Original Article

Globalization Backlash in Developing Countries: Broadening the Research Agenda

Nita Rudra[1] ⓘ, Irfan Nooruddin[1], and Niccolò W. Bonifai[1] ⓘ

Abstract

This special issue explores why the globalization backlash is roiling rich industrialized countries. But why is the backlash less salient in developing ones? In this piece, we challenge scholars to consider why the backlash has not diffused widely to the developing world. We argue support for globalization depends on citizens' expectations of future economic mobility. This is high in the early phases of globalization which encapsulates many developing economies. Since information about globalization's effects is limited, observed mobility of some sustains optimism that the new economic order will allow everyone to prosper. Over time, unrealized expectations of mobility for less-skilled workers puncture this optimism. Such workers in rich countries are long past the honeymoon phase of globalization and confronting realities of stagnant incomes and job precarity. Barring visionary policies unlikely to emerge from today's polarized politics, their discontent will soon be shared by their developing country counterparts, dooming future globalization.

[1]Georgetown University, Washington, DC, USA

Corresponding Author:
Nita Rudra, Government, Georgetown University, Intercultural Center (ICC) 594, 37 & O Streets, NW, Washington, DC 20057, USA.
Email: nr404@georgetown.edu

A dense set of multilateral frameworks was built after the Second World War to support a deeply globalized economy. This global order was enabled by a commitment to openness across the advanced industrial world, which reaped the benefits of trade and investment opportunities manifold. National incomes rose and average citizens in these countries came to take for granted a quality of life—in terms of income and opportunities—that would have been unimaginable for their grandparents. Yet, amidst this wealth and prosperity, a curious backlash against the proverbial hand-that-fed-them has emerged. Populist xenophobic responses to globalization have become the political mainstream, with leaders questioning the legitimacy of the very global liberal order their predecessors built, in spite of the many benefits their citizens had experienced.[1]

The articles in this issue explore the political and economic causes and consequences of greater international market openness. Taken as a set, and in conjunction with the broader literature, this special issue generates new evidence and insights into the growing globalization backlash in rich industrialized countries, such as Switzerland, the United States, the United Kingdom, and other Western European countries. They also expose a core puzzle, yet unanswered: why has the globalization backlash been sharper and more vituperative in rich countries than in developing ones?

In 2002, 91% of Americans surveyed said that trade was good for their country. By 2007, this had fallen to 63%. Sharp drops in public support for trade openness also occurred in other developed nations, such as Italy and France. Yet support for economic openness remains strong in many developing countries. For example, in 2002, over 99% of those surveyed in Vietnam expressed approval of trade and this support had only marginally reduced in 2014 (Pew Center, 2018). Public support for trade is matched by government enthusiasm for openness, as suggested by the proliferation in the cumulative number of South-South preferential trade agreements (see Figure 1).

Of course, not all developing countries are equally gung-ho abut trade. In 2007, over 35% of respondents in Egypt believed trade to be either "bad" or "very bad." Between 2002 and 2018, the general public in Brazil, India, Mexico, and South Africa reduced their support toward trade, though the average level remained still relatively high (trade is "somewhat good"). These data suggest that support for globalization varies not only across rich and poor countries but also within countries over time. A key question is why? Our collective search for answers in this special issue has focused almost exclusively on conditions that prevail in advanced industrialized countries (e.g., formal compensation mechanisms, sovereignty costs related to membership in a unique political and economic union) to explain support for globalization, with an implicit assumption that the explanatory utility of these factors, slightly adjusted for context, "travels" to the developing world. The truth is
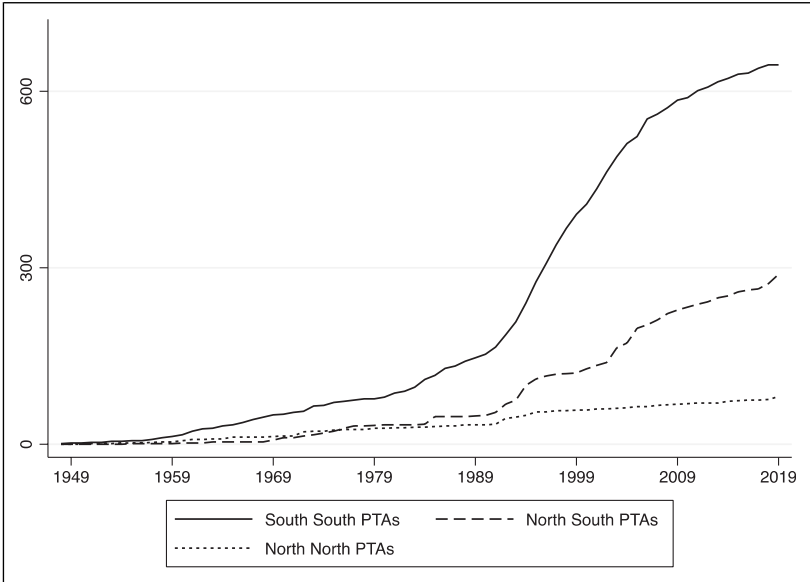
Figure 1. The proliferation in South-South preferential trade agreements. Source: Dur et al. (2014) and Donno and Rudra (2019).

that the narrowness of the theoretical and empirical focus leaves us unable to explain the different public response to globalization in the developing world, which in turns raises fundamental questions about whether we truly understand what is happening in developed countries.

In this conclusion of the special issue, we explore one possible reason for why the level of support for globalization is generally higher in developing countries relative to advanced industrialized countries, as well as why attitudes toward international economic engagement may vary over time within countries. Following Hirschman and Rothschild (1973), we argue that optimism about greater economic mobility—particularly amongst the low-skilled sector, which contains the median voter—is a critical factor determining broad support for open markets. Crucially, prospects of greater mobility are broadly similar between high- and low-skilled workers in the early periods of globalization. Worker's prospects remain high when they see others in their group advancing. This is because accurate and applicable information about the micro-level costs and benefits of globalization is limited, especially for the large unskilled populations that dominate the rural and informal sectors of society; the observed mobility of others then serves as information (or, if you prefer, cues, clues, or heuristics) that the new economic environment will allow them also to prosper.[2]

This honeymoon period is short, however, because dreams of mobility are ultimately dashed. Herein lies the folly of globalization in the current era. The digital revolution followed by rapid improvements in trade and technology has increased the skill premium globally, even in labor-intensive goods (Mansfield & Rudra, 2021). High-skilled workers have reaped the largest gains from trade liberalization regardless of their nation's level of development, and this skill premium tends to remain steady or increase over time. As a result, while support for globalization by both skill groups may be similar in the initial stages of the post-reform era, it erodes quickly amongst low-skilled groups in *both* rich and poor countries. The exceptionally large populations of low-skilled workers in poor nations may at first be positive or ambivalent about the personal benefits of openness, but their optimism decreases relative to skilled workers over time in the current global economy. We assess the plausibility of this explanation using cross-national survey data on trade support and a new indicator of liberalization shocks. Future research should assess this hypothesis more critically, as well as explore other possible explanations for the contrasting patterns of public opposition toward globalization in rich and poor countries.

Public Support for Openness in Developing Countries: What We Know

What explains variation in support for globalization between developing and developed countries? A voluminous literature explores the determinants of openness support in rich economies. This special issue illustrates that protectionist sentiments can be intensified—or, alternatively, support for openness can be weakened—by the following factors: increased economic interdependency—trade and technological change in particular—and the resulting adjustment costs (Milner, Forthcoming, this issue); the adverse effects of the China import shock on the economic ambitions of individuals holding "authoritarian values" (Ballard Rosa et al., Forthcoming, this issue); reduced compensation for the distributional "losers" of globalization (Kim & Pelc, Forthcoming, this issue); and international diffusion effects (Walter, Forthcoming, this issue).[3] From the vantage of our inquiry, this research, as well as the broader literature on this topic, suffers two critical limitations. First, the empirical domain of most of these studies is a small handful of rich countries; and second, it provides limited insight into why support for globalization amongst low-skilled workers tends to decline over time.

Existing scholarship identifies different individual-level predictors of protectionism, again using data principally from the developed world and the United States in particular to confirm theoretical predictions. Andrew Baker is an exception; he analyzes trade preferences in less developed countries (LDCs) context, specifically, Latin America (Baker, 2003). Despite rising

inequality and massive job losses in Latin America following difficult region-wide economic reforms, Baker observes that the mass Latin American public is generally favorable toward trade. He argues that consumption behavior dominates labor-market risks and socio-tropic concerns in determining support for trade in Latin America. After decades of experience with protectionism and economic crisis that came to a head in the 1980s, citizens of 1990s Latin America (the period of Baker's inquiry) could easily observe the positive impact that trade had on prices (-), quality (+), availability (+), and variety (+) of goods they could purchase, which made them more favorable to trade.

Gaikwad and Suryanarayan (2019) are another exception. They find communities that have been historically excluded from India's domestic labor market tend to be more supportive of trade. This is because members of these groups expect economic openness to generate more egalitarian employment opportunities than they can find in the local labor market, where discrimination on ascriptive bases (caste, religion, and language) is endemic.[4] Such analyses underscore the critical importance of avoiding generalizations about trade preferences based on studies focused on rich nations only.

A second unanswered question is why trade support tends to decline over time within countries, which is necessary to answer to understand why public sentiment about trade has soured so dramatically across the developed world over the past decade. Existing explanations tend to be static, attributing declines to a one-time economic or policy shock, or slow to change identities such as race, nationalism, or culture. For example, Mansfield et al. (2016) argue the deep economic recession of 2007-09 increased individual anxiety in the US about trade and global economic forces. Walter, Forthcoming (this issue) shows that individuals may be encouraged or deterred to support the backlash against globalization based on events in other countries. Specifically, Walter shows that individuals in EU-27 economies are more likely to support/oppose their country leaving the European Union based on the success/failure of the Brexit negotiations. Such explanations are plausible, but do not explain why we see similar deterioration in support for trade elsewhere too.

Understanding cross-national variation in support for trade requires a theoretical framework that incorporates rich and poor countries alike. For instance, in the aggregate, we know that citizens of developing countries have been more supportive of globalization (both before and after the 2007-09 recession) (see Pew, 2018). The size of the welfare state (or trade adjustment assistance, Kim and Pelc, Forthcoming, this issue)— a common proxy for a state's investment in embedded liberalism—cannot be the only answer; most developing economies—as well as some developed ones—have limited (or no) social programs to compensate losers from the risks and economic uncertainties associated with globalization (Hays et al., 2005; Nooruddin & Simmons, 2009; Nooruddin & Rudra, 2014).

We start with two simple, deliberately provocative observations. It is curious that many citizens take strong positions against globalization given that the average citizen (or anyone arguably) struggles to understand truly the distributional impacts of trade (see Rho & Tomz, 2017). It is also the case that in most countries, jobs losses from import-competition affect a relatively small percentage of the population. In the United States, for instance, where anti-globalization sentiment has been on the rise, the trade deficit accounts for a small portion of the decline in manufacturing employment (Rose, 2018). Yet, as this issue reveals, globalization has become a contentious issue in many countries. What galvanizes the general population to take such strong positions on international commerce, particularly if they have limited information about its true distributional consequences? In the next section, we build on Hirschman and Rothschild (1973) and propose a new hypothesis to explain support for trade across (rich and poor) countries and over time.

A Hypothesis

We posit that the duration of a country's exposure to the post-Bretton Woods global economy increases skepticism about the benefits of trade *amongst less-educated, less (formally) skilled workers, in stark comparison to their high-skilled counterparts*. The mechanism linking time since openness and public opinion is information about the extent and feasibility of low-skilled-labor mobility prospects. Before a country permits extensive international trade and investment, its population is largely uncertain about the costs and benefits of openness. After liberalization, the passage of time provides citizens with information that they associate with the costs and benefits of globalization. More specifically, people infer who wins and losses from trade by observing who is getting ahead and who is not, irrespective of whether these economic advances are directly linked to openness. Not coincidentally, time since openness correlates with the expansion of global value chains (GVCs), technology advances and the rise of the global skill premium, and growing competitive pressures from large low-wage economies like China. Taken together, the longer low-skilled workers observe globalization without gaining from it relative to other groups, the more likely they are to oppose globalization.

The developing world's experience with globalization is relatively new compared to rich nations, which liberalized twice—first during the 19th century Gold Standard and, second, after the Second World War and the establishment of the Bretton Woods institutions. By contrast, for most developing countries, it was not until the eighties and nineties that governments embraced a dramatic change in development policy. This was the distinct shift in macroeconomic policies from state-led industrial substitution industrialization (ISI) to freer markets.

How did the mass public in developing countries react to this radical change in international economic policies? Recall that liberalization came abruptly to many poorer nations, often mandated by International Monetary Fund (IMF) structural adjustment programs necessitated by sordid histories of colonial exploitation, lackluster development, and governance malpractice. Decades of protectionism created inefficient local monopolies and oligopolies justified as necessary evils to meet growing domestic demand, and preparing for international market competition. These misadventures eventually culminated in economic stagnation, persistent poverty, and accumulation of government debt.

The positive changes promised to the economy by openness policies were thus soon quite evident to the mass public. Alesina et al. (2020) estimate a short (approximately 4 years, on average) lag between the reform period and economic growth.[5] Baker (2003) argues the availability of new consumption goods was a key public signal that major economic reforms had occurred. Linardi and Rudra (2020) suggest that the presence of foreign companies in developing economies represents positive "equilibrium rupture."[6] Such transformations following liberalization shocks are particularly obvious to the general public after a prolonged experience of bad economic times.

Writing almost fifty years ago, Hirschman and Rothschild (1973) argued optimism after a major shift in macroeconomic policies will initially be high in all countries following "development disasters." More specifically, widespread enthusiasm for multilateral economic liberalization as a "new development model" is rooted in hopefulness for future income mobility, particularly after decades of stagnation. But since individuals have little information about the benefits they may reap—or costs they might incur—from globalization and its impact on their social mobility prospects, they infer it using observations of the economic advancement of their "relatives, neighbors, or acquaintances" (Hirschman & Rothschild, 1973, p. 545). Witnessing upward mobility of others initially provides individuals with "information" that the new macroeconomic environment is desirable, and that they too will soon advance. As Hirschman and Rothschild (1973, p. 546) put it, "advances of others supplies information about a more benign external environment; receipt of this information produces gratification." This is true even if individuals are not (yet) improving their economic situation.

However, as Hirschman and Rothschild (1973, p. 552) caution, "[The] change from supporter to enemy comes about purely as a result of the passage of time." This logic suggests a simple distinction between countries that have a lengthy experience with globalization and those with a relatively short one. While a paradigmatic change toward open markets might generate positive mobility prospects for various workers in the economy, either directly or indirectly though spillovers, some groups are likely to advance faster than others. The standard Heckscher-Ohlin factor-proportions theory anticipates

that low-skilled workers in labor-abundant countries should do particularly well and disproportionately benefit from openness. For example, economic theory would predict that since trade liberalization in sectors such as footwear and clothing has increased, low-skilled labor's income should grow in developing countries.

A confounding factor, however, is that a skilled-low skilled labor cleavage has been emerging in both rich and poor nations, disproportionately favoring the former. We identify three reasons why lower-skilled workers may not enjoy long-lasting mobility prospects during the current phase of globalization. First, New New Trade Theory (NNTT) shows that the most productive, superstar firms host the most-talented skilled workers with the highest wages even in developing economies and contribute to wage inequality. According to NNTT, the largest and most productive firms export because they can incur the high fixed costs of exporting, such as setting up global logistics, and of overseas investments (Melitz, 2003). These firms pay higher wages and hire and train the best talent (Helpman, 2017). Workers in less-productive domestic firms in the same sector suffer from either lower wages or unemployment because their less productive employers were forced to exit the sector (Flaherty & Rogowski, 2021). Given that less-productive informal firms employ the bulk of low-skilled workers in developing countries, this large group of workers fares worse than its counterpart in exporting firms within the same occupation category and sector.[7]

A second factor impacting low-skilled labor's mobility prospects is the increasing skill premium fueled by trade-induced skill-biased technological change. Trade facilitates technology transfer through imports of capital equipment and intermediate goods from rich countries (Bustos, 2011; Topalova & Khandelwal, 2011). Information technology and trade are mutually reinforcing in the global economy, altering traditional production systems and fueling a seemingly irreversible rising demand for more skilled labor even in labor-intensive industries. A wealth of empirical research has established that trade and technological progress is shifting global demand toward more highly skilled workers in *both* developed and developing economies (e.g., Acemoglu & Autor, 2011; Burstein & Vogel, 2017; Esquivel & Rodriguez-Lopez, 2003; Michaels et al., 2014). Goldberg and Pavcnik's (2007) comprehensive review of the literature provides further empirical evidence that inequality in developing countries has increased as a result of trade liberalization.

Finally, the spread of global value chains (GVCs) moderates low-skilled labor's mobility prospects over time in developing economies. The structure of global production began to change in the 1990s as advances in information and communication technology (ICT) enabled greater geographical disaggregation of production chains and the offshore outsourcing of jobs and tasks to low-wage countries that had previously taken place in developed

economies. In effect, the modern supply chain involves firms from industrial countries that combine high technology with low-wage labor of developing nations (Baldwin, 2016). At the same time, "standardization" has decreased the costs of supply-chain entry for second- and third-tier firms in developing countries (WTO, 2019).[8] In effect, developing countries today need not have developed a core industrial base prior to their participation in GVCs. Smaller and less-productive firms in developing countries are increasingly involved in supply chains either through affiliated trade (trading as subsidiaries of multinational firms), subcontracting, or as unaffiliated firms, as a direct result.

Our main point of emphasis is that while GVCs may increase employment opportunities for unskilled labor in developing economies (UNCTAD, 2013), their wage mobility and working conditions are likely to deteriorate over time. This is because efforts to join GVCs are frequently accompanied by low labor standards and labor rights (Barrientos et al., 2011; Goger et al., 2014). The global spread of supply chains provides multinational corporations with more options for switching production between suppliers (and countries). They can object to rigid labor-market protections by using their supply-chain networks to engage in labor-standard arbitrage by moving parts of the production process to locations in poor countries with lax regulations (see Mansfield & Rudra, 2021). LDC workers in second- and third-tier suppliers for multi-national corporations that participate in GVCs are particularly vulnerable to pressures for maintaining low labor costs and regulations (Goger et al., 2014; UNCTAD, 2013).

Ultimately, evidence that labor markets in both rich and poor countries are polarizing ("hollowing out of the middle") is mounting (see World Bank, 2016). Scholars anticipate that high skilled wages will rise, and wages for low-skill workers will decline (e.g., Das & Hilgenstock, 2018; Hollweg, 2019; Rodrik, 2018).[9] However, here again the passage of time matters; the pace of this labor market change and related distributional conflicts are likely to be delayed due to the lower wages and a lower rate of technology adoption in many developing countries (World Bank, 2016).

Taken together, from the low-skilled workers' perspective in LDCs, optimism about their social mobility is likely to erode with time, while more-skilled workers' prospects may improve. The widening of inequality between skilled and relatively less-skilled labor in the post-reform era eventually becomes more apparent and entrenched, leading to growing pessimism about future prospects. Economic growth in today's open economy is not likely to be "inequality-neutral" but rather will accentuate existing inequalities to generate rapidly widening chasms in developing country societies. As lower-skilled groups fail to realize their expectations of mobility over time and witness wealth accruing disproportionately to the already privileged elites in their societies (Flaherty & Rogowski, 2021), discontent toward the existing economic order gradually overcomes the subjective mood of hopefulness.

Hirschman and Rothschild (1973) concede that it is virtually impossible to anticipate precisely when this threshold effect will be met, and the timing may well be idiosyncratic and country-specific. The only certainty is that support for open market policies will decline amongst low-skilled workers with time. Inexorably optimism about the future curdles into a sense of relative deprivation. This reasoning suggests the following hypothesis:

> Support for globalization will be relatively higher amongst low-skilled workers in countries that have been open to globalization for less time, as compared to the relative decline in low-skilled worker's support in countries open to globalization for longer periods.

In the next section, we turn to data to assess the plausibility of our hypothesis.

Data and Methods

Openness to Globalization. We first determine when an economy began experiencing a marked transformation toward liberalization, or a liberalization policy shock. Wacziarg and Welch (2008)—hereafter WW—provide the most comprehensive assessment of episodes of trade liberalization between 1950 and 2001, building on Sachs and Warner's (1995)—hereafter SW—criteria for liberalization.[10] However, scholars have criticized components of both measures of openness (Rodríguez & Rodrik, 2000; Rodríguez, 2007).[11]

We establish a new measure of a liberalization policy shock using data from Quinn (1997) and Quinn and Toyoda (2008), which measure a country's regulations of the capital and current account between 1950 and 2014.[12] The capital account estimates a country's openness to the inflow and outflow of capital assets. The current account measures a country's liberalization to the financial proceeds of international trade. We focus on the latter because our focus is on trade openness rather than financial openness, and, since, as an empirical matter in our data, most developing countries relaxed capital restrictions only after implementing reforms to their trade regime. However, since some countries underwent both in rapid succession, we develop a measure using *both* capital and current account "shocks" to approximate the period of liberalization as a check to ensure our findings are not driven by an anomalous change in the current account (see Supplementary Appendix).

To identify liberalization shocks, or when government policy decisively switched from "closed" to "open," we calculate the year(s) when the annual rate of change in the current account is greater than the median of all positive annual rates of change in the sample. A country switches from "open" to "closed" when the annual rate of change in the current account falls below the median of all negative annual rates of change in the sample and the current

account falls below its country-mean threshold.[13] The selected year of openness is the first instance of trade liberalization, unless there is a sustained period of closure of at least 10 years.

This methodology improves on past practice in several ways. First, it utilizes a rigorous measure of government's policy stances toward liberalization by measuring both the existence (absence) and severity of restrictions (see Quinn, 1997; Quinn & Toyoda, 2008). Second, our approach accounts for critical policy reversals when countries sustain long periods of closure. Third, our measure extends the period of investigation and identifies liberalization episodes for countries that were "closed" according to WW, including China, Nigeria, Senegal and Ukraine. Fourth, we ascertain the year of liberalization shocks for countries that were not included in the SW and/or WW sample, such as Vietnam.

To assess the face validity of our estimates, we compare our liberalization shock years against WW. When the measures differ significantly, country case studies focused on identifying the earliest year of deep structural reform leading to a period of sustained trade liberalization helped us ascertain the year of openness. In many developing countries, the year of liberalization coincides with the introduction of Structural Adjustment Programs (SAPs) mandated by the IMF, or at the end of periods of financial depression.

Column 1 (RNB) of Table 1 reports the year of uninterrupted trade liberalization according to our criteria. Columns 2 (SW) and 3 (WW) list the year of liberalization based on SW's and WW's methodologies, respectively. This list of countries depended on data availability for both liberalization shocks and trade preferences survey data discussed in the next section. Parenthetically, we extend the liberalization shock measure to all countries in Quinn and Toyoda (2008).[14]

Individual-Level Survey Data

The individual-level assessment of trade preferences serves as our dependent variable. Specifically, we identify the extent of anti-trade backlash using a cross-national survey conducted by the Pew Global Attitudes Project that includes the following survey item to gauge trade preferences:

> What do you think about the growing trade and business ties between [survey country] and other countries—do you think it is a very good thing, somewhat good, somewhat bad or a very bad thing for our country?[16]

We use the respondent's education level as a proxy for their skill level (Menendez et al., 2018). In developing countries, where a small minority have completed college education, we code respondents with a completed high school degree (and higher) as "skilled." In advanced economies, we code

Table 1. Liberalization Shock.[15]

Country	RNB	SW	WW
Argentina	1989	1991	1991
Australia	1973	1964	1964
Bangladesh	1991	Closed	1996
Brazil	1993	1991	1991
Bulgaria	1991	1991	1991
Canada	1952	1952	1952
Chile	1976	1976	1976
China	1988	Closed	Closed
Colombia	1989	1986	1986
Czech Republic	1995	1991	1991
Egypt	1991	Closed	1995
El Salvador	1992	1989	1989
France	1958	1959	1959
Germany	1952	1959	1959
Ghana	1983	1985	1985
Greece	1953	1959	1959
Hungary	1988	1990	1990
India	1991	1994	Closed
Indonesia	1985	1970	1970
Israel	1985	1985	1985
Italy	1960	1959	1959
Japan	1960	1964	1964
Jordan	1989	1965	1965
Kenya	1991	1993	1993
Korea, Rep.	1980	1968	1968
Lebanon	1991	1993	1993
Malaysia	1987	1963	1963
Mexico	1984	1986	1986
Morocco	1990	1984	1984
Netherlands	1952	1959	1959
Nicaragua	1990	1991	1991
Nigeria	1986	Closed	Closed
Pakistan	1996	Closed	2001
Peru	1990	1991	1991
Philippines	1982	1988	1988
Poland	1986	1990	1990
Russian Federation	1992	Closed	Closed
Senegal	1994	Closed	Closed
Slovakia	1998	1991	1991

(continued)

Table 1. (continued)

Country	RNB	SW	WW
South Africa	1994	1991	1991
Spain	1959	1959	1959
Sweden	1952	1960	1960
Tanzania	1986	Closed	1995
Thailand	1985	1932	1932
Tunisia	1987	1989	1989
Turkey	1981	1989	1989
Uganda	1989	1988	1988
Ukraine	1995	Closed	Closed
United Kingdom	1952	Open	Open
United States	Open	Open	Open
Uzbekistan	Closed	Closed	Closed
Venezuela	1989	Closed	1996
Vietnam	1986		

respondents with a completed college degree (and higher) as "skilled."[17] This skill measure is correlated (0.76) with a universal measure of skill based on developing country standards.[18] Our more nuanced coding underscores how measurement choices based on advanced-country research needs critical interrogation.

Empirical Model

The fact that individual survey respondents are nested within national samples enables us to use a multi-level model as a preliminary test of our hypotheses. We utilize the trade liberalization data described above to measure the time since the country made a policy shift toward openness that was not subsequently reversed. We use this measure in combination with the individual-level measure of skill endowment to assess our prediction that lower-skilled respondents grow more pessimistic about trade as their experience with liberalization grows longer.

Both groups contain countries with varied levels of economic development. For this reason, we control for GDP per capita, economic growth rate, and the share of GDP comprised by trade. We also control for individual-level variables that have been shown to shape attitudes toward trade, such as gender and working age (15-64 years).[19] The survey data we utilize are conducted in five waves: 2002, 2007, 2010, 2014 and 2018. To pick up any secular trends affecting all countries—for instance, 2010 falls right after the great recession of 2007-09—we include year fixed effects in all models.[20]

Results

We begin by calculating the difference in trade support across skill groups.[21] Figure 2 plots this difference—the proportion of high-skilled respondents who believe trade has been good minus the proportion of low-skilled respondents who think similarly—against the length of time the respondent's country has been open. The upward slope of the line is revealing; it tells us that the longer a country has been open, the greater the difference in how high-skilled and lower-skill respondents assess the effect of trade for their countries. When experience with openness is limited, high- and low-skilled respondents express similar views, but as their lived experience with liberalization increases, the polarization of views between educated and less educated respondents grows, with more educated respondents being far more supportive of trade.

This growing divergence in assessments of trade between high- and low-skilled workers is suggestive evidence for the core logic of our argument: broad societal coalitions in favor of openness are falling apart in countries with longer experiences of liberalization as the experiences—and attitudes—of workers diverge.

Next, we estimate a multi-level model predicting individual-level support for trade. The full model results are available in Appendix A1; additional
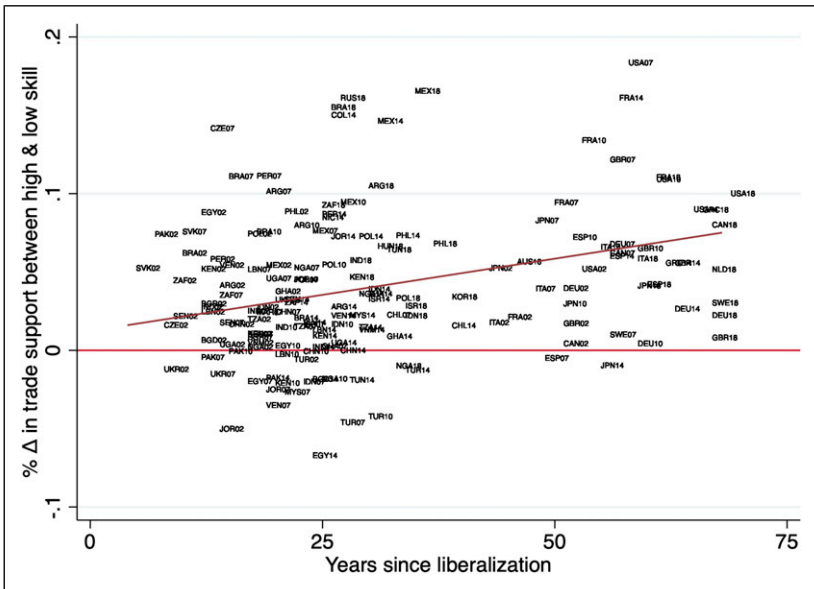

Figure 2. Rising gap in trade assessments between high- and lower-skilled respondents as openness-experience lengthens.

robustness checks are in Supplementary Appendix (wherein we replace RNB with WW, double shock and IMF program participation dummy). We present here the marginal effects of years since liberalization shock, conditional on low-skilled workers' assessments of trade. Consistent with Hirschman and Rothschild (1973), we find that support for trade post-reform is positive amongst the population as a whole (see Appendix A1, Table A1, Column 1); the effect is statistically significant at *p < 0.01*. But including the interaction term in the model (see Column 2) reveals that support for trade grows unevenly. The negative interaction term suggests that less-skilled workers—the median voter—are less likely to be sympathetic about trade with respect to people with a higher education as the number of years since liberalization increases. This finding is consistent with Figure 2.

Figure 3 below plots the estimated effect of low-skill status on whether the respondent says trade has been good or very good for their country. Interestingly, the low-skilled appear more supportive of trade relative to high-skilled workers at the very early stages of liberalization.[22] But, as predicted, as a country's experience with openness grows, low-skilled respondents become increasingly negative about trade's effect on the country, increasing the gap in trade support between low- and high-skilled workers.[23]
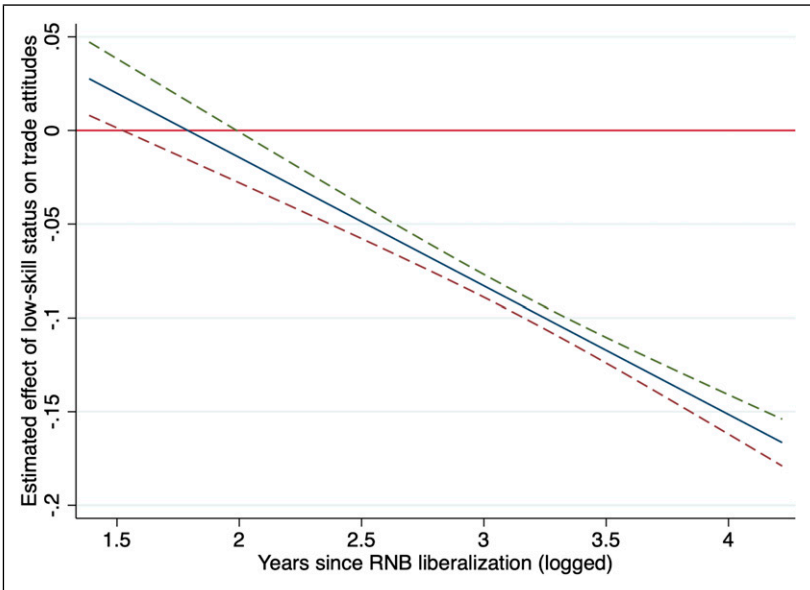

Figure 3. Low-skill respondents grow more negative about trade as their country's experience with liberalization grows.

This suggests that as time wears on and the rewards promised by policymakers (and by standard international trade theory) fail to materialize, low-skilled worker attitudes become more negative. Put differently, it takes a few years before the "polarization" on the basis of skill level emerges, and then it keeps worsening with time. In Figure 3, we estimate the length of the early liberalization experience to be on average between 6 and 7 years, although this varies by countries, in line with Hirschman and Rothschild's (1973) prediction. For example, in Pakistan, which liberalizes in 1996, support for trade among low-skilled respondents steadily increases in the initial period of liberalization from 87% in 2002 (6 years after liberalization) to a peak of 95% in 2010 before beginning its descent sixteen years after liberalization in 2014.

Possible Mechanism: Attitudes toward Mobility Prospects

Our analysis suggests that the mechanism linking years since liberalization and public support for trade is information related to prospective mobility. Witnessing the upward mobility of others following liberalization suggests to people that the new policy environment is desirable, and that they, too, could soon advance. To probe the plausibility of this mechanism, we measure respondents' perceptions of upward mobility using a survey question about their children's future prospects.[24]

We estimate the same model as before and substitute the dependent variable. Our expectation is that the median voters' perception of upward mobility will exhibit the same pattern of support for trade. That is, we expect no difference between low-skilled and high-skilled workers' optimism about their mobility prospects soon after liberalization takes hold; but once the "honeymoon phase" is over, the effect of low skill on perception of upward mobility will decrease with each additional year of liberalization (see Appendix A1 for full results).

Figure 4 plots the predicted effect of low-skill on perception of upward mobility derived from the multi-level model reported in Appendix A1. As expected, the average respondent is hopeful and has positive prospects of upward mobility. However, once again, after taking the interaction into account, Figure 4 indicates that low-skilled respondents anticipate future downward mobility relative to high-skilled workers the longer they have experienced liberalization.

Citizens' changing perceptions of economic mobility may explain why public support for liberalization increases over time—at least up to a point. But after this period, skill endowments matter, and less-skilled workers are less likely to anticipate high prospects of upward mobility.
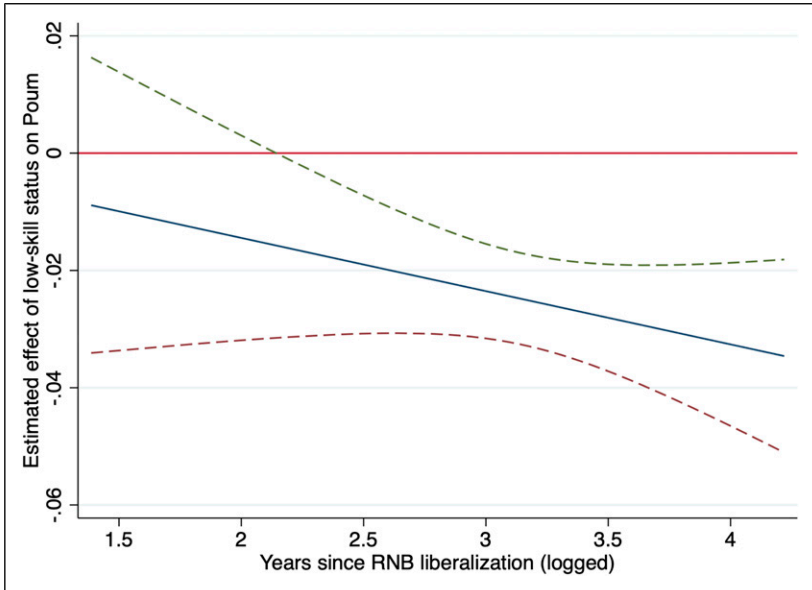
Figure 4. Respondents grow more pessimistic about prospects of upward mobility over time.

Figure 4 should concern anyone interested in maintaining public support for trade. At low to medium levels of experience with openness, the difference between high- and low-skilled respondents in terms of their children's prospects for upward mobility is *not* significant. But among countries with the most experience with openness, the effect of low skill status on respondents' sense of whether upward mobility for their children is realistic is negative and statistically significant. In these countries, less educated people are less likely to think their children have better prospects for upward mobility, particularly as they watch the children of the wealthy grow even wealthier. Support for trade collapses, and backlash ensues.

Our analysis provides suggestive evidence that the longer low-skilled individuals observe globalization without gaining from it, the more likely they are to oppose globalization. As a result, a tipping point exists at some point in the future after which each additional year of liberalization reduces public support for trade. This may occur because people grow impatient waiting for the gains from trade to come to them. Or people may observe that the benefits of globalization go primarily or exclusively to persons unlike them (i.e., more educated; wealthier; majority race, ethnicity, or religion). Individuals may consequently conclude, after some period of time, that they are unlikely to gain from trade after all.

Cave! hic dragones[25]

The special issue has investigated a plethora of economic sources that have accounted for the recent globalization backlash in rich nations. Scholars in this issue explore both the political and economic causes and consequences of greater international market exposure. Moving forward, the conclusion of the special issue asks scholars to explore more fully a core puzzle left unanswered by existing research on this topic: why has the globalization backlash been more pronounced in rich countries than in developing ones?

Here we provide one plausible hypothesis as to why this phenomenon has only manifested in advanced economies, despite globalization having permeated every region of the world. We find initial evidence that the duration of a country's exposure to the global economy coincides with the unequal consequences of liberalization and influences public opinion about trade. Countries that have relatively less experience with globalization tend to exhibit broadly similar levels of support for trade liberalization among the low-and high-skilled—and these countries tend to be developing countries. Among countries classified as low income in 2020 by the World Bank 50% have less than 31 years of experience with globalization. In contrast, 50% of high-income countries have more than 61 years of experience with globalization.[26] We argue that the varied length of exposure to the global economy explains why public support for trade tends to be lower and more polarized in developed countries than in developing countries. Information—particularly related to disappointments with the promised gains from globalization—likely plays a more central role in globalization backlashes in rich economies than is currently appreciated.

The support for trade among the low-skilled in the developing world may persist only for so much longer. In rich countries, the rapid changes in the nature of the global economy, characterized by technology, off-shoring, and global value chains, has left low-skilled workers grasping to hold onto the lives they once had. Across America, abandoned factories sit not far from gleaming headquarters for the very corporations that once kept those factories busy; the executives might not have had to change their zip codes, but the assembly lines that power their business changed time zones, hollowing out the middle of American society and unleashing a vituperative xenophobic backlash across the developed world. But, if their counterparts in rich countries mourn the lives they once had, low-skilled workers in the developing world watch in despair as the more prosperous lives they were promised as part of liberalization reforms look increasingly like mirages. The jobs that came to their shores went to the more highly skilled in their societies, with relatively less fortune trickling down to those with fewer opportunities for education and training. As our results suggest, as time passes, and the promised land becomes more unreachable, the mood in developing countries will inevitably sour against trade as well.

At the moment, the backlash against globalization—documented and explained by the papers in this special issue—is largely limited to developed countries. We speculate that such containment will not last. As developing countries' experience with economic openness grows, backlash against globalization will emerge in these countries as well. When that happens, the elite consensus that built the global economic order will unravel as politicians face domestic pressures unlike any they have had to deal with before. Scholars would do well to subject our hypothesis to more rigorous empirical tests, explore the variation in globalization support amongst skilled and low-skilled workers in poor countries in more detail, assess the scope conditions of our proposed theory, analyze the alternative ways that information related to globalization can operate than what is recognized in this analysis (e.g., media, elite cues, and neighboring country experiences), identify possible sources of resilience to the spread of negative information about globalization, as well as propose alternative explanations for the puzzle we propose in the conclusion of this special issue. Preserving the virtues of international trade requires fresh thinking about how to ensure that its fruits are more equitably shared across—and within—all countries.

ORCID iDs

Nita Rudra ⓘ https://orcid.org/0000-0003-2336-0562
Niccolo W. Bonifai ⓘ https://orcid.org/0000-0002-3178-3269

Notes

1. See Mansfield et al., Forthcoming (this issue).

2. For expository purposes, thinking of this argument in Bayesian terms is helpful. Early on in a country's globalization experience, citizens' priors about their expected outcomes under openness are very diffuse. We argue this translates into a permissive optimism about globalization's potential benefits, especially as early evidence of its effects point to rising incomes in parts of the economy empowered by the op-portunities created by lower barriers to cross-border economic activity (e.g., in the garment industry in Bangladesh or Vietnam, or in call-centers in India). This may be particularly true if openness reforms follow a long period of economic stagnation, or "development disasters," in which case initial success stories are even more compelling given the background of crisis that precipitated the reforms. As citizens gain more experience with globalization, their predictions become more realistic.

3. Walter (2021) provides a comprehensive review of the globalization backlash literature.

4. Consistent with this claim, Menendez et al. (2018) find that high-skilled workers in developing economies are relatively more supportive of trade than low-skilled workers, contrary to what standard economic theory might predict.

5. The tightening of regulations following liberalization dampens economic de-velopment in the short-term. We may thus expect enthusiasm to pick up after the period of adjustment.

6. An equilibrium rupture occurs when a shock to conditions of stability and pre-dictability gives way to uncertainty about individuals' future well-being (Esping-Andersen & Nedoluzhko, 2017).

7. Note that Osgood and Peters (2017) find that the most productive women-owned firms survive and increase their export sales.

8. Standardization of increasingly complex products and processes—or the breaking up of production into discrete and functionally autonomous modules—is vital to the integration of the supply chain.

9. The impact of robotics and artificial intelligence (AI) is beyond the scope of this conclusion, but warrants mention. Robotics is contributing to a reduction in agricultural and assembly-line jobs in developing economies. The World Bank estimates that fully two-thirds of all workers in the developing world could be replaced by automation (Wakefield, 2016; World Bank, 2016).

10. Sachs and Warner (1995) constructed a dummy variable for openness based on five individual dummy variables for specific trade-related policies. A country was classified as closed if it displayed at least one of the following characteristics: (1) Average tariff rates of 40% of more (TAR); (2) Nontariff barriers covering 40% or more of trade (NTB); (3) A black-market exchange rate at least 20% lower than the official exchange rate (BMP); (4) A state monopoly on major exports (XMB); and (5) A socialist economic system (as defined by Kornai, 1992) (SOC). However, data limitations and lack of consistency in the definitions of the available

measures of trade restrictions across time periods prevented Sachs-Warner from using their five criteria to establish the dates of liberalization. Wacziarg and Welch (2008) update the database provided by Sachs and Warner (1995) for the 1990s.

11. Including a country's black market premium and whether the state has a monopoly on major exports is problematic because they are not measures of trade policy but are instead highly correlated with other macroeconomic imbalances. The fact that both measures are the two most important predictors of the SW index lose robustness when controlling for other political and economic variables, is a source of additional concern (Rodríguez & Rodrik, 2000).

12. Both indicators are measured on a scale from 0 to 100, with 100 representing an economy that is fully liberalized.

13. As the sample includes both developed and developing countries, we take the global median since this is more resistant than the global mean to potential country-score outliers.

14. Full table available in Supplementary Appendix.

15. Countries have been designated as "Open" if they have experienced liberalization before the starting period of the Quinn database, which is 1950. We use 1950 as reference year of liberalization for countries that are classified as "Open." The findings do not vary when using an earlier year of liberalization, for example, 1934. Cells that are blank indicate missing data.

16. The respondent is presented with a four-point Likert-type scale answer, ranging from *very bad* to *very good*.

17. We use the World Bank's Country and Lending Group to distinguish between advanced and developing economies. We classify advanced economies those belonging to the "High Income Economies (US\$12,536 or more)" group and developing countries those economies with a GNI capita of US\$12,535 or less. See: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

18. As a robustness check, we replicate our main models using a universal measure of skill. See Supplementary Appendix for more details.

19. Note that the latest survey wave (2018) does not include individual-level data on marital status and on employment. In the Dataverse online replication file, we re-estimate our main models including marital status and employment using 2002, 2007, 2010, and 2014 waves. We find that our results are broadly consistent when controlling for these additional factors.

20. We specify random effects for all multilevel models at the country level.

21. We measure support for trade by combining "Somewhat Good" and "Very Good" responses from the Pew Global Attitudes Project survey questionnaire.

22. The difference in support for trade between high and low-skilled was often indistinguishable (statistically insignificant) in many of our robustness checks (see Supplementary Appendix for details).

23. To account for the potential short-term period of uncertainty subsequent liberalization identified by Alesina et al. (2020), we re-estimate the model also by

leading the period of liberalization by 5 years. The results are broadly consistent with our findings for both dependent variables. Results can be found in the Dataverse online replication file.

24. In 2002 and 2007, the relevant survey question asks: "When children today in (survey country) grow up, do you think they will be better off or worse off than people are now?" In 2014 and 2018, the question is slightly different; it asks "When children today in (survey country) grow up, do you think they will be better off or worse off financially than their parents?" The respondent is presented with a three-point Likert-type scale answer (1-*worse*, 2-*no difference*, and 3-*better*). Note that the difference between the two questions is that the 2014 and 2018 versions specify a financial domain for the assessment. We do not think that this minor difference is a problem and use all available survey years in our analysis.

25. With apologies to Susan Strange.

26. Based on countries listed in Table 1 and relative to 2020.

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Author Biographies

Nita Rudra is a professor in the Department of Government at Georgetown University.

Irfan Nooruddin is a professor in the School of Foreign Service at Georgetown University.

Niccolò W. Bonifai is a Ph.D. candidate in the Department of Government at Georgetown University.

Appendix A1
Table 1. Effect of Liberalization Experience on Trade Attitudes

	Is Trade Good for your Country?	Is Trade Good for your Country?	Mobility Prospects: Will Children Be Better Off?	Mobility Prospects: Will Children Be Better Off?
Fixed effects	(1)	(2)	(3)	(4)
Years since liberalization (log)	0.246*** (0.015)	0.283*** (0.015)	0.446*** (0.019)	0.452*** (0.02)
Lower-skilled	-0.094*** (0.003)	0.123*** (0.017)	-0.025*** (0.004)	0.004 (0.022)
Years since liberalization X Lower-skilled		-0.069*** (0.006)		-0.009 (0.007)
Female	-0.057*** (0.003)	-0.057*** (0.003)	-0.006 (0.004)	-0.006 (0.004)
Working age population (15-64)	0.0376*** (0.005)	0.036*** (0.005)	0.068*** (0.006)	0.068*** (0.006)
GDP per capita (log)	0.0295** (0.009)	0.027** (0.009)	0.109*** (0.012)	0.109*** (0.012)
GDP per capita growth	-0.0165 (0.063)	-0.012 (0.063)	0.025 (0.087)	0.026 (0.087)
Trade (share of GDP)	0.202*** (0.018)	0.202*** (0.018)	0.168*** (0.023)	0.168*** (0.023)
2007	-0.255*** (0.007)	-0.256*** (0.007)	-0.131*** (0.01)	-0.131*** (0.01)
2010	-0.242*** (0.01)	-0.244*** (0.009)		
2014	-0.345*** (0.011)	-0.348*** (0.011)	-0.222*** (0.014)	-0.222*** (0.014)
2018	-0.251*** (0.012)	-0.257*** (0.012)	-0.272*** (0.015)	-0.273*** (0.015)
Constant	2.297*** (0.101)	2.201*** (0.101)	-0.415** (0.148)	-0.429** (0.149)
Random effects				
Var (constant)	0.064 (0.013)	0.062 (0.013)	.33 (0.067)	0.323 (0.067)
Log likelihood	-292527.4 (0)	-292445 (0)	-288237.8 (0)	-288237 (0)
Wald χ2	3928.21	4092.9	1243.49	1245.16
Observations	269,485	269,485	225,276	225,276
Groups	51	51	51	51

Note: Maximum likelihood estimates with standard errors in parentheses. Year fixed effects included with 2002 as baseline. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (fixed effects).