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مديرية الدراسات والتوقعات المالية

Non-price competitiveness of Moroccan exports:

Outline of product quality of key sectors

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Introduction

The policy of economic openness pursued by Morocco, particularly through the signing of several free trade agreements, has resulted in an increase in the rate of openness of the national economy. However, the lower growth of national exports compared to imports in duration, has led to a permanent balance of trade deficit.

So as to overcome the insufficient dynamism of exports with respect to the growing needs of the national economy, especially for imported inputs, Morocco has embarked on a process of significant structural transformations through the implementation of sector-based policies and the promotion of internationally oriented businesses. These ambitious sector-specific strategies have strengthened the emergence of growth-driving businesses which have also contributed significantly to the modernization of the national industrial fabric. This new trend has also been a source of attraction of foreign investments in the industrial sector especially the aerospace, chemistry-parachemistry, electrical and automotive industry.

Thus, export performance has gained new momentum with the operationalization of the National Pact for Industrial Emergence in 2009, mainly focused on the development of global businesses in view of their dynamics at the world level and the competitive advantages that they present, or the industrial and commercial strategy 2008-2020 of the OCP for an increasingly important anchoring in phosphate derivatives, with higher added value.

This structural change in the exportable offer was gradually accompanied by a significant increase in the range of products exported and better positioning, not only on low cost and low-tech products, but also in qualitative competition, which is likely to increase the qualified employment and improve the contribution of total factor productivity (TFP) to growth.

Therefore, the non-price advantage which includes all factors other than price as criteria in the consumer choice (quality, innovation, design, branding, distribution networks ...) becomes an important determinant of competitiveness. In fact, competitiveness is not only a question of price and production costs, but also of creativity, innovation and quality.

According to a study conducted by the European Commission in 2010, price competitiveness explains only 40% of the variation in export performance of the euro area countries over the period 1998-2008.

It is, however, a matter of a difficult-to-measure concept. To try to understand it, the economic literature distinguishes two approaches. The first approach is of qualitative nature and is based on indicators of quality and innovation, and the econometric second one tries to measure the non-price competitiveness by the evolution of exports unexplained by classical variables (the global demand and an indicator of price competitiveness).

To overcome the shortcomings of the two approaches mentioned above, a non-econometric alternative measure, based on the consumer's revealed preference theory, is developed. This approach, developed by Aiginger, considers that if a country has a surplus volume of a product whose export price is higher than the import price, then the sale of this product depends more on the quality than price.

This work proposes to apply this approach to the Moroccan exports and that of a sample of competitor countries, in order to analyse their positioning in the qualitative competition and price competition. It presents in its first part the evolution and analysis of the structure and profile of Moroccan exports between 1998 and 2014. In the second part, the methodology adopted for assessing the quality of exports of the main sectors will be shown. The last part will present the results in the form of a typology of exports of key products of Morocco and the sample countries according to their performance in terms of quality competitiveness and price competitiveness.

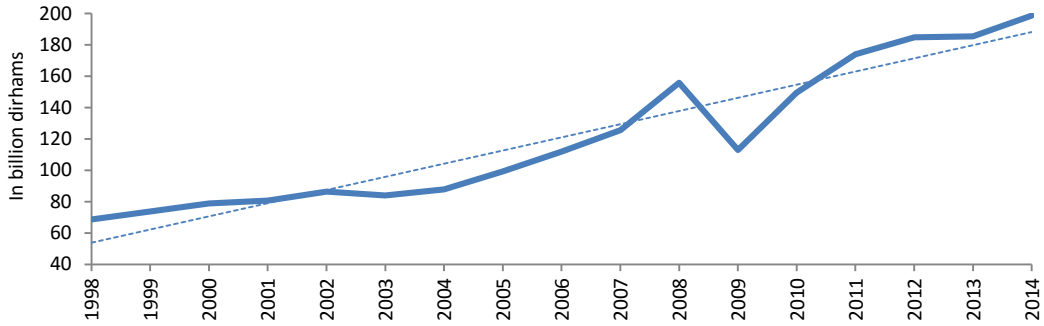
1. Analysis of the structure and profile of Moroccan exports

Analysis of Morocco's export profile reveals that a process of structural transformation takes place thanks to the emergence of new export industries, improvement of technological content and qualitative competition.

1.1. Analysis of the structure of Moroccan exports

The value of Moroccan exports of goods has experienced sustained increase, rising from 68.6 billion dirhams in 1998 to 198.6 billion dirhams in 2014. The pace of export growth was higher during the period 2007-2014, that is, 7.4% against 6.3% between 1998 and 2006.

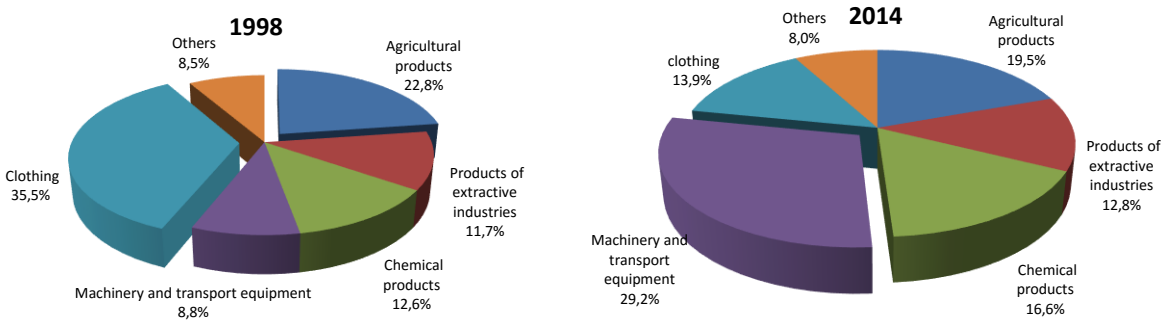
Figure 1: Evolution of Moroccan exports



Source: calculations of DEPF (Directorate of Financial Studies and Forecasts) based on data from the Exchange Office

At the sector level, the structure of Moroccan exports witnessed a significant change between 1998 and 2014. The share of clothing and agricultural products decreased by 35.5% and 22.8% respectively in 1998 to 13.9% and 19,5% in 2014. In contrast, the share of machinery and transport equipment rose sharply from 8.8% in 1998 to 29.2% in 2014, linked in particular with the remarkable increase in exports in the automotive sector. Similarly, the shares of extractive industries and chemical products have grown stronger, respectively accounting for 12.8% and 16.6% of exports in 2014, against 11.7% and 12.6% in 1998, thanks to the dynamism of exports of phosphates and derivatives.

Figure 2: Structure of Moroccan exports



Source: DEPF calculations based on data from the Exchange Office

It thus appears that the structure of Moroccan exports has witnessed a significant change in favour of emerging industries with high added value (automotive, electrical and electronic

industries ...), at the time when the so-called traditional sectors recede (clothing, agricultural products). This transformation is explained in particular by the orientation of the Moroccan industry to new global businesses, which generated an increase in exports of products such as wires and cables for electricity, whose share rose from 1.7% to 10.4% between 1998 and 2014, and the emergence of new products such as touring cars and aircraft and related material and parts thereof, whose exports reached 9.6% and 1, 6% respectively of Morocco's total sales.

Regarding the main agricultural and sea products exported, their share has witnessed a decline over the same period. In particular, crustaceans and molluscs and fruits represented respectively 3.1% and 2.5% of Morocco's total exports in 2014 against 6.3% and 4.2% in 1998.

Phosphates showed also a decrease in their share (4.1% after 6.4% in 1998). Similarly, clothing sales have seen their share drop in Moroccan exports, especially men's clothing of textile materials excluding knitted or crocheted fabrics, whose share rose from 11.2% to 2.2% between 1998 and 2014.

1.2. Analysis of the profile of Moroccan exports

The comparison of the evolution of Morocco's exports to that of the world imports would allow to assess the level of Morocco's performance with respect of export and its positioning on the global market. This analysis, made on the basis of a portfolio of 20 major product groups exported by Morocco, compares the growth of our exports with the dynamics of global demand.

Comparing the profile of Moroccan exports between the two periods 1998-2002 and 2010-2014 reveals champion products which are dynamic products characterized by both strong growth of world imports and market share gains for Morocco. They represent 40.2% of the total exports on average for the period of 2010-2014, against 12.3% on average over the period 1998-2002. They consist mainly of automotive vehicles, phosphates and fertilizers, electricity distribution equipment and crustaceans and molluscs.

However, Morocco has lost market shares for goods characterized by a growing global demand. This includes, in particular, clothes, shoes and food products (fruits and vegetables). These products are classified as non-performing products, due to the strong competition on the world market.

It should be noted that the phosphates, which were classified as declining products (decline of both global demand and the Moroccan market shares) during the first period, moved to the category of champion products in the second period, thanks to the new strategy of the OCP. Since 2006, OCP has adopted a new development strategy which aims to increase crude phosphate production from 28 to 47 million tonnes by 2020, of which approximately 80% will be processed locally, reduce production costs from 30% to 40%, and build the world's largest fertilizer production platform by the next ten years.

Figure 3 : Profile of Moroccan exports in the global market (Average 1998-2002)

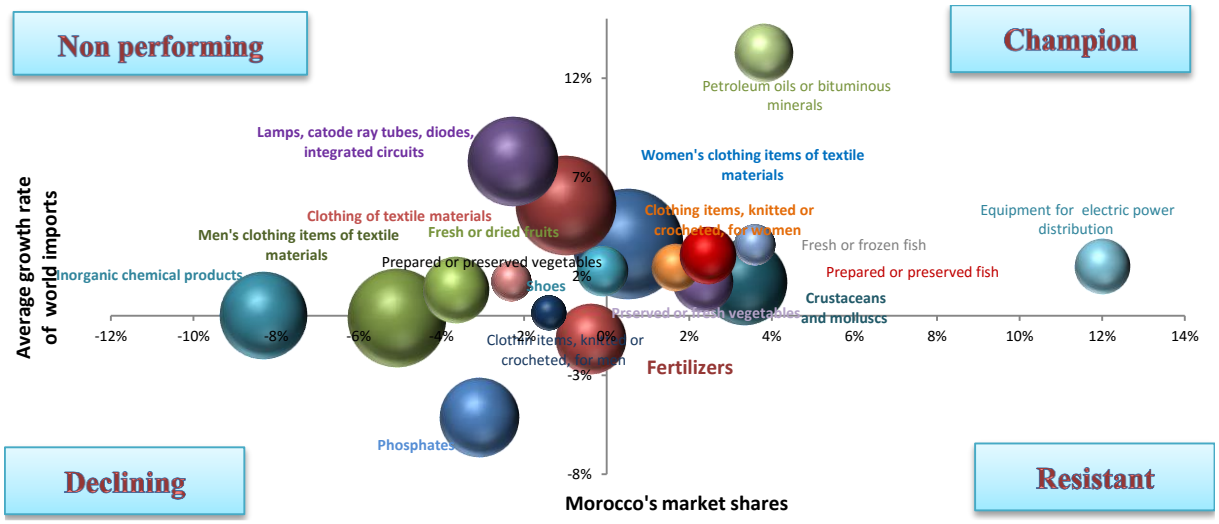
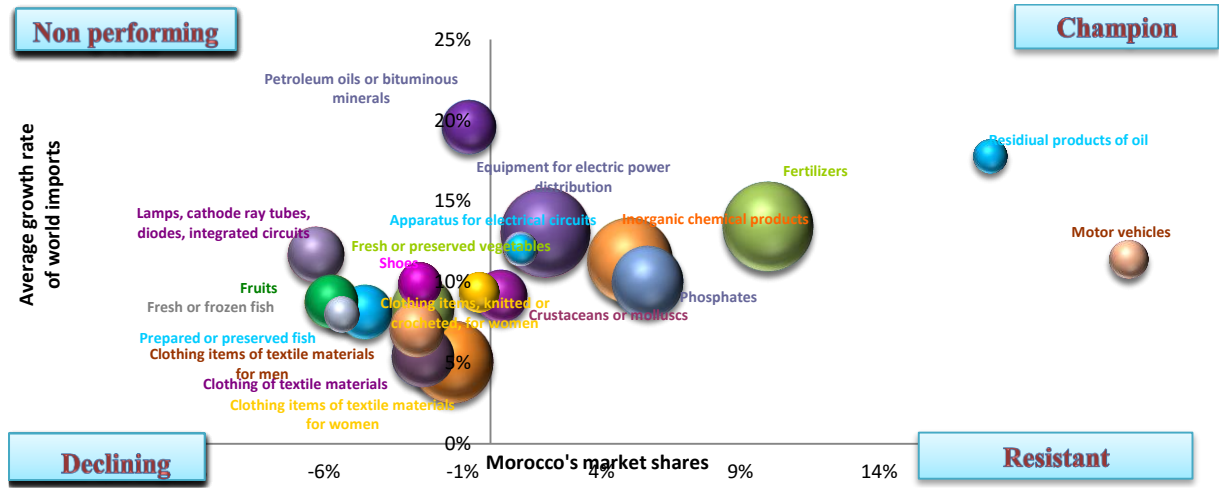


Figure 4 : Profile of Moroccan exports in the global market Average (2010-2014)



Source: DEPF calculations based on data from the Exchange Office

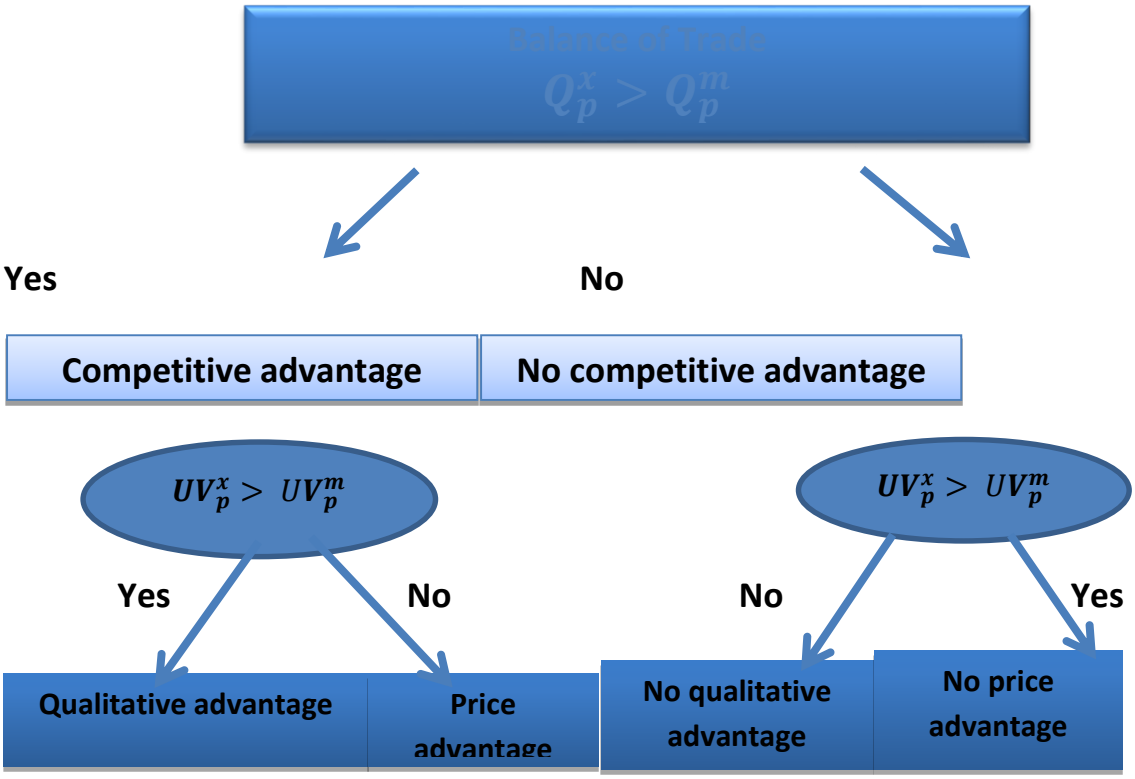
2. Assessment of the quality competitiveness of Moroccan exports

2.1. Methodology for understanding the quality of Moroccan exports

The concept of non-price competitiveness is difficult to measure. To try to comprehend it, the economic literature distinguishes two approaches:

- ***An indirect and qualitative approach*** which is based on indicators of quality and innovation. At the micro-economic level, several studies approach the role of various factors of non-price competitiveness of companies in their export performance (marketing strategy, research intensity, the business environment, ...). However, at the macroeconomic level, the studies that evaluate the effect of non-price competitiveness on exports are less abundant, due to the difficulties of constructing such indicators at a country level.
- ***An indirect and econometric approach*** that attempts to measure the "non-price" competitiveness by the evolution of exports unexplained by classical variables (global demand and price competitiveness indicator). Thus, the unexplained part measures the omitted variables, that is to say, the non-price determinants of the evolution of exports. However, these results are divergent and depend on the model specification, the selected price competitiveness indicators (relative export prices, effective exchange rates and relative unit salary costs) or the field to which they apply (manufacturing, total economy). These methodological differences explain the divergence of these estimates in the literature.

To overcome the shortcomings of the two approaches mentioned above, a non-econometric alternative measure, based on the theory of "revealed preferences[1]" of the consumer is developed. This method involves measuring the average quality of a country's exports to indirectly infer its positioning in terms of "non-price competitiveness". This approach, developed by Aiginger considers that if a country has a surplus volume of a product whose export price is higher than the import price, then the sale of this product depends more on the quality than price.



For measuring the quality competitiveness of Moroccan exports, we have adopted the approach developed by Aiginger. This approach is based on the classification of international

[1] Microeconomic concept derived from the consumer theory, which is based on the deduction of consumer preferences through the observation of his choices.

trade in goods, using the unit values and trade balances in terms of quantities to study the competitive position of countries according to their price advantage and quality advantage.

Table 1 : the different cases implied by the condition of Aiginger

	$UV_p^x > UV_p^m$	$UV_p^x < UV_p^m$
$Q_p^x > Q_p^m$	Successful quality positioning	Successful price positioning
$Q_p^x < Q_p^m$	Deficient price positioning	Deficient quality positioning

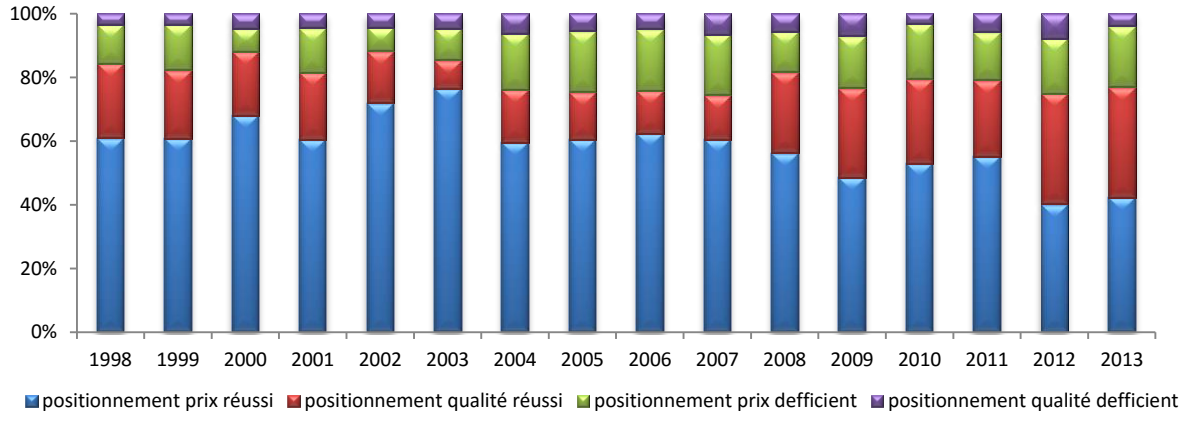
VU_p^x : *export unit value* Q_p^x : *quantity of export*
VU_p^m : *import unit value* Q_p^m : *quantity of import*

Analysis of the quality competitiveness of Moroccan exports was made using detailed foreign trade statistics from the database of the Exchange Office. This database allows having data by products according to the nomenclature SITC (three positions) and by production sector. The sectors selected for analysis are agro-food, extractive industries, chemistry, machinery and transport equipment, and clothing. To achieve a benchmark, the approach was applied to a sample of competitor countries composed of: Spain, Tunisia, Turkey, India, China, Mexico, Egypt and Romania. The detailed data of foreign trade for these countries come from the WITS database of the World Bank.

2.2. Analysis of the global and sector positioning of Moroccan exports in qualitative competition and price competition

The foreign trade data analysis shows that the majority of Moroccan exports, more than 70% in 2002, were positioned in price competition. Nevertheless, from 2008, qualitative competition began to gain in importance. The share of Moroccan exports, owing their performance to their quality competitiveness, reached 41.5% in 2014. The share of exports which present a disadvantage in terms of quality remains weak ranging between 3% and 7.6% throughout the period. Moreover, the share of exports presenting a deficient price positioning rose from 7.2% in 1998 to 20.8% in 2014.

Figure 5 : Positioning of Moroccan exports in qualitative competition and price competition



(Successful price positioning successful quality positioning deficient price positioning deficient quality positioning)

Source: DEPF calculations based on data from the Exchange Office

The gains in quality competitiveness can be explained by the implementation of a series of sector plans, which are part of a twofold approach to modernizing the traditional sectors like

agriculture, fisheries and mining, and developing the innovative sectors like renewable energy, logistics, automotive industry and aerospace.

In particular, the Pact for Industrial Emergence through its two phases has helped expand exports of traditional sectors where Morocco has a competitive advantage, such as textiles and agro-food, and create new sectors such as aerospace and automotive. The OCP strategy fell also within the framework of the choice of a better valorisation of rock phosphate and, at the same time, reduction of production costs.

Generally, recent evolutions tend to confirm the increase in the range of Moroccan exports, as illustrated by the increase in exports of motor vehicles, which became the first engine of export ahead of phosphates. In fact, the contribution of industrial sectors to export marks a change in the growth model of our country.

2.2.1. Successful quality positioning for more than half of the exports of the Moroccan agricultural sector

Analysis of the results related to the ***agricultural sector*** in Morocco shows a high share of agricultural goods in qualitative competition (53%). In addition, 36% of total exports of the agricultural sector owe their performance to their price competitiveness, while the exports that show a deficient price positioning account for nearly 8% of total exports of agricultural products.

Figure 6 : Positioning of exports of Moroccan agricultural products in qualitative competition and price competition (on average for the period 2010-2014)



Source: DEPF calculations based on data from the Exchange Office

Analysis of the results for the agricultural sector of a sample of competitor countries revealed diversity in the forms of competitiveness. Spain, and to a lesser extent Turkey and Tunisia owe their commercial performance mainly to their quality competitiveness. India and Mexico are essentially competitive in terms of prices.

A more detailed-by-product group analysis shows that Spain, Morocco and Mexico stand out with regard to the quality of their exports of fresh, chilled or frozen vegetables. In fact, with respect to the vegetable products, Morocco presents net comparative advantages especially with regard to tomato. The sector of tomatoes in Morocco enjoys a significant professionalism through effective traceability and quality management system, a vertical integration between large greenhouse farms and large exporters and the geographical proximity to the market of the European Union. It should be noted that Mexico is the world's largest exporter of tomato, with a share of about 20.7% of world exports in 2012, followed by Spain with a share of 14.6%.

Regarding fresh or dried fruits, Spain offers highly competitive products because of their good quality, while Morocco's performance is related to the competitiveness of its prices. Morocco's citrus exports recorded, during the last years, a degradation of their quality explained by the ageing of orchards. Turkey, for its part, has a significant quality advantage. Turkey has achieved a high penetration of citrus market thanks to a good cultivation technique, an important effort of irrigation and a harvest that is very spread out over time. Moreover, Turkey is the world

leader in the export of hazelnuts, thanks to the significant State support for the development of these crops. Moreover, Tunisia owes its fruit export performance to the quality of its dates. This country is among the world's largest exporters of dates. With regard to the export of canned fruits, Spain and Turkey are distinguished by the quality of their products. In contrast, exports of other countries have a clear price advantage.

In terms of vegetable fats and oils, Spain owes its performance to the quality of its products. It is indeed one of the world leaders in the export of olive oil. Moreover, Moroccan exports of these products show a deficient price positioning. The analysis of the sector of olive oil shows that the low level of technology coupled with the depreciation of the quality of the raw material, due to the bad conditions of its handling, generates oils which are non-compliant with international standards. Similarly, the lack of quality control at the level of the traditional processing units adversely affects the quality of the oils produced.

With regard to exports of fish, Morocco is characterized by the competitiveness of its prices. It is noteworthy that Morocco is ranked 18th at the international level, according to FAO, with fisheries production amounting to one million tonnes. This record is owed to a single species, sardine, of which Morocco is both the largest producer and exporter at the world level.

With respect to exports of crustaceans and molluscs, Mexico, Turkey, Tunisia, Morocco, India and China are distinguished by the quality of their products. Morocco has also a quality advantage with regard to canned fish. Thanks to an important available raw material and an experience of over 80 years, Moroccan industry of canned fish has earned a worldwide reputation for its quality label. Also, many components of the Moroccan food industry enjoy the ISO certifications and a skilled expertise allowing it to secure a place in many foreign markets with highly diversified products, like the canned olives, for which Morocco ranked third among world exporters in 2012.

Table 2: Matrix of determinants of export competitiveness of Morocco's agricultural products and its main competitors

Code		Morocco	Mexico	Spain	India	China	Tunisia	Turkey
54	Fresh, chilled or frozen vegetables	Quality	Quality	Quality	Deficient quality	Deficient price	Deficient price	Price
36	Fresh or chilled	Quality	Quality	Deficient	Quality	Quality	Quality	Quality

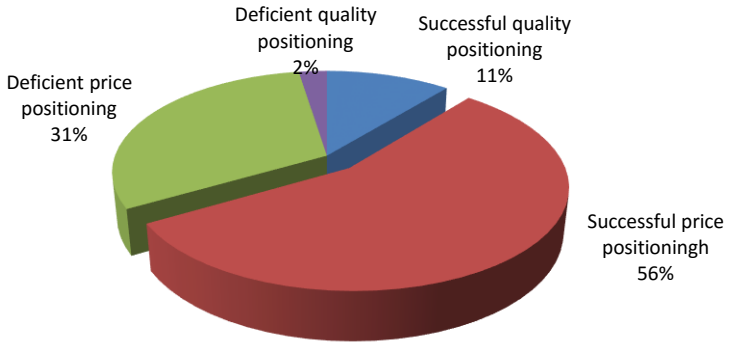
	crustaceans and molluscs			price				
37	Prepared or preserved fish, crustaceans and molluscs	Quality	Deficient price	Deficient price	Quality	Quality	Deficient price	Quality
57	Fresh or dried fruits	Price	Price	Quality	Deficient price	Deficient price	Quality	Quality
421	Vegetable oils and fats	Deficient price	Deficient price	Quality	Deficient price	Deficient price	Deficient price	Deficient price
34	Fresh, chilled or frozen fish	Price	Quality	Deficient price	Quality	Deficient price	Deficient price	Deficient price
56	Prepared or preserved vegetables	Quality	Deficient price	Quality	Price	Quality	Quality	Price
58	Prepared and preserved fruits	Price	Price	Quality	Price	Price	Deficient price	Quality

Source: DEPF calculations based on data from the Exchange Office

2.2.2. Dominant price positioning for Moroccan exports of the sector of extractive industries, driven by phosphates

Regarding the ***sector of extractive industries***, almost 56% of exports have a price advantage, while 31% of the sector exports have a deficient price positioning. Furthermore, 11% of exports of the sector products mainly owe their performance to their quality.

Figure 7 : Positioning of Moroccan exports of extractive industry products in qualitative competition and price competition (on average for the period 2010-2014)



Source: DEPF calculations based on data from the Exchange Office

The results for the sample of countries show that Tunisia and Mexico owe their performances regarding the export of extractive industry products mainly to their price competitiveness. In contrast, China suffers from deficient price competitiveness.

With regard to product, the phosphate exports of Morocco, China, Tunisia and Egypt owe their performance to price competitiveness. Morocco has a high comparative advantage with respect to phosphates, which represent 5.6% of the country's total exports. With reserves equivalent to more than half of global reserves, Morocco is the third worldwide producer of crude phosphate after the United States and China, and is the world's largest phosphate exporter.

In contrast, exports of residual petroleum products of Morocco and Turkey show deficient price competitiveness, given the unavailability of the raw material and its impact on the cost of production.

Moreover, exports of metals such as silver, platinum of Morocco and Mexico have a quality advantage while exports of lead of Morocco, Mexico and China enjoy a clear price advantage.

Table 3: Matrix of determinants of export competitiveness of Morocco's extractive industries sector and its main competitors

Code		Morocco	Mexico	China	Tunisia	Turkey	Egypt
272	**Phosphates**	Price	Deficient price	Price	Price	-	Price
335	**Residual petroleum products**	Deficient price	Deficient quality	Price	-	Deficient price	Price
681	**Silver, platinum and metals of the platinum group**	Quality	Quality	Deficient quality	-	-	-
287	**Ores and concentrates of base metals**	Price	Quality	Deficient price	-	Price	Price
685	**Lead**	Price	Price	Price	-	-	-

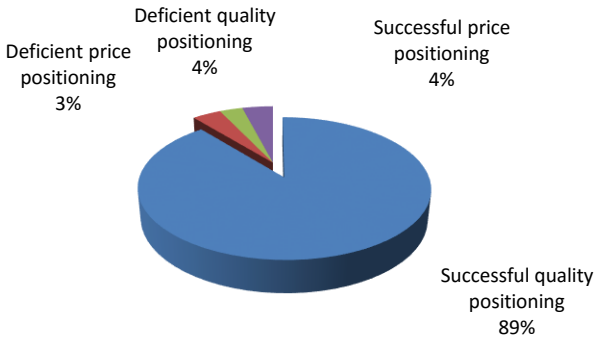
Source: DEPF calculations based on data from the Exchange Office

2.2.3. Dominant quality positioning of Moroccan exports of the chemical sector

Exports of chemical products have mostly (89.1%) of a quality advantage. In addition, only 4% of exports of chemicals have a deficient quality positioning and 3% have a deficient price positioning.

Moroccan exports of chemical products are dominated by fertilizers (56%) and inorganic chemical products and halogen salts (36%). These two product groups are characterized by significant comparative advantages. It should also be noted that the share of pharmaceutical drugs is recording an upward trend since 2005, despite its low comparative advantage.

Figure 8 : Positioning of Moroccan exports of chemical products in the qualitative competition and price competition (on average for the period 2010-2014)



Source: DEPF calculations based on data from the Exchange Office

Spain has a significant quality advantage in the exports of chemicals. However, those of China, Tunisia, India, Turkey and Egypt owe their performance to price competitiveness.

The analysis of the origin of export competitiveness by product shows that the competitiveness of the inorganic chemical products and halogen salts come from the quality in the case of Morocco and Tunisia and the price in the case of Spain, China and Egypt.

With regard to fertilizers, Morocco stands out in terms of its quality competitiveness. It should be noted that fertilizers now represent 45% of the turnover of the OCP. This development is in line with the strategic orientations of the group which aim at improving downstream activities, allowing generating more added value. In fact, thanks to the investment of the group in research and development, the new products account for over 14% of the turnover in 2014, against 0% in 2011, allowing the OCP to meet the specific needs of global markets (22 qualities of fertilizer made).

In the pharmaceutical drugs sector, with the exception of Spain, which enjoys quality competitiveness, Morocco, Tunisia and Turkey show a deficient quality. Exports from Mexico, China and Egypt benefit from a price advantage.

Table 4: Matrix of determinants of export competitiveness of Morocco's chemical products and its main competitors

Code		Morocco	Mexico	Spain	China	Tunisia	Turkey	Egypt
522	**Inorganic chemical products and halogen salts**	Quality	Deficient price	Price	Price	Quality	Deficient price	Price
562	**Chemical fertilizers**	Quality	Deficient price	Deficient price	Price	Price	Deficient price	Price
542	**Pharmaceutical drugs**	Deficient quality	Price	Quality	Price	Deficient quality	Deficient quality	Price
551	**Essential oils**	Deficient price	Deficient price	Deficient price	Price	Deficient price	Deficient price	Deficient price
553	**Perfumery and cosmetics**	Deficient price	Price	Quality	Price	Price	Price	Price

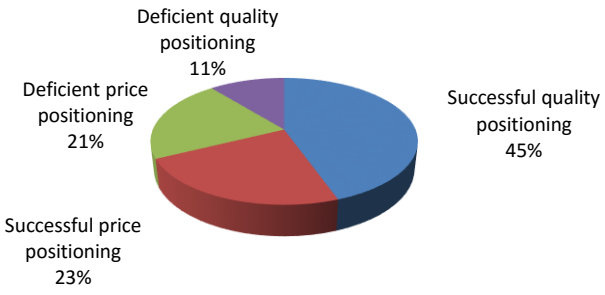
Source: DEPF calculations based on data from the Exchange Office

2.2.4. Mixed origin of competitiveness of Moroccan exports of machinery and transport equipment

Exports of machinery and transport equipment have a quality advantage up to 44%. While 23% of the sector's exports owe their performance to the competitiveness of their prices, 21% of exports show a deficient price positioning.

Morocco is highly specialized in the field of electricity distribution equipment, followed by the equipment related to electric circuits and aircraft. However, the comparative advantage of products such as touring cars, vehicle parts and accessories and electronic valves and tubes remains weak.

Figure 9 : Positioning of Moroccan exports of machinery and transport equipment in the qualitative competition and price competition (on average for the period 2010-2014)



Source: DEPF calculations based on data from the Exchange Office

The analysis of the results for the sector of machinery and transport equipment of the sample of competitor countries highlights important quality competitiveness in the case of Spain and Romania. On the other hand, Turkey and to a lesser extent China, India, Mexico and Tunisia enjoy a price advantage.

The detailed-by-product analysis reveals that exports of electricity distribution equipments of Morocco, Spain and Romania have a clear quality advantage. However, price competitiveness explains the performance of exports of those of China, Turkey, Egypt and Tunisia.

With regard to touring cars, exports from Spain and Mexico owe their performance to their quality competitiveness, while those of Morocco, India and China show a significant price advantage. It is noteworthy that Morocco offers numerous advantages to automakers, especially a competitive labour cost and good transport infrastructure. Thus, the Moroccan automotive industry has shown a remarkable growth in recent years, confirmed by increased foreign investment flows and the performance achieved in terms of exports, particularly for wiring and construction. In 2014, the Moroccan automotive industry became the first Morocco's export sector ahead of agribusiness and phosphates.

Moreover, exports of aircraft and associated equipment and parts thereof suffer from a deficient price positioning, in the case of Morocco, in connection with the high import content of exports and low local integration that does not exceed 30%. Moreover, Morocco is confronted in this niche with a stiff competition, especially from the countries of Eastern Europe. Nevertheless, the sector is still on significant growth margins. In this context, the opening of the integrated industrial platform Midparc is the strong signal of a will to boost the aerospace industry to higher levels of competitiveness.

Table 5: Matrix of determinants of the competitiveness of Morocco's exports of machinery and transport equipment and its main competitors

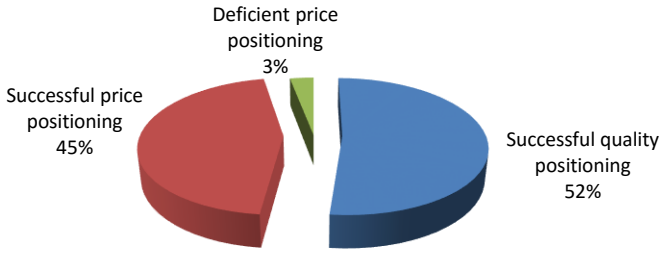
Code		Morocco	Mexico	Spain	India	China	Tunisia	Turkey	Romania
773	Electricity distribution equipment	Quality	Deficient price	Quality	Deficient quality	Price	Prix	Price	Quality
776	Lamps, electronic valves and tubes	Price	Deficient price	Prix deficient	Price	Price	Deficient quality	Deficient quality	Deficient price
781	Touring cars	Price	Quality	Quality	Price	Price	Deficient price	Price	Price
772	Apparatus for switching, protecting or connecting electrical circuits	Deficient price	Deficient price	Price	Price	Price	Deficient price	Price	Deficient price
792	Aircraft and related equipment and their parts	Deficient price	Price	Quality	Price	Price	Deficient quality	Deficient quality	Price
784	Vehicle parts and accessories	Deficient price	Deficient quality	Deficient price	Price	Price	Deficient price	Prix	Quality

Source: DEPF calculations based on data from the Exchange Office

2.2.5. Origin of competitiveness divided between quality and price for the clothing sector's exports

The analysis of the origin of the competitiveness of the ***clothing*** sector products shows that 52% of the sector's exports have a quality advantage, and 45% of exports owe their performance to their prices.

Figure 10 : Positioning of clothing exports in the qualitative competition and price competition (on average for the period 2010-2014)



Source: DEPF calculations based on data from the Exchange Office

The origins of the competitiveness of the clothing sector's exports differ according to the sample countries. While exports of Tunisia and Romania enjoy quality competitiveness, those of China, Egypt and Turkey show a clear price advantage.

The preparation of the matrix of competitiveness of clothing exports revealed very significant results. In fact, with respect of the seven groups of products studied, China and Turkey are characterized by price competitiveness of their exports. However, India has an important quality advantage. For its part, Morocco holds a competitive position shared between a price competitiveness and quality competitiveness according to the products.

The Moroccan clothing sector enjoys a comparative advantage (6.7 on average for the period 2010-2014). The exports in this sector represent 16.7% of total exports. This sector is characterized by significant strengths, especially the availability of labour and geographic proximity to Europe. However, Moroccan clothing exports remain dependent on the volume of outsourcing sponsored by distribution chains (Spanish and French in particular) to Moroccan garment companies (35% of temporary admissions without payment in Morocco concern the clothing). The sector also suffers from the increased Asian competition, the strong fragmentation and the unavailability of inputs on the domestic market.

Table 6: Matrix of determinants of the competitiveness of Morocco's exports of clothing sector and its main competitors

Code		Morocco	Mexico	India	China	Tunisia	Turkey	Egypt	Romania
842	Women's clothing of textile materials excluding knitted or crocheted	Quality	Price	Price	Price	Quality	Price	Price	Quality
845	clothing of textile materials even knitted or crocheted	Price	Deficient price	Quality	Price	Quality	Price	Quality	Deficient price
841	Men's clothing of textile materials excluding knitted or crocheted	Quality	Price	Price	Price	Quality	Price	Price	Quality
844	Women's clothing and accessories of knitted or crocheted fabrics	Quality	Price	Quality	Price	Quality	Price	Deficient price	Quality
843	Men's clothing and accessories of knitted or crocheted fabrics	Price	Price	Quality	Price	Quality	Price	Price	Deficient price
846	Clothing accessories of textile materials except those for babies	Deficient price	Quality	Quality	Price	Deficient price	Price	Deficient quality	Deficient price
848	Clothing and accessories excluding those of textile fabric	Deficient price	Deficient quality	Quality	Price	Deficient price	Price	Deficient quality	Deficient price

Source: DEPF calculations based on data from the Exchange Office

Conclusion

The analysis of the competitive position depending on the price advantage and quality advantage reveals that the share of Moroccan exports in price competition reaching over 70% in 2002 has given way to that of sales in qualitative competition. The latter are rather gaining in importance rising from less than 14% before 2007 to 25.5% in 2008 reaching 41.5% in 2014. The share of exports which present a disadvantage in terms of quality remains low ranging between 3% and 7.6% over the whole period. Moreover, the share of exports presenting a deficient price positioning rose from 12.3% in 1998 to 20.8% in 2014.

Thus, the significant change in the growth model of our economy, in favour of emerging industries of high added value(Chemical products, automotive, electrical and electronics industries, ...), has led to the strengthening of the contribution of products of higher quality, which is likely to affect also the relative demand for skilled/unskilled labour.

Our country gradually improves its capacity to develop and export products whose demand is more related to quality than price. The factors linked to the industrial specialization, trade policy as well as the factors such as business climate, regulations, infrastructure ..., have contributed to this improvement. Technological progress, innovation, research and development, human resources development and rational use of information and communication technologies, which are factors that could improve the quality, become essential strategic options of competitiveness.

In this respect, Morocco has implemented a strategy for innovation in 2009 and has developed a strategy for scientific research by 2025. In addition, several sectoral policies have implicitly incorporated aspects related to innovation support. In addition, a National Committee for Innovation was created in 2013 that ensures global governance, synergy between the actors and the coordination of these different sectoral strategies.

Alongside the measures taken for the improvement of exportable offer and competitiveness, Morocco has multiplied the initiatives for the development of R&D both within the framework of Innovation Morocco strategy and that of different sector plans. This strategy has set itself the goals of developing programs of R&D funding in the advanced technologies, setting up innovation cities in Fez, Rabat and Marrakech and developing instruments of financing, especially Intilak, technological service network and Tatwir.

Measures have also been taken within the framework of various sectoral plans which aim, inter alia, at creating regional technology parks that can provide opportunities for the development of R&D, multiplying particularly the interfaces between research and business and providing an appropriate framework for foreign companies with high added value.

In addition, the industrial Acceleration Plan is expected to be implemented from 2015 through the creation of a fund for the support of industrial development and the implementation of a new approach for the mobilization of public land for the creation of high quality industrial parks dedicated to renting with the objective of supporting businesses and sectors with high value added which develop the export offer and create employment especially the qualified one.

Moreover, special attention will be given to the development of university offer and vocational training. In this context, Morocco continues its efforts in order to make of scientific research a lever for economic and social development of the Kingdom through the implementation of the national strategy for the development of scientific research by 2025. It should be noted that R&D spending has improved, rising from 0.6% in 2006 to 0.8% of GDP in 2013, although it remains low in comparison with that of emerging countries.

The Government's commitment towards innovation has allowed strengthening its potential in recent years and improving its position in relation to the Global Innovation Index

2015. Thus, compared to 2014, Morocco has improved its ranking by six places in the Global Innovation Index[2] (78th /141).

[2] *The Global Innovation Index 2015: Effective Innovation Policies for Development* is the result of a collaboration between Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO) as co-publishers, and their Knowledge Partners