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REVIEW OF "GLOBALIZATION AND INEQUALITY" BY ELHANAN HELPMAN

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Overview

When trade comes up in conversation these days, a favorite talking point by people who oppose it is, "But it causes so much inequality, which outweighs the benefits." The refrain has spread like wildfire through the left and the right, through key national and global institutions, even among people who should know better. The vitality of the phrase persists in part because the economics profession has struggled to come up with a coherent response. The literature has been evolving rapidly and sometimes we no longer feel we can say things we thought we knew without nuance.

Elhanan Helpman, patron saint of the general equilibrium trade theory and, despite not (yet) having a Nobel, one of the most distinguished economists of our time, clears the fog for anyone worried they lack the authority to do so themselves. After a deep and meticulous examination of some of the most influential studies in the literature, he concludes that, "Globalization in the form of foreign trade and offshoring has not been a large contributor to rising inequality" (p.170).

Helpman does not shy away from evidence of the painful effects that import competition has had on many individuals and localities. On the contrary, if you read only one chapter of this book, let it be Chapter 7 where he reviews some of the literature on the local effects of the "China shock." Rather, he reviews the existing evidence without fear or favor, taking care to consider both theory and data. He is unable to come up with any reliable estimate that points to trade-related activity as accounting for even one-quarter of the increase in wage inequality or the skill premium in any decade since the 1980s, with many estimates hovering around 10 percent.

Initial thoughts on trade and inequality

Helpman draws on a decade's worth of prestigious lectures he has given, pulling together and updating his thoughts in a lucid, unified way that carries the reader through the modern history of some of the central research on trade and inequality. In the first chapter, he reviews trends in inequality and decides to focus on earnings inequality, often referred to interchangeably with the skill premium or the college wage premium in later chapters.[1]

[1] A cautionary sidenote: Helpman's declaration early in the book that global inequality (across countries) has increased appears in uncomfortable conflict with a key takeaway from Branco

The earliest analyses in his review try to discern whether the labor literature's finding that the US college wage premium more than doubled between the late 1970s and 2000 despite the large increase in the domestic supply of college graduates had anything to do with trade. Wage inequality increased more generally over the same period in numerous other countries, as well.

The early attempts to link trade and inequality found little empirical support, yielding the prevailing opinion by 2000 that skill-biased technical change was the principle driver of the observed increase in inequality. However, he points out that the early attempts were hamstrung by models with rudimentary labor markets and other conceptual stylizations that were the state of the art at the time, as well as data much less granular than what is ubiquitous in studies today.

It is natural that the rest of the exploration proceeds to grapple principally with two themes: technological change and labor market frictions. These themes arise naturally from the progression of the academic literature Helpman reviews. If we look at Helpman's research today, much of it is engaged in pushing the frontier presented by these two issues arising in the early analyses—investigating the black box of technological change and designing models that can deal with labor market frictions and heterogeneity in the data. The issues of technology, trade, and labor market adjustment also nest meaningfully within current public policy debates.

Trade, technological advancement, and inequality

Helpman's in-depth discussions of the role of trade in driving the increase in demand and remuneration for workers with high ability or skill wrestle with some sticky issues. A popular talking point by advocates of trade liberalization is that "it's technology, not trade" that is driving increases in inequality. Helpman's discourse is useful in that he attempts to define what the distinction between technology and trade means. "Technology" as an explanation for increasing earnings inequality embodied in a rising skill premium can mean a number of things. The various possibilities presented in the text are:

(1) an organic or spontaneous advance, independent of trading patterns, that allows producers to generate a unit of output with fewer skilled, unskilled, or both types of workers, with advances that result in firms demanding more skilled relative to unskilled labor qualifying as both *low-skilled-labor-saving* and (*high-*)*skill-biased*;

(2) an advance that reduces the cost of locating one or more stages in the production of a good in countries with different wages (offshoring) and thereby increases the demand for skilled relative to unskilled labor in at least one country; and

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Milanovic's (2016) book, *Global Inequality*. Do we reconcile this by different sample periods? Different data? Semantics? Helpman's statement in Chapter 1 did not play a role in his discussion of the book's core question of whether trade affects within-country inequality, so I do not pursue these questions further.

(3) an advance chosen by the firm in response to new opportunities available after a reduction in trade or offshoring costs that results in firms demanding more skilled relative to unskilled labor, called *directed technical change* and in this case is also *skill-biased*.

Possibility (1), which I call *organic* for lack of an obvious label elsewhere, may occur under autarky and does not require trade to be involved at all. This is often the way the term "technology" is thrown around in public discourse by proponents of trade. Even so, this organic type of technological advance may emerge in such a way that even though the advance itself is not due to changing trade patterns, it may prompt a change in trade patterns that amplifies the effect of the advance itself on the skill premium.

Helpman evaluates available estimates of contributions from all of these mechanisms to earnings inequality. If one hadn't already been pondering the entanglement between trade and technology, just seeing these different ways in which the two interact laid upon the pages makes one wonder whether it is useful to try to distinguish them in discussions of worker wellbeing within the public policy sphere. Helpman himself muses briefly in the last chapter,

"…as shown by Kletzer (2001), workers who lost employment between 1979 and 1994 as a result of import competition were not very different from workers who lost jobs for other reasons, such as automation or shifts in demand. For this reason, it is necessary to build safety nets for workers who lose jobs, independently of whether the job losses are caused by foreign competition. This is a major challenge for public policy." (p.174)

Trade, labor market adjustment, and inequality

Helpman's treatment of labor market frictions was at once illuminating in its breadth and disconcerting. Sprinkled across the chapters we saw frictions in different forms:

(1) specific factors, where workers have abilities that are not fully transferrable across different product sectors;
(2) heterogeneous worker ability, which I label a friction in the sense that it can lead to wage dispersion in equilibrium and can be costly to change;
(3) search and matching frictions, where it is costly for firms to find, screen (if necessary), and hire workers;
(4) relocation costs, which may prevent a worker from quickly moving to an area with vacancies after losing a job in a community overwhelmed by import competition.

His nod to specific factors in models considering managers in North-South trade is elegant. His in-depth exploration of assortative matching as a mechanism for wage dispersion, and the rematching after trade costs fall that Sampson (2014) and Burstein, Morales, and Vogel (2016) have found may augment assortative matching, is great fodder for anyone—undergraduate trade or topics course, graduate course discussion, and any public or private sector Chief Economist's office. His discussion of what we can and cannot learn from the China shock, MERCOSUR, and NAFTA literature on some of these frictions

sparkles with knowing insight. He does an especially good job putting the numbers on employment impacts in context so that readers can understand the economic relevance of their size. His manner of shining a light several times on empirical and theoretical results showing that under some circumstances, trade can reduce earnings inequality amidst these frictions, is fascinating.

Nevertheless, his treatment of unemployment and labor force participation leaves one hanging. There are two reasons why the general public looks with skepticism at the academic treatment of trade and trade policy. The biggest is that trade theorists have had so little to say about persistent unemployment and decreased labor force participation in trade-affected areas.[2] Helpman describes the findings of several papers identifying increases in unemployment and declines in labor force participation, but never satisfactorily traces that back to an honest critique of exactly where the theoretical literature falls short or needs to fill in holes in our understanding. The closest he comes is a short mention of the hole in the context of Autor, Dorn, and Hanson (2013):

"The formal model, developed in the Autor, Dorn, and Hanson online appendix, does not account for unemployment; it assumes that every worker finds employment in some available occupation. For this reason, it is hard to gauge the extent to which the estimation equations are consistent with labor market frictions that lead to unemployment." (p.101)

Later, he writes, "Although different forms of labor market frictions operate through mechanisms that differ in details, they all lead to unemployment and often to varying wage outcomes. Yet despite the recognition of these frictions, a paucity of evidence exists concerning the size of their effects." (p.147). In truth, our ignorance goes way beyond size. We don't know precisely what frictions exist that make workers (i) vulnerable to joblessness (either unemployment or dropping out of the labor force); (ii) displaced to a job with a lower wage; or (iii) able to move to a new vacancy with minimal losses.

In addition to the frictions enumerated above, much of this variation in the nebulously friction-related outcomes may depend on the broader industry dynamics of adjustment to import competition, about which we still know little with regard to worker displacement. Much of it may be related to public goods and other features of the local community, which would have important implications for place-based policy initiatives that go unmentioned in the book but could be key to addressing inequality and trade-related political economy issues.[3] Although Helpman does not by any means ignore unemployment, he declines to conceptualize how the field should integrate it into the question of trade and inequality or

[2] The other reason for skepticism toward trade models by trade economists is that we do not know what drives the current account and resort to integrating it as either exogenous or fixed at zero in our general equilibrium models of trade. I am sympathetic to Helpman's decision to leave this out, as it is not clear that trade policy affects the current account in the medium- to long-term (my own research affirms the common assumption that it does not) and it could be considered more of a capital-flows issue, which he dispenses with in the introduction.

[3] See Feler and Senses (2017) for an analysis of how local public service agencies that bolster the social safety net can be starved of revenue during a trade shock just when they are most needed.

the political aspects of trade policy, even though he argues in the final chapter that they are an important frontier for future research. Certainly joblessness is as important as wages in driving populist sentiment and an important feature of any inequality that might derive from changes in trade patterns.

More than a few models that examine wage dispersion and "have unemployment" in the form of search and matching still result in trade making all workers better off, just some more so than others, and no meaningful change in the unemployment rate even in the short-term following trade liberalization. Structural estimates, like the groundbreaking study Helpman rightly emphasizes by Caliendo, Dvorkin, and Parro (2015), which do incorporate changes in unemployment or allow some workers to incur losses, face an uphill battle for credibility with the general public on that count because trade theorists have not done a full reckoning of the holes in what we know about trade-influenced joblessness and how to model it. When assessments of new trade agreements arrive at the doorstep of policymakers and the public, more than a few roll their eyes for this reason. Careful examination and delineation for the field, by one of the great minds in general equilibrium, as to exactly what weaknesses exist in the way we model unemployment and labor force participation, and what puzzles in this respect lie in the data, would provide needed insight and more credibility when people look to trade economists to learn about the implications of trade for inequality.

Coda

A few papers have emerged since the draft of this volume likely went to the publisher. First, Feenstra, Ma, and Xu (2017) and Feenstra and Sasahara (2017) find, using the ADH reduced-form approach, that employment in export sectors and other jobs largely offset the loss of manufacturing jobs emanating from the China shock, lending additional credibility to the structural estimates mentioned above. Regarding Helpman's call-to-arms for work on the political economy of inequality and trade policy, Blanchard and Willman (2018) derive results showing that public investment in education is crucial to preventing self-inflicted terms-of-trade shocks from populist swings.

Helpman mentions the relevance of the consumption side in determining the effect of trade on real wages across income groups, citing Fajgelbaum and Khandelwal (2015). New papers by Borusyak and Jaravel (2018), Hottman and Monarch (2017), Jaravel and Sager (2018), and Gailes, Gurevich, Shikher, and Tsigas (2018) all delve deeply and astutely into distributional effects on the consumer side, though several of them neglect to integrate household saving into their computations, which may be important to understanding the tariff burden across income groups if poor households spend a larger fraction of income on consumer goods. In addition, a number of papers in the economic development literature, like Nicita, Olarreaga, and Porto (2014), evaluate the net impact of tariffs on households as producers and consumers in low-income countries.

I presume the many additional papers related to trade and inequality omitted in the text succumbed to space constraints and to the clean linearity of the chapters.

In summary, no one with any interest in current trade policy debates could ask for a better read than Helpman's "Globalization and Inequality".[4] There is an almost voyeuristic joy in learning his thoughts on one of the most pressing questions of our times, made particularly satisfying by the depth and clarity with which he speaks. It is helpful to know that in the estimation of one of the world's most learned judges, although we still have a long way to go in understanding and addressing the pain of local effects from import surges, the preponderance of evidence suggests that trade and offshoring is at most a marginal contributor to inequality, not a principal culprit.

[4] One might accompany it in an undergraduate seminar course on US trade policy with Irwin (2016) and Clausing (2018).

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