Firm organisation: What we know and why we should care

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Increasingly, people are pointing the finger of blame for economic woe at large firms. This column argues that organisation design is often affected by government trade policy. If firm organisation design has implications for consumer welfare (in terms of prices and quality of product), evidence suggests that governments should make sure that in future, trade policy and corporate governance policy are more complementary.

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A series of corporate calamities in the 2000s has helped to arouse suspicion amongst policymakers and the public that corporate organisation matters. Internal organisation issues are blamed for lost jobs, lost pensions and lost fortunes (e.g. Enron, Worldcom); for plane crashes in the US, lead-painted toys from China[1], and, most devastatingly of all, the global crisis. These outcomes are increasingly ascribed to unaccountable managers, misaligned ownership structures, outsourcing and other internal organisation issues. Much of this criticism is focussed on areas where the firms themselves have little market power. Indeed, it is often stiff competition that is blamed by the managers on the rare occasion that they are brought to account for organisational failures.

Treating firms like 'black boxes'

Economic research has lagged in providing guidance to policymakers on these matters. Industrial organisation is mainly focused on market power and its firms are 'black boxes' that always maximise profits. And despite the tremendous strides in understanding firm organisation (e.g. Williamson 1975; Grossman and Hart 1986; Hart and Moore 1990), little has been done to study how organisational firms operate and perform in markets. At the same time, empirical studies have documented the tremendous variation in both organisation and firm performance in markets as diverse as airlines and concrete (Syverson 2011); there is little explanation for how persistent poor performance is not weeded out by competition.

How market forces affect organisation design

First steps toward understanding how market forces affect organisation design have been made by McLaren (2000), Grossman and Helpman (2002), and Legros and Newman (2008). They have investigated the role of market thickness and terms of trade in supplier markets. More recent studies examine how organisational firms behave in competitive markets, how efficient and inefficient ones can coexist in the face of competition, and how they respond to changes in market conditions and policies. In particular, Legros and Newman (2012) develop a tractable model in which firm organisation – specifically, ownership and control à la Hart and Holmström (2010) – depends on product prices, as well as the terms of trade in supplier markets. Integrating an enterprise enhances productivity, but also imposes higher private costs on the managers who determine its ownership structure. Product price enters the tradeoff because it directly affects the organisation's profit objective, but has a negligible impact on the costs. As the price rises, the tradeoff is resolved in favour of more integration, since the organisational goal becomes relatively more valuable than

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private goals.

Policies that affect product prices affect firm organisation

A recent paper by Alfaro et al. (2012) examines the predicted relationship between price levels and vertical integration. The authors exploit both cross-sectional and time-series variation in the degree of trade protection faced by firms[2]; the authors use WorldBase from Dun and Bradstreet (D&B), which contains data about millions of plants around the world. For each plant, the dataset includes information about its different production activities, as well as its ownership (e.g. its domestic or global parent). This allows constructing firm-level vertical integration indices, measuring the fraction of inputs used in the production of a firm's final good that can be produced in-house.

Alfaro et al. (2012) find that, the higher the tariff applied by a country on the imports of a given product – and thus the higher domestic prices – the more vertically integrated firms will be that are producing that product in that country. The effect is larger precisely where organisational decisions ought to be more responsive to import tariffs, i.e. for firms that only serve the domestic market and in sectors in which tariffs have a larger impact on domestic prices. These results suggest that policies that affect product prices can have direct effects on firm organisation.

Falling trade barriers

Conconi, Legros and Newman (2012) adapt Legros and Newman's framework (2012) to examine the impact of falling trade barriers on organisation. They consider the effects of the successive liberalisation of product and factor markets and obtain two main results. First, consistent with the evidence in Alfaro et al. (2012), even when supplier firms do not relocate across countries (i.e. there is no 'offshoring'), freeing trade in goods triggers price changes that can lead to significant changes in ownership structures (waves of mergers and divestitures) within countries. Second, following the liberalisation of product markets, the removal of barriers to factor mobility can induce further organisational restructuring, which can lead to increases in goods price (or decreases in their quality). These effects will tend to result from a shift toward outsourcing in the country with the less productive suppliers[3]. This finding is in line with evidence of inefficiencies often attributed to firms switching from integration to non-integration (e.g. the safety problems associated with US-designed toys produced by Chinese contractors and subcontractors or customers' frustration with the outsourcing of call centres).

Why does organisation design matter?

Conconi, Legros and Newman (2012) and Legros and Newman (2012) show that organisation design has implications for consumer welfare. Organisation design affects not only the behavior and performance of individual firms, but also has distinctive positive and normative implications for industry behavior and welfare. In particular, since integration favours consumers because it produces more than non-integration, managers without full financial stakes will tend to overvalue their private costs, leading to inefficient outsourcing. In the international context, factor market liberalisation can lead to price increases/quality losses, possibly hurting consumers in all countries. These results suggest the potential for a complementarity between trade policy and corporate governance policy[4].

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1 See "Mattel Recalls 19 Million Toys Sent From China," *The New York Times*, August 15, 2007.

2 So far, evidence on the importance of market forces on organisational choices is sparse. Some studies have examined how the extent of competition in the product market affects vertical integration decisions (Aghion, Griffith and Howitt 2006) or decentralization within firms (Bloom, Sadun and Van Reenen 2012; Guadalupe and Wulf 2012).

3 The intuition for this result is integration is more flexible than outsourcing in its ability to distribute surplus between suppliers -- since they do not make decisions, the profit shares they receive have no incentive effects -- and will therefore tend to be adopted when the supplier market strongly favors one side or the other.

4 In line with this idea, the European Commission has proposed an Action Plan on corporate governance to 'strengthen shareholders' rights' and to 'foster the efficiency and competitiveness of business, with special attention to some specific cross-border issues' (see Commission press release, May 21 2003).