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The Role of Market Size, Trade, and (In)Equality”
by Pinelopi Koujianou Goldberg and Tristan Reed*

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INDUSTRIALIZATION AND CAPITALISM have lifted billions of people out of poverty. The most recent few billions have risen in newly industrialized countries in an era of globalization. Goldberg and Reed identify a fundamental constraint on industrialization. Increasing returns at the country level mean that industrialization will not occur without access to a market of adequate size.

Empirically, the fundamental constraint is measured by using threshold models to predict sustained transitions out of poverty in the recent historical past. I am delighted that Goldberg and Reed adapt the model of [Bresnahan and Reiss \(1991\)](#) to this task. Much of the delight arises because this application has at least 9 orders of magnitude larger welfare implications in-sample than did ours.

The demand constraint permitting industrialization can be pushed out in any of three ways. A country could have a larger population, could have a larger middle-class population, or could be economically integrated with large, rich countries. As the domestic politics of large, rich countries have lately turned against globalization, the constraint is shifting worldwide. This is quite different from an old supply-side constraint, dislike of capitalism (or of non-crony capitalism) in countries hoping to industrialize.

That leads me to a geopolitical remark, to a methodological remark, and then to a discussion, based on the methodological remark, of practicalities for policy.

As Goldberg and Reed point out, one country-level path to enabling industrialization would be to relax the demand constraint by enlarging the domestic middle class. Their estimates suggest several other paths, such as coalitions among industrializing countries. To me, the most likely (not the most valuable!) is that China, and perhaps India, will more and more offer to replace the longstanding roles of the United States and Western Europe as trading partners for poorer countries. China and India have geopolitical ambitions, huge domestic markets, and each now has a considerable bilateral trade with poorer countries. Protectionism in the West leaves them an opportunity, one that Goldberg and Reed’s estimates suggest could be very valuable to the still-impoorished parts of the South.

The threshold models are portmanteau estimators. In the current application, they have different strengths and weaknesses than the earlier entry-threshold models in IO. An important strength here, in the Development context, is that the thresholds themselves are of economic interest. How much demand does it take to enable poverty reduction? What function of population, income measures, and access to overseas markets is the empirically relevant demand? The portmanteau structure means, and this is another strength, that threshold estimates do not require detailed modeling or analysis of the mechanisms of industrialization. They are robust to a number of questions. Which industries? What structure for the successful industries? Necessary to enable multiple candidate industries

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to get market selection? What infrastructure, education, etc. policies in support? A huge advantage of the threshold models is one need not answer these questions to learn how large the available market need be for sustained poverty reduction in recent years.

That is also the methods' weakness. Policy implementation, whether business policy or public policy, does need analysis of these questions. All portmanteau estimators have a weakness much like this, leaving unanswered questions but, one hopes, and definitely in this application, bringing something extremely important to the foreground.

The first question: what industries are associated with the scale-based development success documented here? Thinking about this question does not lead to industrial policy. Many different areas of policy will turn on the specifics. Industries have different infrastructure needs, different labor force needs (and therefore different derived demand for education and health services), different comparative advantage in any particular country, and different supply chains. Productive investments in labor force development and in infrastructure, etc. will thus vary with the kinds of industrialization a country is trying to enable. Firm founders will also want to know.

The second question: what different set of industries is implied by changes in rich-country policies towards globalization? If, for example, industrializing countries now need to shift to serving a domestic middle class, what are the most promising areas to pursue? If the definition of the global "North" switches from meaning U.S./EU to meaning China/India, do different prospects arise? Both supportive national policies and business policies turn on this.

The first of those two questions is basically a completion of the inferences from Goldberg-Reed, the part their portmanteau estimates leave in the background. The second question, however, seems to require more structure to deal with more complex counterfactuals. In one external environment, that of the recent historical past, one set of public and business policies was suitable for sustained poverty reduction. Will that set change if the nature of the available demand changes? That calls for thinking broadly about competition, that is, for what will the output of the growth sectors be a substitute? Supply of those substitutes is another element of the detailed demand-side constraint.

Industrialization to serve a growing domestic middle class will entail competition with imports. Those are not simply imports from the North, but imports from other industrializing countries. This suggests the importance of not merely examining comparative advantage, but also examining the localization of demand. Localization of demand, for example through the emergence of nation-level brand names, would be another argument in favor of enhancing the domestic middle class. More generally, the structure of non-homothetic demand is essential to the argument that redistribution will relax demand-side constraints and also to the practical policy question of what industries to support with infrastructure, education, health policy, etc., going forward. So, too, the potential competitors.

Industrialization for export-led growth changes as the destination markets change. Available demand by, for example, Chinese customers will depend on competition with domestic Chinese producers—may be different in many dimensions (comparative advantage, technical basis, customer tastes, etc.) than competing with U.S. or EU domestic producers. Like growing domestic demand, this calls for policies attuned to the enabled growth, not some disembodied general growth.

Successful industrialization is, by definition, a new economic activity (at least new to the focal country). To the extent any particular new activity is risky, policies that enable a variety of initiatives will have a higher probability of having some success. This alone could provide an explanation of the substantial market sizes needed for industrialization. And it argues against policy initiatives with a strong picking-winners flavor, and even

more strongly against favoring the efforts of cronies of the government or other insiders. Health, education, and infrastructure policies that can support a wide variety of success models are therefore more valuable for growth. And pose new research questions.

I am struck that none of these more specific questions call for the same methods advances that my IO colleagues have already brought to entry models, improving on threshold methods. Good. New, very important economic questions that require new methods are the cure for boring methods advance.

Whatever the broad strategic direction nations choose, the tighter demand constraint also poses difficult political economy challenges. Goldberg–Reed’s idea of a growing domestic middle class can serve as our first example. It is a daunting challenge to have income grow for ordinary folks rather than for the PM’s family and other connected people. And after that, the new domestic middle class will likely need political power as well as economic power. Otherwise, the temptation to protect import-competing industries holds a risk of shutting growth down. Similar problems arise with new-destination export-led growth. Similar challenges arise with the political parts of the choice of growing the middle class rather than finding new export markets that come with geopolitical strings. Enabling market-based industrialization rather than picking winners? Similar challenges. The narrowing of the demand-side constraint on industrialization is real, and imposes real costs on the world’s poorest.

All of these industrial and demand factors fall outside the threshold model not only because they are sharper hypotheses but also because they turn on different data, different knowledge, different research approaches, and call for methods outside the current envelope of all economics fields. Good! An important paper like this one should raise more questions than it answers.

A paper documenting a new constraint on growth can only be so positive about the future. This one, by limning the fundamental constraints while also taking the first steps towards a practical set of policy analyses to overcome them, is both terrific positive economics and leaves me positive about the future.

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