



Recommended citation:

1 Introduction

Economists use total factor productivity

Figure 1: Euro-area total factor productivity (TFP) and 2001 trend line (2001=100)

Source: Bruegel based on Beaudet al (2016), database updated in 2019 available at <http://www.longtermproductivity.com/>

One reason for this slowdown might be linked to the advent of the digital age and the difficulties encountered by statisticians and economists in measuring such new technologies in official statistics. But measurement only explains part of the sluggish TFP growth in Europe (Syverson, 2017). Another theory seeking to explain sluggish productivity growth is secular stagnation, which sees the TFP slowdown as a savings-investment imbalance caused by various factors (including demographics

Within a sector, allocative efficiency is achieved when this equivalence holds for all firms in the sector. Resources are free to move between firms and are employed by the most productive firms. This implies that unproductive firms will gradually lose sales and exit the market while freeing up resources for new or more productive firms.

Similarly, at the cross-sector level, allocative efficiency is obtained when input factors are allocated well between the most and least productive sectors of a country's economy. All these dimensions are interlinked. A firm that employs too much of a production factor and faces a marginal cost greater than the marginal return could make more profit by reducing its use of that factor. The resources

Table 1:

productivity considerations should be taken into account when discussing the option of shortening value chains to increase strategic autonomy of the European Union (European Commission, 2021)

Finally, digitalisation and remote working might also increase the diffusion of freelancing and the adoption of contracts agreed on an individual basis between the employee and the employer, (European Commission, 2021) Such developments might be negative for the labour market (European Commission, 2021)

(2020a MICROPROD paper D4.6) ~~second~~ in understanding the bargaining dynamics in the labour market and helping policymakers to design informed policies. Desbelaere et al (2020a) found that in 50 percent of Belgium and 40 percent of Dutch firms employees have excessive market power which is reflected in wages above marginal product of labour in both countries, 30 percent of firms have the upper hand and exercise their power to pay wages below productivity. This leaves only 20 percent of firms in Belgium and 30 percent in the Netherlands setting wages at the level. The authors also found that offshoring improves employer's bargaining position. Firms with offshoring activities for either finished goods or intermediate goods are more likely to pay wages below productivity.

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decentralisation which sectoral negotiations complemented by firm-level collective contracts. The authors show how this latter form of decentralisation had a positive effect on total factor productivity growth in the aftermath of the great financial crisis, emphasising the importance of the level of bargaining. Mueller and Neuschaeffer (2021, MICROPROD) show that in Germany, firms that have firm-level work councils report productivity that is 8% higher than firms where wage bargaining takes place at the sector level only. Importantly, plants that have both layers of bargaining in place are the most productive. Ajio and di Mauro (2020) also report that the percentage of firms outside collective bargaining (in individual contracts) significantly reduced the average TFP performance at the sectoral level.

banks to raise the required funding in conditions to the same degree as firms operating in well functioning financial markets

Testing their model in the three biggest countries of the Eurozone, the authors found evidence that the opportunity cost effect of current TFP growth dominates in Germany, while the liquidity effect dominates in Italy. They also found that the size of the coefficients is larger for France than for Germany, suggesting that credit allocation is more efficient in France than in Germany. At the micro

legacy assets remain on the balance sheet, and the bank itself continues to have incentives to avoid realising losses¹⁵. The authors found that US regions where supervisors played their role more stringently experienced higher labour productivity growth after the crisis with more firm entries, more job creation, and higher employment, wages, patents and output. They also concluded that one standard deviation higher supervisory forbearance during the crisis led to approximately a 2.9 percentage point lower rate of establishment exits and job destructions. However, after the crisis, there was a 3.6 percentage point lower rate of entry and job creation. Overall, for every job lost due to lower supervisory forbearance (ie regulators being more stringent in supervision), there were 1.05 jobs created after the crisis, showing that tighter supervision was not costly in terms of jobs in net terms. These results expose the inherent trade-off between short-term pains and long-term gains. Not all financial institutions are systemically important and the risks of banks could be higher than the risks associated with letting some fail.

Since the financial crisis, central banks have had to resort to unconventional monetary policy to contain the negative effects on the economy of the subsequent crisis. Cyrot et al (2020, MICROPROD paper) investigated the capital allocation effects in Germany during and after the sovereign asset purchase programme – the Securities Market Programme – (SMP) European Central Bank (ECB) the European sovereign debt crisis. They found that firms indirectly affected by a positive liquidity shock reduced employment, but also increased their level of assets. Based on the two most conservative methodological approaches, the long-term differential employment effect in the two years following the unconventional monetary policy measure was minus 3.7 percent and minus 6.1 percent, while the effect on asset growth ranged between 8.9 percent and 11.7 percent. The authors also found a negative effect on sales (between 2.2 percent and minus 4.1 percent) and a positive effect on labour productivity (in the range of 2.2 percent to 3.5 percent). The asset purchase programme might thus have induced banks to conduct their monitoring functions more stringently, ultimately leading to investment and productivity advancements among their corporate credit portfolio, while negatively impacting employment and sales.

¹⁵For banks close to the minimum capital requirement, loan loss provisioning is costly since they may fall below the minimum threshold. Therefore, they have an incentive to avoid provisioning non-performing loans. Reasons for higher supervisory forbearance are, for example, local regulators are normally more lenient on distressed banks than federal supervisors as they weigh local economic factors more; also, the regulator's headquarters is a factor, because revolving doors (officials changing career and going to work for a bank not too far away)

¹⁶These are firms in business relationship

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