

# Intensity of Competition in Emerging Markets and in Advanced Economies<sup>1</sup> —

## Evidence from the Persistence of Corporate Rates of Return in Emerging Markets

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The micro-economic behaviour of economic agents in the crisis-affected Asian economies, together with the private sector's expanding role in developing countries in general have focussed attention on issues of competition, corporate governance and corporate finance. The paper explores the analytical links between these phenomena with particular reference to developing countries. Its main purpose is to report on some surprising results the authors have obtained by time series analysis of corporate rates of return in emerging markets in the 1980s and 1990s.

Following the pioneering work of Mueller (1986) and Mueller and Geroski (see Mueller, 1990), there is a well established literature which measures the intensity of competition for an economy or an industry in terms of the persistency of firm profitability.<sup>2</sup> The simple intuition behind this methodology is the view that *ceteris paribus*, the more intense the competition in an industry, the lower is likely to be the persistence of corporate profitability over time in the industry. Companies may earn monopoly rents from temporary advantages, howsoever acquired whether through monopoly power or good management, such profits will not persist for long in competitive markets. Thus, a time series analysis of corporate profits sheds light on the dynamics of the competition process which the commonly used static measures of competition (e. g. the various concentration measures based on size distribution of firms) cannot do.

Following the same methodology as for advanced economies, the paper reports the following persistency coefficients for the seven emerging markets studied.

| Country  | Persistency Coefficient |
|----------|-------------------------|
| Brazil   | 0.013                   |
| India    | 0.229                   |
| Jordan   | 0.348                   |
| Korea    | 0.323                   |
| Malaysia | 0.349                   |
| Mexico   | 0.222                   |
| Zimbabwe | 0.421                   |

These coefficients are systematically lower than those observed for advanced countries. Empirical studies indicate that the typical values of the persistency coefficients for industrial countries tend to be in the region of .5.<sup>3</sup> Taken at their face value, these results would suggest that competition is at least as intense in developing countries as in developed countries, if not more so. Is this plausible?

The paper examines the statistical biases which may have led to these counter intuitive results. Some of the more obvious factors such as the business cycle and the macroeconomic environment are controlled for in the methodology used for the empirical exercise. Other possible biases which may affect the results include (a) the shorter length of time-series for corporate profits for developing countries; (b) the survivorship bias; (c) the use of accounting information. These biases are found to be either unimportant or unlikely to affect the main conclusions. Since the same methodology is being used in this study as for advanced countries, the latter are subject to many of the same difficulties. It is not at all clear that the emerging market results are more affected by some of the relevant biases (for example (c)), than those for industrial countries.

<sup>1</sup> This brief document summarises the main results of the study "Competition, Corporate Governance and Financing of Corporate Growth in Emerging Markets. Empirical Investigations in the Light of the Asian Crisis" by Jack Glen, Kevin Lee and Ajit Singh, which is available as a University of Cambridge, Department of Applied Economics Discussion Paper in Accounting and Finance. For correspondence please contact: Professor Ajit Singh, Faculty of Economics, Sidgwick Avenue, Cambridge CB3 9DD, England; e-mail: Ajit.Singh@econ.cam.ac.uk

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<sup>2</sup> For recent contributions, see among others, Odagiri (1994), Waring (1996) and Goddar, Wilson (1999).

<sup>3</sup> See Goddard, Wilson (1999), Mueller (1990).

In economic terms the paper argues that the results may go against conventional wisdom and anecdotal evidence, but are not implausible. They are fully compatible with Tybout's (2000) recent comprehensive survey article in the *Journal of Economic Literature* on the efficiency of emerging market manufacturing firms. Tybout concludes his review of the available evidence in the following terms:

"(T)he existing empirical literature does not support the notion that LDC manufacturers are relatively stagnant and inefficient. Turnover rates in plants and jobs are at least as high as those found in the OECD, and the amount of cross-plant dispersion in measured productivity rates is not generally greater. Also, although small-scale production is relatively common in LDCs, there do not appear to be major potential gains from better exploitation of scale economies."

To sum up, the paper contributes in the following ways. First, while there are a few studies of the nature and degree of product market competition within individual emerging economies, this is among the first comparative international studies on the theme and, unlike previous research, focuses on the dynamics of the competition process. Secondly, the paper compares systematically the results for emerging markets with those reported for advanced economies. It contributes by its surprising main conclusion that the persistence of profitability is not greater, and hence intensity of competition is no less, in emerging markets (including the crisis-affected Asian countries) than in advanced economies. Lastly, the paper improves upon the econometric methods employed in most previous persistence of profitability studies.

## References

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