

Globalization, Government Popularity, and the Great Skill Divide

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We provide the first large-scale, global evidence on the impact of the skill composition of trade on political approval. We show that political implications of trade shocks depend on the relationship between workers' skills and the characteristics of goods traded. Using Gallup World Poll surveys of a million respondents from 121 countries over 2005–18, we show that growth in high-skill intensive exports increases confidence in government among skilled individuals relative to unskilled ones. Growth in high-skill intensive imports has the opposite effect. Growth in low-skill intensive exports (imports) increases (decreases) confidence in government among unskilled individuals relative to skilled ones. To identify causal relationships, we construct instruments based on time-varying effects of air and sea distances on bilateral trade in goods of different skill intensity.

The growth of cross-border trade has profoundly affected politics around the world. Donald Trump made it the central issue of his 2016 election campaign, threatening various countries with tariffs. The rise of Chinese imports contributed to Trump's victory, as well as to support for right-wing populists across Europe and for those who voted "leave" in the United Kingdom's Brexit referendum (Autor et al. 2020; Colantone and Stanig 2018a, 2018b). Many see globalization as a new dimension of politics, complementing or even replacing the traditional left-right cleavage (De Vries 2017; Grossman and Helpman 2021). To quote the *Economist* (2016), "The new divide is . . . between open and closed."

Yet, although some scholars have derived implications of classic and newer trade theories for preferences on trade and social policies, empirical analysis of how trade affects political attitudes worldwide has been more limited (Mayda and Rodrik 2005; Menéndez González, Owen, and Walter 2023;

O'Rourke and Sinnott 2001; Scheve and Slaughter 2001; Walter 2017). Several papers have documented trade's impact on recent elections—in the United States (Autor et al. 2020; Che et al. 2022; Jensen, Quinn, and Weymouth 2017; Margalit 2011), the United Kingdom (Colantone and Stanig 2018a), and Europe (Colantone and Stanig 2018b; Dippel et al. 2022). Most find that import shocks increase polarization or voting for populist parties (see Guriev and Papaioannou [2022] and Walter [2021] for surveys).

In this article, we shift focus from electoral outcomes to the approval ratings of governments. We explore how trade shapes public opinion in between elections.¹ At the same time, we look not just at the aggregate impact of total import and export flows on all citizens but at the disaggregated effects that differentially influence groups with distinct trade-related interests.

Using annual data from the Gallup World Polls (GWP) for 2005–18 on more than a million individuals in 120 countries,

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Replication files are available in the *JOP* Dataverse (<https://dataverse.harvard.edu/dataverse/jop>). The empirical analysis has been successfully replicated by the *JOP* replication analyst. An online appendix with supplementary material is available at <https://doi.org/10.1086/729955>.

1. Apart from occurring more frequently than elections, polls on government approval are not distorted by differences in electoral rules and integrity. Gallup's questions and methodology are the same in all countries. Questions about government approval may also be less susceptible to the framing effects that affect responses to questions about trade policy (Hiscox 2006).

Published online June 13, 2024.

The Journal of Politics, volume 86, number 4, October 2024. © 2024 Southern Political Science Association. All rights reserved. Published by The University of Chicago Press for the Southern Political Science Association. <https://doi.org/10.1086/729955>

we present the first large-scale, systematic evidence on this issue. Gallup's data permit examination of heterogeneous political effects. In particular, we show that political responses to globalization depend on both individuals' skill levels and the skill intensity of their country's exports and imports.² To identify causal relationships, we use both ordinary least squares (OLS) panel regressions with country-year fixed effects and instrumental variables (IV) based on the time-varying effects of bilateral air and sea distances, originally proposed by Feyrer (2019) and later used by other trade scholars.³

Our results reveal a causal impact of trade on political approval. Perhaps surprisingly given the perceived appeal of protection in many places, average confidence in government increases as imports rise, especially high-skill intensive ones. Consumers seem to value the broader selection and price competition open trade provides. Aggregate exports have no clear impact, perhaps because higher exports directly benefit only exporting firms, while increased imports potentially benefit all consumers. However, effects are heterogeneous. We show that trade shocks influence skilled and unskilled workers differently, in ways that depend on the interaction of their characteristics with the specific type of trade. Citizens apparently respond to how trade affects their own labor prospects. Highly skilled workers approve of government more when exports of high-skill intensive goods and services rise

and when imports of high-skill intensive items fall. Likewise, low-skilled workers approve more when low-skill intensive exports rise and low-skill intensive imports fall. Although modest, the effects are enough to matter in today's highly polarized politics. For instance, if all trade flows change by the average within-country standard deviation in the direction favored by the highly skilled and opposed by the low skilled (high-skill exports rise, high-skill imports fall, low-skill imports rise, and low-skill exports fall), confidence in government among the highly skilled is predicted to rise by 4.8 percentage points relative to that among the low skilled—a significant change given that confidence averages about 50% in surveyed countries.

Much work on the politics of trade concentrates on total flows. In some ways, that makes sense. Yet, to focus on aggregate trade is to miss a lot. For each worker, certain imports threaten job security or wages, while others offer valuable consumption options. As we show, low-skilled respondents worldwide respond positively to high-skill intensive imports, while high-skilled workers welcome low-skill intensive ones. Workers seem not to reject—and blame government for—trade *per se*. Rather, they dislike competition from goods intensive in their skills.

A disaggregated approach of this type may help illuminate the politics of trade in cases when perspectives based on relative factor abundance have failed.⁴ To predict where protectionist campaigns will take off and with whom, aggregate trends are not enough. In both developed and developing countries, surging imports of basic goods may provoke protest from the unskilled, while inflows of sophisticated manufactures and services antagonize educated elites. More generally, rising trade does not just change overall backing for political incumbents—it reshapes support coalitions in ways that vary with the country's skill profile and economic specialization.

The article proceeds as follows. We present our theoretical argument and discuss how it relates to previous literature. We then describe the data and outline our empirical approach and instrumentation strategy. Finally, we present the results and conclude.

THEORETICAL ARGUMENT AND PREVIOUS LITERATURE

How might one expect changing trade flows to affect individuals' attitudes toward their government? A very simple starting point is to assume that attitudes are based, at least in part, on economic self-interest. And, as in the "pocketbook" version of retrospective voting, those whose economic outcomes have

2. Throughout, we use "skilled" or "highly skilled" to signify at least tertiary education. Since few in low-income countries have completed tertiary education (2% of adults on average in included countries), results are most relevant to middle- and high-income countries. Among middle-income countries included, tertiary education rates as a share of adult population were, respectively, Namibia 1%, Cameroon 2%, Pakistan 4%, India 5%, Bolivia 8%, Nicaragua 10%, Armenia 15%, and Mongolia 20% (using Barro and Lee [2013], with data for 2010). We check robustness to using secondary education as the threshold, as reported below. And, using data from the European Social Survey (ESS), we show that patterns are similar replacing education with occupation. In proxying skills with education, we follow many previous papers (e.g., Ardanaz, Murillo, and Pinto 2013; Mayda and Rodrik 2005; Menéndez et al. 2023; Walter 2017). Of course, education might also pick up other factors. College study may teach tolerance toward foreigners and the benefits of commerce or encourage risk acceptance (Hainmueller and Hiscox 2006; Mansfield and Mutz 2009; Rho and Tomz 2017). Low skills may go with antielitism (Grossman and Helpman 2021). However, others (e.g., Borusyak and Jaravel 2021) argue that protrade attitudes among the educated likely do reflect trade-related material interests, in particular the greater earnings boost trade provides to college graduates. This interpretation fits fine-grained US data. Our results are also more consistent with education proxying for skill than other pathways.

3. We also extend the scope of study beyond the period of the initial China import shock—from its 2001 World Trade Organization (WTO) accession to the 2008 financial crisis—to explore political effects of trade up to 2018.

4. Another exercise in disaggregation is Walter (2017), which divides workers into three groups based on both skills and exposure to globalization.

recently improved will tend, other things equal, to approve of the incumbent government more than those whose outcomes have worsened (Fiorina 1981).⁵

This raises the question how trade affects economic outcomes for different individuals. We argue that this depends on how particular flows interact with the individual's skill profile. Highly skilled workers should do better when high-skill intensive exports rise and when high-skill intensive imports fall. Both changes should boost demand for domestically produced high-skill intensive goods and, thus, for highly skilled workers, increasing their wages and job security. Similarly, low-skilled individuals should benefit when low-skill intensive exports rise and low-skill intensive imports fall. Combining these ideas suggests the following hypothesis:

H1. Approval of the government will rise relatively more among those with a given skill level when exports (imports) of goods intensive in that skill level increase (decrease).

As noted, changes in trade flows affect individuals' economic outcomes—and hence their political attitudes—by more than one mechanism. One pathway is via wages. If trade liberalization generates demand for exports of a certain good, those with the skills necessary to produce it should see their wages rise. This is the famous Stolper-Samuelson Theorem. But the theorem assumes perfect competition and costless mobility of resources. If frictions exist, trade can affect factor owners' welfare by additional channels. In a world with unemployment, higher exports may raise not just wages but also labor demand at a given wage. Even if a rise in exports is caused by a fall in product prices due, say, to productivity growth, the increased employment and job security in export industries will benefit workers in them, potentially boosting their confidence in government.⁶ This motivates our second hypothesis, about mechanisms:

H2. Respondents will report relatively less (more) unemployment and a more positive (negative) view of economic performance when exports (imports) intensive in their skill-level increase (decrease).

Our argument takes certain elements from classic Heckscher-Ohlin-Vanek (HOV) trade theory. Like HOV, we focus on individuals' factor endowments, implicitly assuming factors can move flexibly across industries. As noted, we take from the HOV-associated Stolper-Samuelson Theorem the idea that product price changes induce corresponding changes in factor prices, benefiting owners of factors used intensively in production of goods with rising demand. Yet, in other ways we depart from HOV. Most importantly, we do not assume that trade flows are determined entirely by factor abundance. The simple version of HOV based on this assumption has weak empirical support (Davis et al. 1997, 421; Treffer 1995, 1029). Contrary to HOV, countries with similar endowments often trade with each other. And even where low-skilled labor is abundant, trade liberalization often coincides with a rising skill premium and wage inequality (Goldberg and Pavcnik 2007, 77).⁷ Rather than assume, à la HOV, that trade simply reflects factor abundance, we let the data tell us which countries export and import which goods.⁸ And where HOV focuses on differences in trade policy—contrasting autarky with openness—we study changes in trade flows, whatever their cause. Apart from policy shifts, many other things—from technological innovation to emerging complementarities and economies of scale—could alter trade. These need not all have the same effects. Finally, as noted, HOV relates to how gross imports or exports affect owners of different factors. We hypothesize, by contrast, that individuals' welfare and political attitudes reflect the interaction between their endowments and particular, disaggregated trade flows.

Our analysis builds on various strands of previous literature. Several studies relate citizens' skill levels to trade policy preferences. Almost all find that support for openness increases with skill level in developed countries, in line with HOV expectations (Mayda and Rodrik 2005; O'Rourke and Sinnott 2001; Scheve and Slaughter 2001). But the pattern is less clear in developing countries, where low-skilled workers

5. Of course, many things apart from trade—such as macroeconomic conditions—affect individuals' economic outcomes and, by our own logic, should influence political attitudes. Our empirical design, which focuses on the interaction between individual characteristics and particular trade flows, holds constant all such factors that do not themselves vary with this interaction. In addition, our models that include country-year fixed effects control for any macroeconomic conditions in the country in each year. (We also show that our results hold when explicitly controlling for unemployment and GDP growth, as well as country fixed effects and year fixed effects.)

6. Even allowing for such frictions, the main Stolper-Samuelson effect survives (Adão et al. 2022; Deardorff 2000; Deardorff and Staiger 1988). Adão et al. relaxed the perfect competition assumption as well as restrictions on preferences and technology and showed that the factor content of gross exports still served as a sufficient statistic for the effect of trade exposure on wages.

7. This may reflect the fact that, as emphasized by the “new new trade theory,” exporting firms tend to be more productive and employ more able—and skilled—workers even in less developed countries. Given this, trade in such countries may raise wages of unskilled workers because of their relative abundance but increase those of relatively skilled employees of exporting firms even more (Burstein and Vogel 2017; Menéndez et al. 2023).

8. Indeed, in our sample, the proportion of high-skilled workers and high-skill intensive exports correlates cross-nationally only at 0.36. Clearly, trade flows do not only reflect factor endowments.

are abundant and should therefore favor trade. Some report evidence along these lines (Jäkel and Smolka 2013, 2017; Mayda and Rodrik 2005; O'Rourke and Sinnott 2001). Others find that in many developing or middle income countries low-skilled workers actually like trade less than skilled ones (e.g., Beaulieu, Yatawara, and Wang 2005).⁹

Such studies suggest that skill levels influence trade policy preferences. But do these also affect political attitudes and behavior? One might expect the losers from trade not just to favor protection but also to vote, lobby, and protest against incumbents who fail to provide it. In a pathbreaking work, Rogowski (1989) explored how such effects, derived from HOV theory, could explain the emergence of particular political coalitions in nineteenth-century Europe and North America. A small but growing literature has looked for such political linkages in recent decades.

Four papers focus on voting in the United States. Margalit (2011) found that job losses from import competition depressed the vote share of the incumbent president in 2004 and 2008. Similarly, Che et al. (2022) show that Chinese competition boosted the Democratic vote in congressional elections in the 2000s—when the Democrats were in opposition—but not after 2008. Autor et al. (2020) confirm the anti-incumbent backlash—congressional districts more exposed to Chinese imports had higher votes for Trump in 2016—but find a more general polarization effect: on both sides of the spectrum, districts hit hardest by Chinese competition disproportionately rejected moderate incumbents. Finally, Jensen et al. (2017) differentiate by skill levels. Between 1992 and 2012, incumbents received more votes in county-years with higher employment in high-skill intensive tradeable goods and services and with lower employment in low-skilled manufacturing.

Moving beyond the United States, a few papers explore political consequences of trade in a cross-national context. Colantone and Stanig (2018a) study how globalization affected voting in 15 West European countries in 1988–2007. They find that greater exposure to Chinese imports boosted support for far-right and nationalist parties, which often oppose globalization. Margalit (2008), using 2003 International Social Survey Program data from 34 countries, concludes that in advanced economies those who feel harmed by trade tend to support parties that favor protection and socio-cultural conservatism.

Instead of trade policy preferences or voting behavior, we focus here on respondents' confidence in government—the most general (and available) measure of approval of incum-

bent policies and performance. This is less demanding than asking about attitudes toward trade, which may be vague, superficial, and unrelated to behavior. Moreover, responses to questions about trade will miss effects of trade-induced economic changes not recognized as such by the respondent. And, in any case, our subject here is how trade affects political attitudes and behaviors rather than policy preferences *per se*. Focusing on confidence in government also has some advantages over studying (self-reported) voting. Whereas voting occurs only at elections, confidence can be measured in more frequent surveys, allowing us to control for country and year effects. (Our data include up to 14 years for more than 100 developed and developing countries.) While our main focus is confidence in government, we show that results are similar using leader approval. The latter could be influenced by the leader's personality and rhetoric, rendering it a slightly noisier measure, although such factors are unlikely to correlate strongly with skill-trade flow interactions.

Note that our hypotheses, although intuitive, could fail for various reasons. First, trade has multiple effects on individuals' welfare. These run via both labor and consumer product markets. Like HOV, we focus on the former and assume the latter are secondary or at least do not differentially affect consumers with different skill levels. Growth in high-skill intensive imports should worsen a high-skilled worker's labor market prospects. But it may also make high-skill intensive goods that the worker buys cheaper. If high-skilled workers consume more high-skill intensive goods than low-skilled workers, the consumption benefit could offset the labor market cost. And if workers in different high-skill industries are poorly substitutable, the labor market cost to a worker of increased imports of some other high-skill intensive products may be small.

Second, trade flows have both direct and indirect effects. Most obviously, if some high-skill and low-skill intensive goods are complements, more demand for one may increase demand for the other, reducing welfare differences across high-skilled and low-skilled workers (Goldberg and Pavcnik 2007, 60). Or if one type of low-skill intensive good is used in production of another, imports of the first could be necessary for exports of the second. Contra HOV, countries could both import and export low-skill intensive goods, and the imports in question might increase low-skilled workers' welfare. Third, trade flows have income as well as price effects. Surging exports of high-skill intensive goods, by raising incomes of high-skilled workers, may boost demand for low-skill intensive goods. The relative magnitude of these effects will depend on tastes, elasticities, and the sizes of the different sectors. Fourth, dividing workers into "skilled" and "unskilled" may be too crude. With the rise of "superstar firms," as emphasized by

9. A complicating factor is that even those who are relatively highly skilled in poorer countries may still occupy a low place in the global skill distribution (Menéndez et al. 2023).

the new new trade theory, income growth may concentrate in a small subset of enterprises, leaving many skilled workers with wage growth no greater than that of their unskilled counterparts (Flaherty and Rogowski 2021). Even more important, many people—skilled and unskilled—work in non-tradeable sectors; a skilled worker in nontradeables will have nothing to lose from high-skill intensive imports. And, finally, our hypotheses could fail if political attitudes are sociotropic rather than based on the individual's personal economic outcomes. That would break the link between each citizen's labor market prospects and her approval of the incumbent.

DATA

Our data come from the GWP, the UN International Trade Statistics Database (COMTRADE), Centre d'études prospectives et d'informations internationales (CEPII), and Polity IV. The level of analysis is the individual.

Individual-level data from Gallup World Polls

Our main data on political approval come from the 2005–18 GWP; the main sample includes more than 1 million respondents from 121 countries. These nationally representative surveys, fielded yearly in over 140 countries, interview about 1,000 individuals in each on a range of topics.¹⁰ We include only those aged 18–64, to focus on economically active individuals. Our key outcome variable comes from the question on confidence in the national government: “In (this country), do you have confidence in each of the following, or not: . . . How about national government?” We also show that results are similar using the question about approval of the incumbent leader: “Do you approve or disapprove of the job performance of the leadership of this country?” The GWP also includes respondents' demographic characteristics (age, gender, educational attainment, marital status, religion, and urban/rural residence), labor market outcomes, and income. It codes education as elementary (up to eight years of basic education), secondary (9–15 years), or tertiary (completed four years beyond high school or received a four-year college degree). In our sample, about 16% of respondents have tertiary education, 52% secondary, and 32% primary. The GWP does not ask respondents their occupations.

Appendix table 1 lists descriptive statistics for the main variables. Appendix figures 1a and 1b show the global trends in confidence in government for democracies and nondemocracies, averaged across all cases with data available for

seven or more years. Overall, around half of respondents said they had confidence in their national government on average—47.9% in democracies and 61.1% in nondemocracies. The averages are relatively stable over time, but within countries variation is much greater. Among countries with data for at least seven years, the average gap between highest and lowest ratings was 32 percentage points.

How reliable is the GWP's “confidence in government” question as a measure of incumbent political support? To cross-validate it, we explored how it corresponds across country-years with related measures from two other widely used data sets—the World Values Survey (1981–2016) and the ESS (2002–18). These ask about confidence in the government and parliament, trust in parliament, trust in political parties, trust in politicians, and satisfaction with government performance. Given the varying formulations, we did not expect a perfect match. In fact, the correlation between the GWP measure and these other variables across country-years is very strong, with correlation coefficients of .71 to .85 (see app. table 17). Still, one might worry that respondents in nondemocracies might fear to answer frankly. Note, however, that in our main regressions country-year fixed effects control for any tendency of all respondents in that country-year to overstate their approval. A problem for inference would only arise if respondents with different skill levels varied the extent of their preference falsification over time in ways correlated with particular trade flows. This seems unlikely.

In any case, previous work on GWP data has failed to find evidence of preference falsification in the authoritarian countries included (perhaps because Gallup cannot poll in the most repressive ones). Guriev and Treisman (2020, 616) checked whether greater political repression—measured in four ways—correlated across country-years with higher leader approval, as one would expect if authoritarian rule prompted preference falsification. Across all the GWP nondemocracies, repression was never significant. Nor did greater repression correlate with more refusals to answer or “don't knows.” Among the less repressive nondemocracies, greater repression was actually associated with lower leader approval, suggesting that any fear was more than offset by outrage.¹¹

International trade data

Data on exports and imports of goods and services come from COMTRADE (special license version), which contains more than 300 million year-exporter-importer observations.

10. We drop Nagorno-Karabakh, Northern Cyprus, Somaliland, and Puerto Rico. Previous articles have used the GWP to study subjective well-being (e.g., Deaton 2008), institutional trust (e.g., Stevenson and Wolfers 2011), and leader approval (e.g., Guriev and Treisman 2020).

11. Among the nondemocracies, government approval dropped on average during the global financial crisis, from 70.3% in 2007 to 54.1% in 2008 and 57.8% in 2009. Among democracies, it fell sharply in those years in some (e.g., the United Kingdom) but rose in certain others for other reasons (e.g., the honeymoon of President Obama in 2009 in the United States).

To categorize manufactured goods by skill intensity, we use the three-digit Standard International Trade Classification (revision 3).¹² For services, we use the Extended Balance of Payments Services classification along with correspondence tables from the “Manual on Statistics of International Trade in Services” (United Nations 2002; see app. tables 15 and 16). We adjust entries to constant 2011 dollars using the consumer price index. Some examples of high-skill intensive goods and services are electronics, medical and chemical products, optical goods, and auditing, financial, and legal services. Goods such as cutlery, fencing grills, metal containers for storage or transport, and office supplies are classified as low-skill intensive products.¹³ Our instrumentation strategy (see below) employs two geographical measures—a city population-weighted mean of the great-circle distance between each pair of countries (for air distance) and the shortest maritime distance between two countries (for sea distance)—from Fouquin and Hugot’s (2016) Historical Bilateral Trade and Gravity Dataset (TRADHIST).¹⁴

ESTIMATION METHODOLOGY

Empirical strategy

Our preferred specification to assess the effect of trade on confidence in government is

$$Y_{ict} = \beta_0 + \beta_1 \text{Skilled}_{ict} \times (\text{Log High-Skill Intensive Exports})_{ct} \\ + \beta_2 \text{Skilled}_{ict} \times (\text{Log High-Skill Intensive Imports})_{ct} \\ + \beta_3 \text{Unskilled}_{ict} \times (\text{Log Low-Skill Intensive Exports})_{ct} \\ + \beta_4 \text{Unskilled}_{ict} \times (\text{Log Low-Skill Intensive Imports})_{ct} \\ + \beta_5 \text{Skilled}_{ict} + \beta_6 X_{ict} + \beta_7 \delta_{ct} + \varepsilon_{ict}, \quad (1)$$

where Y_{ict} is a dummy indicating that individual i in country c at time t has confidence in the national government. Skilled is a dummy for completed tertiary education; Unskilled indicates less than completed tertiary education. Log High (Low) Skill Intensive Exports (Imports) is the natural log of the volume of high (low) skill intensive exports (imports). We estimate linear probability models for ease of interpretation. The main coefficients of interest are those on the interaction terms, β_1 , β_2 , β_3 , and β_4 , which capture the impact of

growth in the volume of high (low) skill intensive exports and imports on confidence in government among skilled and unskilled individuals. Country-year fixed effects δ_{ct} control for all country-time-varying factors that could correlate with confidence in government (such as political regime, press freedom, GDP per capita). They also control for country-year-specific trade flows. That is why our main model can only measure the differential effect of particular trade flows among skilled relative to unskilled workers—through the coefficients on the interaction terms—and cannot interact the same trade flow with skilled and unskilled at the same time.¹⁵ The vector of demographic controls including age, age squared, male, marital status, children (under 15), and urban residence is X_{ict} . We do not control for respondent unemployment since the GWP includes this only from 2009. Below, we show that results are robust to this choice.¹⁶ We cluster standard errors by country-year and use Gallup’s sample weights to ensure representativeness at the country level.

Instrumentation strategy

To identify the causal effects of international trade on political approval, we need to address omitted variables bias and reverse causality. If individuals lack confidence in government, that might affect economic activity and eventually the volume and composition of trade. Trade and political outcomes might also be jointly affected by omitted variables (such as institutional change). Furthermore, measurement error in trade data could produce attenuation bias. To tackle these issues, we use two-stage least squares methodology with instrumental variables that affect high (low) skill intensive exports (imports) but are unrelated to government approval.

To find valid instruments, we focus on exogenous determinants of trade that predict high- and low-skill intensive exports and imports. Note first that the cost of shipping is higher by air than by sea. Thus, air freight is profitable only for goods with a relatively high value-to-weight ratio. That means that countries located far from their major export

12. We categorize high-skill and medium-skill intensive goods and services as “high skilled” and labor-intensive and low-skill intensive ones as “low skilled.”

13. Some low-skilled individuals do work in sectors such as electronics, so these classifications rank sectors by the average level of skill intensity.

14. Fouquin and Hugot (2016) obtained maritime distances from vesseltracker.com. They first identified each country’s largest port (two ports if it was bordered by two different seas or oceans) and chose the shortest maritime distance between any of the ports of both countries. For landlocked countries, they report distance from the closest foreign port.

15. We do present models replacing country-year fixed effects with country fixed effects and year fixed effects (tables 1 and 2, cols. 1–3), which allows us to include interactions of both skilled and unskilled with each trade flow in the same regression, as well as aggregate trade flows, the influence of which would otherwise be absorbed by the country-year fixed effects. The drawback is that excluding country-year fixed effects weakens controlling for unobservables.

16. Our results remain similar when we include various additional individual-level controls (per capita annual household income in international dollars, a dummy for relatively high life satisfaction, a dummy for expecting higher satisfaction in five years, and a job climate index, which measures the community’s perceived effort to provide economic opportunities). We omit these from our baseline specification due to the potential problem of “bad controls.”

markets in sea distance but near them in air distance have a comparative advantage in high value-to-weight goods (Harrigan 2010).¹⁷ High-skill intensive goods tend to have high value-to-weight ratios because more human capital is used in their production.¹⁸ Thus, for any two countries, trade in high-skill intensive products falls with the air distance between them, while trade in low-skill intensive products falls with sea distance.¹⁹

Moreover, transportation costs have been changing. As Hummels (2007) documents, technological improvements have sharply cut air shipment costs, while the cost of sea freight has stagnated or even risen recently.²⁰ Volumes of high- and low-skill intensive products traded between pairs of countries have adjusted in response. We use these changes in bilateral trade flows caused by advances in transportation technology to instrument for total change in trade volumes.²¹

Our approach is related to the gravity model (Anderson 2011; Anderson and van Wincoop 2003) and closely follows Blanchard and Olney (2017), Feyrer (2019), Magistretti and Tabellini (2020), and Pascali (2017). First, we estimate predicted trade flows separately for high-skill intensive products and for low-skill intensive products. Formally, we estimate the following equation:

$$\log X_{ijt} = \beta_{\text{sea},t} \log \text{SeaDistance}_{ij} + \beta_{\text{air},t} \log \text{AirDistance}_{ij} + D_{ij} + T_t + \varepsilon_{ijt}, \quad (2)$$

17. See World Bank (2009, sec. 5) for case studies. The two distances can differ dramatically. For example, Finland and Mongolia's shortest bilateral sea distance is 23,155 km, while they are only separated by 5,152 km by air (population-weighted great-circle distance).

18. Data on the share of transport costs in the price of different goods confirm this. Harrigan (2010, app. table A3) provides estimates of the share of air freight costs in the value of different goods when shipped by air. The average share of air freight costs in value was 24% for animal and vegetable products, 22% for petroleum, and 21% for forest products, all mostly low-skill intensive goods. The share was 1% for chemicals, 2% for machinery, and 7% for capital intensive manufactures, all more often high-skill intensive goods. Harrigan also shows that for US importers, the value/weight ratio is a very significant determinant of the decision to ship by air.

19. In app. figs. 3 and 4, we confirm that the shipping cost of high-skill intensive products is more sensitive to the air distance between the exporter and importer, while the shipping cost of low-skill intensive products is more sensitive to the sea distance between them.

20. Air freight costs have been falling relative to sea transportation costs for decades (Feyrer 2019). However, air and sea freight costs have varied dramatically since 2005 (app. fig. 3). The unit cost of air freight fell by 59% between 2005 and 2015, while that of sea freight increased by 47%. In line with this, total air freight traffic worldwide surged, from 152 billion ton-kilometers in 2005 to 199 billion ton-kilometers in 2015 (ICAO 2015).

21. Similarly, Pascali (2017) used the adoption of the steamship in the nineteenth century to establish a causal relationship between trade and development, exploiting the different impact of steamships on trade between countries separated by larger or smaller technology-specific travel time.

where X_{ijt} is either (a) the flow of high (low) skill intensive exports from exporter i to importer j in year t or (b) the flow of high (low) skill intensive imports to importer i from exporter j in year t . The year dummies are T_t , and D_{ij} represents pair fixed effects, which means the relationship is identified on the basis of within-pair changes in high (low) skill intensive trade. Here, $\beta_{\text{sea},t}$ is a vector of coefficients capturing the effect of sea distance in each year, while $\beta_{\text{air},t}$ is a similar vector capturing the effect of air distance in each year. From equation (2), we calculate predicted bilateral flows of high (low) skill intensive exports and imports for each country pair and year, based on their sea and air distances. We sum the predicted flows, X_{ijt} , across trading partners to construct our final instruments: the total predicted volume of high (low) skill intensive exports (imports) of goods and services for each country in each year.²² We use these four country-year-level instruments to create four predicted interaction terms—log total predicted volume of high-skill intensive exports $\times$ tertiary education, log total predicted volume of high-skill intensive imports $\times$ tertiary education, log total predicted volume of low-skill intensive exports $\times$ less than tertiary education, and log total predicted volume of low-skill intensive imports $\times$ less than tertiary education—as instruments for the four right-hand-side variables in equation (1).²³

As figure 1 shows, our instruments are good predictors of actual skill-intensive exports and imports for each country and year.²⁴ (The R^2 for eq. [2] is around 0.90.) Since they are a function of only geography and time, they are exogenous with respect to political approval and thus allow us to identify causal effects.²⁵ Following Feyrer (2019), our key

22. We construct separate instruments for high-skill intensive imports and high-skill intensive exports. While each export from i to j is simultaneously an import to j from i , the reported exports of one country rarely coincide exactly in a given year with the reported imports of its partner country. There are many reasons: time lags in transportation, goods passing through third countries, goods delayed in customs, different classification systems, and different trade systems.

23. Since our dependent variable is logged, we delog the estimates before summing across trading partners and then take the log of the total. Our main models also include zero trade values. We tried excluding zero trade values and found qualitatively similar results.

24. The outliers are country-year observations from Ukraine, Georgia, Bosnia, and other countries where trade patterns are distorted by non-economic factors.

25. Although the instruments are formed using actual trade flows, they include only variation in these that is determined by geography and time—variables that cannot be affected by the political process or evolution of attitudes. Our approach is very similar to that in Blanchard and Olney (2017), Pascali (2017), Feyrer (2019), and Magistretti and Tabellini (2020). The main difference is that these papers use data over several decades while we explore yearly variation within a decade. Perhaps surprisingly, we find that even within such a short period, the interaction of time dummies with air and sea distances can produce a strong instrument.

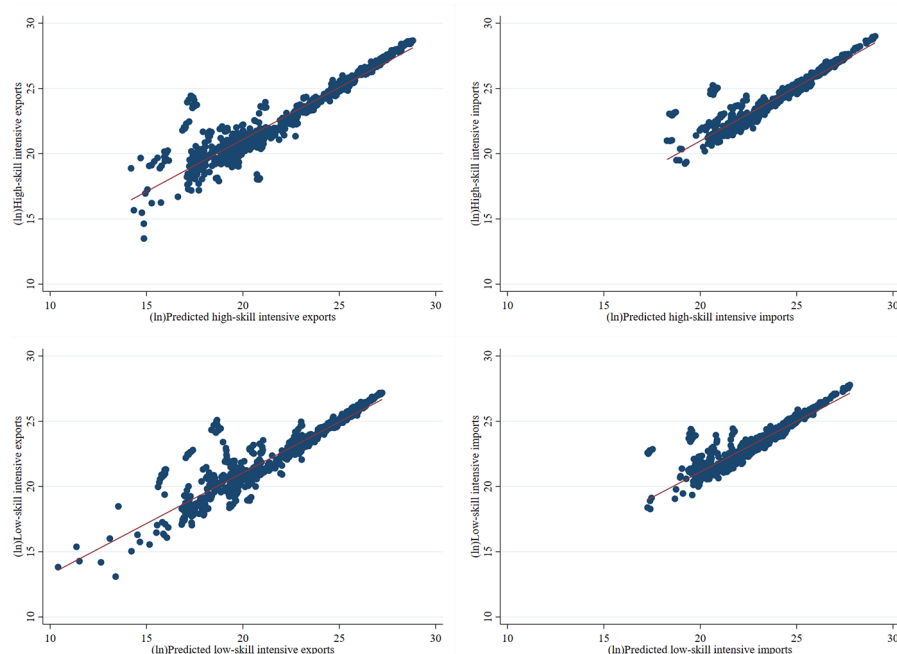


Figure 1. Predicted high-skill (top) and low-skill (bottom) intensive exports (left) and imports (right)

identification assumption is that the evolution of transportation technology over time is independent of any particular country and therefore contains no information about government approval in specific countries.

RESULTS

This section presents three sets of results. We first show OLS estimates and then IV results. Third, we investigate potential mechanisms, present robustness checks, and explore heterogeneity.

Ordinary least squares specifications

We begin by analyzing the effects of total international trade on political approval. Table 1 presents OLS models where the dependent variable is a dummy for confidence in national government. Column 1 includes country and year fixed effects (rather than country-year fixed effects as in eq. [1]).²⁶ Confidence in government does not correlate with total exports, but it does with total imports: a 10% rise in imports is associated with a 1 percentage point rise in government approval. Approval correlates negatively with education: on average, those with a college degree are 2.2 percentage points less likely to have confidence in government. Column 2 adds individual-level demographic controls; results do not change.

Why are total imports—but not exports—associated with government approval? To understand this, we disaggregate

by education level in table 1 column 3. Higher imports predict higher approval among both highly and less educated individuals, although the effect is slightly stronger for the latter. Higher exports, by contrast, only correlate with approval among the educated, and since there are fewer of these the effect washes out in the aggregate. In column 4, we include country-year fixed effects, thus controlling for all time-varying country characteristics. As in column 3, educated individuals have higher confidence in government (relative to their unskilled peers) when exports are higher—but lower confidence in country-years with higher imports.

In table 2, we turn to our main focus: the different effects of high- and low-skill intensive trade. Columns 1–3 report results with country fixed effects and year fixed effects. When we combine responses of skilled and unskilled individuals (col. 1), we find a positive coefficient on high-skill imports but no significant coefficients on other trade flows; the positive coefficient on total imports in table 1 apparently owes more to high-skill than low-skill imports. Table 2 column 2 adds demographic characteristics; results do not change. Column 3 interacts high- and low-skill trade with individual skill levels. We find that the positive coefficient on high-skill imports is driven by the less educated individuals. The nonsignificant coefficients on other flows in columns 1 and 2 mask important heterogeneity. The unskilled respond positively to low-skill exports but negatively to high-skill exports. They respond very positively to high-skill imports but not to low-skill imports. The skilled respond very positively to low-skill imports but not to high-skill imports. (Other effects

26. As noted, the effect of total exports (imports) would be absorbed by country-year fixed effects.

Table 1. OLS Estimates with Aggregate Exports (Imports) and Tertiary Education Interactions

	(1)	(2)	(3)	(4)
Log total exports	-.002 (.009)	-.001 (.009)		
Tertiary education × log total exports			.022** (.010)	.023*** (.005)
No tertiary education × log total exports			-.003 (.009)	
Log total imports	.105*** (.021)	.104*** (.021)		
Tertiary education × log total imports			.091*** (.022)	-.014** (.007)
No tertiary education × log total imports			.105*** (.021)	
Tertiary education	-.022*** (.004)	-.005 (.003)	-.259*** (.065)	-.231*** (.062)
R ²	.116	.122	.122	.156
Country fixed effects	Yes	Yes	Yes	No
Year fixed effects	Yes	Yes	Yes	No
Demographic characteristics	No	Yes	Yes	Yes
Country-year fixed effects	No	No	No	Yes

Note. Outcome: confidence in government. Demographic characteristics: male dummy, age and its square, and dummies for marital status (married/civil partnership) and for rural residence. Results use Gallup sampling weights; robust standard errors (in parentheses) clustered at the country-year level. $N = 1,074,949$.

* $p < .10$.

** $p < .05$.

*** $p < .01$.

could not be estimated precisely.) These results are intuitive: individuals prefer growth of exports intensive in their skill levels and imports that compete with the other skill class.

The coefficients in table 2 column 3 may be biased due to various country-year covariates. In our main specification (eq. [1]), reported in column 4, we add country-year fixed effects (coefficients on controls are reported in app. table 2). The results confirm a “skill divide” in the effect of trade on confidence in government. Rising high-skill exports increase government approval among the skilled relative to the unskilled. Rising high-skill imports decrease approval among the skilled relative to the unskilled. The effects of higher low-skill exports and imports are exactly opposite. The coefficients are statistically significant except for that on low-skill exports.

How can we reconcile these results from column 4 with other findings in tables 1 and 2? Table 1 shows that on balance citizens approve of government more when imports rise; this is true for both educated and uneducated individuals. However, table 2 shows that the uneducated are more likely to respond positively to high-skill imports while the educated prefer low-skill imports. As the college educated are a minority, the average effect is driven by the less edu-

cated. The aggregate effects of exports are similar but weaker in magnitude and often not significant.

Instrumental variables specifications

We turn now to IV estimates. As described above, we predict high (low) skill exports (imports) using equation (2). We then use the four predicted high (low) skill exports (imports) variables to generate instruments for the four independent variables of interest in column 4 of table 2.²⁷ Table 3 reports the first-stage results. The four interactions of predicted trade flows with individual-level education are strong instruments for the four endogenous variables; the value of the Kleibergen-Paap F -statistic for joint significance of the instruments is 143. The second-stage results are in table 2, column 5. The coefficients have the same signs as in the OLS specification (col. 4) but are all statistically significant and slightly larger. An increase (decrease) in high-skill exports (imports) boosts confidence in government among the high-skilled relative to

27. We tried instrumenting the eight regressors in table 2, col. 3, but the first stage is too weak.

Table 2. Estimates with High-Skill and Low-Skill Intensive Exports (Imports) and Education Interactions

	OLS				IV (5)
	(1)	(2)	(3)	(4)	
Log high-skill exports	−.017 (.011)	−.016 (.011)			
No tertiary × log high-skill exports			−.019* (.011)		
Tertiary × log high-skill exports			.011 (.012)	.029*** (.005)	.037*** (.005)
Log high-skill imports	.085*** (.031)	.084*** (.031)			
No tertiary × log high-skill imports			.088*** (.031)		
Tertiary × log high-skill imports			.034 (.033)	−.055*** (.011)	−.067*** (.012)
Log low-skill exports	.019 (.012)	.019 (.012)			
No tertiary × log low-skill exports			.019* (.012)	.008 (.005)	.013* (.006)
Tertiary × log low-skill exports			.012 (.012)		
Log low-skill imports	.024 (.022)	.023 (.022)			
No tertiary × log low-skill imports			.020 (.022)	−.044*** (.012)	−.052*** (.013)
Tertiary × log low-skill imports			.064** (.026)		
Tertiary education	−.022*** (.004)	−.005 (.003)	−.254*** (.070)	−.214*** (.065)	−.142** (.072)
R ²	.116	.122	.123	.156	.007
Country fixed effects	Yes	Yes	Yes	No	No
Year fixed effects	Yes	Yes	Yes	No	No
Demographic characteristics	No	Yes	Yes	Yes	Yes
Country-year fixed effects	No	No	No	Yes	Yes

Note. Outcome: confidence in government. Demographic controls, weights, and clustering are the same as in table 1. $N = 1,074,949$.

* $p < .10$.

** $p < .05$.

*** $p < .01$.

their low-skilled peers. Similarly, a rise (fall) in low-skill exports (imports) increases approval among the low skilled relative to the high skilled. These results are fully consistent with hypothesis 1.

The magnitudes, although modest, are enough to make a difference in polarized settings: if high-skill exports and low-skill imports each rise by 10% and high-skill imports and low-skill exports each fall by 10%, predicted confidence in government rises by 1.6 percentage points among the high skilled relative to the low skilled. If each trade flow changes by its

average within-country standard deviation, the skill gap in confidence grows by 4.8 points—a significant change given that average confidence in government in our sample is 51%.²⁸

28. For each trade flow, we calculate the within-country standard deviation from all observations in the given country and then average these across countries. In certain regions such as Europe most goods are shipped by land, a possible concern for our IV strategy. However, results do not change when we drop one global region (such as Europe; app. table 13). If this created problems, it would do so by weakening the first-stage regressions in table 3; in fact, these are very strong.

Table 3. IV First-Stage Results for Confidence in Government Outcome

	Tertiary × Log High-Skill Exports (1)	Tertiary × Log High-Skill Imports (2)	No Tertiary × Log Low-Skill Exports (3)	No Tertiary × Log Low-Skill Imports (4)
Tertiary × predicted log high-skill exports	.702*** (.048)	−.129*** (.034)	.008 (.051)	.124*** (.035)
Tertiary × predicted log high-skill imports	.556*** (.099)	1.373*** (.066)	−.326*** (.101)	−.491*** (.065)
No tertiary × predicted log low-skill exports	−.161*** (.052)	−.138*** (.035)	.815*** (.067)	.116*** (.036)
No tertiary × predicted log low-skill imports	.705*** (.126)	.585*** (.093)	−.453*** (.127)	.284*** (.097)
Tertiary education	6.732*** (.780)	4.740*** (.700)	−7.581*** (.850)	−5.411*** (.776)
Demographic characteristics	Yes	Yes	Yes	Yes
Country-year fixed effects	Yes	Yes	Yes	Yes
First-stage <i>F</i> -statistic	1,049.56	1,489.12	539.84	750.83

Note. For details on demographic control variables, see note to table 1. Results use Gallup sampling weights and robust standard errors (in parentheses) are clustered at the country level. Kleibergen-Paap *F*-statistic for joint significance of the instruments for col. 5 of table 2 = 143.44; *N* = 1,074,949.

* *p* < .10.

** *p* < .05.

*** *p* < .01.

Replicating the results with the European Social Survey

The GWP provides unmatched worldwide coverage over multiple years and includes a standardized measure of respondents' education levels. However, it does not ask about respondents' occupations, another way to infer skills.²⁹ With this in mind, we tried replicating the main regressions using data from the ESS (2002–18), which does record occupation. We classified ISCO-08 (International Standard Classification of Occupations) levels 3 and 4 occupations (managers, professionals, technicians, and associate professionals) as “high skill” and level 2 ones (support workers; service and sales workers; agriculture, forestry, and fishery workers; craft and related trades workers; plant and machine operators and assemblers; elementary occupations) as “low and medium skill.” The ESS does not have exactly the outcome variable we use in Gallup. Instead, we constructed two measures of generalized confidence in government—the average and the first principal component of the respondent's satisfaction with

government and trust in the country's parliament, politicians, and political parties. Results are in line with our main findings (app. table 3). Low-skilled workers (now defined by their occupations) respond positively to low-skill exports but negatively to low-skill imports. The skilled respond very positively to high-skill exports but negatively to high-skill imports.³⁰ In short, even using a different survey with another measure of government support and an occupation-based definition of skills, we find the same pattern as in the GWP.

Potential mechanisms

We argued that individuals respond more to trade in goods intensive in their own skill class because that sort of trade matters most for their own labor prospects (hypothesis 2). Table 4 provides some evidence. Greater exports (imports) of high-skill intensive goods reduced (increased) unemployment among those with college degrees (col. 1). Similarly, greater exports (imports) of low-skill intensive goods reduced (increased) unemployment among those without higher education. If high-skill exports and low-skill imports

29. Owen and Johnston (2017) suggest that the nature of tasks bundled into particular occupations determines how vulnerable they are to trade competition, which should affect attitudes.

30. Results are similar using ESS “satisfaction with government” (available on request).

Table 4. Mechanisms: Instrumental Variables

	Unemployed (1)	Economic Confidence Index (2)	Local Economic Conditions (3)
Tertiary × log high-skill exports	−.006*** (.002)	1.654* (.975)	.034*** (.012)
Tertiary × log high-skill imports	.014** (.005)	−5.922* (3.556)	−.075 (.049)
No tertiary × log low-skill exports	−.007*** (.002)	.554 (1.126)	.022 (.013)
No tertiary × log low-skill imports	.016*** (.006)	−5.308 (3.982)	−.074 (.054)
Tertiary education	.002 (.022)	−2.384 (11.604)	−.165 (.139)
Observations	918,323	767,259	784,336
Kleibergen-Paap rk Wald <i>F</i> -statistic	132	59	66

Note. Demographic controls, weights, and clustering are the same as in table 1. Gallup's Economic Confidence Index, which varies from −100 (most negative) to +100 (most positive), is based on responses to two questions: (1) "How would you rate economic conditions in this country today—as excellent, good, only fair, or poor?" and (2) "Right now, do you think that economic conditions in this country, as a whole, are getting better or getting worse?" "Local economic conditions" is based on the question: "Right now, do you think that economic conditions in the city or area where you live, as a whole, are getting better or getting worse?" The outcome is a scale where "poor" = 1 and "excellent" = 4. A respondent is defined as unemployed if he or she reports not being employed or self-employed in the last seven days, was able to begin work in the last four weeks, and actively sought a job in those weeks.

* $p < .10$.

** $p < .05$.

*** $p < .01$.

each increase and high-skill imports and low-skill exports each decrease by their average within-country standard deviation, the predicted skill divide in unemployment rises by 0.94 percentage points—a substantial amount given that unemployment averages about 6% in the sample.

Unfortunately, the GWP does not report respondents' wages.³¹ But it does ask them to evaluate economic conditions, both nationwide and locally. The answers are likely to reflect a mix of perceived labor market prospects and income trends. Table 4 columns 2 and 3 show how these variables relate to trade flows for the two respondent types. Although not always statistically significant, the coefficients have the expected signs. For instance, rising high-skill intensive exports were associated among skilled respondents with more buoyant perceptions of both the national and local economic environment. Although it is not definitive, we take this evidence as supportive of hypothesis 2.

Robustness checks and heterogeneity

In appendix table 4, we estimate our main models (table 2, cols. 4 and 5) for an alternative outcome, leader approval.

31. It does report household income, but that includes nonwage income (capital returns, welfare payments, etc.) and wages of other household members, who may have different education levels.

Results are similar for high-skill intensive exports and imports and for low-skill intensive imports, but interactions with low-skill exports are insignificant in the IV model. That might be because leader characteristics such as image or rhetoric differentially influence differently skilled respondents, complicating identification. So far we have treated college graduates as "skilled." Next we try using completed secondary education as the dividing line (app. table 5). The results for high-skill trade are similar, and those for low-skill trade are insignificant. Evidently, results do not depend on an arbitrary choice of education threshold.³² To further explore this, appendix table 6 includes separate dummies for tertiary and secondary education, along with their interactions with trade flows. Results appear driven by tertiary education: interaction terms with secondary education are small and rarely significant, while those for tertiary education are similar to those in table 2.

In appendix table 7, we show that results are robust to excluding various three-year periods one at a time. Appendix

32. Among GWP countries, the percentage with completed tertiary education ranged from less than 1% of the population over age 14 in Guatemala to 30% in South Korea (Barro and Lee 2013). (These rates are as of 2010 and have probably risen since in many countries.) The average rates for different (World Bank) income groups as of 2010 were as follows: high-income countries, 14%; upper middle income, 8%; lower middle income, 5%; low income, 2%.

tables 8 and 9 explore individual heterogeneity. Very few differences between subgroups are statistically significant. Effects are larger for males than females and for older individuals (ages 38–64) than for younger ones (ages 18–37; app. table 8). They are slightly larger among those from households below the median income (in the given country-year; app. table 9). What about heterogeneity across subgroups of countries? We test this using interaction terms with dummies for various subgroups. Appendix table 10, column 1, shows that the main results hold strongly for net importers of high-skill goods (rows 5–8) and are not significantly different for net exporters of these (rows 1–4).³³ Similarly, column 2 shows that the results hold for high- or medium-income countries (rows 5–8) and are not significantly different for low-income ones (rows 1–4). The main results hold strongly for democracies (col. 3, rows 5–8) but not for nondemocracies.³⁴

In appendix table 11, we check whether the relationship between trade and political approval is linear or driven by extreme trade shocks. We create dummies for quartiles of high-skill intensive exports and interact these with log high-skill intensive exports themselves. The coefficients are very similar across quartiles, which suggests that the impact of the interaction between log high-skill intensive exports and skills is linear. We also do this for high-skill intensive imports and for low-skill intensive exports and imports and find no evidence of nonlinearity for these as well.

The GWP country panel is unbalanced. While 98 countries have data for at least six years, only 77 have nine or more years. To check whether this is distorting results, we replicated our IV regressions in balanced panels (including all countries with data for at least six, seven, eight, and nine years). Results are similar (app. table 12). To check whether results are geographically broad-based, we drop one global

region at a time (app. table 13). Coefficients change little.³⁵ Finally, we try including country and year fixed effects (rather than country-year fixed effects) and add unemployment and growth (app. table 14). While the coefficients on unemployment and growth are strongly significant (and have intuitive signs, negative and positive, respectively), the main findings do not change.

CONCLUSION

Our results confirm that international trade shocks affect individuals' support for their governments. However, the effects are heterogeneous and depend on the match between individuals' skill levels and characteristics of the goods imported or exported. Studying 120 countries in 2005–18, we found that increases (decreases) in exports (imports) of goods intensive in a particular skill level boosted confidence in the government relatively more among those with the given skill level. Higher exports (imports) of goods intensive in a given skill level correlate with lower (higher) reported unemployment and better (worse) evaluations of the economy among those with that skill level.

These findings suggest new insights into the politics of trade. Previous work mostly focused on the impact of import surges (like the one after China's WTO accession) on low-skill workers in developed countries. Such shocks contributed to the rise of populism in the United States and Europe. However, in some other countries, trade shocks disproportionately harm high-skill workers. Since the highly educated tend to be more politically sophisticated and active, governments face pressures to enact economically harmful, skill-biased protectionism (Milner and Mukherjee 2013).

To take one example, unemployment among college graduates recently surged in India, more than doubling in 2011–16 and forcing millions to settle for menial jobs (Slater 2019). This followed trade reforms that cut the weighted average tariff on manufactured products from 25% in 2004 to 7% in 2013, according to World Bank data. Prime Minister Modi responded by reintroducing tariffs on skill-intensive imports such as electronic components (Aiyar 2018). Despite his image as an economic liberal, he embraced protectionism, favoring high-tech “national champions” and using import duties to pressure electronics firms to make advanced goods and components within India (Aiyar 2018). Modi's ratings among skilled Indians rose dramatically.³⁶

33. For example, the estimated effect of log high-skill exports on those with tertiary education in a net high-skill goods importer is 0.031 (app. table 10, col. 1, row 5); the corresponding effect in a net high-skill goods exporter is estimated to be lower than this by 0.005 (the total effect is the sum of the coefficients in rows 1 and 5), but this difference of 0.005 is not statistically significant. So we cannot reject the possibility that the effect in the two types of country is the same.

34. In 2018, 19 of 93 countries were nondemocracies. Here, the difference between the estimates for nondemocracy and democracy (i.e., the numbers in app. table 10, rows 1–4) are statistically significant, and the difference more than wipes out the main effect (rows 5–8). Disaggregating nondemocracies (results available on request), the main results actually hold even more strongly for relatively harsh dictatorships ($\text{Polity2} < 0$) than for democracies. Only among milder dictatorships ($0 \leq \text{Polity2} < 6$; 10 countries in 2018) do the effects disappear on average. Still, since results are sensitive to how the sample is split, we focus more on the aggregate findings than on country subgroups.

35. We also tried reestimating the regressions using a hierarchical random slope model to control for cross-level interactions. The results were similar (available on request).

36. Between 2013, the year before Modi took office, and 2018, the last year of his first term, confidence in government among college graduates rose from 49% to 76%. Among the less educated, it rose by only 19 percentage points, from 60% to 79% (GWP).

Although various factors could have played a role, his protectionist measures likely contributed.

India does not appear exceptional. In poorer democracies, one might expect unskilled workers to dominate because of their voting power. Yet, trade policy often favors the highly skilled. Between 1978 and 2002, trade barriers against low-skill goods fell in many developing world democracies, but those against high-skill goods held constant or rose (Milner and Mukherjee 2013, 3). Other countries with a high-skill bias in protection include Brazil and South Africa—both, like India, net importers of high-skill goods. Since 2000, gross tertiary enrollment in middle-income countries has soared from 14% to 38%. Yet, unemployment among college graduates has risen from 4% to 5% in Brazil, 10% to 14% in India, 9% to 16% in Pakistan, and 10% to 14% in South Africa.³⁷ As skills increase in many developing countries, the combination of free trade for low-skill goods with protection for high-skill jobs may continue to tempt leaders.

More generally, our results fit into an emerging literature on the politics of trade that emphasizes disaggregated, context-specific diagnoses and policies (e.g., Menéndez et al. 2023; Owen and Johnston 2017; Walter 2017). Identifying trade's winners and losers requires considering not just economic class or even skill group but how these interact with flows of particular types of products. To offset trade-induced hardships and build reform coalitions, policy makers may need to draw detailed distinctions, adapting general theories to narrowly defined settings.

ACKNOWLEDGMENTS

We thank Dany Bahar, Pranab Bardhan, Kirill Borusyak, Paola Conconi, Georgy Egorov, Thiemo Fetzer, Jack Hou, David Laitin, Yotam Margalit, Anna Maria Mayda, William Olney, Kevin O'Rourke, Hillel Rapoport, Victor Shih, Ekaterina Zhuravskaya, and participants at the American Economic Association Annual Meeting 2022, American Political Science Association Annual Meeting 2020, the Beijing Forum, the Dynamics, Economic Growth, and International Trade conference, European University Institute, Royal Economic Society, the Centre for Economic Policy Research–European Bank for Reconstruction and Development–Economics of Transition conference, CESifo Venice Summer Institute, Fudan University, the University of Wisconsin–Madison, and the World Bank and IBS (Instytut Badań Strukturalnych) conferences for their helpful comments. Matías Gómez Seeber provided outstanding research assis-

tance. Views presented are those of the authors and not necessarily those of the European Bank for Reconstruction and Development. All interpretations, errors, and omissions are our own.

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