

Discussion of “Capital Allocation and Productivity in South Europe” by Gopinath, Kalemli-Ozcan, Karabarbouniis, and Villegas-Sanchez

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## What GKKV Do

- ▶ Study empirically the evolution over time of misallocation and productivity using micro firm-level data from Spain and other European countries.
  - ▶ Main finding, increasing capital misallocation with roughly constant labor misallocation.
  - ▶ Capital inflows directed to less productive firms.
  - ▶ Patterns shared in South Europe (Spain, Portugal and Italy) not in the North (Germany, France, Norway).
- ▶ Develop an otherwise model of production heterogeneity with financial frictions and investment adjustment costs that rationalizes the firm-level patterns when shocked with a reduction in the real interest rate.
- ▶ Story plausible, key question is how important it is quantitatively.

# Main Idea

- ▶ Benchmark: efficient allocation of resources given a set of heterogeneous production units and aggregate resources,

$$\max_{\{k,l\}_i} \sum_i s_i^{1-\gamma} [k_i^\alpha l_i^{1-\alpha}]^\gamma, \quad \text{s.t.} \quad \sum_i k_i = K, \quad \sum_i l_i = L.$$

- ▶ Efficient allocation  $x_i = \theta_i X$  for  $x \in \{k, l\}$ , i.e., establishments are allocated resources according to TFP, more productive establishments allocated more resources.
- ▶ An increase in capital ( $\uparrow K$ ) would be assigned in the same fashion in the efficient allocation given a constant set of establishments.
- ▶ Policy distortions, frictions, and institutions can create misallocation (both within and across establishment's productivity types).
- ▶ Same institutions can aggravate misallocation with increased resources.

# Why It Is Important

- ▶ Restuccia and Rogerson (RED 2013):  
“In our view the most persuasive evidence in support of the role of misallocation will come from work that follows the direct approach in specific contexts, especially those in which we observe changes in some underlying source of misallocation and can measure the resulting change in misallocation and aggregate TFP.”
- ▶ GKKV paper represents an important step in this direction providing evidence linking changes in a source of misallocation and the aggregate effects.
- ▶ GKKV impressive in its many parts: remarkable effort dealing with issues of data; ambitious model, calibration, and contrasting model predictions with data; and comprehensive in providing comparative evidence across a number of countries.

# General Comments

1. Limitation of empirical measures of misallocation is lack of direct connection with policies/institutions/frictions generating it.
  - ▶ Too many potential sources of increased capital misallocation.
  - ▶ Current connection of increased misallocation with capital inflows to South Europe and constant frictions while plausible is weak.
  - ▶ Micro data can be exploited more to connect capital inflows with increased misallocation.
  - ▶ Longer time series data?

## General Comments

2. Each part of the paper is good, paper could be even better if these parts were more connected
  - ▶ Micro data uncover an interesting fact of increased capital misallocation
  - ▶ The authors suggest a potential hypothesis and constructs a model with specific features that delivers the desired results
  - ▶ The model generate consistent predictions along many dimensions
  - ▶ To me, what is needed is a quantitative assessment of the hypothesis, the extent to which the decline in the real interest rate (capital inflows) explain a substantial portion of the patterns in the data?
  - ▶ More discipline is needed on the specific features delivering the results.

## General Comments

3. While effort on data impressive, more can be learned from the data at hand
  - ▶ Study more systematically the evolution of firm productivity, role of reallocation and entry and exit, and the connection of these patterns with increased misallocation and capital inflows.
  - ▶ Entry and the potential for selection seems to play an important role in driving aggregate productivity.
  - ▶ More discussion on the measure of capital and its potential limitations for resulting firm-level TFP measures and pattern over time?

## Other Comments

- a. Measures of coverage not necessarily useful in representing coverage of firm-level TFP distribution.
- b. Facts focus on evolution of dispersion measures. Level differences also relevant, in assessing the extent to which the data is useful in studying misallocation and the quantitative significance of increased misallocation.
- c. Period coverage. Is increasing capital misallocation occurring (or to a less extent) before joining the Euro?



## Specific Comments

- d. Pattern of increased capital misallocation not unique to South Europe. Chinese data shares similar pattern. Nevertheless, useful to know contribution of capital inflows to increased misallocation in Europe, a quantitative assessment is needed.
- e. In quantitative models of financial frictions, the bulk of aggregate productivity losses comes from distorted occupational choices that affect the distribution of production units in the economy. Data and model can be exploited more to assess this component. Right now entry/exit are added as robustness. A key issue is distorted entry and selection of firms with capital inflows and financial frictions.

# Conclusion

- ▶ Interesting facts on increased capital misallocation in South Europe.
- ▶ Plausible hypothesis of increased capital inflows with financial frictions and adjustment costs.
- ▶ I would like to see a quantitative assessment of this hypothesis, what portion of the aggregate and firm-level effects are explained by increased capital inflows in this context.