



## STEG-PEDL Virtual Course on 'Private Enterprises, Productivity and Economic Growth'

Session 2: Friday 13<sup>th</sup> February 2026

[Chad Syverson](#)

[Presentation Slides](#)

[Video](#)

**Q: How will attendance be taken? And how will we get certificates?**

A: At the end of the course, if you contact us, we will provide certificates to those who have attended at least 12 lectures for at least 60 minutes each.

**Q: In order to better prepare for the class, where can we access the reading material?**

A: <https://grp.cepr.org/steg/courses/Private-Enterprises-Productivity-and-Economic-Growth>

**Q: Can we access the slides for this week, last week and future weeks?**

A: Please find a link to the presentation slides at this link: <https://grp.cepr.org/steg/courses/Private-Enterprises-Productivity-and-Economic-Growth>. Look under Lectures, then the Sessions 1 and 2 dropdowns. The slides for future weeks will usually become available at this address a day or two ahead of the presentation, under the relevant Session dropdown (e.g. Next week will be under Session 3).

**Q: Hello, I missed the first lecture last week- is there a way to access the recording?**

A: You can also access the video directly here on YouTube: [Video](#). The slides are on the lecture website: <https://grp.cepr.org/steg/courses/Private-Enterprises-Productivity-and-Economic-Growth>. Look under Lectures, then the Sessions 1 and 2 dropdowns.

**Q: We are zooming in on the right tail, but do we also have heterogeneity if we zoom in on the smaller firms?**

A: I don't know the specifics for ready-mix concrete, but almost certainly this is true. I can tell you from my own work, for instance, that there is tons of heterogeneity across farms in smallholder agriculture in Africa.

Hard to have heterogeneity in number of workers (single worker/self-employed), but certainly there is heterogeneity in profits/productivity etc.

**Q: Heterogeneity = differences across units (people, firms, regions)?**

A: In this case, the heterogeneity (variation) is found across many dimensions... Just saying that firms are not identical, even within the same sector.

**Q: Is it correct to think of the importance of demand as a market failure, since the best firms are not able to grow as much as they could have without frictions in market access?**

A: I think the differences in demand facing different firms do not necessarily point to a market failure. It suggests that there are other (unobserved) dimensions that may matter a lot for the demand facing the individual firm. That could still be consistent with markets that function well, or it could embed frictions of various kinds.

**Q: Measuring TFPQ for manufacturing requires input-output data and estimating a production function, which is still possible with good data. What do you think is the best way to measure TFPQ for services? Or do you know if there is literature digging deep into different service sectors and best approximation of TFPQ there?**

A: For services, this is obviously really difficult, because Q is not well defined. (A unit of services is much harder to define and to observe than a measure of output in manufacturing or agriculture.) So for services, we have a more challenging problem. I'll put this question to Chad at the end!

**Q: When firms give a negative amount produced, what is the economic story that prohibits that? Is it because effective factor price is too high, so firms want to reverse production and sell the factor?**

A: I think it's just the obvious problem that producing negative quantities is technically challenging! (It's not the same as producing positive quantities and disposing of it...)

**Q: Is it correct to interpret gamma as the structural demand curvature parameter that governs the equilibrium price–cost wedge under oligopolistic competition?**

A: I'm out of my comfort zone in answering this -- but my intuition is that gamma would definitely affect this wedge, in Chad's model. But it's more generally, exactly as he says, the substitution elasticity across the outputs of different firms. So that has broader implications than just for oligopolistic competition.

**Q: Why does the comparative statics reverse sign when we talk about entry cost vs fixed operation cost?**

A: I'll ask Chad in the Q&A to give an intuition for this.

**Q: Aren't productivity spillovers captured by learning-by-doing? Or is it important to distinguish the micro learning by doing vs. the macro/industry level learning by doing?**

A: Learning-by-doing is typically within the firm, not external. Productivity spillovers can be static, external economies of scale.

**Organizers: We'll have some time for Q&A in a few minutes... If you have questions that you'd like me to direct to Chad, please do put them here in the chat now, and I'll collect a few... (Editor's note: see [Video](#) for answers)**

Q: Could I ask about estimating productivity for the service sector?

Q: What about productivity estimation in the presence of a significant informal sector as in most developing countries? I think this relates a lot to his point on demand heterogeneity being even more important than productivity.

Q: Professor Syverson, your work has shown that productivity dispersion is significantly smaller in industries where products are more substitutable — essentially that competition culls the least productive firms. This model formalizes that through amplifying the effect of the profitability draw on firm size. But I'm curious about the direction of causality. Could it be that in industries with high substitutability, the surviving firms look more similar not because competition killed the weak ones, but because high-substitutability environments discourage entry by heterogeneous firms in

the first place — meaning the selection happens before entry, not after? And if so, does that change how we should think about competition policy in concentrated industries?

Q: Are there any models to forecast risks of heterogeneity?

Q: What is the role of anti-trust and competition strengthening policy for gamma?

Q: Amongst the examples of heterogeneity you mentioned (product innovation, management, firm structure, etc.), which angles of heterogeneity are still open questions? What about the role of process innovation and patents?

Q: Could I ask if the following interpretation makes sense, or is it a stretch? So - from a development perspective, you're thinking about firms in developing economies and how to help them grow. You're looking at focusing on improving productivity vs focusing on removing trade barriers to access larger markets (i.e. more demand) or directly linking SMEs to demand (e.g. supplier development programs). These findings would seem to imply that focusing on unlocking demand would do much more than focusing on firm productivity. What do you think? Further, could this be an argument for protectionist trade policy?

Q: If we use TFPR (Revenue Productivity) to measure the size-productivity relationship, are we actually measuring efficiency, or are we just measuring a firm's ability to charge high prices (market power)?