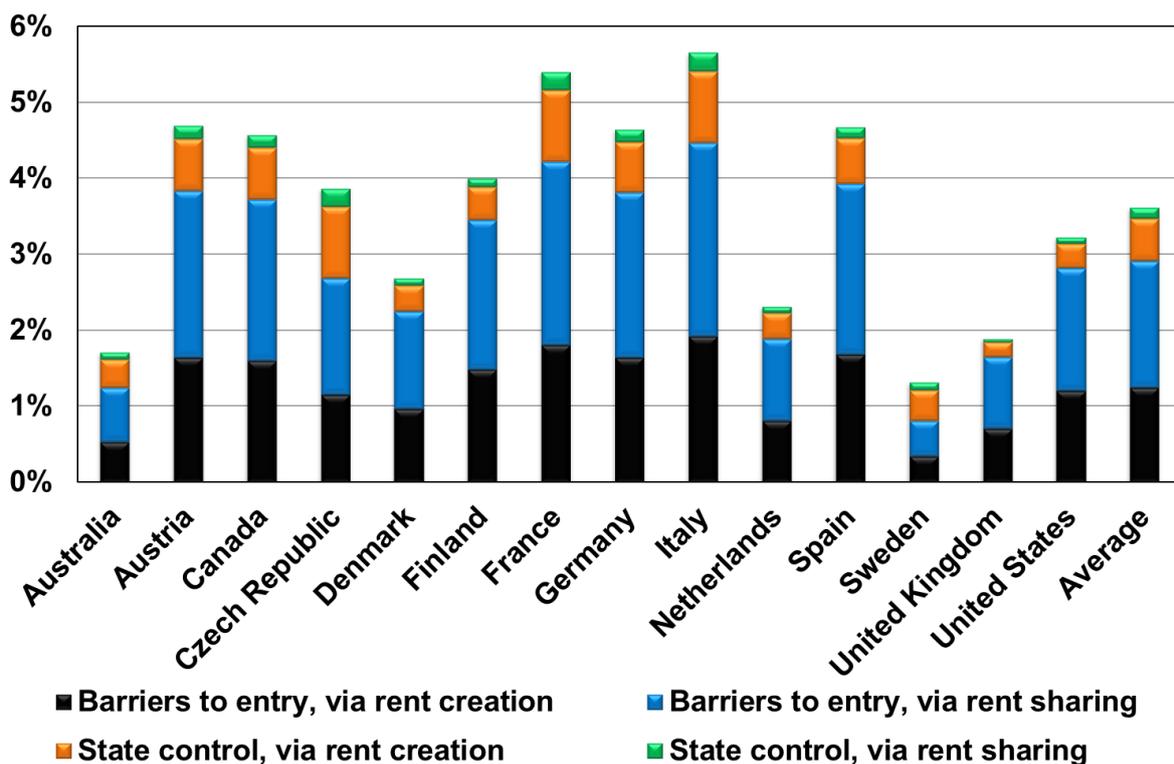


The impact of structural reform on rent creation, rent sharing and productivity

By [Gilbert Cette](#), Jimmy Lopez and Jacques Mairesse

The positive effect on productivity of reducing product market regulation and employment protection legislation has been extensively documented and analysed, leading to many structural reforms in OECD countries. On the basis of new measures of rent creation and rent sharing, we show that further product market deregulation could substantially increase productivity, notably in France and Italy.

Chart 1: Expected total factor productivity gains from product market deregulation



Sources: Authors' calculations assuming a switch to the most pro-competitive regulations.

An extensive empirical literature has investigated the impact of competition on productivity, often using the OECD's anti-competitive Product Market Regulation (PMR) indicators to proxy for the lack of competition (see, for instance, [Conway et al., 2006](#); and [Barone and Cingano, 2011](#)). Some papers have also used the OECD's Employment Protection Legislation (EPL) indicators to gauge the productivity impact of the lack of flexibility in labour markets (see, for instance, [Bassanini, Nunziata and Venn, 2009](#)). Recently, [Cette, Lopez and Mairesse](#)

[\(2018\)](#) have proposed new measures of rent creation and rent sharing on cross-country-industry panel data, assessed the relationship of these new measures with the OECD PMR and EPL regulation indicators and estimated the impacts on productivity of these new measures.

What are the original features of our new measures of rent creation and worker's rent sharing?

While standard measures of competition, such as the Lerner index, assume perfect labour markets, our new measure of rent creation, which is a notional mark-up rate, relaxes this assumption by taking into account that workers may appropriate, through their wages, part of the rent created. The corresponding measure of workers' share of rent shows that the rent is shared equally between firms and workers on average, but this rent sharing appears very heterogeneous. Therefore, comparisons of these notional mark-up rates, between country, industry and year, differ markedly from comparisons using the Lerner index (and thus based only on the firm's rent). Moreover, changes in the Lerner index are not necessarily directly associated with changes in workers' rent, therefore the Lerner index changes are not a good proxy for rent creation changes. Indeed, half of firms' rent increases (decreases) are achieved through decreases (increases) in workers' rent and half through total rent increases (decreases).

How do market and employment regulations impact rent creation and rent sharing?

In [Blanchard and Giavazzi's \(2003\)](#) theoretical model, the creation of rents results from product market regulations, whereas workers' rent sharing is influenced by labour market regulations. This model has received empirical support in Askenazy, Cette and Maarek (2018) who used value added prices and value added labour shares as indicators of rent creation and rent sharing. The new measures proposed by [Cette, Lopez and Mairesse \(2018\)](#) lead to a deeper understanding of the links between market and employment regulations and corroborate these theoretical conclusions overall, but with interesting differences. Table 1 summarizes these links, showing that: (i) PMR has positive effects on rent creation and workers' share of rents; (ii) these PMR effects are higher for barriers to entry than for State control regulations; (iii) EPL has a positive impact on wages per hour; but (iv) EPL has no significant impact on workers' share of rents as a negative impact on hours worked offsets the positive impact on wages per hour. Moreover, estimation results by skills find that these two opposite impacts of EPL on wages and hours worked are larger for low- and medium-skilled workers than for high-skilled workers.

Table 1: Regulation impact on rent creation and rent sharing

		(1)	(2)=(3)+(4)-(1)	(3)	(4)
		Rent creation	Workers' share of rent	Wages per hour	Hours worked*
Product market regulations	Barriers to entry	+	+	+	+
	State control	+	0	0	+
Employment protection legislation		0	0	+	-

*Notes: '+' and '-' are used for positive and negative statistically significant effects and '0' for no significant effects; *: More accurately, this dependent variable is the intensity of use of labour, in hours worked, relative to intermediate inputs. The regulation impact on workers' rent is the sum of the column (3) and (4) effects, so the impact on rent sharing is equal to this sum minus column (1) effect.*

Rents from market regulations have a strong impact on productivity

[Cette, Lopez and Mairesse \(2016\)](#) use industry production prices and wages as very crude indicators of rent creation and rent sharing to investigate their effects on productivity. [Cette, Lopez and Mairesse \(2018\)](#) also investigate the impact of rent creation and rent sharing on Total Factor Productivity (TFP), but using new and preferable measures and performing instrumental variable regressions, using the OECD's product market regulation indicators as instruments. Their estimation results (combined with the previous ones, from regulations to rent creation and rent sharing) suggest that less competition reduces the incentive to innovate, with a lower TFP as a result, and that higher workers' bargaining power also lowers TFP. These estimation results make it possible to calculate the expected TFP gains from a PMR reform: the adoption in each country of the most pro-competitive PMR in 2013 (this is the last year for which PMR indicators were available). The adoption of these regulations would require very large-scale product market structural reforms in some countries, such as France and Italy. It is therefore an extreme scenario of structural policy reform.

Chart 1 presents the results of this simulation. The largest overall impact on TFP is in Italy and France (5.7% and 5.4% respectively), followed by Austria, Spain and Canada (more than 4%). These countries have the highest levels of anti-competitive regulation. At the other end of the scale, the impact is smaller in Sweden, Australia and the United Kingdom (1.3%, 1.7% and 1.9% respectively), followed by the Netherlands (2.3%), which appear to be the lowest regulated countries. These figures confirm that the gains that could be expected from the implementation of ambitious product market reforms could be significant in many countries (gains of 3.6% on average). In all countries, the TFP gains come mainly from the adoption of the most pro-competitive PMR on barriers to entry. This result suggests that the priority in reforming the product market should be to reduce barriers to entry as opposed to decreasing State control.