

EXIT, ENTRY OF FIRMS AND PRODUCTIVITY DYNAMICS IN TURKEY

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Introduction

Turkey pursued an import-substitution based development strategy over the period 1960-1980, just as many other developing countries did during this period. This period came to abrupt end following the severe balance of payments crisis in the late seventies. She then introduced a number of structural reforms in the year 1980 which led gradually to greater trade openness, liberalization of input and product markets, financial liberalization and finally to the liberalization of the capital account. Emphasis during the early years of the program was on encouraging exports through various direct and indirect incentives (through export tax rebates, preferential export credits, foreign exchange allocations and the duty-free access to imports). A number of studies investigated the implications of the trade reforms of the post-1980 period for the performance of the Turkish economy, especially for the manufacturing sector: issues analyzed include the impact of these developments on innovation decision of Turkish firms, productivity of the manufacturing sector and on the diffusion of foreign technology brought by foreign companies to domestic firms.

The implications of these far reaching reforms on the dynamics entry and exit of firms have not been examined thoroughly. However, one channel through which these reforms can influence economic performance in the Turkish economy is through their impact on the entry and exit rates of firms and, in a second stage by the effect firm demography (survivors, entrants, exitors) can exert on productivity of firms.

Evolution of exit and entry of firms

Exit and entry are phenomena through which market selection occur and resources are reallocated across sectors.

The main findings are: (i) young firms tend to exit the market after a relatively short period of activity, i.e. the survival of entrants is low (ii) The increase in the mean size for successive cohorts point to the progress of surviving firms towards the efficient scale of production (iii) it takes more than a decade for a cohort of entrant firms – if it occurs at all – to achieve a size comparable to the average incumbent firm (iv) data on the evolution of average size of exitors accordingly to the number of years preceding their exit point to an inverted-U type relationship between firm size and time-to-exit.

Explanatory factors of firms' entry and exit

Determinants of the entry rate can be regrouped into four categories – which include firms-, sector- and country-specific factors:

Indicators of opportunities and attractivity of industries for potential new firms: (i) sector-level profit margin since the profitability in a sector will determine its attractiveness for new firms to be established in the industry and (ii) sector-level growth rate to exert a positive influence on the entry rates since firms will prefer to enter in rapidly growing industries that have greater business opportunities.

Risks and sunk costs associated with entry in a sector (entry barriers): sector-level capital intensity correlated by the extent of entry barriers since the amount of initial investment to be carried out in capital-intensive industries may act a significant deterrent to potential entrants (ii) degree of concentration in an industry will influence entry rates since it will be easier for firms to enter industries with a high degree of competition and a large number of small firms (iii) labor productivity at the sector level may signal the good performance of incumbent firms and discourage firms from entering in order to avoid severe post-entry competition (iv) the average wage rate at the sector-level which will reflect the demand for sector-specific skills, may discourage firms from entering in high wage sectors where they could face difficulties in hiring workers with appropriate skills

The impact of openness to trade on entry (policy variables that reflect the extent to which reforms pertaining to trade regime influence entry rate of firms)

(i) High tariff rates on imported goods may hamper competition at the sector level by isolating firms from competitive pressures originating from imports and hence discourage entry of firms into those sectors that benefit extensively from import protection (ii) direction of trade: growth rates of exports to developed and developing countries' markets are introduced in the regression in order to check whether an increase in these variables impacts on entry of firms. Moreover, growth rates of imports from developed and developing countries' markets are introduced to test for its possible impact on the rate of entry.

Correlation between entry and exit rates

This correlation may arise because either exit and entry rates are influenced by the same structural factors or because they are causally related.

Linkages between entry and exit rates, and firm productivity

Findings of a decomposition analysis of the labor productivity growth into the contributions of four components: (i) a within component - reflecting the productivity change in incumbent firms - has always been positive and the most important component over the period 1992-2001 (ii) a between effect - measuring the change in incumbent firms' market share, productivity at the industry level will increase if the market share of higher productivity surviving firms increase - with a always negative contribution and explains an important part of the negative growth rate of productivity at the industry level (iii) contribution of entrants and exitors to productivity growth which are much lower than those recorded for the first two components, with entrants having pushed up manufacturing productivity and exitors having depressed it over the period 1992-2001.

Using a number of estimation techniques, econometric analysis confirms to a certain extent the aforementioned findings. Besides lagged and contemporaneous values of entry and exit rates, a number of control variables are used to explain labour productivity in the Turkish manufacturing sector over the period 1992-2001.

The exit rate variable has a coefficient that is negative and significant at 1 % level The coefficient associated with the lagged value of this variable is negative but not significant at the 10% level, pointing to the existence of a contemporaneous effect. It seems that the exit rate is a measure of market conditions: more firms exit under adverse shocks, and, under these conditions, the survivors also suffer.

As for the variable measuring entry rate, its coefficient is negative but significant only at 10 %. The coefficient of the one year lagged entry rate variable - significant at 5 % level -conveys similar information. The negative impact of entry rate on the growth rate of surviving firms could be an indication of market stealing effect. If more firms enter to the market, the share of incumbent firms is likely to decline, and this competitive pressure exerted by new firms can lead to a decline in the growth rate of the incumbents firms.

Findings

Findings for Turkey point to the positive and expected impact of trade policy reforms on industry dynamics and favor the design and application of policy measures aimed at accelerating the market selection process. Measures should as well be applied to tackle the issue of high mortality rates for entrants. Further reduction in import duties can also act as enablers of entry and a permissive factor for exit of less efficient firms.