



From Micro to Macro: Entry Barriers, Resource Misallocation and Aggregate Productivity

Comments on Roberto Fattal Jaef's Policy Research Talk

February 23, 2021

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Insights

- Assumptions can make a model tractable to focus on key issues
 - Look at dynamic dimensions of impacts
 - Importance of transparency of assumptions; clarity of intuition
- Entry barriers AND resource misallocation
 - Mitigate some of each other's effects
 - Careful of analyzing one in isolation
- Calibrate to estimate size of different distortions
 - DBI can underestimate actual entry barriers in MICs and LICs
 - Careful of ascribing too much to a single measure
- Value of using firm data from across multiple countries
 - Make more use of differences of microdata and link them to macro outcomes

Estimating distortions

Interpreting size of estimated barriers to entry and to misallocation, with implications for policy priorities

- Differences across countries in average size vs average productivity
 - Variation of average size 40-180 workers vs VA/L of 10-20 times
 - On average, size is smaller in LICs, but larger variation in HICs than LICs
 - (Kenya??)
- Addressing differences in quality – of K, HK and Y – and market power
 - Gaps in quality – and market power - can account for significant dispersion that is now assumed to be due to distortions (de Loecker; Cusolito and Maloney)
 - If some of idiosyncratic distortions are really quality and market power, then would need *smaller* entry barriers to match size patterns in the data
- Make more of disaggregated data
 - Distribution of sizes
 - Differences across sub-sectors

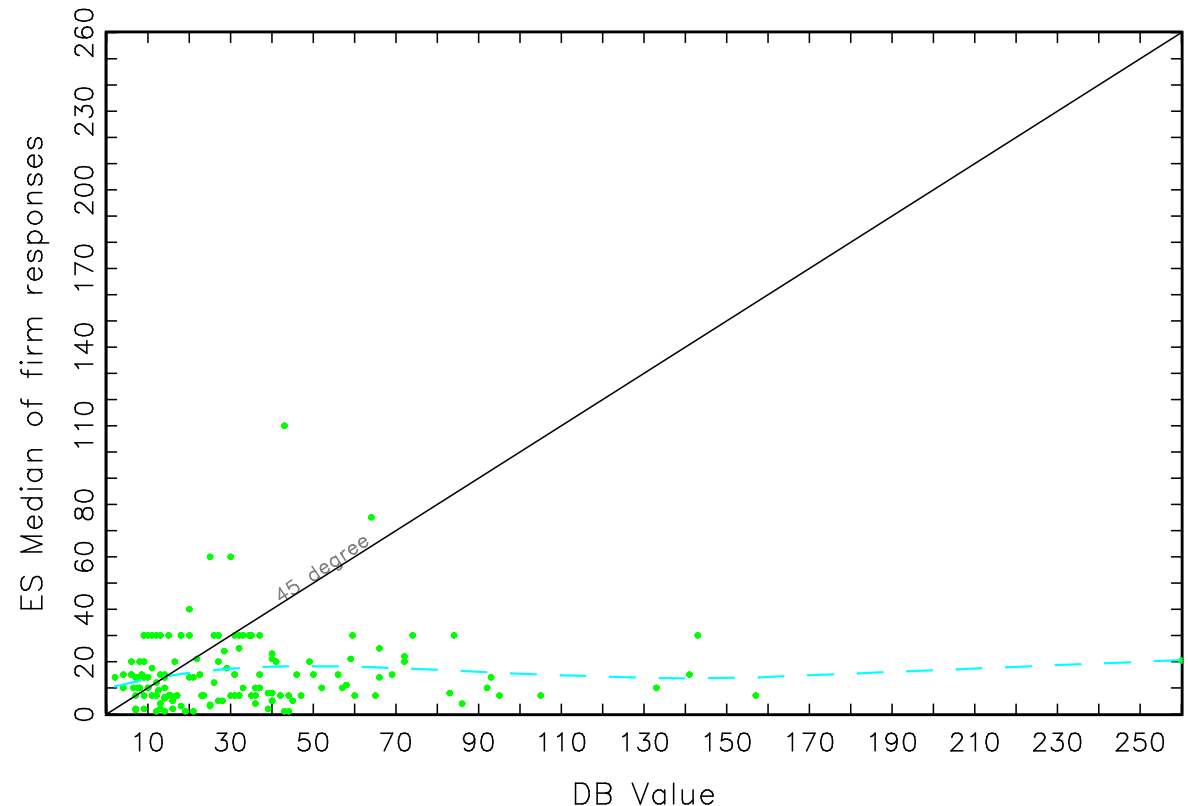
Size and distortions

- Size of firms – shift vs skew distribution
- Average size vs upper tail – for aggregate productivity, really interested in top performers, how innovative and how many are innovating?
 - Missing middle vs few large firms vs a few too-large firms
- And rather than exogenous probability of growth and exit – how does previous performance predict growth and survival?
 - Need panel (not all the datasets are)

Measuring distortions

- Finds DBI under-estimates entry distortions – especially for lower income countries
- DBI literally covers the time and costs of registering – but there are lots of other potential barriers to entry
- De jure vs de facto
 - Most are *less* burdensome in practice in LICs
 - But variation *within* countries is greater than variation in averages across countries

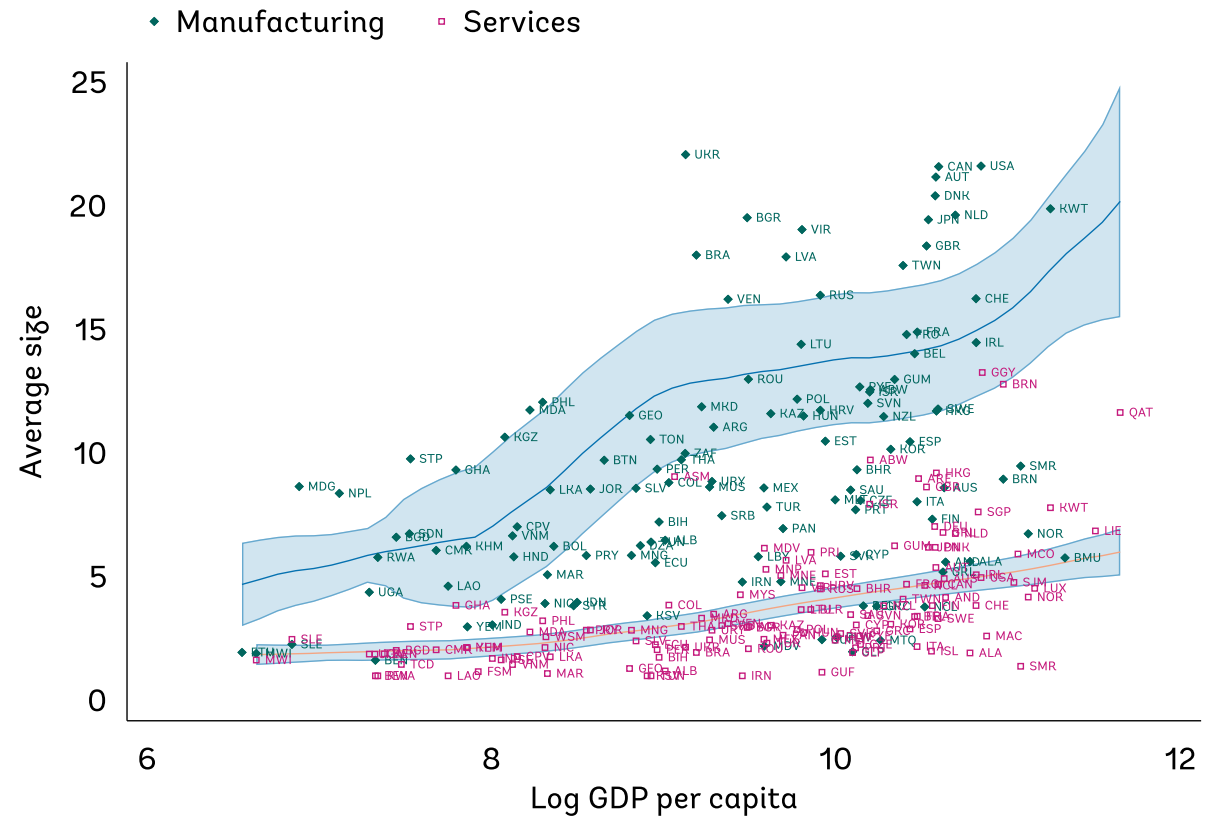
Figure 1b: Days to start a business/get operating license, comparing Doing Business and Enterprise Survey results

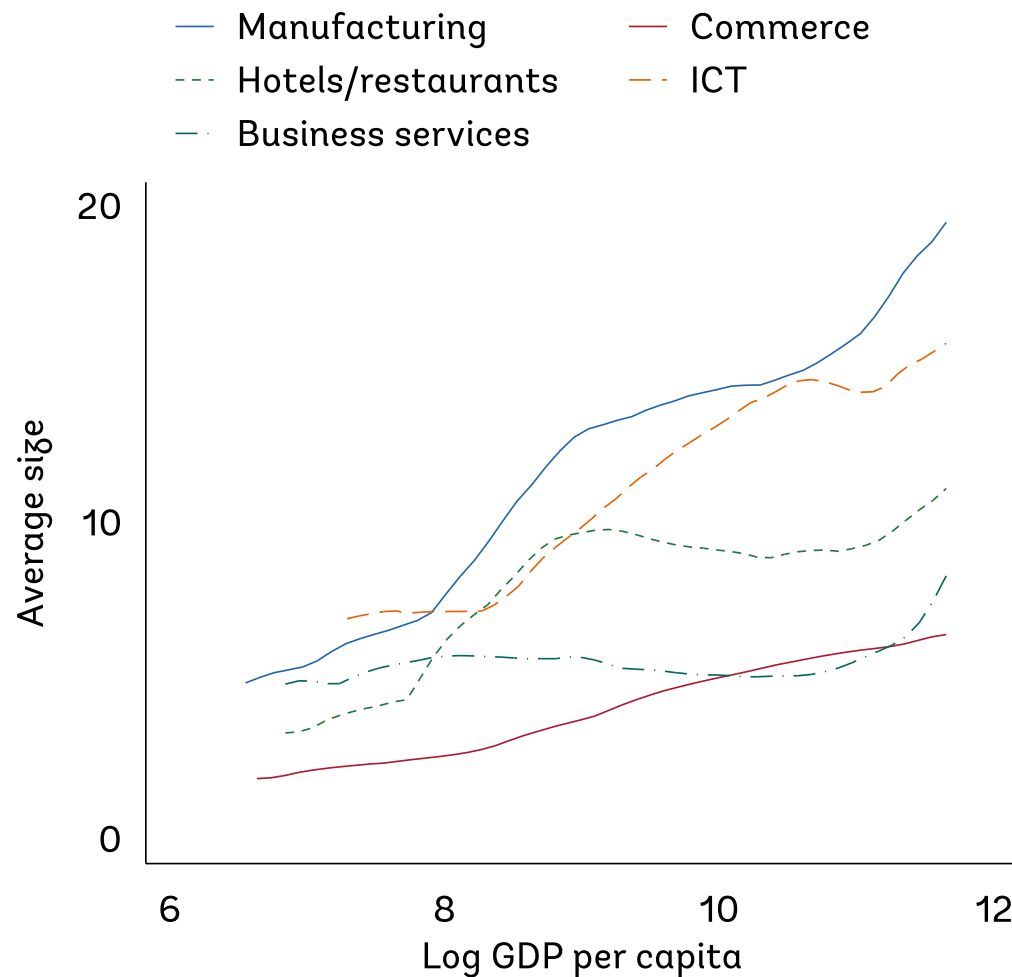


Hallward-Driemeier and Pritchett, JEP 2015

Average establishment size of manufacturing and services firms

- Manufacturing firms are larger
- And size rises more with income with manufacturing



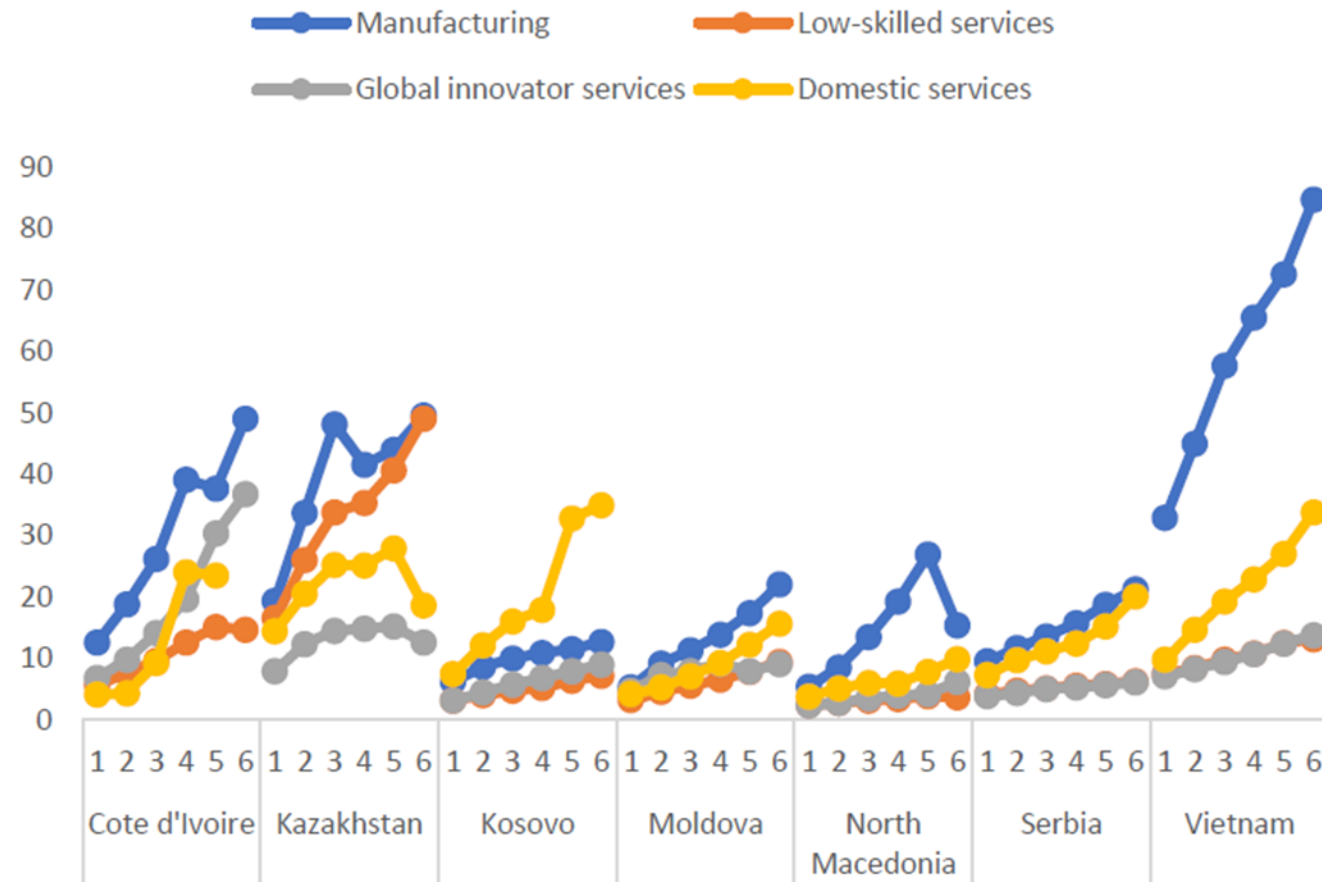


Sectoral composition matters

- Could make more of differences across sub-sectors and variations in their sensitivity to different distortions
- Distortions are the not the only driver of size
- US sectoral composition is not necessarily representative of the composition in LICs – nor the type of work within a 2 digit sector across countries

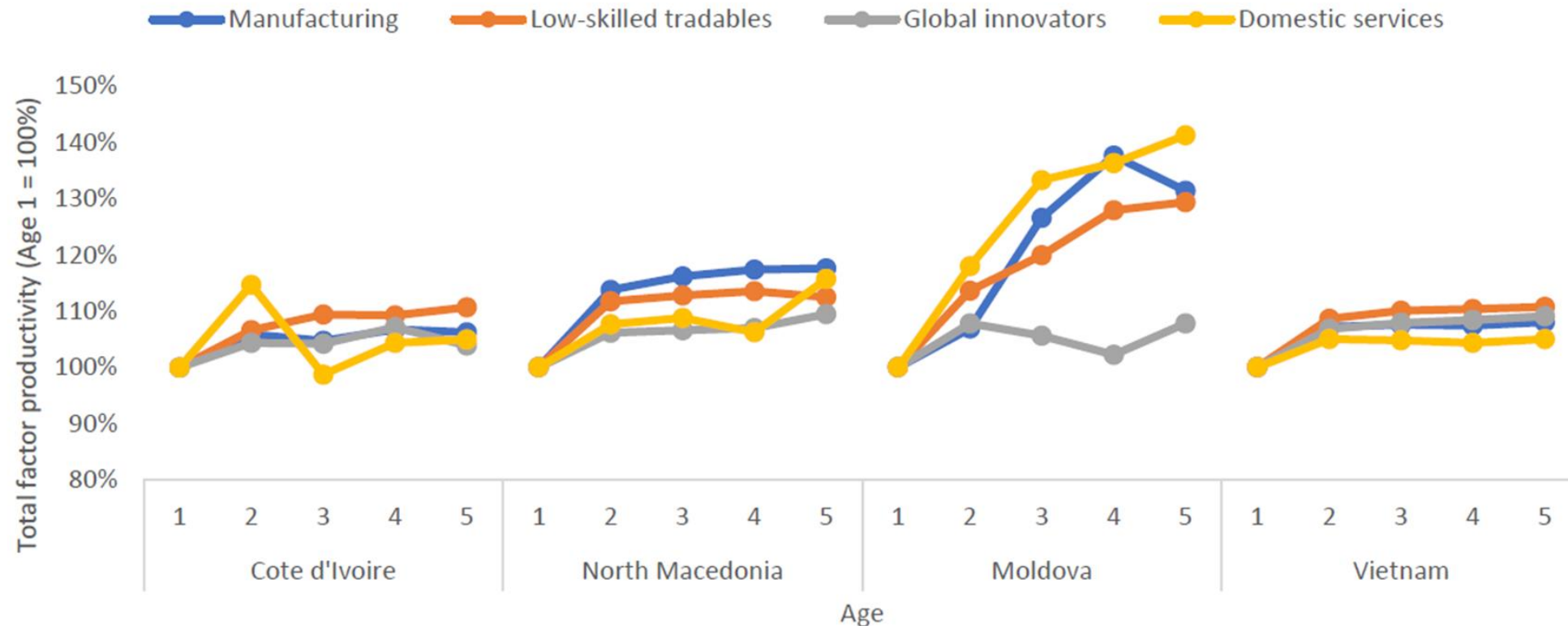
Firm size over life-cycle in practice

Lower employment growth in services than manufacturing



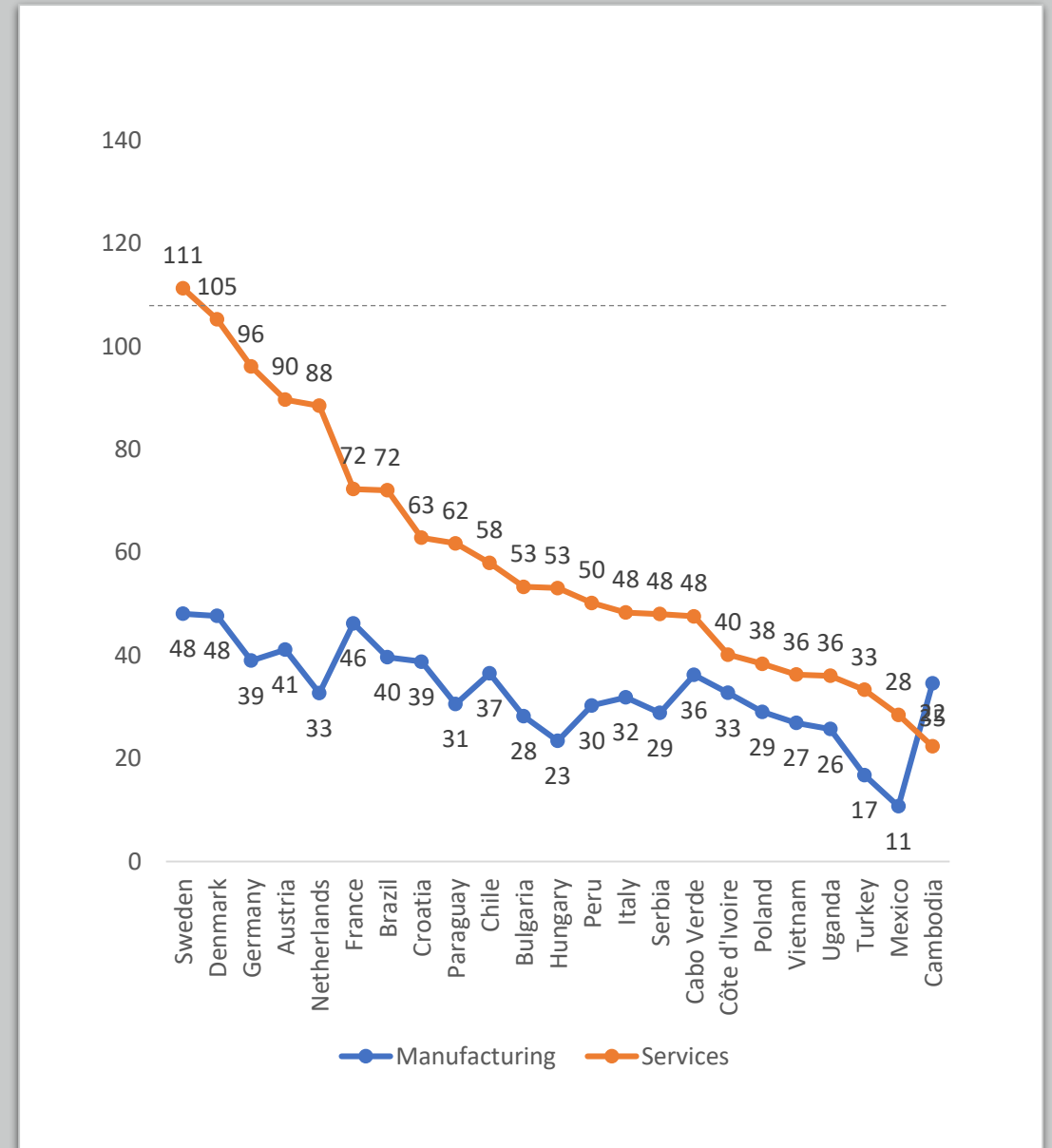
Productivity growth of services firms is similar to that of manufacturing firms

Median total factor productivity, relative to the first-year level



Association of size and productivity is less pronounced in services

Labor productivity of a micro firm (0-9 employees) relative to a large firm (250+ employees, set at 100)



Source: Aterido and Davies (2021) background paper for Services-Led Development (Hallward-Driemeier, Nayyar and Davies, forthcoming)



Data Agenda!

- Need for more and better firm data
- More countries to make their micro data available – manufacturing and services
- Panel data to track firms over time
- Include measures of prices and quality
- Digital technologies raise additional estimation challenges
- And expand measures of distortions and barriers – de facto and de jure