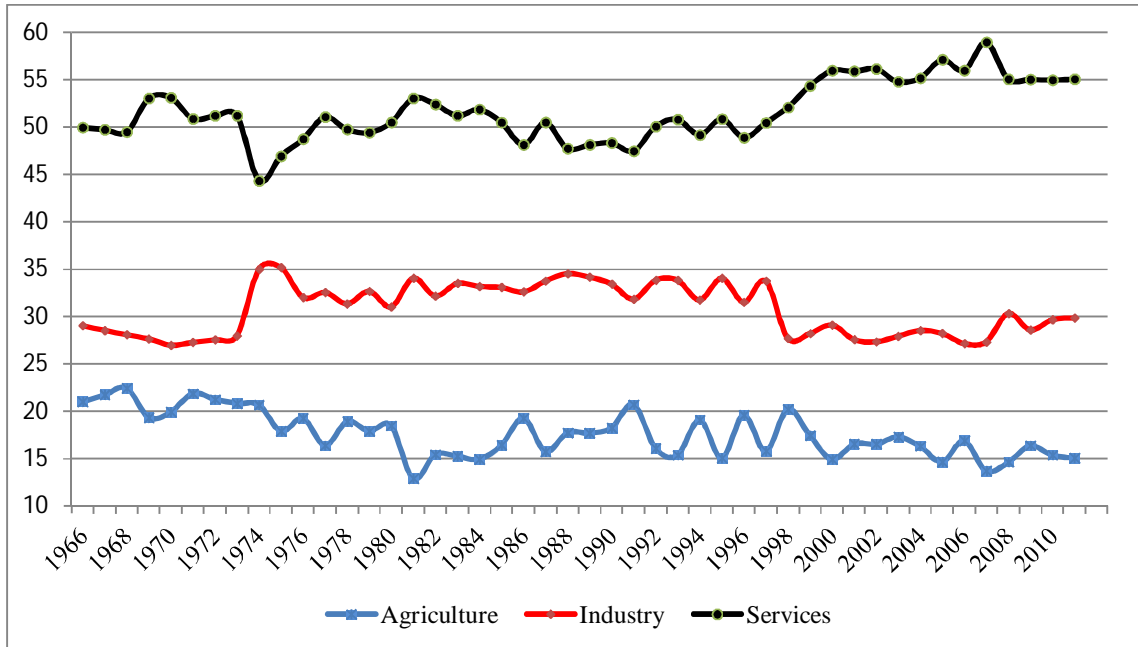
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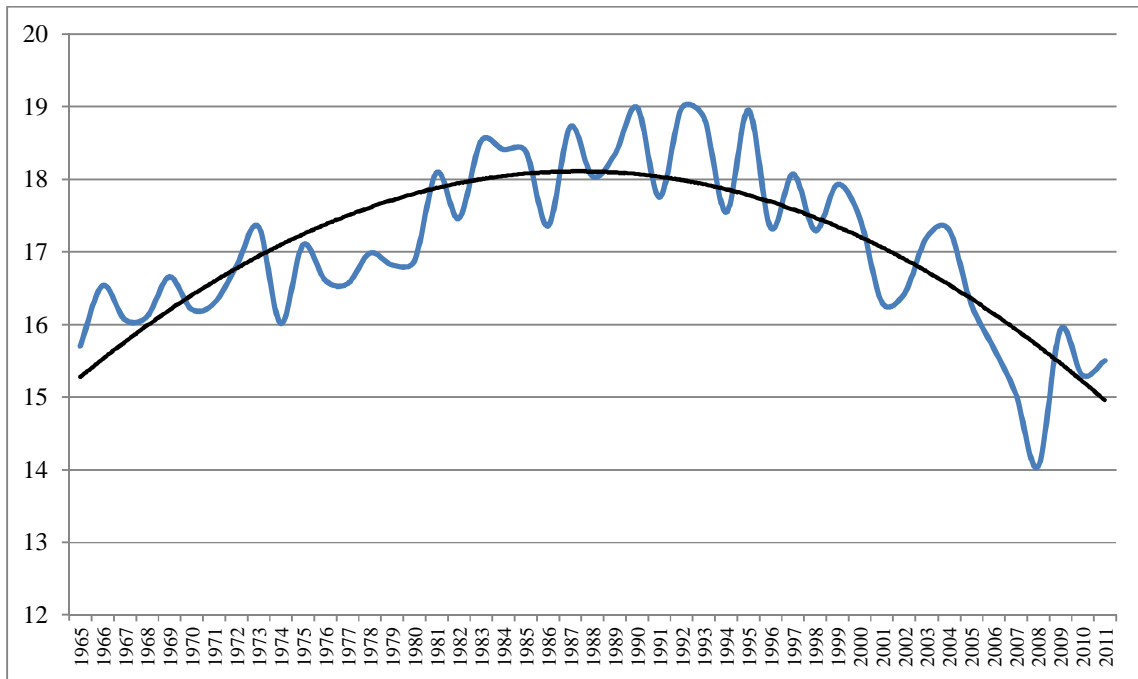


**Figure 1 : Morocco's GDP Decomposition (1965-2011)**



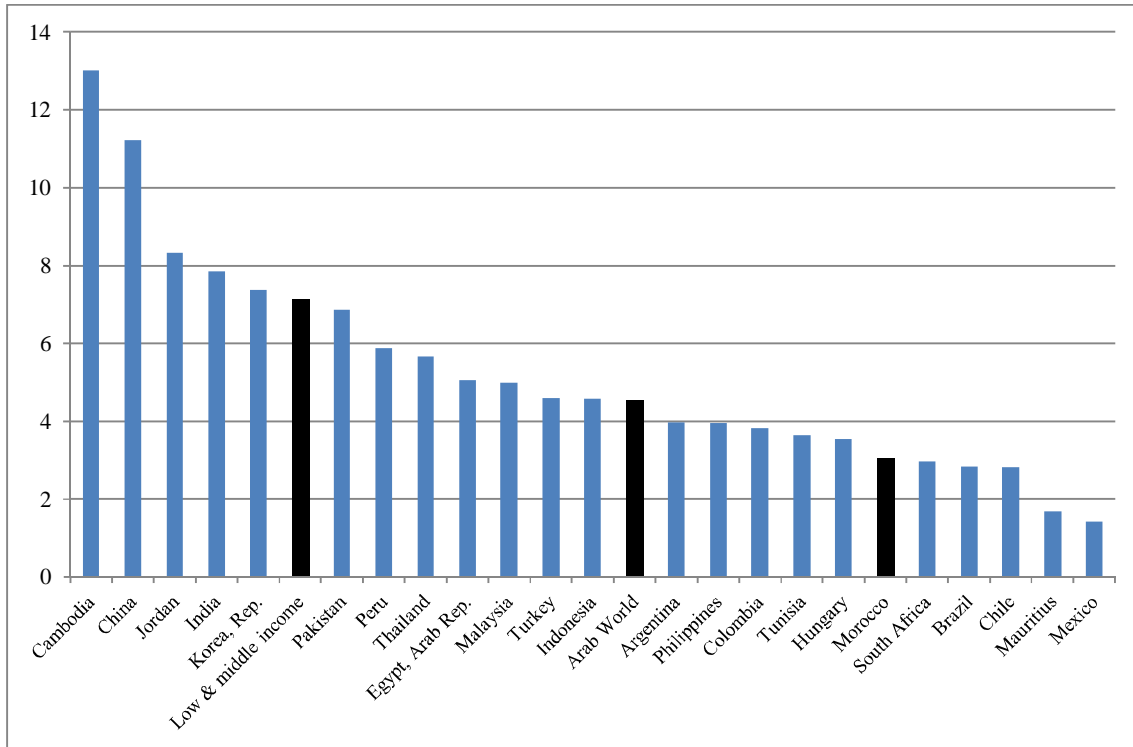
Source: World Development Indicators (2012). <http://data.worldbank.org/data-catalog/world-development-indicators>

**Figure 2: Morocco's Share of Manufacturing Value Added in GDP (1965-2011)**



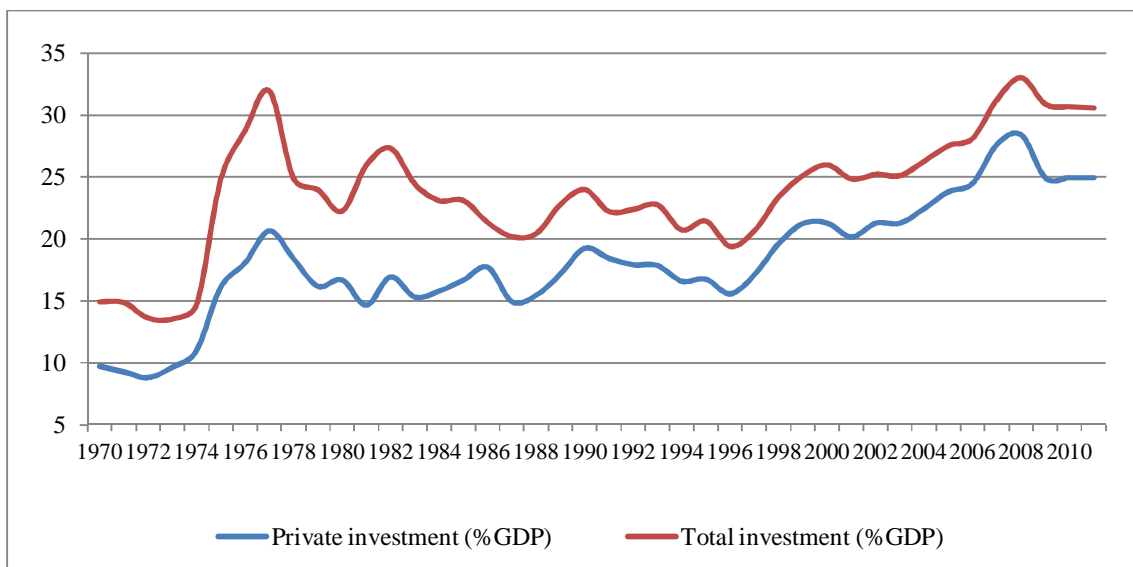
Source: World Development Indicators (2012). <http://data.worldbank.org/data-catalog/world-development-indicators>

**Figure 3: Manufacturing Value Added Average Annual Growth Rate 2000-2010**



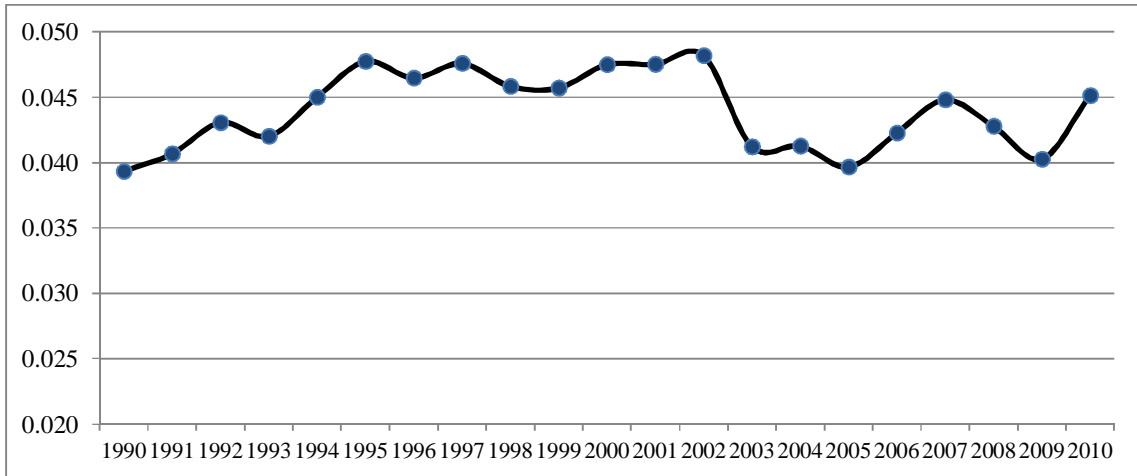
Source: Author's calculation based on World Development Indicators (2012). <http://data.worldbank.org/data-catalog/world-development-indicators>

**Figure 4: Private Investment and Total Investment (% of GDP)**



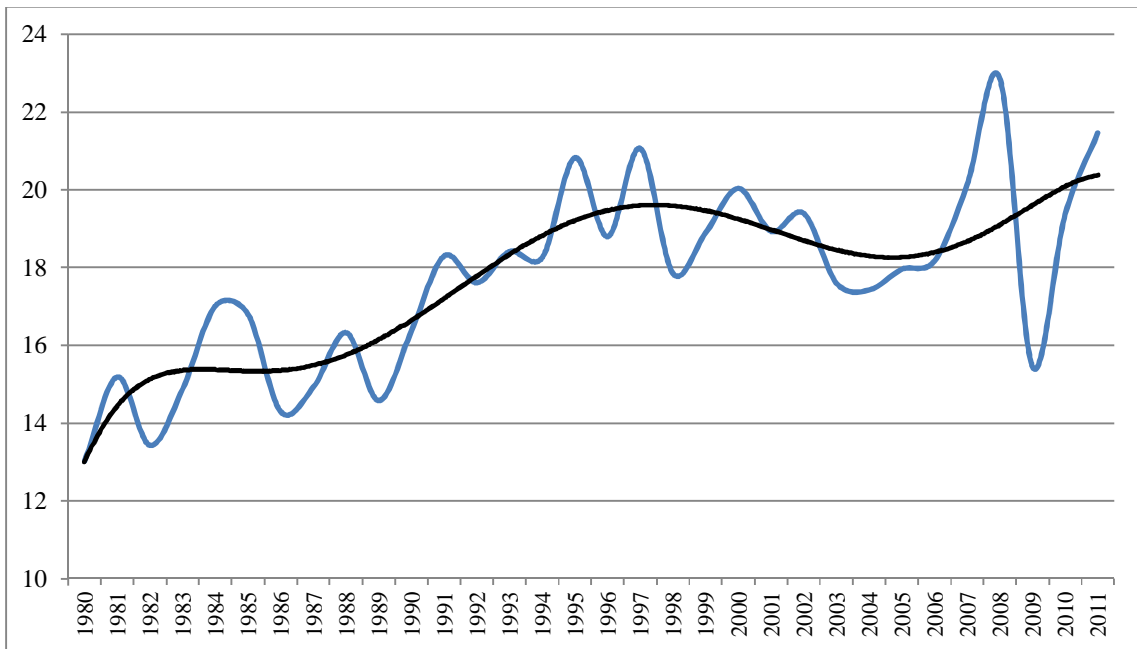
Source: Author's calculation based on World Development Indicators (2012). <http://data.worldbank.org/data-catalog/world-development-indicators>

**Figure 5: The Herfindhal-Hirshman Index (manufacturing value added 4-digit level)**



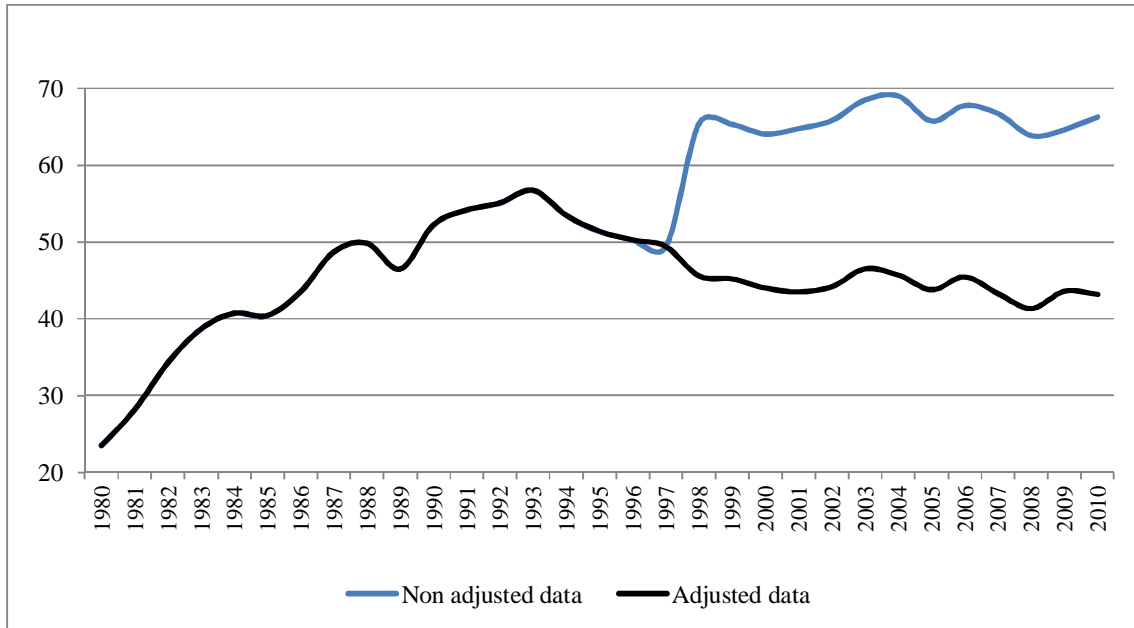
Source: Author's calculations based on Morocco's Ministry of Industry data (2011).

**Figure 6: Share of Merchandise Exports in GDP**



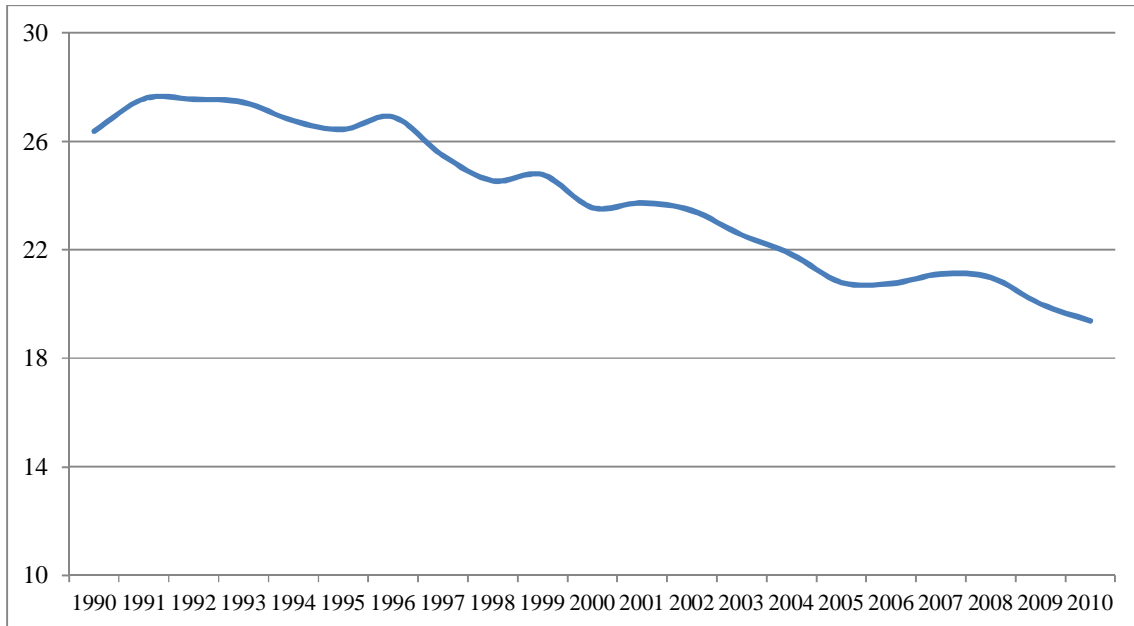
Source: Author's calculations based on World Development Indicators (2012).

**Figure 7: Share of Manufactured Exports in Merchandise Exports**



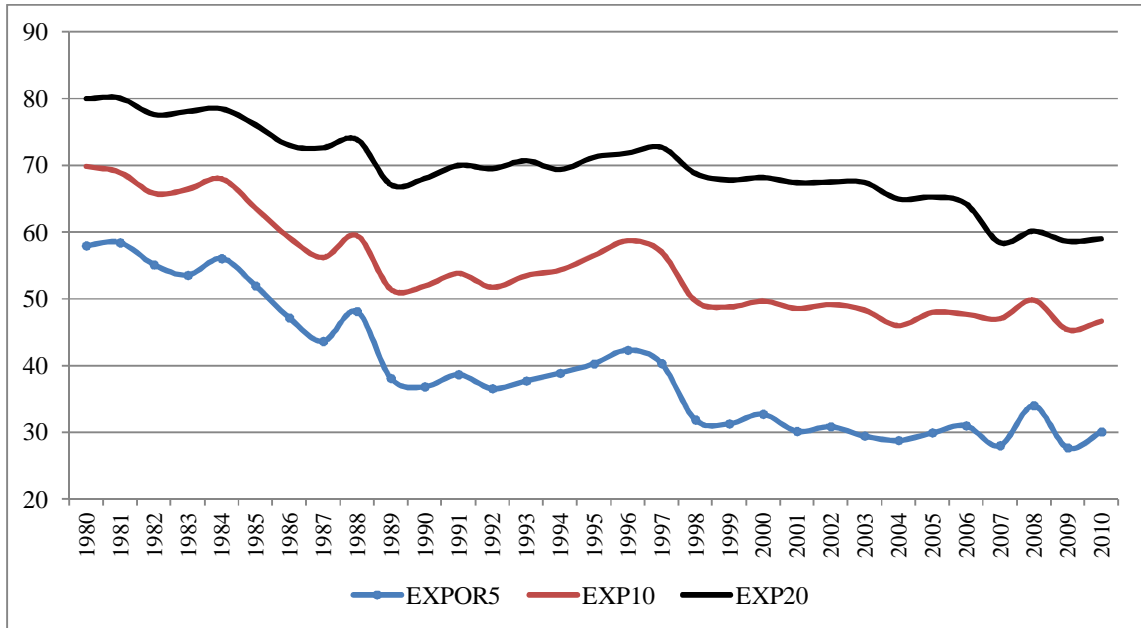
Note: Since 1998 all re-exports of imports under temporary admission (TA) have been counted as exports. The adjusted data removes this component of exports in order to obtain a homogenous series of manufactured exports in merchandise exports over the whole period.  
 Source: World Development Indicators (2012) and Morocco's Foreign Exchange (2011).

**Figure 8: Share of Manufacturing Firms Engaged in Exports**



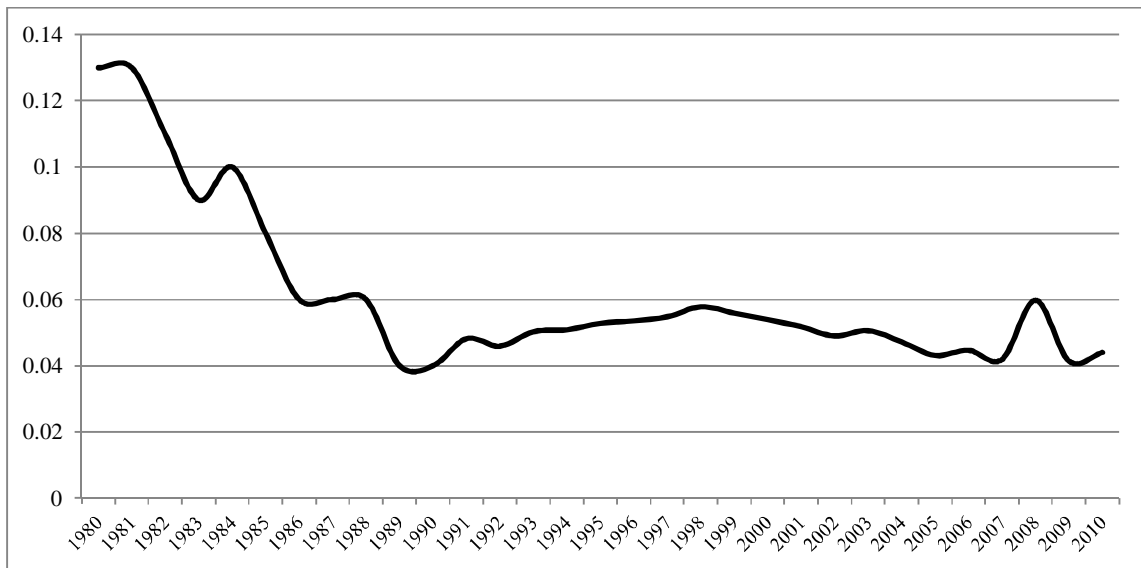
Source: Author's calculation based on Ministry of Industry data (2011)

**Figure 9: Share of the Major 5, 10 and 20 Products in Morocco's Merchandize Exports**



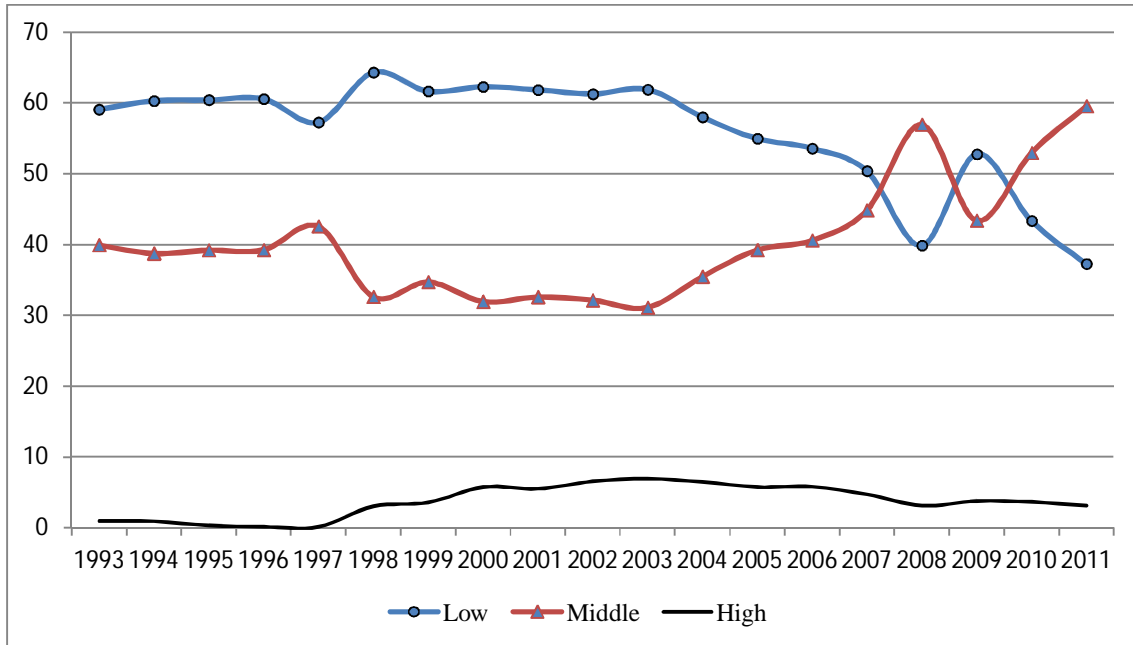
Source: World Bank (website) and Morocco's foreign exchange (2011). Economic Diversification and Growth in Developing Countries Toolkit. <http://info.worldbank.org/etools/prmed/CountryScorecard.aspx>

**Figure 10 : Export Diversification (HHI 4-digit)**



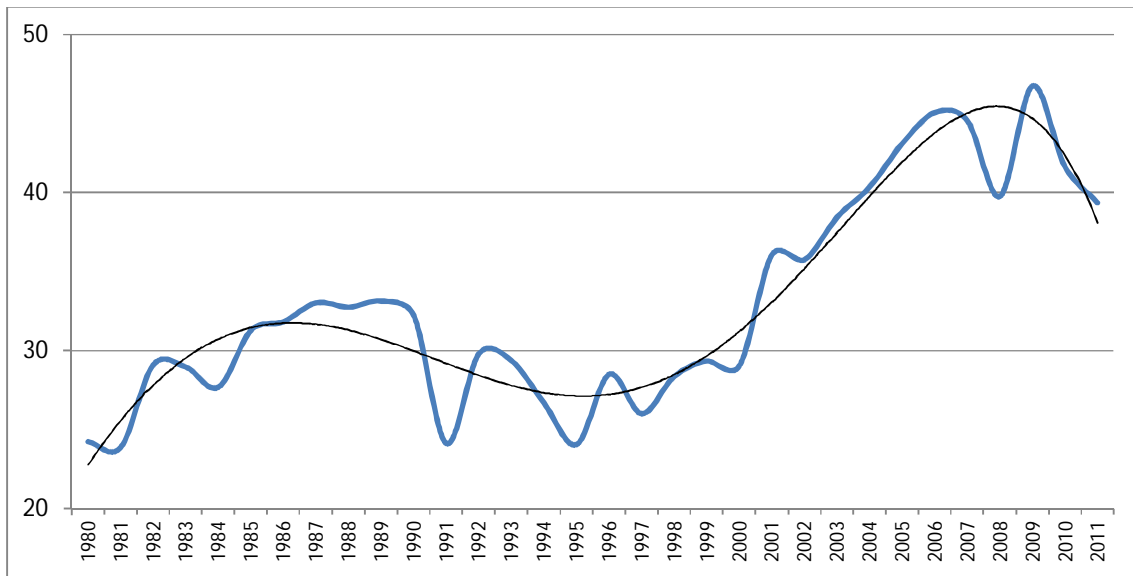
Source: World Bank and author's calculations based on Morocco's foreign exchange office data. <http://info.worldbank.org/etools/prmed/CountryScorecard.aspx>

**Figure 11: The Technological Content of Morocco's Exports**



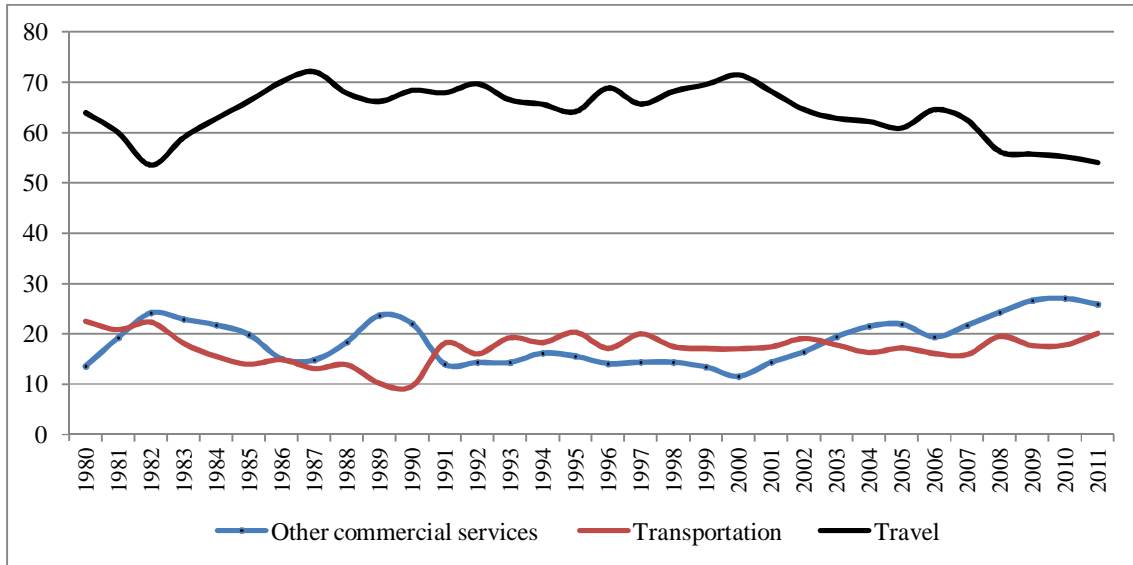
Source: Author's calculations based on Morocco's foreign exchange (2011) office data and using OECD approach (1997).

**Figure 12: Share of Export Services in Total Exports**



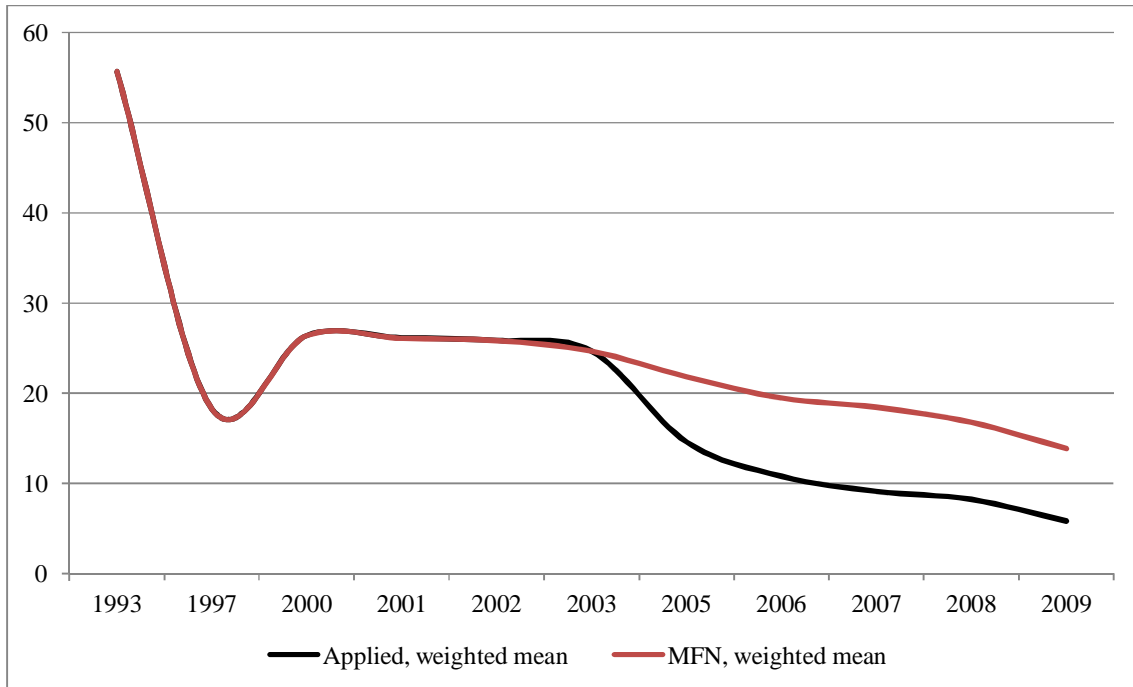
Source: Author's calculation based on Morocco's foreign exchange office (2011)

**Figure 13 : Composition of Services Exports**



Source: Author's calculation based on Morocco's foreign exchange office (2011).

**Figure 14: Morocco's Tariffs on Manufactured Products**



Source: Tariff profile, World Trade Organization (2012).

**Table 1: Average Real Growth of Manufacturing Value Added and GDP in Morocco**

	1965-1979	1980-1989	1990-1999	2000-2011
Manufacturing growth	5.48	3.17	2.26	2.71
GDP growth	6.64	3.44	2.16	4.55

Note: The real growth uses constant (2000\$ US) values of GDP and manufacturing value added.

Source: Author's calculation based on World Development Indicators (2012). <http://data.worldbank.org/data-catalog/world-development-indicators>

**Table 2: Sources of Morocco's Manufacturing Sector Value Added Growth**

	1985-1989		1990-1999		2000-2011	
	Contribution	Share	Contribution	Share	Contribution	Share
Labor	3.5	105	0.9	42	0.3	11
Capital	0.9	27	0.8	37	1.7	64
TFP	-1.1	-32	0.5	21	0.7	25
Total	3.3	100	2.3	100	2.7	100

Source: Author's calculations based on WDI (2012) and Morocco's Ministry of Industry data (2011). <http://data.worldbank.org/data-catalog/world-development-indicators>

**Table 3: Comparison of the Structure of the Manufacturing Value Added between Morocco and Developing Countries' Group (2009)**

	Morocco	Developing countries
15 - Food and beverages	23.1	16.09
16 - Tobacco products	10.1	1.43
17 - Textiles	3.3	3.62
18 - Wearing apparel, fur	6.9	2.54
19 - Leather, leather products and footwear	1.2	0.85
20 - Wood products (excl. furniture)	0.9	1.12
21 - Paper and paper products	1.1	2.49
22 - Printing and publishing	1.3	1.73
23 - Coke, refined petroleum products, nuclear fuel	3.7	7.13
24 - Chemicals and chemical products	1.9	10.98
25 - Rubber and plastics products	2.4	3.37
26 - Non-metallic mineral products	15.1	4.90
27 - Basic metals	3.1	5.16
28 - Fabricated metal products	4.5	3.71
29 - Machinery and equipment n.e.c.	1.2	4.61
30 - Office, accounting and computing machinery	0.1	2.42
31 - Electrical machinery and apparatus	4.6	6.00
32 - Radio, television and communication equipment	0.6	9.81
33 - Medical, precision and optical instruments	0.8	0.50
34 - Motor vehicles, trailers, semi-trailers	2.0	5.68
35 - Other transport equipment	1.1	4.06
36 - Furniture; manufacturing n.e.c.	1.2	1.77
<b>Total Manufacturing</b>	<b>100</b>	<b>100</b>

Note: The benchmark of developing countries does not include China.

Source: UNIDO database and Morocco's Ministry of Industry data (2011).



**Table 4: Industries with the Largest Progress in their Value Added Growth (2000-2010)**

<b>Industries</b>	<b>Average annual growth 2000-2010</b>	<b>% in the 2000 MVA</b>	<b>% in the 2010 MVA</b>
Manufacture of machine tools	54,3	0,000	0,019
Manufacture of games and toys	48,6	0,001	0,029
Manufacture of other non-metallic mineral products	45,8	0,105	2,743
Manufacture of coke oven products	28,7	0,002	0,014
Manufacture of instruments for measuring, checking, testing	21,7	0,059	0,252
Production, processing and preserving of meat and meat products	21,4	0,085	0,352
Casting of metals	21,0	0,035	0,141
<i>Manufacture of aircraft and spacecraft</i>	<i>21,0</i>	<i>0,161</i>	<i>0,645</i>
Forging, pressing, stamping and roll forming of metal	19,4	0,057	0,199
<i>Manufacture of electrical equipment n.e.c.</i>	<i>18,8</i>	<i>1,039</i>	<i>3,475</i>
Other first processing of iron and steel	18,8	0,011	0,035
Manufacture of non-ferrous metals	16,5	0,228	0,629
Manufacture of jewellery and related articles	15,3	0,057	0,143
<i>Manufacture of pharmaceuticals products</i>	<i>14,5</i>	<i>2,184</i>	<i>5,074</i>
Recycling of non-metal waste and scrap	12,5	0,003	0,005
Manufacture of railway and tramway locomotives and rolling stock	10,2	0,056	0,089
<b>Total</b>	<b>17,1</b>	<b>7,0</b>	<b>14</b>

Note: MVA refers to the current value of manufacturing value added.

Source: Author's calculation based on Morocco's Ministry of Industry data (2011).

**Table 5: Industries with the Largest Regress in their Value Added Growth (2000-2010)**

<b>Industries</b>	<b>Average annual growth 2000-2010</b>	<b>% in the 2000 MVA</b>	<b>% in the 2010 MVA</b>
Optical instr. and photographic equipment	-31,48	0,046	0,001
Rubber products	-17,60	0,622	0,054
TV and radio receivers	-11,77	0,008	0,001
Knitted and crocheted fabrics	-9,87	0,184	0,039
Pesticides and other agro-chemical products	-9,76	0,145	0,031
Other products of wood	-9,21	0,287	0,066
Veneer sheets and other panels and boards	-8,07	0,396	0,102
Pulp, paper and paperboard	-6,66	1,693	0,509
Cutlery, tools and general hardware	-6,36	0,188	0,058
Other special purpose machinery	-6,14	0,036	0,011
Preparation and spinning of textile fibers	-5,36	1,507	0,520
Leather clothes	-5,12	0,086	0,031
Miscellaneous manufacturing n.e.c.	-5,04	0,263	0,094
Carpets and other textiles	-5,04	0,636	0,227
Steam generators, except central heating hot water boilers	-4,84	0,055	0,020
Rubber products	-4,15	0,561	0,220
Other transport equipment n.e.c.	-3,55	0,005	0,002
Textile weaving	-2,42	1,402	0,657
<b>Total</b>	<b>-5,91</b>	<b>8,1</b>	<b>2,6</b>

Note: MVA refers to the current value of manufacturing value added

Source: Author's calculation based on Morocco's Ministry of Industry data 2011.

**Table 6: Tentative Estimate of the Cost of IP Measures in Morocco**

Measure	Estimated cost <sup>34</sup>	
	2009	2010
<b>New creations:</b> Exemption from or refund of value added tax (VAT) on capital goods, equipment and tools (period of 24 months)	83	102
<b>Exporting enterprises</b> are exempt from corporate tax (IS) and Income tax (IR) for a period of five years, after which there is a 50 percent reduction in the IS (for that part of turnover that is exported) and a 20 percent reduction in IR.		
• Corporate tax exemptions	1845	1997
• Income tax exemptions	107	115
For enterprises <b>exporting services</b> , including hotels, the exemption or reduction only applies to turnover in foreign currency.		
• Corporate tax exemptions	336	319
• Income tax exemptions	66	71
<b>Enterprises established in Tangier</b> are eligible for a 50 percent reduction in the IS or IR for a period of five years		
• Corporate tax exemptions	459	492
• Income tax exemptions	55	59
<b>Enterprises located in provinces and prefectures fixed by decree</b>		
• Income tax exemptions	136	146
<b>Free export zones (ZFE)</b>		
• Corporate tax exemptions <b>for the first 5 years</b> , followed by a reduction for the next 10 years	51	55
<b>Investments worth DH 200 million or more</b> are exempt from customs duty on imports of capital goods and also exempt from VAT on imports. (36 months of the company's existence).		
• Customs duties' exemptions	591	260
• VAT exemptions	64	23
<b>Automotive industry:</b> Exemptions of customs duties on imports of products, materials, accessories and sets needed to manufacture "economy cars" ("affordable cars")		
• Customs duties	638	365
<b>The Hassan II Fund for Economic and Social Development</b> <sup>35</sup> bears part of the costs incurred by enterprises in some industrial sectors <sup>36</sup> .		
• The construction or purchase of buildings: 30% of the cost (maximum unit cost of DH2,000/m <sup>2</sup> , excl. taxes		Between 2000 and 2005, the Fund contributed in 111 projects with over DH4.5 billion: Textiles sector (51 percent), and sub-contracting in the automotive sector (31 percent) <sup>37</sup> .
• The purchase of capital goods: maximum of 10% of the cost (excluding import duties and charges)		
• Max contribution to any single project 10% of investment and capped at DH20 million.		
<b>Eligibility:</b> new investment projects (creation or expansion) submitted by investors whose overall investment is more than DH 5 million, excluding taxes, and provided that the amount invested in capital goods is more than DH2.5 million, excluding taxes.		<b>Roughly DH900 million per year.</b>
<b>Total (in million of Moroccan dirham)</b>	<b>5 331</b>	<b>4 904</b>

Note: Unit Moroccan Dirham, approximately \$ 1 = DH 8  
Source: Author's calculation.

<sup>34</sup> The estimated cost is based on Morocco's Ministry of Finance Report on fiscal spending (2010)

<sup>35</sup> The Hassan II Fund for Economic and Social Development was established in 2000.

<sup>36</sup> Since 2008, the sectors are limited to: textiles-clothing and made-up textile goods; manufacture of equipment for the automotive industry; manufacture of components for electronic assemblies and sub-assemblies; manufacture of equipment for the aeronautics industry; nanotechnology-related manufacturing; and microelectronics and biotechnology.

<sup>37</sup> WTO (2009), Morocco: Trade Policy Review, page 66.

**Table 7: Schedule of Tariff Dismantling Under the FTA Agreement with the European Union**

Dismantling year	Raw material (%)	Intermediate products (%)	Products not manufactured locally (%)	Products manufactured locally (%)
0(March 2000)	25	25	25	
1	25	25	25	
2	25	25	25	
3	25	25	25	10
4				10
5				10
6				10
7				10
8				10
9				10
10				10
11				10
12				10

Source: EU-Morocco Association Agreement (2000/204/EC, ECSC). [http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc\\_127906.pdf](http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc_127906.pdf)

**Table 8: Firms that Benefited from Upgrading Programs in the Period 2003-2007**

Source of funding	Number of firms	Number of actions
<b>Euro Maroc Enterprise</b>	364	709
FOMAN technical assistance	371	432
Modernization PME	412	642
ISTIMRAR technical assistance	69	69
FOMAN Co-funding	59	59
Walloon Export Agency (AWEX)	16	16
Investment promotion unit (Italy)	177	177
Industrial and technological development center (Spain)	203	203
German Cooperation (GTZ)	135	135
New Business Opportunities (NBO/USAID)	74	74
<b>Total</b>	<b>1 415</b>	<b>2516</b>

Source: Achy et al. (2006)