

A COMMENT ON:

*“Presidential Address: Demand-Side Constraints in Development: The Role of Market Size, Trade, and (In)Equality”*

by *Pinelopi Koujianou Goldberg and Tristan Reed*

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LET ME START THIS COMMENT by confessing that as I was reading the paper, I found myself staring at the tables documenting poverty reduction and market size changes across countries with a level of curiosity and interest that I had not experienced in a long time. Is it true that small market size is a constraint for economic development? Can it be overcome through international or domestic market size? At a time when globalization is being questioned, these are important and difficult questions that Goldberg and Reed wisely address.

The paper builds on the classic idea that the transition from agriculture to manufacturing requires the adoption of advanced technologies which are subject to increasing returns to scale and thus are only profitable when operated on a large market. The theoretical literature has proposed two mechanisms through which this market size can be attained: first, through expansion in international markets (Helpman and Krugman (1985)), a road taken by East Asian countries; second, through growth in domestic markets (Murphy, Shleifer, and Vishny (1989)), which the authors note was the road recently taken by other developing countries like India. Is there systematic evidence that these mechanisms were important for poverty reduction in the past four decades?

A first challenge in addressing this question is that there are several theoretical mechanisms through which market size can affect development. Some of these mechanisms involve firm-level economies of scale, while others require industry- or economy-level increasing returns. A second difficulty is that developing countries around the world had very different strategies to integrate in the world economy, encompassing regional free trade agreements and unilateral trade liberalizations. A final issue is that it is difficult to track the effects of firm-level productivity gains in the household-level outcomes of poor informal workers (Goldberg and Pavcnik (2004), Topalova (2010)).

The empirical literature has made progress by testing for different theoretical mechanisms using (i) detailed product and firm-level data that permit direct observation of the outcomes of interest at different levels of aggregation; (ii) exogenous changes in market size generated by trade liberalization episodes or other trade shocks.<sup>1</sup> The consensus view is that expansion into international markets induces firms to upgrade technology, quality, and skills, leading to productivity gains. A natural question at this point is to what extent these mechanisms carefully documented at the firm level had important aggregate effects on the level of poverty in developing countries.

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<sup>1</sup>Empirical studies include Verhoogen (2008), Lileeva and Trefler (2010), Bustos (2011), Aw, Roberts, and Xu (2011), Ferraz, Finan, and Szerman (2015), Atkin, Khandelwal, and Osman (2017), McCaig and Pavcnik (2018), and Alfaro-Urena, Manelici, and Vasquez (2022).

This paper addresses this question by observing the aggregate cross-country data through the lens of a “new growth theory” model where the industrial sector is characterized by increasing returns and imperfect competition (Murphy, Shleifer, and Vishny (1989)). The empirical strategy puts minimal structure on the data to capture the essential ingredients of the market size mechanism, namely, that there is a threshold market size after which adoption of technologies leading to development is profitable. Instead of analyzing outcomes directly linked to the theoretical mechanisms, the analysis focuses on the outcome of interest: poverty reduction. And instead of exploiting the details of trade policy for causal identification, Goldberg and Reed measure the size of the international market for each country. Importantly, variation in this measure is driven by trade policy through the signature of international trade agreements and the size of trading partners. I think there is a lot to learn from this “let’s look at the elephant in the room” approach which takes the essential ingredients of the model to the relevant features of the data.

Goldberg and Reed find that a country with a population smaller than 325 million people whose income is lower than the global middle class does not have a domestic market large enough to sustain poverty reduction. These findings imply that the international market is key for most developing countries, which are not large enough to follow the path of India. What will be the development prospects for these countries if there is a reversal of globalization? The authors find that countries with a large middle class can rely on their domestic market, as a 10% increase in the middle-class share represents an increase in population size of 50 million for the average developing country in the sample. The authors conclude that redistribution towards the middle class can be an effective way of increasing domestic demand for small countries with scarce international market access.

The paper also investigates the mechanisms proposed by Murphy, Shleifer, and Vishny (1989), where a widely distributed initial income boost, driven by agricultural productivity growth or commodity exports, can generate domestic demand for the increasing returns sector and start the development process. They found that poverty reduction episodes are often preceded by fast export growth, but not by agricultural productivity growth. In my view, this finding lends support to the hypothesis that countries with a comparative advantage in agriculture do not have a clear path to start the structural transformation process. While closed-economy models of structural change suggest that fast productivity growth in agriculture can generate demand for manufacturing and services, these effects are hard to find in the data,<sup>2</sup> first, because in open economies a comparative advantage in agriculture leads to specialization in this sector and imports of manufacturing goods;<sup>3</sup> and second, because new agricultural technologies are labor-saving, thus income gains tend to be concentrated in the hands of land owners. As a result, agricultural productivity growth might not generate increases in demand for non-traded services.<sup>4</sup>

The findings by Goldberg and Reed are relevant for these commodity-based economies as they suggest a role for demand-side policies in starting the structural transformation process. Governments can redistribute the gains from primary sectors to generate a middle class that can sustain a transition to manufacturing and services. Some Latin American countries have implemented policies in this direction after the commodity boom in

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<sup>2</sup>Closed-economy models stressing demand forces include Murphy, Shleifer, and Vishny (1989), Kongsamut, Rebelo, and Xie (2001), and Gollin, Parente, and Rogerson (2002).

<sup>3</sup>See the open-economy models in Corden and Neary (1982) and Matsuyama (1992).

<sup>4</sup>See the empirical evidence in Bustos, Caprettini, and Ponticelli (2016) who studied adoption of GM crops in Brazil.

the 2000s, with mixed consequences. Large social programs and high minimum wages in Brazil significantly reduced inequality (Barros, De Carvalho, Franco, and Mendonça (2010), Engbom and Moser (2022)). However, redistributive efforts did not succeed in other countries, notably Argentina and Venezuela. One concern is that some developing countries do not have the state capacity to tax and redistribute the resources generated by the primary sector. In this case, resources end up concentrated in the hands of government officials, leading to corruption, populism, and conflict. Understanding the conditions under which redistributive policies succeed at changing the income distribution in a sustained manner appears to be an interesting area for future work.

A second potential avenue for countries with a comparative advantage in primary sectors would be to invest in supply-side policies that shift comparative advantage towards sectors that employ more labor, such as industry and traded services. These could be classic supply-side policies such as educational investment or industrial policies. These interventions directed to change the sectorial composition of the economy can generate a more equal distribution of income without the need of large redistributive policies. There is a recent empirical literature exploring the effectiveness of industrial policy experiments (Kalouptsi (2018), Choi and Levchenko (2023)) or other shocks that affect the relative profitability of industries with increasing returns (Juhász (2018), Bartelme, Costinot, Donaldson, and Rodriguez-Clare (2021), Bustos, Castro Vincenzi, Monras, and Ponticelli (2022)). Hopefully, more work in this area will uncover some regularities that can inform a consensus view in the near future.

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