

# *Industrial Dynamics and Productivity Growth in Morocco*

<sup>1</sup>Lahcen ACHY and <sup>2</sup>Khalid SEKKAT

<sup>1</sup>Professor at INSEA (Rabat, Morocco) and <sup>2</sup>Professor at ULB (Belgium) and Research Director at ERF

Mars 2009

## *Introduction*

In the early 1980s, the Moroccan authorities started a process of reform from a closed economy based on import substitution and characterized by a large public sector to a market-oriented economy founded on free trade. In the 1992, Morocco accelerated these economic reforms with the objective of achieving higher efficiency through more intense competition. The hope was to foster economic growth and development. More than two decades after the beginning of this comprehensive program of economic reforms, the Moroccan economy has achieved progress in several sectors but remains highly specialized in comparison to many other developing countries. And this specialization has only increased over time. Just a few industries (i.e. textiles, wearing apparel, food products and chemicals) represent around 70 percent of the total employment in the manufacturing sector. In these industries, productivity is decreasing markedly and mark-ups are relatively high. This indicates that there are issues with industry dynamics in the Moroccan manufacturing sector.

Recent empirical evidence shows that the persistence of inefficiency, despite reforms, is specific to just a handful of developing countries, Morocco among them. While studies on Korea and Taiwan as well as Chile indicate that these countries responded to reforms as expected -- that is to say that exposure to foreign competition following trade liberalization influenced the exit of the least efficient producers contributed significantly to productivity growth-- the same is not true for Morocco. This paradox has guided the present research. The main objective or research questions has been:

1. **H**ow important is the entry and exit dynamics of firms into the market?
2. **W**hat are the economic and institutional factors that have most affected such dynamics?
3. **T**o what extent has the process of firms' entry and exit improved the manufacturing sector's productivity?

This briefing presents an overview of the main findings of this research followed by recommendations for policy interventions.

## *Findings: The Dynamics of firms' entry and exit*

Data on firms in Morocco focus primarily on the net creation of firms. Few studies investigate simultaneously the dynamics of firms' entry and exit. Entry and exit are part of the market selection process by which resources are reallocated within and across industries. In Morocco, the average entry rate of firms with more than 10 employees did not exceed five percent over the period 1996-2004. This rate is the equivalent of some 300 new firms entering the manufacturing sector each year. Exit rate, on the other hand, has been of similar magnitude although with more volatility compared to entry rate. However, since 2000, the number of exiting firms has been systematically higher than the number of newly established firms. This phenomenon reflects the impact of trade liberalization that places firms in a more competitive environment and forces vulnerable ones to exit from the market.

Entry and exit rates in the manufacturing sector in Morocco are comparable to those reported in Jordan and Tunisia. However, they are much lower than those of other emerging economies such as Turkey, Brazil, Hungary or Poland.

The behavior of entry and exit of firms tends to differ from one sector to the other. However in most cases, waves of entry and exit of firms occur simultaneously. This is an indication that, in Morocco, within industries, reallocations outweigh sectoral shocks. This trend is particularly visible in the case of food products, rubber and plastic products, and chemical products.

In Morocco, more than half of the exiting firms do survive for more than nine years but fail to remain in the market for longer periods. Only 25 percent of firms exit before their fifth year. Morocco shows therefore a different trend compared to other countries where survival of entrants is low and large number of exit occurs within the first three years of a firms' life. This indicates that the Moroccan market tolerates inefficient firms for a longer period compared to other countries. Usually, firms facing difficulties attempt first to adjust through laying off workers. The average size of exiting firms tends to decline some years before their disappearance. When their situation worsens, the decision to exit is then taken.

### ***Key factors explaining the dynamics of firms' entry and exit***

Three key factors influence firms' decisions to enter or exit the market:

- Firm characteristics: the average size in terms of employment or output.
  - Industry characteristics: profit margin, concentration ratio, growth rate, average productivity, average wage rate, capital intensity, and openness to international trade.
  - Country variables: trade barriers, exchange rate, investments, and labor market regulations.
- It may also include institutional and governance indicators such as political stability, corruption, democratic accountability, and bureaucratic quality.

Higher profit margins are expected to attract new firms to enter into an industry. The concentration reflects the easiness to enter a market. It is easier to enter perfectly competitive industries in which many small firms produce standard products in comparison with highly concentrated industries. The growth rate of the industry is an indicator of its life cycle. In principle, new firms prefer to enter rapidly growing industries. The average labor productivity reflects the dynamism of an industry. It can also be associated with investment. In the first case it may encourage entry while in the second case it could discourage entrants either because investment requirements are massive or because of the risks of severe post-entry competition. The average wage rate in an industry can be negatively associated with the flow of entry if it reflects the demand for industry-specific skills. High capital intensity may discourage entry as the cost of the initial investment could be substantial. Finally, openness to trade captures the impact of foreign competition through imports and opportunities of business through exports.

### ***Has the dynamics of entry and exit improved productivity in Morocco?***

Productivity change at different points in time may be caused by a change in productivity among surviving firms, changes in survivors' market shares, entrants' contribution to productivity change, or from exitors' contribution.

The evidence from the present study shows that over the last years, the process of entry and exit has led to a net improvement of productivity in almost all manufacturing industries. This contribution is large ranging from 15 percent to 150 percent of the additional productivity. In particular, firms that exit the market are less productive than survivors. The reallocation of market shares among survivors played no role. Thus, another source of productivity improvement lies behind restructuring by survivors.

### ***Policy recommendations***

The results imply that policies aiming at easing entry of new firms are critical to productivity improvement in the Moroccan manufacturing sector and, hence, to its competitiveness. These include better access to factors of production and more market opportunities through exports. In particular, better access to appears to affect productivity directly and indirectly through higher entry and exit rates.

Intense competition, either foreign or domestic seems, to affect productivity directly and indirectly through higher entry and exit rates. Hence, enforcement of competition policy seems to be a good instrument for improving productivity.

Abstracting from internal demand, which is a macroeconomic issue, it seems that productivity improvement can also be achieved through a greater export orientation of the economy.