Product market regulation

Product market regulation (PMR), the degree to which policies promote or inhibit competition can substantially affect innovative entrepreneurship by creating barriers to business entry and growth so as to reduce the optimal size of businesses. The evidence suggests that the level of product market restrictiveness varies substantially across countries. PMR can also affect the state of competition and access to foreign and domestic markets for innovative businesses. Several policy approaches, including the creation of one-stop shops for regulatory advice, can help address challenges.

What is product market regulation?

Product market regulation (PMR) is the degree to which policies promote or inhibit competition in areas of the product market where competition is viable. Formal regulations that affect the degree of product market competition include state control of business enterprises, legal and administrative barriers to entrepreneurship, and barriers to international trade and investment.

How does product market regulation affect innovative businesses?

Product market regulation influences the entry and exit processes of firms, i.e. the process of creative destruction, which is an important element of a country's aggregate employment and productivity growth (OECD, 2009; Bartelsman et al., 2009; Bravo-Biosca, Criscuolo and Menon, 2012). Market selection leads to the exit of less productive firms and the success of the more productive. Young firms play a crucial role in these dynamics, which shape aggregate productivity growth (Link to section 132, State of Competition).

Experimentation, learning and selection underlie young firms' dynamics, which are characterised by high rates of gross job creation and destruction. Young firms are more likely to exit and have high levels of job turnover, but those that survive grow more rapidly than mature firms. This "up or out" dynamics (Bartelsman, et al., 2009; OECD, 2009) has been found in several countries and suggests that firm creation and the dynamics of new firms are important for understanding and quantifying the processes underlying differences between countries in aggregate employment and productivity growth.

The extent to which creative destruction contributes to growth differs across countries, however, even when taking into account differences in the composition of economies. Existing evidence highlights large differences in entry rates (and size of firms at entry) but also in the post-entry performance of young firms. Such differences reflect the role of regulatory and institutional frameworks and market structure, which will affect reallocation dynamics in various ways. For example, high barriers to entry, subsidies to incumbents or policy measures that can delay the exit of failing firms may stifle competition and slow the reallocation process relative to an economy without barriers (Bartelsman et al., 2009). Local regulations, agreements between incumbent market players (suppliers or distributors), limited access to local input resources, bankruptcy laws and labour market regulations also contribute to reducing the rate of entry of new firms (i.e. entrepreneurship). These barriers affect competition and entrepreneurial activities in a given sector and hence have a strong influence on industrial renewal and innovation (Aghion et al., 2005).
OECD analysis of these PMR indicators finds a correlation between pro-competitive policies and growth (Wölfl, et al., 2010), which is mainly driven by measures that lower barriers to entrepreneurship and competition, whose link with growth is found to be robust across different empirical for whole sets of countries. An improvement in the barriers to entrepreneurship indicator by ½ index point, corresponding roughly to the difference between the value of the barriers to entrepreneurship indicator of countries such as Brazil, China, India, Indonesia, South Africa and that of the average OECD country, would translate into an approximately 0.4% higher average annual rate of GDP per capita growth over the subsequent decade.

What are specific impacts of product market regulation on innovative

entrepreneurship?

- **PMR and administrative burdens on starting a business are costly, both in terms of monetary loss and lost opportunities for the entrepreneur** (see Administrative framework for entry and growth [1]). **They may lower the entry rates of innovative entrepreneurs.** Studies show that both the monetary costs incurred by the entrepreneur to open up a business (Fisman and Sarria-Allende, 2009; Klapper, Laeven and Rajan, 2006) and the time delay caused by entry regulations (Ciccone and Papaioannou, 2007) are associated with lower entry rates. There is a negative correlation between the number of days that it takes to open a business and the entry rate of businesses, measured by the number of newly registered limited liability corporations divided by the total number of registered corporations (Figure 1). Evidence from single country and cross-country industry level studies shows that employment and business creation are lower in highly regulated countries (Djankov, Lopez-de-Silanes and Shleifer, 2002; Bertrand and Kramarz, 2002). On the other hand, countries where the legal status to operate firms can be obtained more cheaply and quickly see significantly more entry in industries that should naturally have more entry, i.e. those that experience expansionary global demand and technology shifts (Klapper, Laeve and Rajan, 2006; Ciccone and Papaioannou, 2007).

- **Cumbersome PMR also have an impact on the average size of entrants and the growth of young firms** (see Administrative framework for entry and growth [1]): they cause new entrants to be larger and incumbent firms in high-growth industries to grow more slowly (Klapper et al., 2006). In developing countries, official licensing procedures are an important constraint on entrepreneurial activity (e.g. De Soto, 1990). In fact, recent evidence from developing countries shows that regulatory reforms and the introduction of electronic business registers that reduce the cost and time of business registration are accompanied by a switch from the informal to the formal economy, which enables businesses to avoid bribes and fines and to have easier access to credit (Mullainathan and Schnabl, 2009; Klapper, Amit and Guillen, 2009).

Figure 1. Revealed technology advantage in ICT

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What is the evidence on product market regulation and innovative businesses?

The strictness of PMR varies widely across countries and sectors (Figure 2; OECD, 2012). The degree of variation is even larger when the different sub-components of the PMR (e.g. by sector or aspect of regulation) are examined individually (OECD, 2012).

The **economic effects of PMR** are heterogeneous and complex. Inappropriate product market regulations can impose substantial costs and inefficiencies on firms, sectors and the economy as a whole. These costs can arise in several ways. First, firms can have less incentive to economise on resources. This can take the form of over-investment in capital or employing excess labour, or of inefficient internal organisation of production. Second, a lack of competition can lead to higher profits and/or wages than would be the case under competitive conditions. Third, regulations on service and product type can prevent firms from taking advantage of economies of scale. Finally, there is increasing evidence that lack of competition tends to provide little incentive for firms to

pursue technological innovations in production, to create new goods and services, and to adapt the quality and mix of goods and services to changing consumer needs. In sum, the direct results of inappropriate regulation in a particular sector are likely to be higher costs, higher prices, misallocation of resources, a lack of product innovation and poor service quality.

Since the end of the 1990s, the OECD has been constructing a system of indicators, termed PMR indicators, to document the state of product market regulation in OECD countries (see Wölfl, et al., 2010). The basic goal of PMR indicators is to turn qualitative information, as concerns laws and regulations that may affect competition, into quantitative indicators. They aim at measuring regulations that are potentially anti-competitive in areas where competition is viable and focus on policy settings instead of market outcomes.

The economy-wide PMR indicator covers both general and sector regulatory issues in the domains of “state control”, “barriers to entrepreneurship” and “barriers to trade and investment” (Wölfl et al., 2009). These indicators are built in a bottom-up approach that makes it possible to trace the indicator scores back to individual policies. The qualitative information on which the indicators are based is mainly derived from answers to a questionnaire by national administrations, the results of which are subject to peer review, thereby guaranteeing a high level of comparability across countries. This information is coded by assigning a numerical value to each of the possible responses to a given question. The coded information is normalised over a scale of zero to six, reflecting increasing restrictiveness of regulatory provisions for competition and aggregated into low-level indicators at the bottom of the indicator tree. At each step up the indicator tree, higher-level (composite) indicators are calculated as weighted averages of their lower-level indicators, using equal weights for aggregation.

In 2008, the indicator system was substantially revised to preserve its policy relevance in light of evolving regulatory and competition issues in OECD countries. The "integrated PMR indicator", on which comparisons between accession countries and OECD countries are based, integrates previously separate sectoral indicators and thus embodies to a much larger extent than in the past information on sector-specific regulation. This enables and facilitates the analysis of changes in individual (economy-wide or sectoral) regulatory policies in OECD countries and their impact on the overall regulatory stance.

Figure 2. Revealed technology advantage in biotechnologies

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What other topics relate to product market regulation and innovative businesses?

PMR, with regard to the **regulatory framework for innovative entrepreneurship** (see regulatory framework for innovative entrepreneurship [2]), can create restrictions on entry and growth. PMR can also affect the **state of competition** (see State of competition [3]) and **access to foreign and domestic markets** (see Access to foreign and domestic markets [4]) for innovative companies.

What policies relate to product market regulation and innovative businesses?

Product market regulation can be directly affected by policy. Governments can reduce, reform or abolish regulations, which enhances competition, in particular when combined with other measures to enhance competition in an industry, such as measures to enhance access to networks or a strong competition stance from the competition authority.

Specific policies include the following:

- The creation of a task force for administrative simplification and deregulation, enabling dialogue between the public and private sectors.
- For necessary regulations, the creation of public information campaigns (and telephone helplines and support) in order to ensure firms have time to plan for regulatory changes and that they understand the purpose behind specific regulations.

What policies related to product market regulation could specifically support innovative entrepreneurship?

Within the context of innovative entrepreneurship, policy could:

- Institute regulatory impact analysis within the process of creating new laws and regulations, allowing regulators and legislators to understand the effects of new regulations on smaller enterprises and innovative entrepreneurs.

- Create one-stop shops for regulatory advice and registration so entrepreneurs can pass through administrative regulations with a minimum of time and travel, and with all available sources of advice and assistance.

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Related Link: Public procurement for innovation
State of competition
Innovation procurement schemes
Markets, Competition and Standards
Access to foreign and domestic markets

Links
[1] https://www.innovationpolicyplatform.org/content/administrative-framework-entry-and-growth?topic-filters=12021
[2] https://www.innovationpolicyplatform.org/content/regulatory-framework-innovative-entrepreneurship?topic-filters=12029
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