

Comments on The Productivity Puzzle and Misallocation: An Italian Perspective

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There is a growing concern over the perceived slowdown of TFP growth in many advanced economies, particularly in southern Europe. In Italy, for instance, TFP growth has been essentially zero (or slightly negative) between 1995 and 2014 (Hassan and Ottanasio 2014). In Spain, despite high rates of GDP growth, TFP fell at an annual rate of 0.7% between 1995 and 2007 (Garcia Santana et al., 2016). Understanding the evolution of TFP in these economies is clearly of first-order importance.

In this paper, Calligaris, Del Gatto, Hassan, Ottaviano, and Schivardi (henceforth, CDHOS) focus on one particular aspect of Italian TFP (or, more precisely, revenue TFP): its dispersion across firms, industries, and geographical regions. The idea, following Hsieh and Klenow (2009), is that a greater dispersion of revenue TFP is a symptom of underlying market frictions. In an ideal world, resources would flow from less to more productive firms to eliminate any such dispersion. If we do not observe this, the logic goes, it is because there must be misallocation, i.e., frictions preventing the efficient allocation of resources.

Starting from this logic, CDHOS study the universe of Italian incorporated companies to provide a very thorough description of TFP and revenue TFP (henceforth, TFPR) in Italy between 1995 and 2013. They complement this evidence with firm-level data to establish how firm characteristics are correlated with their being inefficiently sized. Their paper is full of interesting and, in some cases, surprising facts.

First, CDHOS confirm that misallocation in Italy has increased substantially: had the dispersion of RTFP remained at its 1995 level, they estimate that Italian GDP would have been 18% higher in 2013. Second, somewhat surprisingly, CDHOS show that this increase in misallocation is largely due to greater misallocation among firms within a given group, i.e., firms of similar size, in a given sector, or in the same geographical region. In other words, misallocation does not appear to have increased because specific groups of firms (e.g. small firms, located in the South, or in traditional sectors) have been “left behind”. Third, this increase in misallocation appears to be correlated to R&D intensity at the sector level: specifically, there is a positive correlation between a sector’s increase in measured misallocation and the increase in its R&D intensity. Finally, using firm-level data, CDHOS find that firms that employ a larger share of graduates or invest more in intangible assets appear to be inefficiently small.

These are important facts, which should be seriously considered by anyone interested in the recent evolution of productivity in Italy and, more broadly, in Southern Europe. Indeed, CDHO’s findings are largely consistent with those of previous studies that have focused on other European economies. In particular, they align remarkably well with the results of Garcia Santana et al. (2017) for the case of Spain. Also in Spain misallocation increased dramatically, and also in Spain this increase appears to have been pervasive across activities and sectors.

¹ European Central Bank, CREI, and Barcelona GSE. This paper should not be reported as representing the views of the European Central Bank (ECB). The views expressed are those of the author and do not necessarily reflect those of the ECB. I thank Manuel García-Santana for helpful discussions in preparing these comments.

The paper is very polished and the authors have done a thorough job of addressing previous suggestions. I have therefore little to say on the specific results, which seem overall convincing. Instead, I will make three general comments.

My first comment is entirely complimentary. Although the methodology of Hsieh and Klenow (2009) has been extremely influential in shaping the profession's thinking about productivity and resource allocation, it is not without caveats. In particular, it is not clear that the entire measured dispersion of TFPR across firms can be attributed to inefficiency. Alternative factors such as adjustment costs, idiosyncratic risk, or measurement error may contribute to such dispersion as well.² It has also been noted that reductions in the dispersion of TFPR need not reflect an improvement in inefficiency, as they could be driven by the convergence of "undesirable" characteristics at the firm level (e.g. convergence of market power to high levels). CDHOS now devote a full section to explaining these caveats while also exploring their relevance in the Italian data. They also devote a new section to exploring whether the increased dispersion in TFPR is associated to a greater dispersion in idiosyncratic risk.

In my view, both of these sections are great additions to the paper. As a consumer of this literature, I often find that papers engaging in this type of exercise are quick to jump to conclusions (taking the reader along!) without exercising due caution. CDHOS now provide the reader with both, a condensed conceptual discussion of the methodology's shortcomings and a collection of simple empirical exercises to assess their validity in the Italian context.

My second comment refers to the interpretation of some of the firm-level results. CDHOS study the correlation between "relative TFPR" (i.e. a firm's TFPR relative to the average in the sector) and a host of firm-level variables related to ownership structure, access to finance and workforce composition. The results are extremely interesting but, at times, their causal interpretation is pushed too far.

On the finance front, for instance, relative TFPR appears to be negatively correlated with the (lagged) tightness of credit constraints. CDHOS interpret this as evidence that credit constrained firms are absorbing too many resources and should downsize. But other interpretations are also natural. Maybe credit-constrained firms are precisely those that face negative productivity shocks, which they need credit to absorb: in fact, this is exactly how the authors interpret the negative correlation between low TFPR and equity emissions. An alternative interpretation is that these firms have low productivity precisely because of their limited access to credit. On the workforce composition, relative TFPR appears to be negatively correlated with the use of government-subsidized programs to temporarily suspend workers ("wage supplementation schemes") and with the use of temporary workers. CDHOS interpret this as evidence that firms that resort to these programs and type of workers are inefficiently large and should downsize. But, once again, an alternative interpretation is that firms use these programs and type of workers precisely to absorb negative productivity shocks.

To conclude, let me make one final comment regarding CDHOS's general interpretation of their findings. By jointly considering the evolution of TFPR dispersion and its correlation with R&D at the sector level, CDHOS conclude that misallocation has increased in Italy because it has become harder to reallocate resources across firms in sectors where technology is changing fast, rather than between sectors with different speeds of technological change. This is a very interesting

² Bils et al. (2017), for instance, find that measurement error may account for a significant fraction of the level and/or evolution of measured misallocation in the United States and India.

interpretation, but I wonder if the authors could have followed it up with more analysis. For instance, they could have focused on the sectors with fast technological change to try to understand the drivers of increasing TFPR dispersion. One possibility is that this increase is driven by the co-existence of firms with high- and low-TFPR growth. This would suggest that there are highly innovative firms in Italy, even if the reallocation of resources towards these firms is limited. A far bleaker alternative is that the increase in dispersion is driven by the co-existence of firms with stagnant and with mildly declining TFPR. This would suggest that Italy's lackluster productivity growth is not just related to its inability to reallocate resources towards highly productive firms, but rather its inability to create and nurture these firms altogether.

Overall, CDHOS have written a great paper, which provides a very thorough picture of productivity and misallocation in Italy. It contains many new and interesting facts to guide future research, which should be taken into account by all those seeking to understand Italy's and – more generally – Southern Europe's productivity malaise.

References

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