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Economic Systems 31 (2007) 375–390

ECONOMIC SYSTEMS

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Entry, reforms, complementarity and performance: A tale of two Indian manufacturing sectors

Sumon Kumar Bhaumik [a,b,c,*], Shubhashis Gangopadhyay [d], Shagun Krishnan [d]

[a] *Brunel University, Economics and Finance, School of Social Sciences, Marie Jahoda, Uxbridge UB8 3PH, Middlesex, UK*
[b] *IZA-Institute for the Study of Labour, Bonn, Germany*
[c] *William Davidson Institute, Ann Arbor, USA*
[d] *India Development Foundation, India*

Received 23 April 2007; received in revised form 15 August 2007; accepted 21 August 2007

Abstract

In this paper, we use plant-level data from two Indian industries, namely, electrical machinery and textiles, to examine the empirical relationship between structural reforms like abandonment of entry restrictions to the product market, competition and firm-level productivity and efficiency. These industries have faced different sets of policies since Independence but both were restricted in the adoption of technology and in the development of optimal scales of production. They also belonged to the first set of industries that benefited from the liberalization process started in the 1980s. Our results suggest that both the industries have improved their efficiency and scales of operation by the turn of the century. However, the process of adjustment seems to have been worked out more fully for electrical machinery. We also find evidence of spatial fragmentation of the market as late as 2000–2001. Gains in labour productivity were much more evident in states that either have a strong history of industrial activity or those that have experienced significant improvements in business environment since 1991.

JEL classification: L52; L64; L67; O25

Keywords: India; Reforms; Industry; Textiles; Electrical machinery; Efficiency

* Corresponding author at: Brunel University, Economics and Finance, School of Social Sciences, Marie Jahoda, Uxbridge UB8 3PH, Middlesex, UK. Tel.: +44 1895 267247; fax: +44 1895 269786.
E-mail address: Sumon.Bhaumik@brunel.ac.uk (S.K. Bhaumik).

0939-3625/$ – see front matter
doi:10.1016/j.ecosys.2007.08.004

1. Introduction

While the reforms process in India was arguably initiated in the mid 1980s, structural reforms aimed at ushering in competition in product and credit-capital markets were introduced in 1991, after a severe balance of payments crisis put the country tantalizingly close to a macroeconomic meltdown (Rodrik and Subramanian, 2004). Over the next few years, trade barriers were reduced significantly; most non-tariff barriers were eliminated and the peak rates of tariffs were reduced considerably. The banking sector was liberalised; banks were given autonomy to decide on allocation of credit, subject to some restrictions involving the proportion of credit allocated to the priority sector, as well as limited ability to price credit in a way that reflected credit risk. In addition, new private sector banks were allowed to enter the banking sector and foreign banks were allowed to expand their operations in India. The capital market was re-organised and the Securities Exchange Board of India (SEBI) emerged as a quintessential regulator that allowed market forces to determine security prices. Perhaps, most importantly, the policy that mandated all companies to seek licenses before entering the product market was abandoned overnight, thereby giving firms and entrepreneurs unprecedented freedom to enter the market place. By the end of 1997–1998, all but nine industries had been de-licensed.

Yet the reforms were by no means complete. At the turn of the century, over 80% of assets in the banking sector remained in the balance sheets of state-owned banks, and there is evidence to suggest that these banks continued to allocate credit on the basis of past history of allocations as opposed to case-by-case (re)-evaluation of risks and returns associated with each credit application (Banerjee and Duflo, 2002). While there has been a considerable improvement in the turnover and depth of the equity segments of the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE), the market for corporate debt has yet to develop and is marked by private placements, paucity of trading in the secondary market and stale prices (Bose and Coondoo, 1999). The convertibility of the rupee on the capital account of balance of payments was slowed down considerably by the South East Asian currency crisis of 1997–1998. The Foreign Exchange Regulation Act of 1973 (FERA), which severely restricted foreign exchange transactions, was not replaced by the more benign Foreign Exchange Management Act (FEMA) until 1999. Finally, while firms were allowed to enter the product market without recourse to licences, the bankruptcy law remained unreformed, and exit from the product market remained a costly process (Gangopadhyay and Knopf, 1998).

To the extent that competition is not an end in itself, and is expected to improve the efficiency with which scarce resources are allocated among competing entrepreneurs, therefore, it is not obvious whether the structural reforms in India, with entry deregulation as its central pillar, has succeeded in improving the efficiency of the Indian private sector. There is some evidence to suggest that trade liberalization and net entry of firms since 1991 have improved productivity in the manufacturing sector (Chand and Sen, 2002; Sivadasan, 2003; Bhaumik et al., 2006). At the same time, there is evidence to suggest that lack of reforms of, for example, labour laws, which is linked to the lack of reforms of the bankruptcy regulations, has fragmented the market with inter-state differences in the enforcement of labour laws, and that these differences can account for inter-firm differences in performance (Besley and Burgess, 2004). The credit market appears to be similarly fragmented. Berger et al. (in press) argue that state-owned banks, private banks and foreign banks in India have a comparative advantage in forging main-bank relationships with state-owned firms, closely held private firms and foreign firms, respectively. In effect, even as the overall growth rate in India remains strong, the relationship between the structural reforms, competition and firm-level productivity and efficiency remains an open economic question.