Trading Places, Trading Platforms: The Geography of Trade Policy Realignment

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Abstract What motivates politicians and political parties to shift their positioning on an issue? Focusing on the case of trade policy in countries with advanced economies and plurality electoral systems, I argue that the relative positioning of parties on an existing issue can change even when the preferences of the key actors (voters and politicians) are held constant, and even when party leaders continue to represent the same constituencies. In advanced plurality countries, college-educated voters support free trade, and high-density constituencies are predominantly represented by Left incumbents. As college-educated workers migrate to high-density constituencies in pursuit of higher wages, Left incumbents increasingly embrace free trade, while Right incumbents take more protectionist positions. I provide empirical support for several observable implications of my theory.

What factors cause political parties to shift their positions on issues? Moreover, under what conditions will parties "trade places" on an issue, triggering a realignment? Notable examples include the civil rights realignment of the 1960s in the United States[1] and the more recent partisan shifts on European integration in the United Kingdom.[2] Some theories link party position change to the replacement of previous party leaders with new officeholders who hold different policy preferences or cater to different constituencies,[3] while others focus on the adaptation of incumbents to shifts in preferences among voters or interest groups.[4]

In this paper, I put forward a new framework of party position change in which office-motivated incumbents adapt their positioning even without any voters changing their preferences. I argue that internal migration can induce shifts in positioning, and even realignment. My argument links a persistent political geography to an evolving economic geography. In advanced plurality countries, Left incumbents represent mostly high-density constituencies, while Right incumbents predominantly represent low-density constituencies.[5] In pursuit of higher wages, college-educated workers move to high-density constituencies. Because those workers tend to support free trade, this migration induces more pro-trade positioning by Left incumbents. At the same time, the "brain drain" of highly educated workers from low-density electorates

1. Kuziemko and Washington 2018.
2. Schonfeld and Winter-Levy, Forthcoming.
3. Adams 1997; Carmines and Stimson 1989; Shoch 2001; Trubowitz 1998.
4. Karol 2009; Stimson, MacKuen, and Erikson 1995.
5. For more on the relationship between population density and party politics in advanced plurality countries, see Rodden 2019.

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yields more protectionist positioning by Right incumbents. Due to changing party positioning, I predict that college-educated voters will increasingly support the Left, while less educated voters should increasingly turn out for Right candidates.

I focus on the issue of trade for two reasons. First, this is an issue where the core cleavage is education. Workers of different skill types differ in their policy preferences on trade: survey data suggest that college-educated citizens are substantially more supportive of trade than those without college education. As a result, skill-biased internal migration—the internal migration of workers of different educational backgrounds—should influence party positioning on trade. The second reason I focus on trade is that trade policy is not core to either Left or Right parties: it is hard to imagine the Right becoming the party of redistribution or the Left becoming the party of low taxes, but Left and Right parties have historically shifted on trade policy.[6] In the United States, the parties have stronger "brands" on domestic policy issues like taxes, gun control, or abortion than they do on foreign policy issues like trade,[7] so incumbents have the flexibility to stake out new positions on trade in response to shifting electoral incentives.

Despite the surge of academic interest in understanding the contentious politics of trade in advanced democracies, research has not addressed the emerging realignment of parties in advanced plurality countries[8] with regard to trade policy. Previously protectionist Left parties are increasingly endorsing globalization, while formerly "free market" Right parties are increasingly becoming the parties of protectionism (though both Left and Right parties are beset by internal divisions on trade). Take, for example, the UK Labour Party. Its 1983 platform argued that "We must therefore be ready to act on imports directly … to safeguard key industries … using tariffs and quotas, if these prove necessary." But its 2017 platform argued that "Labour is pro-trade … Prosperity depends on minimising tariff and non-tariff barriers."[9]

In the United States, this shift predates Trump; examining Republican platforms from 2000 to 2012, Kuk, Seligsohn, and Zhang find a persistent trend toward a more pessimistic tone about trade (with an increasing emphasis on concerns about "fair trade," for example) and away from prior enthusiasm for "free and open trade."[10] Cerrato, Ferrara, and Ruggieri similarly find a consistent trend toward protectionism in Republican presidential campaign rhetoric from 2008 to 2016.[11] The 1988 Canadian Liberal platform expressed strong opposition to the Canada–United States Free Trade Agreement, the central issue of that year's election; by 2015 the

6. The Democrats were the more pro-trade party for most of American history, but Democratic incumbents shifted to protectionism after a key constituency, the AFL-CIO labor union, endorsed protectionism in 1970. For more, see Karol 2009.

7. Kertzer, Brooks, and Brooks 2017.

8. "Plurality systems" here are countries with geographically defined single-member constituencies in which voters cast ballots for individuals, rather than parties. Cox 1990 provides a similar definition.

9. The 1983 platform is available at <http://labourmanifesto.com/1983/1983-labour-manifesto.shtml>; 2017 platform at <https://labour.org.uk/wp-content/uploads/2017/10/labour-manifesto-2017.pdf>.

10. Kuk, Seligsohn, and Zhang 2018.

11. Cerrato, Ferrara, and Ruggieri 2018.

Liberal platform stated that "Canada's economic success relies on strong trade relationships with our closest neighbours … We will work to reduce the barriers that limit trade … Trade is vital for our economy. It opens markets, grows Canadian businesses, and creates good-paying middle class jobs."[12] Still, trade is a contentious issue on both the Left and the Right, as trade advocates clash with those who have been "left behind" by globalization.

At the same time, Left parties in advanced plurality countries have become more popular with highly educated citizens, while Right parties have gained less educated supporters, at the expense of losing support among educated voters.[13] What is driving these puzzling realignments? I link these related realignments to internal migration:[14] as skilled individuals sort into high-density constituencies controlled by the Left, Left parties increasingly endorse free trade and Right parties turn toward protectionism.[15] As a consequence of changing party positioning, educated voters defect from the Right to the Left, while less educated citizens increasingly support the Right.

I begin by providing evidence for several assumptions underlying my theory. I then present the formal model, which embeds a spatial equilibrium model from economic geography within a formal model of incumbents choosing party platforms. I conclude by testing the predictions of my model in Australia, Canada, the United Kingdom, and the United States, and find strong and consistent evidence in favor of my theory. Until recently, Republican constituencies were more educated than Democratic constituencies; today, Democratic constituencies are disproportionately college educated. The relative skill of Left constituencies has risen across other advanced plurality countries as well. Finally, I find that Left parties have become relatively more supportive of free trade over the last few decades; at the same time, they have become relatively more popular with college-educated voters in all four countries.

12. Liberal platform, 66. Available at <https://liberal.ca/wp-content/uploads/sites/292/2020/09/New-plan-for-a-strong-middle-class.pdf>.

13. Take, for example, the United States: college-educated voters had supported Republican presidential candidates for decades, but in 2016 college-educated voters preferred Clinton to Trump by a nine-point margin, while voters without a college education (a traditionally left-leaning group) supported Trump by eight percentage points. Tyson and Maniam 2016. Despite the British Labour Party's long history as a working-class party, in the 2017 election educated voters favored Labour by a substantial margin, while those in the lowest educational category preferred the Conservatives by more than twenty percentage points. Curtis 2017.

14. Gallego et al. 2016 estimate that 31 percent of English citizens relocated to a different parliamentary constituency at least once between 1991 and 2008. About 20 percent of Americans change counties over a five-year period (Glaeser and Gottlieb 2009). Mummolo and Nall 2017 find that internal migration patterns in the United States are determined by economic factors, not by partisan sorting. Though international migration is often analyzed in international political economy, internal migration has been neglected as a salient factor for understanding the politics of globalization. For more on the contentious politics of internal migration, see Gaikwad and Nellis 2017; for an analysis of the relationship between attitudes to internal and internal migration, see Singer and Quek forthcoming.

15. I am not the first to link internal migration to political change in the United States. An extensive literature in American politics finds that migration into and out of the American South was an important contributor to the civil rights realignment in the second half of the twentieth century (Beck 1977; Campbell 1977). Brown 1988 and Frendreis 1989 argue that migration into an area changes the preferences of the local electorate. Examples include the migration of affluent, liberal Americans into Tennessee (Lyons and Durant 1980), and the influx of educated voters into the Rocky Mountain West (Robinson and Noriega 2010).

The rise of a more protectionist Right and a pro-market "New Left" have largely been studied separately. One possible factor driving party repositioning on trade is changing voter preferences; exposure to import competition seems to induce "authoritarian" preferences and support for far-right parties.[16] While preference change in favor of authoritarianism can explain more protectionist positioning by the Right, it cannot explain why Left parties have become more supportive of free trade in advanced plurality countries. A separate literature studies the emergence of a "New Left" in advanced democracies that is increasingly capitalistic and supportive of free trade. For example, Ford and Goodwin argue that the UK's Labour Party abandoned its working-class constituency to gain the support of the expanding university-educated middle class.[17] However, arguments of this nature cannot explain why Right parties in advanced plurality countries have become more protectionist at the same time that a "New Left" has emerged. My theory is unique in explaining both a liberalizing Left and a more protectionist Right. Furthermore, my argument is consistent with other evidence of policy-driven changes in voting in advanced plurality countries, such as the defection of southern whites from the Democratic party in response to the party's endorsement of civil rights,[18] or the recent realignment of British voters following the Conservative Party's shift on Brexit in the aftermath of the 2015 referendum.[19]

My findings also add nuance to a disagreement in the literature on whether exposure to globalization increases or diminishes future support for trade.[20] For example, Milner argues that trade creates pro-globalization constituencies among firms with international interests.[21] Examining support for trade among political parties, Milner and Judkins find that exposure to globalization leads to higher support for trade among all parties: "Parties in countries that are more open (holding size and level of development constant) are less protectionist … As globalization grows, the differences among parties in a country over trade policy decline, as all become more free trade oriented."[22] However, more recent work finds a link between trade

16. Ballard-Rosa et al., Forthcoming; Cerrato, Ferrara, and Ruggieri 2018; Colantone and Stanig 2018.

17. Ford and Goodwin 2014; see also Evans and Tilley 2012.

18. See Kuziemko and Washington 2018 for more on policy voting in the United States. Furthermore, Fowler finds that "intoxicated partisans, if they exist, are a small share of the American electorate, and policy voting is more prevalent." Fowler 2020, 146. More generally, Carsey and Layman write that "issue-based change in party identification should occur among individuals who are aware of party differences on an issue and find that issue to be salient." Carsey and Layman 2006, 464.

19. Schonfeld and Winter-Levy, Forthcoming.

20. There is a long-standing literature on the effects of globalization on party systems and societal cleavages more generally. Rogowski 1989 argues that trade exposure produces either class conflict or urban–rural conflict, depending on the relative abundance of labor, capital, and land. Alternatively, Kriesi et al. 2006 argue that globalization "transforms" the structure of the Western European political space as conflict between winners and losers of globalization crosscuts other cleavages like the religious–secular or urban–rural divides.

21. Milner 1988.

22. Milner and Judkins 2004. They find that Right parties are more pro-trade than Left parties in advanced democracies, and they argue that this is because Right parties depend more on capital owners for support, whereas Left parties depend more on labor. In opposition to this finding, I demonstrate that Right parties in plurality countries have become more protectionist as globalization has progressed. Like

exposure and backlash to globalization at the voter level[23] and at the party-platform level.[24] I present a middle ground between these competing findings: in advanced plurality countries, trade-induced migration yields more support for trade among Left legislators, but also more enthusiasm for protectionist policies among Right legislators.

Empirical Motivation for a New Theoretical Framework

My argument links the internal migration of college-educated workers to emerging realignments on trade policy in advanced plurality countries. I now present a set of empirical facts to motivate my theoretical focus on the interaction of economic and political geography. These facts are consistent with a broader literature highlighting that college-educated individuals are less likely to support protectionism, and that (American) legislators who represent more educated constituencies are more likely to support pro-trade legislation. I also provide evidence that Left incumbents in advanced plurality countries disproportionately represent high-density constituencies, consistent with the strong empirical relationship between population density and Left voting demonstrated by Rodden.[25] Finally, I demonstrate that economic forces disproportionately boost the wages of college-educated (American) workers in high-density constituencies, and that high-density constituencies are becoming disproportionately college-educated ("skilled") in all four advanced plurality countries, consistent with the work of Autor,[26] which shows that urban wage premiums have disproportionately increased for college-educated workers in the United States at the level of "commuting zones" (areas in which there is much commuting within the area but not between areas—that is, local labor markets).

Education and Individual Preferences on Trade

The literature links individual-level attainment of postsecondary education with support for liberal trade policies in the United States[27] and Europe.[28] I follow O'Rourke and colleagues in analyzing data from the International Social Survey Programme National Identity surveys (1995 and 2003), which include all four countries in my sample.[29] I examine answers to the question of whether the respondent's

Milner and Judkins, Dutt and Mitra 2005 also focus on capital and labor, predicting that Left governments will be protectionist in capital-abundant countries. However, their model cannot account for the increasingly pro-trade Left in capital-abundant advanced democracies.

23. Autor 2016; Colantone and Stanig 2018.
24. Burgoon 2009.
25. Rodden 2019.
26. Autor 2019.
27. Scheve and Slaughter 2001.
28. Mayda and Rodrik 2005.
29. O'Rourke et al. 2001.

TABLE 1. *University education and support for protectionism*

	Dependent variable:			
	Limit foreign products to protect national economy			
	Australia	*Canada*	*United Kingdom*	*United States*
University-educated	−0.189***	−0.185***	−0.340***	−0.203***
	(0.016)	(0.025)	(0.034)	(0.026)
Age	0.001***	0.001*	0.002***	0.002***
	(0.0004)	(0.001)	(0.001)	(0.001)
Male	−0.083***	−0.087***	−0.061***	−0.061***
	(0.013)	(0.021)	(0.022)	(0.019)
Constant	0.789***	0.512***	0.638***	0.656***
	(0.023)	(0.032)	(0.034)	(0.029)
Year fixed effects	Yes	Yes	Yes	Yes
Observations	3,947	2,191	1,644	2,203
R^2	0.056	0.061	0.088	0.046
Adjusted R^2	0.055	0.059	0.086	0.045
Residual std. error	0.395 (df = 3,942)	0.483 (df = 2,186)	0.434 (df = 1,639)	0.436 (df = 2,198)
F-statistic	58.390***	35.334***	39.731***	26.780***
	(df = 4; 3,942)	(df = 4; 2,186)	(df = 4; 1,639)	(df = 4; 2,198)

Note: *$p < .1$; **$p < .05$; ***$p < .01$

country "should limit foreign products in order to protect its national economy." Answers are on a five-point scale from "strongly agree" to "strongly disagree." For ease of interpretation, I create a binary variable that equals 1 for "strongly agree" or "agree," and 0 otherwise. I regress this dependent variable on a binary indicator of whether a respondent has completed university education, and include controls for age, gender, and year fixed effects. In the United Kingdom, university-educated respondents are 34 percent less likely to endorse protectionism; in the other nations, they are 18 to 20 percent less likely. These results are consistent with other work demonstrating a link between university education and pro-trade sentiment.[30] I conclude from this analysis that education is likely the key cleavage for individual preferences on trade, in line with the existing literature.

Educated Constituencies and Legislator Voting on Trade

I have shown that college-educated individuals are more supportive of liberal trade policy, so the influx of college-educated voters into a constituency should indicate rising pro-trade sentiment. Legislators should adapt to these shifting preferences,

30. Hainmueller and Hiscox 2006; Mayda and Rodrik 2005; O'Rourke et al. 2001; Scheve and Slaughter 2001. I also find that older people are more protectionist, while men are less protectionist, but the effects of these variables are small in comparison to the effects of education.

given that there is evidence of "dynamic responsiveness"[31] to changing constituency preferences in the United States,[32] the UK,[33] and Canada.[34]

In the US context, Bailey finds that members of Congress (both House and Senate) who represent skilled constituencies are more likely to vote in favor of trade agreements;[35] this finding has been widely replicated.[36] Furthermore, there is evidence from the United States that members of Congress vote in line with constituency opinion on trade bills.[37]

I now examine data from Milner and Tingley on voting on trade bills in the House of Representatives.[38] Their data set includes votes on three types of bills: trade negotiating authority for presidents, international trade agreements, and individual legislators' bills to regulate trade policy. They include only trade votes that were consequential for US trade policy (not procedural votes or "sense of Congress" votes) and did not deal with individual products (unless those products involved major US industries—for example, steel, automobiles, textiles, and sugar—and had been used by previous scholars in analyses of roll-call votes). They coded the binary dependent variable such that 1 means support for trade liberalization, while 0 means opposition. I assess the cross-sectional relationship between percent college educated in a district and the probability a legislator votes in favor of a trade agreement for the 103rd (1993–1995) and 106th (1999–2001) sessions of Congress.[39] I match the Milner and Tingley data on legislative voting on trade to district-level data on education (percent over twenty-five years old with a bachelor's degree) from the 1990 and 2000 censuses (the 103rd and 106th Congresses, respectively). I include a set of controls from Milner and Tingley, which include the legislator's party, district-level percent foreign born, percent Black in the district, and a variable indicating whether a president from the same party supports the trade bill (controls are suppressed for presentation). Finally, I include vote fixed effects to control for any vote-specific factors. Consistent with the literature, I find that percent college educated is a robust predictor of pro-trade voting in both years ($p < .0001$): a 10 percent increase in district-level percent college educated is

31. I borrow this term from Caughey and Warshaw 2018.

32. Stimson, MacKuen, and Erikson 1995 find that members of the US House are especially likely to maintain their seats by adapting their positions to changing public opinion; they refer to this preemptive shift in positioning as "rational anticipation." Other research in American politics also finds evidence of responsiveness to constituency preferences. Canes-Wrone, Brady, and Cogan 2002 contend that voters do not re-elect incumbents whose positions are out of step with theirs, so politicians adopt the preferred policy positions of their constituents. Similarly, Ansolabehere and Jones 2010 find that American voters' beliefs about their legislator's positions are closely related to the legislator's actual voting record and the policy brand of the legislator's party. Furthermore, citizens hold legislators accountable if the legislator's voting record diverges from the voter's own policy preference.

33. Hakhverdian 2010.

34. Soroka and Wlezien 2004.

35. Bailey 2001.

36. For recent examples, see Conconi et al. 2020, Milner and Tingley 2011, and Owen 2017.

37. Pomirchy and Schonfeld, 2019.

38. Milner and Tingley 2011.

39. There are no 1990 census education data by district for the 101st or the 102nd Congress.

linked to a 7 to 8 percent increase in the probability of the district's representative voting in favor of trade liberalization.

Political Geography

I have thus far provided evidence that college-educated individuals are less likely to support protectionism, and legislators who represent highly educated constituencies are more likely to vote in favor of trade liberalization. I now turn to evidence for the foundations of my theoretical argument linking political and economic geography. Rodden demonstrates a robust relationship between population density and Left voting in advanced plurality countries.[40] Though it initially emerged out of the working-class politics of the Industrial Revolution, "urban–rural polarization" persists in Australia, Canada, the United States, and the United Kingdom.

TABLE 2. *Congressional voting on trade*

	Dependent variable:	
	Roll-call vote	
	103rd	*106th*
PERCENT COLLEGE-EDUCATED	0.008***	0.007***
	(0.002)	(0.001)
CONSTANT	0.713***	0.023
	(0.045)	(0.105)
Observations	1,267	1,245
R^2	0.111	0.283
Adjusted R^2	0.106	0.279
Residual std. rror	0.455 (df = 1,260)	0.417 (df = 1,237)
F-statistic	26.128*** (df = 6; 1,260)	69.606*** (df = 7; 1,237)

Note: *$p < .1$; **$p < .05$; ***$p < .01$.

I first validate the assertion that Democratic incumbents maintain consistent control of high-density electoral constituencies. I divide districts by population density into a top half ("high-density") and a bottom half; I then calculate what proportion of Democratic and Republican members of the House of Representatives are in high-density districts.[41] Most Democratic members of the House are in high-density districts in all years of the sample, while most Republican representatives are in low-density districts in each year (Figure 1). I perform the same analysis for the Senate, finding that a majority of Democratic seats are in high-density states in each year.

40. Rodden 2019.

41. I perform this analysis by matching district-level congressional data on population density from the United States (1990 census, 2000 census, and 2006, 2008, 2010, 2012, 2014, and 2016 American Community Surveys) to VoteView data on membership of the US House of Representatives in those years (103rd, 106th, 109th, 110th, 111th, 112th, 113th, and 114th Congresses, respectively).

I now extend my analysis of partisan constituencies by examining data from Australia, Canada, and the United Kingdom.[42] For Australia, Canada, and the United Kingdom, I divide constituencies by population density into a top half ("high-density") and a bottom half ("low-density") in each of the country years in my sample.[43] In every year for which I have data, most of each country's major Left party constituencies are high-density, and most of each country's major Right party constituencies are low-density (Table 3).[44]

TABLE 3. *Percentage of left and right constituencies that are high density*

	Australia 2011	*Australia 2013*	*Australia 2016*	*Canada 2001*	*Canada 2006*	*Canada 2011*	*Canada 2016*	*UK 2001*	*UK 2011*
Left	63	71	64	59	67	73	65	63	75
Right	43	42	45	29	33	37	22	25	31

Economic Geography

I consider the interaction of this relatively constant political geography with an evolving economic geography.[45] Research in economic geography finds that "skilled"

42. In this paper, I focus on Labour and the Conservatives in the United Kingdom, but not the Liberal Democrats; and I focus on the Canadian Liberal and Conservative Parties, but not the New Democratic Party (NDP). I exclude these parties from my analysis for a few reasons. While the Liberal and Labour Parties have safe seats in high-density constituencies, the British and Canadian Conservative Parties have safe seats in low-density constituencies. By contrast, safe seats for the Liberal Democrats are scattered across rural, middle-class suburban, and inner-city constituencies (Cook 2010, 313–14). The same holds for the NDP, whose base includes both urban and rural elements, such as urban workers in British Columbia and Ontario and farmers in Manitoba and Saskatchewa (see <https://www.britannica.com/topic/New-Democratic-Party-political-party>). Furthermore, there is a dearth of incumbent persistence for both of these parties: changes in party positioning are more likely to be driven by selection (new candidates winning, incumbents losing) than by incumbent adaptation. The Liberal Democrats have won as many as sixty-two seats (out of 650) in 2005, but in 2015 they won only eight. Similarly, the NDP's seat share has fluctuated widely, from only nine (three short of official party status) in 1993 to 103 in 2011. Finally, the positions taken by these parties are unlikely to have significant implications for trade policy. The Liberal Democrats have never been one of the two largest parties in the British House of Commons, while the NDP has never formed the Canadian government.

43. For 2001 and 2011, I calculate the percentage of Labour seats in the House of Commons that are in high-density parliamentary constituencies, and do the same for the Conservative Party. Because of data limitations, I am able to do this analysis for England and Wales only (which include almost 90 percent of constituencies in the United Kingdom). I also perform this analysis for the Canadian House of Commons elected in 2011 and 2016 (the Liberal Party is the Left party, and the Conservative Party is the Right party), and the Australian House of Representatives in 2011, 2013, and 2016 (Labor is Left, and the Liberal Party is coded as Right; by 2011, the Liberal and National Parties had merged in the Australian state of Queensland and in the Northern Territories, so I count "LNP" (Liberal-National Party) incumbents as Liberal).

44. I cannot analyze the Canadian Senate because senators are appointed by the prime minister; for the same reason, I cannot examine the British House of Lords. Australian senators are elected via state-wide proportional representation, and are therefore not within the scope of my theory.

45. In *Spending to Win*, Rickard finds that politicians in plurality systems favor geographically concentrated interest groups, while geographically diffuse interest groups perform better under proportional

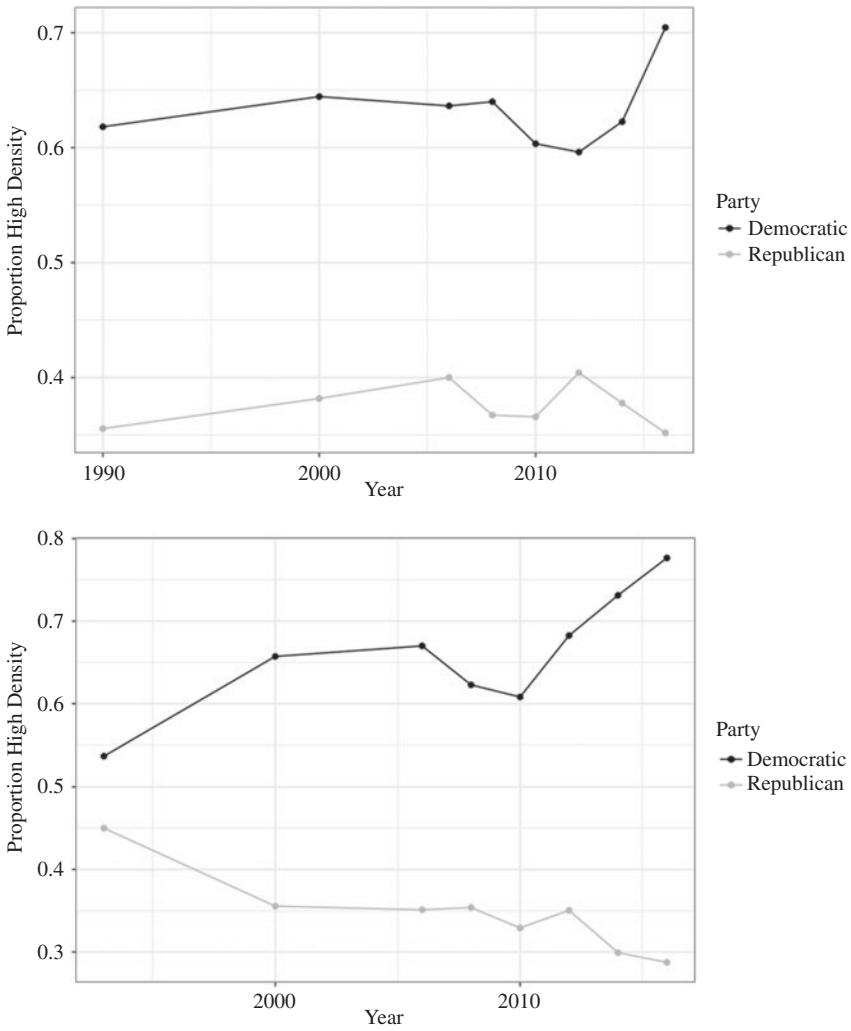

FIGURE 1. *Proportion of constituencies that are high-density (by party) in the Senate (top) and the House (bottom). Democrats (Republicans) primarily control high-density (low-density) constituencies*

representation. However, Rickard takes economic geography as given, analyzing "the political implications of existing patterns of economic geography" (2018, 31). By contrast, I allow economic geography to endogenously evolve by employing spatial equilibrium modeling tools, enabling me to assess the implications of changes in economic geography for partisan positioning and voter behavior.

(college-educated) workers now earn significantly higher wages in high-density US metropolitan statistical areas.[46] Until a few decades ago, both skilled and unskilled workers earned higher wages in urban areas, but

> urban non-college workers currently perform substantially less skilled work than in prior decades. This deskilling reflects the joint effects of automation and international trade, which have eliminated the bulk of non-college production, administrative support, and clerical jobs … attenuating, to a startling degree, the steep urban wage premium for non-college workers that prevailed in earlier decades.[47]

I now verify that the same economic dynamics uncovered by Autor hold at geographic levels that are relevant for American trade politics, namely congressional districts (the House of Representatives) and states (the Senate). I use American Community Survey data from 2016 on the median earnings of workers whose highest level of education is a bachelor's degree ("skilled") and workers whose highest level of education is a high-school diploma ("unskilled"). I then subtract the median gross rent (contract rent plus the cost of utilities) from these wages to calculate the median skilled and unskilled "real" wages. In Figure 2, I plot real wages against log population density. As expected, I find that skilled workers earn higher real wages in denser congressional districts and states. The same does not hold true for unskilled workers, who actually earn lower real wages in denser congressional districts.

These geographic differences in real wages are a source of spatial "skill sorting" in advanced countries. For example, Lindley and Machin find evidence of "increased spatial concentration of more educated workers" in US metropolitan statistical areas between 1980 and 2010.[48] Relatedly, Diamond finds that American "cities which became disproportionately productive for high skill workers attracted a larger share of skilled workers … driving up local rents … Low skill workers were less willing to pay the 'price' of a lower real wage … leading them to prefer more affordable … locations."[49] In Canada, because of "the interprovincial migration process, human capital is redistributed from the more rural to the predominantly urban provinces."[50]

46. See, for example, Lindley and Machin 2014.

47. Autor 2019, 1.

48. Lindley and Machin 2014, 131. While there is evidence that internal migration in the United States has fallen, it is not the level of internal migration that matters for my argument, but the skill-and-location-biased nature of internal migration.

49. Diamond 2016, 479. Similarly, Ganong and Shoag find that the "divergence in the skill-specific returns to moving to high-income places" and rising costs of housing in high-productivity areas have deterred low-skill migration to high-productivity (high-rent and high-wage) areas. Ganong and Shoag 2017, 76.

50. Coulombe 2006, 199. Skilled workers are also sorting into high-density areas in advanced proportional representation democracies. In Spain, De la Roca 2017 finds that "migrants to big cities are positively selected in terms of education, occupational skills, and individual productivity." Other research finds evidence of skill sorting in Italy (Mion and Naticchioni 2009) and Sweden (Ahlin, Andersson, and Thulin 2018).

I now provide evidence that high-density constituencies have become disproportionately skilled in advanced plurality countries, starting with the United States. I calculate the "skill gap" between high- and low-density constituencies, which is the difference

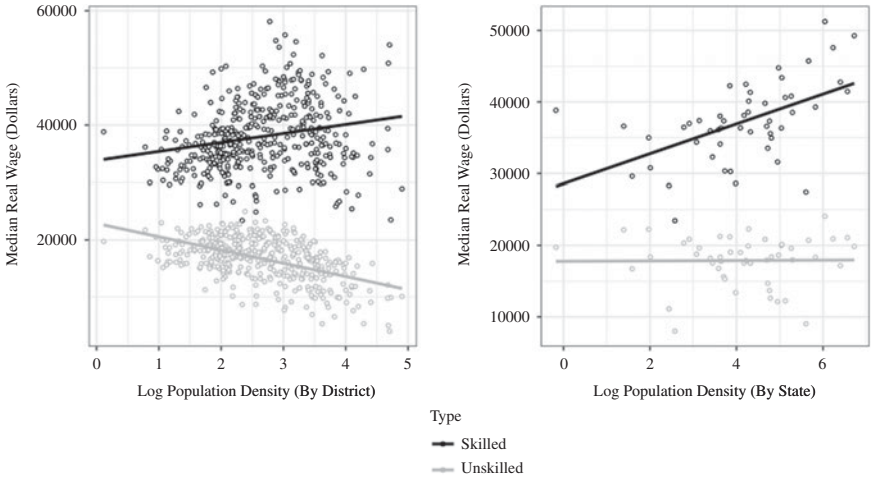

FIGURE 2. *In US states and congressional districts, there is a positive relationship between population density and skilled real wages*

between high- and low-density constituencies in average percent skilled (the percent of adults over twenty-five with a bachelor's degree or higher). In Figure 3, I plot this measure over time for both congressional districts and states, finding evidence of a strong positive time trend.[51] In 1990, high-density states were about as skilled as low-density states; by 2016, there was a substantial skill gap. The growing skill gaps between high- and low-density states and districts are not driven by outliers, as the skill gap between the median high-density constituency and the median low-density constituency exhibits the same positive time trend, as shown in the online supplement. It is true, however, that this skill gap has exhibited especially significant growth when comparing the densest and least dense constituencies. In 1990, the top 10 percent of congressional districts in terms of density were less than 1.5 percentage points more skilled than the bottom decile; by 2016, this skill gap had grown to almost 10.5 percentage points. This combination of "brain drain" from rural areas and skilled migration into dense areas has substantial implications for partisan constituencies, as Democrats controlled 93 percent of the densest decile of congressional districts in 2016, while Republicans controlled 87 percent of the least dense decile.

To isolate the mechanism of internal migration, I analyze data on county-to-county migration in the previous year (by level of educational attainment) from the five-year

51. I start with 1990 because I cannot access census data on district education levels before 1990.

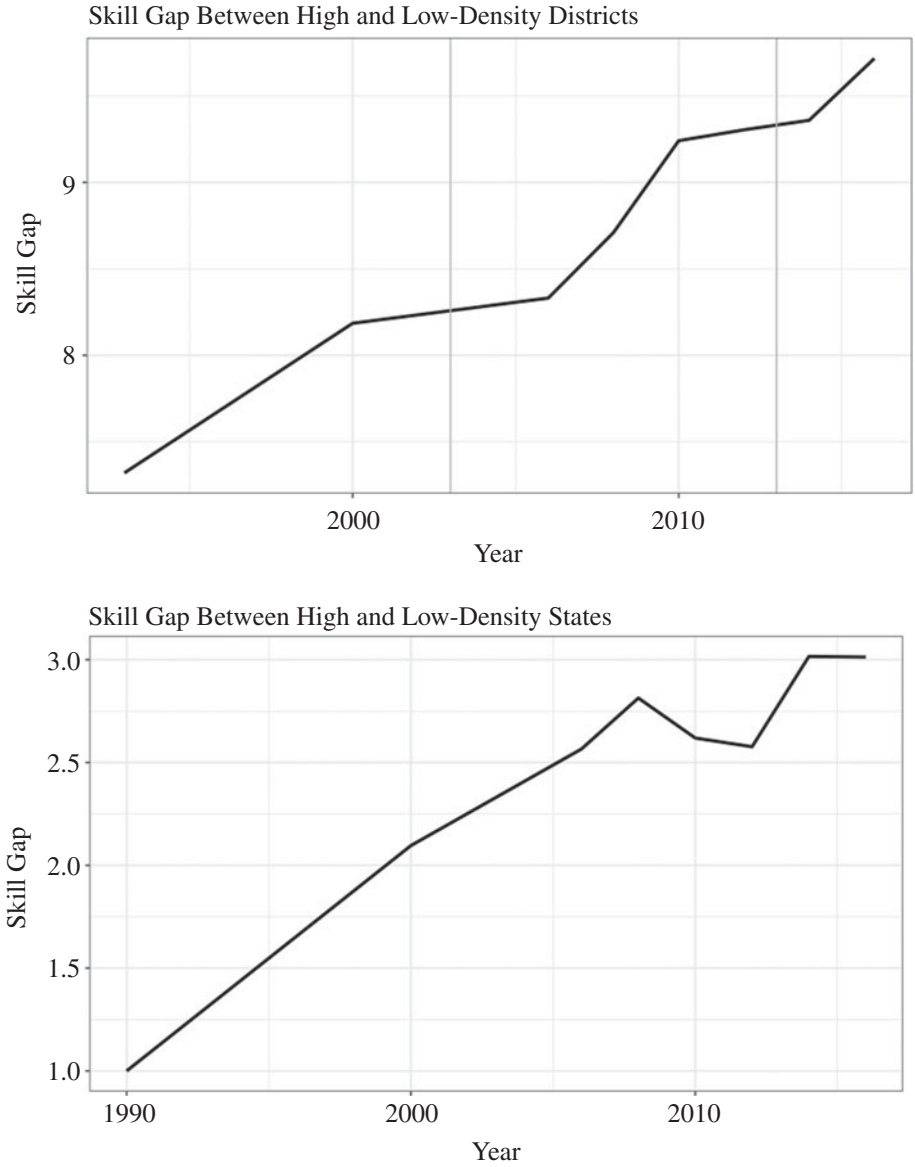

FIGURE 3. *The growing skill gap between high- and low-density constituencies in the United States in the House (top) and Senate (bottom)*

American Community Survey spanning 2007 to 2011 (this is the only period for which data on migration by educational attainment are available). As before, I code college and above as "skilled."[52] I match this migration data to population data from the same five-year American Community Survey sample to construct a "high-density" half and a "low-density" half. At both the congressional district and the state level, I calculate *net skilled migration* as the number of skilled in-migrants plus the number of unskilled out-migrants minus the number of skilled out-migrants minus the number of unskilled in-migrants. High-density constituencies disproportionately gained skilled workers from internal migration (Figure 4).

Finally, I examine whether high-density constituencies have become disproportionately skilled over time in the other advanced plurality countries. As before, I divide constituencies into a high-density top half and a low-density bottom half. I again calculate the average "skill gap" between high-density and low-density constituencies, but I now conduct this analysis for the Australian House of Representatives, the Canadian House of Commons, and the UK House of Commons, using the broadest data coverage available (2001, 2006, 2011, and 2016 for Canada; 2001 and 2011 for the United Kingdom; and 2011 and 2016 for Australia). I do in fact find evidence of a growing skill gap in these countries.

Modeling the Interaction of Political and Economic Geography

Having demonstrated evidence of an evolving economic geography and persistent political geography in advanced plurality countries, I now consider the interaction of political and economic geography in a formal theoretical framework. I combine two models: a game-theoretic model from political science and a spatial equilibrium model from economic geography. To capture the notion of self-interested incumbents catering to their local constituencies in a plurality system, I build on the basic framework of Snyder.[53] National party platforms are determined by self-interested party leaders who must cater to their particular (geographically defined) constituencies to win re-election.[54] This theoretical framework conceptualizes political parties as groups of office-seeking politicians, echoing Aldrich, who argued, "It is political leaders … *those who seek and those who hold elective office*—who are the central actors in the party."[55] To capture the dynamics of the internal migration of workers of different skill levels, I draw on the basic spatial equilibrium framework

52. Some counties are in multiple congressional districts. I allocate counties to congressional districts by weighting districts by their share of a county's population. The results are robust to weighting districts by their share of a county's territory instead.

53. Snyder 1994.

54. Incumbents cannot easily move between constituencies because there may be legal requirements for running for election in a particular place. Furthermore, incumbents may have organizational and reputational advantages in their own constituencies but not in others.

55. Aldrich 1995, 19–20, emphasis in the original. Similar views of parties can be found in other foundational analyses of party politics, such as those of Downs 1957 and Schlesinger 1994. For an alternative

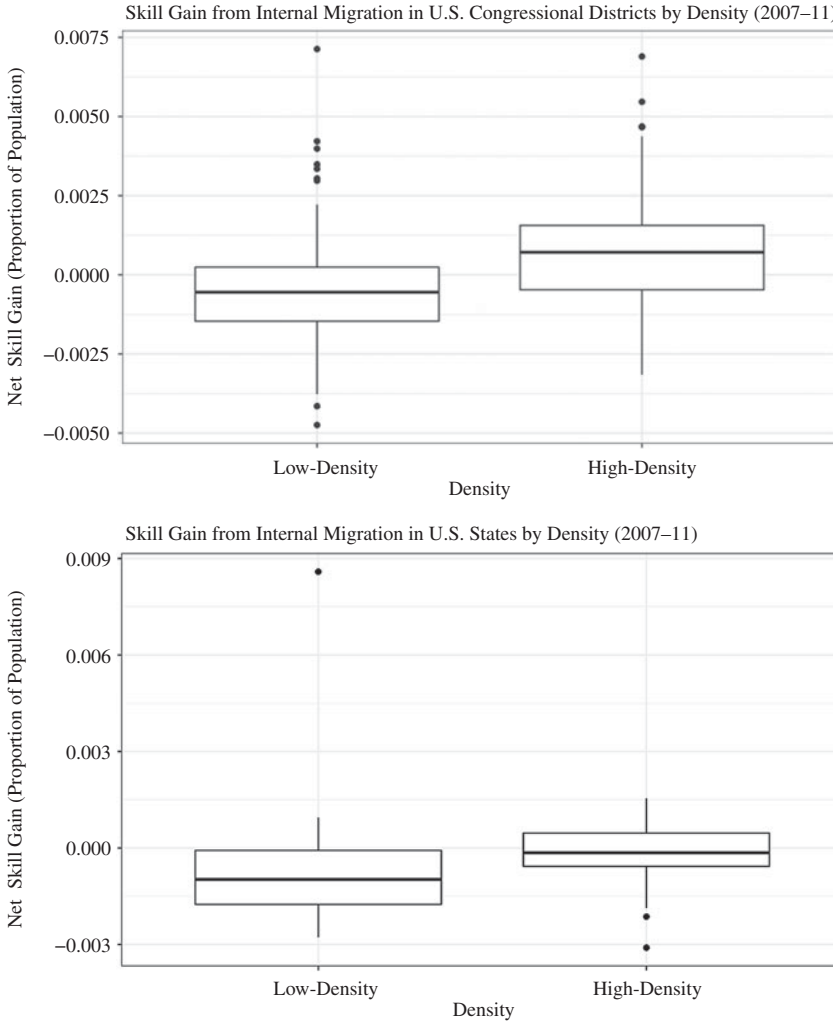

FIGURE 4. *High-density constituencies in the House (top) and Senate (bottom) have disproportionately gained skilled workers due to internal migration*

of Moretti.[56] The model generates predictions about the relative skill of Right-controlled constituencies over time, as well as the relative positioning of Right parties on trade and the relative popularity of Right parties with college-educated voters.

view of parties (the UCLA school), see Cohen et al. 2009; for a critique of that view, see McCarty and Schickler 2018.

56. Moretti 2011. The spatial equilibrium framework was initially explored by Rosen 1979 and Roback 1982.

The model also presents the conditions for a partisan realignment on trade and for a voter realignment by skill level. Combining these models allows me to unify economic and political geography into one theoretical framework—and ultimately to tease out the political implications of an endogenously evolving "spatial economy."[57] I argue that migration-induced changes in the demographics (and thus, the preferences) of partisan constituencies yield shifts in party positioning.[58]

The Political System

I first consider the political system. There are two constituencies within the political system which begin with the same population but differ in land area. We call the lower-density constituency a and the higher-density constituency b. In each constituency, there are legislative candidates from the Left (L) and the Right (R) parties. Candidate P_c of party $P \in (L, R)$ competes in constituency $c \in (a, b)$ in election period $t \in (1, 2)$. At the beginning of the game ($t = 1$), the incumbent in constituency b is L_b, while the incumbent in constituency a is R_a; this initial condition operationalizes the historical relationship between population density and Left voting in advanced plurality countries. The game begins in autarky. Ahead of each election, incumbents take positions on tariff policy. Tariff policy is assumed to be pliable, that is, a policy dimension in which parties are open to changing their policies in response to electoral incentives.[59] I refer to the tariff position adopted by the Left member of the legislature in period 1 as τ_{L1}, while the tariff position adopted by the Right incumbent is τ_{R1}. Challengers are not strategic actors; they are associated with their "party brand," that is, with the position taken by their co-partisan legislator in that election period.

In each constituency, the candidate who wins the majority of votes wins the election; formally, a candidate in constituency c must win the vote of the median voter in constituency c, m_c. Voters are not strategic, and simply vote for the candidate in their constituency whose party's platform is closest to their ideal tariff policy. If m_c prefers tariff τ_{m_c}, L_c wins the constituency if $|\tau_L - \tau_{m_c}| < |\tau_R - \tau_{m_c}|$, and R_c wins if $|\tau_R - \tau_{m_c}| < |\tau_L - \tau_{m_c}|$. Ties occur with zero probability, as I assume that incumbents win if their platform positions are the same (incumbency advantage).[60]

57. In a proportional-representation system without districts, like the Netherlands or Israel, an evolving economic geography would not yield clear changes in political incentives.

58. While the analysis in this paper focuses on trade policy realignment, there may be other cases in which internal migration in a political system where politicians cater to local constituencies can have important consequences for political positioning. Future research can consider the political consequences of other instances of internal migration, such as the Great Migration of African Americans from rural areas in the South to northern cities.

59. These differ from fixed policies, which might include redistribution or other domestic policy issues. For more on this distinction, see Grossman and Helpman 1996.

60. On the incumbency advantage see, for example, Gelman and King 1990 for evidence from the United States and Kendall and Rekkas 2012 for evidence from Canada.

The Spatial Economy

I now introduce the spatial economy. There are S skilled workers and U unskilled workers. θ_c is the number of workers of type $\theta \in (S, U)$ in constituency c. Each worker's utility is their real wage, which is their skill- and constituency-specific nominal wage $W_{\theta c}$ for skill type $\theta \in (S, U)$ and constituency $c \in (a, b)$ minus their constituency-specific cost of rent ρ_c.[61] Workers of each skill type seek to maximize their real wage; migration occurs until workers of each skill type are indifferent between living in constituency a and constituency b (spatial equilibrium).[62] Formally, this means $W_{\theta b} - \rho_b = W_{\theta a} - \rho_a$ in equilibrium.[63]

Wages for skill type θ in constituency c are increasing in labor productivity $X_{\theta c}$ and decreasing in the number of workers of the same skill type in their constituency, θ_c ($W_{\theta c} = X_{\theta c} - \theta_c$).[64] I assume the price of rent in constituency c is directly proportional to the number of people living in constituency c ($\rho_c = S_c + U_c$).[65]

Trade

Following each election, Nature chooses either constituency a or constituency b as the "median constituency." The party P that wins the median constituency in election period t sets nationwide government tariff policy $\tau_{Gt} = \tau_{Pt} \in [0, 1]$, where $\tau_G = 1$ indicates autarky and $\tau_G = 0$, free trade.[66] Starting from autarky, trade boosts the productivity of skilled labor in the high-density constituency (X_{Sb})

61. There is no commuting in the model, which may be a realistic assumption given the size of electoral constituencies. There is also no home ownership in the model; while this is not a realistic assumption, including home ownership is unnecessary to show the interesting spatial dynamics of the model. Furthermore, one can think of the rent parameter ρ_c as a proxy for the general cost of living in constituency c; Moretti 2013 finds that rising housing costs (in US metropolitan statistical areas) are associated with increases in the cost of local services.

62. I am assuming away moving costs in this analysis; though migration costs would reduce the total level of internal migration, the direction of migration would not change. None of the results of the model depend on a particular level of population movement, only on the direction of skilled and unskilled migration.

63. See Kennan and Walker 2011 for evidence that individuals migrate in response to economic incentives.

64. I assume $X_{Sc} > X_{Uc} > 1$ such that wages are never negative.

65. This simple equation captures the positive relationship between demand for housing and the price of housing (assuming imperfectly elastic housing supply); I chose this linear functional form for reasons of parsimony, but it is not necessary for the main results.

66. For simplicity, I do not include the World Trade Organization in the model. Though all of the advanced plurality democracies in my sample are in the WTO, they often apply tariff rates below the WTO's most favored nation (MFN) rates, suggesting that they can increase tariffs from those levels without violating WTO rules. For example, according to the WTO's *World Tariff Profiles 2017* report, Australia applies a lower MFN tariff rate (2.5 percent) than the bound rate (9.9 percent) on all products; the same can be said for Canada (4.1 percent average applied MFN tariff rate, 6.5 percent bound rate). Furthermore, Rosendorff 2005 notes that there are institutional mechanisms allowing states to temporarily suspend compliance with international trade law in times of intense domestic political support for protectionism. The ongoing trade war between the United States and China following the implementation of

intertemporally: $X_{Sb2} = X_{Sb1} + (1 - \tau_{G1})\Delta$, with $\Delta > 0$. In line with empirical evidence (and consistent with their utility functions), I assume unskilled voters are more protectionist than skilled voters. However, I allow for some heterogeneity among voters of each skill type, and assume that skilled voters have tariff preferences $\tau_S \sim U(0, 0.5)$ and unskilled voters have preferences $\tau_U \sim U(0.5, 1)$.[67]

Stage Game

The stage game in period t is as follows.

1. Incumbents set party platforms τ_{Lt} and τ_{Rt}.
2. Elections are held.
3. Nature chooses either a or b as the median constituency.
4. Party P in control of the median constituency implements tariff policy $\tau_{Gt} = \tau_{Pt}$.

Between $t = 1$ and $t = 2$, workers relocate across constituencies to maximize their expected utility (until spatial equilibrium is achieved).

Equilibrium Solution

Because there are many possible Nash equilibria of this game, I focus on the "trembling hand perfect equilibrium,"[68] which allows players to make mistakes and to play any strategy (in this case, for incumbents to choose any party platform) with positive probability. This refinement allows me to compute a unique equilibrium, rather than choosing among many possible equilibria. For example, the Right incumbent can choose any τ_R that is better for the median voter in constituency a than the τ_L chosen by the Left incumbent; in this case, there would be many possible equilibrium values of τ_R. However, the trembling-hand refinement allows any tariff platform to be played by the Left incumbent with positive probability—in this case, the only optimal strategy for the Right incumbent is to match the low-density constituency's median preference, τ_{ma}. In period 1, we have the equilibrium tariff positions $\tau_{L1*} = \tau_{m_b1}$ and $\tau_{R1*} = \tau_{m_a1}$. By the same logic, we have $\tau_{L2*} = \tau_{m_b2}$ and $\tau_{R2*} = \tau_{m_a2}$. It is therefore a strictly dominant strategy for incumbents to position at their own constituencies' median tariff positions—otherwise, there is a positive probability of losing their seats. Because incumbents cater to their constituencies' median voters, challengers from both parties lose their elections in each period—political geography persists across periods.

tariffs by the Trump administration casts further doubt on the ability of the WTO to insulate trade from protectionist pressures in domestic politics.

67. This assumption allows for continuous platform change in the model, rather than discontinuous shifts in party positioning.

68. Selten 1988.

The function M maps the skill ratio of a constituency to its median tariff preference; formally, $M\left(\frac{S_c}{U_c}\right) = \tau_{m_c}$, where M is a decreasing function (more skilled demographics mean the median voter prefers a lower tariff). If all the voters in a constituency are skilled, the median tariff preference would be $\frac{1}{4}$, because skilled voter preferences are uniformly distributed between 0 and 0.5, yielding 0.25 in expectation. If there are equal numbers of skilled and unskilled, the median tariff preference would be 0.5 (because unskilled voter preferences are uniformly distributed between 0.5 and 1), and if all the voters in a constituency are unskilled, the median tariff preference would be 0.75. If there are more skilled than unskilled ($S_c \geq U_c$), the median voter's preference would be $\frac{S_c+U_c}{4S_c}$ (this yields $\frac{1}{4}$, or 0.25, when $U_c = 0$, and if $S_c = U_c$, then the equation yields $\frac{1}{2}$, or 0.5, as expected). If there are more unskilled voters than skilled in a constituency ($U_c \geq S_c$), the median voter's tariff preference is $1 - \left(\frac{S_c+U_c}{4U_c}\right) = \frac{3U_c-S_c}{4U_c}$ (which equals $\frac{3}{4}$, or 0.75, when $S_c = 0$ and $\frac{1}{2}$, or 0.5, when $S_c = U_c$, as expected).

We therefore have that if $U_c > S_c$, then $M\left(\frac{S_c}{U_c}\right) = \tau_{m_c} = \frac{3U_c-S_c}{4U_c}$, and if $U_c < S_c$, then $M\left(\frac{S_c}{U_c}\right) = \tau_{m_c} = \frac{U_c+S_c}{4S_c}$. The particular equilibrium values of $\tau_{Lt*} = \tau_{m_b t}$ and $\tau_{Rt*} = \tau_{m_a t}$ therefore depend on the initial spatial distribution of skilled and unskilled workers, as well as government tariff policy (which influences the spatial distribution of workers in period 2).

Comparative Statics

Relative Skill of Right Constituencies

Increasing skilled productivity in the high-density constituency by $(1 - \tau_{G1})\Delta$ yields skilled migration to b and unskilled migration to a. Because $X_{Sb2} = X_{Sb1} + (1 - \tau_{G1})\Delta$, $S_{a2} = S_{a1} - \frac{4(1-\tau_{G1})\Delta}{12}$, $S_{b2} = S_{b1} + \frac{4(1-\tau_{G1})\Delta}{12}$, $U_{a2} = U_{a1} + \frac{2(1-\tau_{G1})\Delta}{12}$, and $U_{b2} = U_{b1} - \frac{2(1-\tau_{G1})\Delta}{12}$. Because $\Delta > 0$, $\frac{S_{b2}}{U_{b2}} > \frac{S_{b1}}{U_{b1}}$ and $\frac{S_{a2}}{U_{a2}} < \frac{S_{a1}}{U_{a1}}$.[69] The proof is given in the online supplement.

Relative Protectionism of the Right

We now assess the intertemporal change in relative party positions on tariffs. Because M is a decreasing function, and $\frac{S_{b2}}{U_{b2}} > \frac{S_{b1}}{U_{b1}}$, $\tau_{l2} = \tau_{mb2} = M\left(\frac{S_{b2}}{U_{b2}}\right) < M\left(\frac{S_{b1}}{U_{b1}}\right) = \tau_{mb1} = \tau_{l1}$. The same argument shows that $\tau_{R2} > \tau_{R1}$.

Define the *relative protectionism of the Right* in period t as $\tau_{Rt} - \tau_{Lt}$. Because $\tau_{R2} > \tau_{R1}$ and $\tau_{L2} < \tau_{L1}$, $(\tau_{R2} - \tau_{L2}) > (\tau_{R1} - \tau_{L1})$. The relative protectionism of the Right

69. It is also worth noting that $U_{b2} + S_{b2} > U_{b1} + S_{b1}$ and $U_{a2} + S_{a2} < U_{a1} + S_{a1}$. We therefore know that trade exposure causes the high-density constituency to gain population and the low-density constituency to lose population, so we do not need to worry about the constituencies "changing types" (i.e., a low-density constituency becoming more dense or a high-density constituency becoming less dense).

therefore rises over time. In the special case where the low-density constituency is relatively skilled at the beginning of the game but becomes relatively unskilled by the end of the game ($\frac{S_{a1}}{U_{a1}} > \frac{S_{b1}}{U_{b1}}$ and $\frac{S_{a2}}{U_{a2}} < \frac{S_{b2}}{U_{b2}}$), there is a "partisan realignment on trade": $\tau_{L1} > \tau_{R1}$ and $\tau_{L2} < \tau_{R2}$.[70]

Relative Skill of Right Voters

θ_{Pt} is the number of workers of type θ that vote for party P in period t. Define the *relative skill of Right voters* as $\frac{S_R - S_L}{S} - \left(\frac{U_R - U_L}{U}\right)$. Because the relative protectionism of the Right declines $(\tau_{R2} - \tau_{L2}) > (\tau_{R1} - \tau_{L1})$, the relative skill of Right voters declines as well: $\frac{S_{R2} - S_{L2}}{S} - \left(\frac{U_{R2} - U_{L2}}{U}\right) < \frac{S_{R1} - S_{L1}}{S} - \left(\frac{U_{R1} - U_{L1}}{U}\right)$. In the special case where there is a partisan realignment on trade ($\tau_{L1} > \tau_{R1}$ and $\tau_{L2} < \tau_{R2}$), there is a voter realignment by skill level: $\frac{S_{R1}}{U_{R1}} > \frac{S_{L1}}{U_{L1}}$ and $\frac{S_{R2}}{U_{R2}} < \frac{S_{L2}}{U_{L2}}$.

Propositions

From these results, I derive three propositions:

Proposition 1. As a result of internal migration and persistent political geography, the relative skill of Right constituencies *declines between periods.*

Proposition 2. As the relative skill of Right constituencies declines, the relative protectionism of the Right *rises*.

Proposition 3. As a result of the rising relative protectionism of the Right, the relative skill of Right voters *declines*.

In summary, I embed a spatial equilibrium framework within a game-theoretic model of party platform setting by re-election-driven incumbents. Trade exposure causes the high-density constituency to become more skilled, while the low-density constituency becomes less skilled. In response to changing constituency demographics, the Left incumbent adopts a more pro-trade platform than before, while the Right platform becomes increasingly protectionist. Finally, intertemporal changes in party platforms drive skilled voters toward the Left and make unskilled voters more likely to vote for the Right. If a partisan realignment on trade occurs, then a voter realignment takes place as well.[71]

Empirical Analysis

Relative Skill of Right Constituencies

I now turn to examining the empirical evidence for the predictions of the model, starting with Proposition 1. I first undertake a quantitative case study of the United States,

70. Formally, $M\left(\frac{S_{a1}}{U_{a1}}\right) < M\left(\frac{S_{b1}}{U_{b1}}\right)$ and $M\left(\frac{S_{a2}}{U_{a2}}\right) > M\left(\frac{S_{b2}}{U_{b2}}\right)$.

71. Proofs of Propositions 1 and 2 are in the online supplement; Proposition 3 follows trivially from Proposition 2.

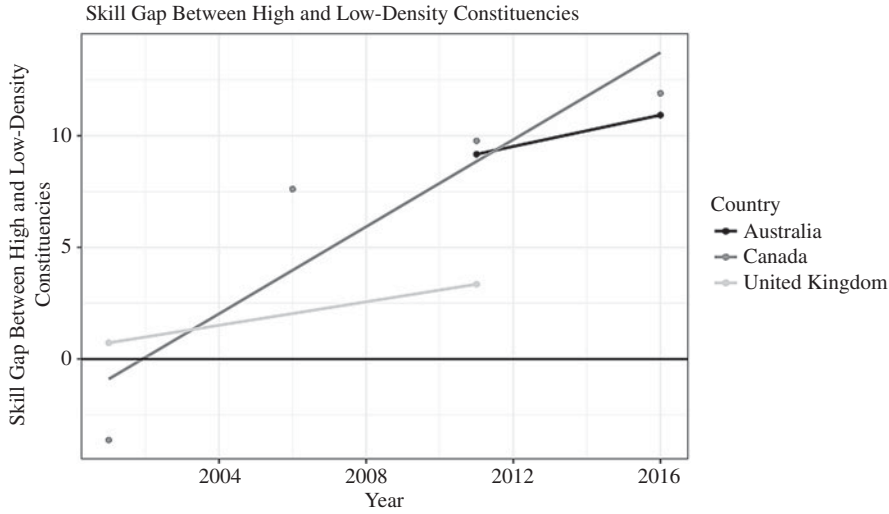

FIGURE 5. *The growing skill gap between high- and low-density constituencies in Australia, Canada, and the United Kingdom*

which has the broadest data coverage for population density, internal migration, and percent college educated of all the countries in the sample. After finding strong support for the model in the United States, I extend my analysis to other advanced plurality countries.

Given that the relationship between population density and Democratic political control has persisted, an increasing relationship between population density and percent college educated should result in Democratic constituencies that are increasingly skilled (and Republican districts that are comparatively less skilled). As before, I match data from the US census (1990 and 2000) and the American Community Survey (2006, 2008, 2010, 2012, 2014, and 2016) with data from VoteView on members of Congress to examine the skill levels of Republican and Democratic districts over time (Figure 6). I find that the median Republican-controlled district was more skilled than the median Democratic district in 1990, but Republican districts are now less skilled, and this gap has grown since 2006.[72] The same result holds when analyzing the mean district, rather than the median (see the online supplement). I perform the same analysis for the US Senate, and I find that in 1990 the median Republican Senate constituency was more educated than the median Democratic Senate constituency; but for the last two decades,

72. Gray lines indicate years in which there was redistricting.

Democratic Senate constituencies have been relatively more skilled than those controlled by Republicans.[73]

To negate the concern that changes in relative skill levels are due to changes in the types of constituencies each party controls (rather than through demographic change in continuously held constituencies), in the online supplement I subset to constituencies held by each party throughout the whole period (for the House of Representatives, I must account not only for selection but also for redistricting). Continuously held Republican constituencies became relatively less skilled than continuously held Democratic constituencies over time.

To isolate the mechanism of internal migration, I again analyze data on county-to-county migration in the previous year (by level of educational attainment) from the five-year American Community Survey spanning 2007 to 2011. As before, I code college and above as "skilled," and calculate *net skilled migration* as the number of skilled in-migrants plus the number of unskilled out-migrants minus the number of skilled out-migrants minus the number of unskilled in-migrants at both the congressional district and the state level.

I then assess whether Democratic (Republican) constituencies have gained (lost) skilled workers due to internal migration. I subset to House and Senate constituencies that were held by the same party throughout the whole period. Democratic constituencies disproportionately gained college-educated voters via internal migration (Figure 7).

Finally, I examine cross-nationally whether Left-controlled constituencies have become relatively more skilled over time in the Australian House of Representatives, the Canadian House of Commons, and the UK House of Commons. I measure the *relative skill of Right constituencies*, which is the difference between the skill level of the median constituency controlled by the Right and the skill level of the median constituency controlled by the Left. I expect this variable to trend in a negative direction over time as high-density Left constituencies become disproportionately more skilled through internal migration.

The plot (Figure 8) shows the relative skill of Right constituencies in Australia, Canada, and the United Kingdom; values over the black line indicate that Right constituencies are relatively more skilled. The data coverage is the same as the plots before showing an increasing skill gap between high- and low-density constituencies. The relative skill of Right constituencies has sharply declined in Canada: Right constituencies were relatively skilled in 2001, but were relatively unskilled by 2006. In the United Kingdom, the relative skill of Right constituencies declined between 2001 and 2011, though values were positive in both years. As before, the data coverage for Australia includes only 2011 and 2016, but we see little evidence of change in the relative skill of Right constituencies (though the data coverage is only very recent).

73. In both chambers of the American legislature, Right constituencies were initially more skilled, and are now less skilled; in the model, this shift is the key theoretical condition for a partisan realignment on trade.

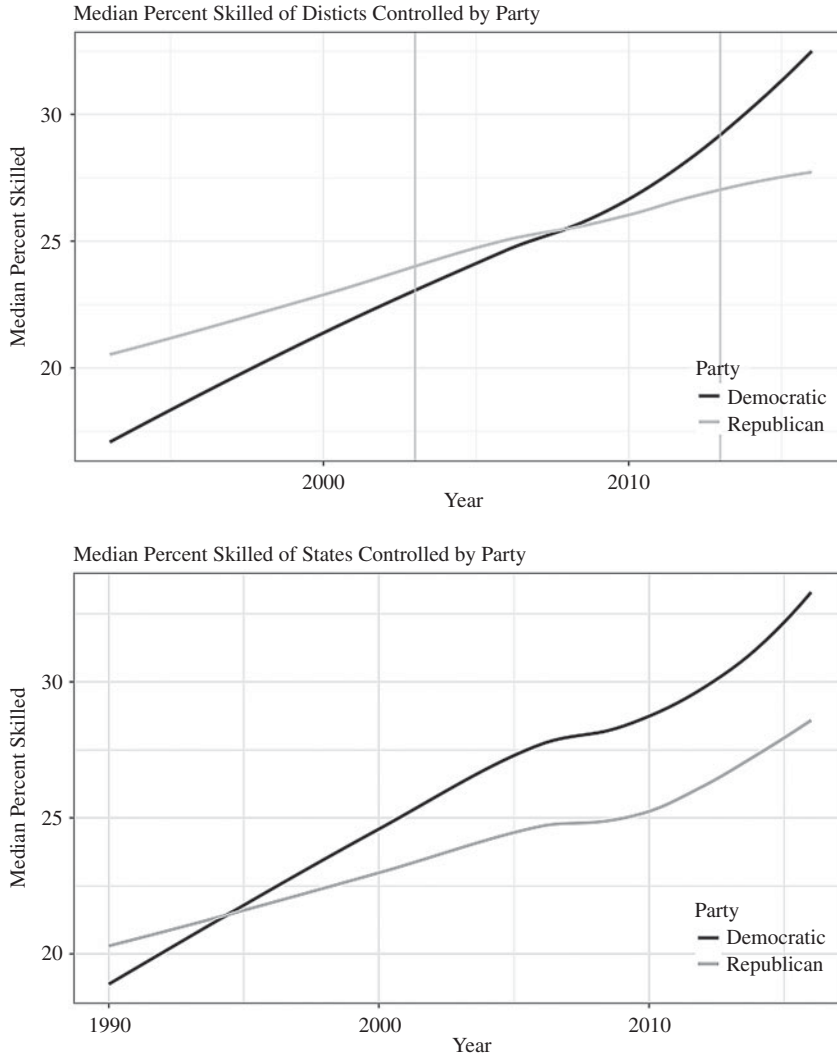

FIGURE 6. *Median percent skilled of constituencies in the House (top) and Senate (bottom) by party in control. Democratic constituencies are now more skilled than Republican constituencies*

These cross-national differences may result from differences in political and economic geography: in Canada, only a fifth to a third of Right party constituencies were high density (as shown in Table 3), but in Australia about 45 percent of Right constituencies are high density. Furthermore, Figure 5 reveals a rapidly growing skill gap between high- and low-density Canadian constituencies; this gap does not appear to be growing as fast in Australia.

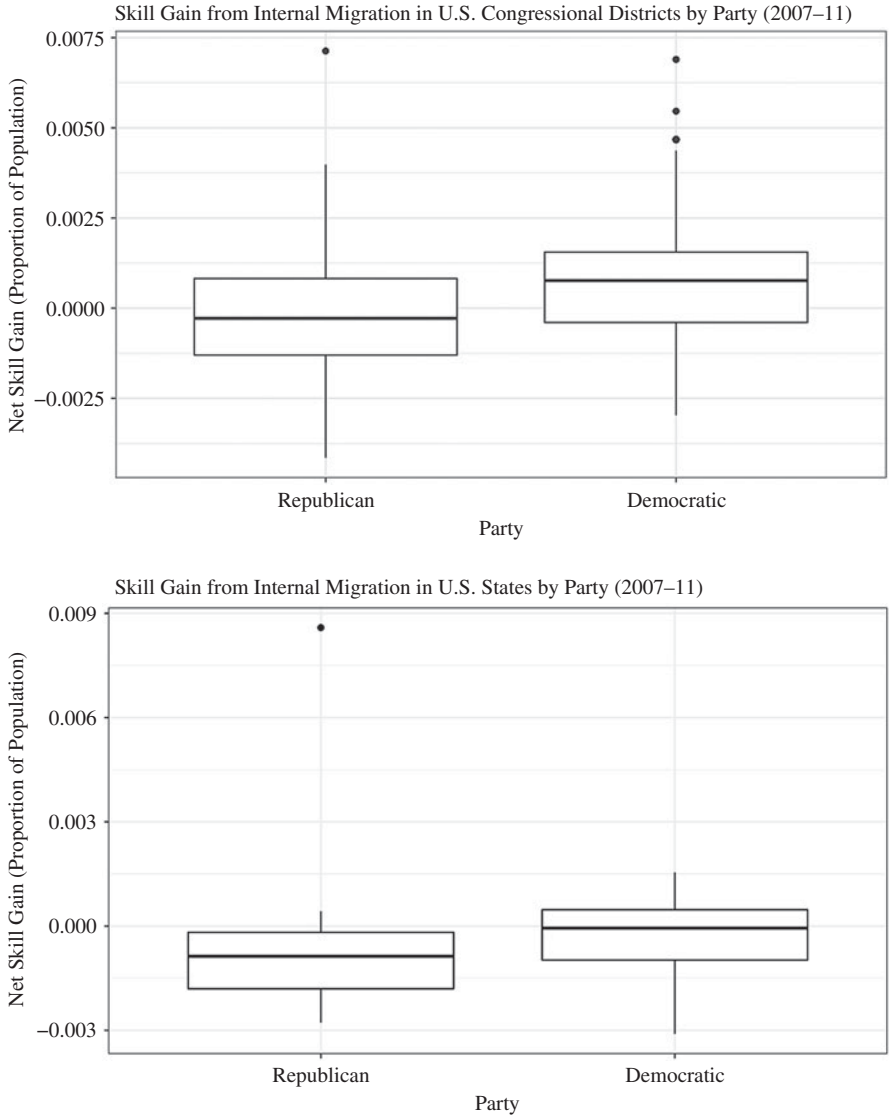

FIGURE 7. *Net skill gain from internal migration in the House (top) and Senate (bottom) by party. Democratic constituencies have disproportionately gained skilled constituents through internal migration*

Relative Protectionism of the Right

I now examine the empirical evidence for Proposition 2 in Australia, Canada, the United Kingdom, and the United States between 1985 and

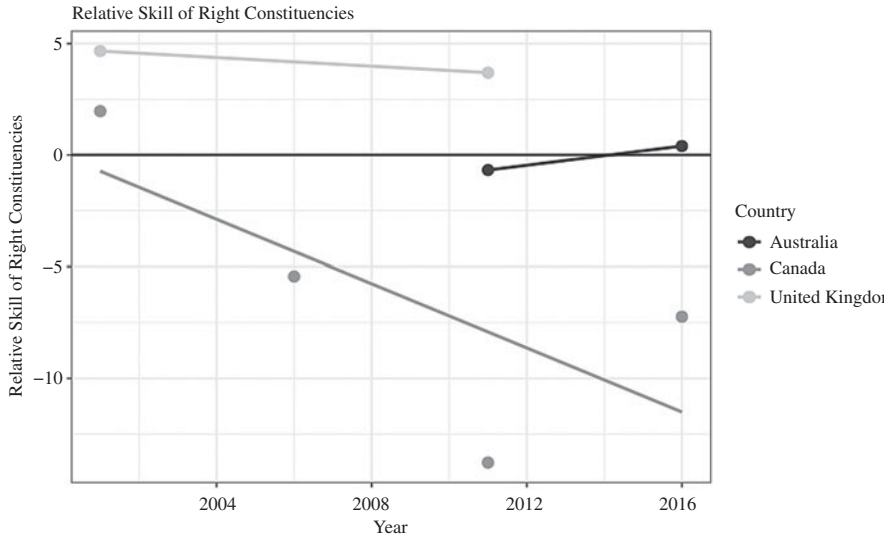

FIGURE 8. *Right-controlled constituencies have disproportionately lost university-educated constituents in Canada and the United Kingdom, though there is little recent change in Australia*

2015.[74] I measure parties' support for tariffs in a given election year by taking a Manifesto Project[75] measure of favorable mentions of protectionism in a party's platform and subtracting from it a measure of unfavorable mentions of protectionism.[76] To assess whether there is evidence of an emerging partisan realignment on trade, I measure the relative protectionism of the Right in each country-election year by subtracting the major Left party's *support for tariffs* value from the major Right party's value (i.e., for the United States in 1988, the relative protectionism of the Right is the Republicans' 1988 support for tariffs minus the Democrats' 1988 support for tariffs).

I focus on the relative positioning of the parties, rather than their absolute positioning, because my Downsian model of electoral competition assumes that relative positioning drives electoral outcomes. As Karol writes, "Politicians do not adopt stances in a vacuum. They care greatly about where a stand situates them vis-à-vis the other

74. The Right parties in my sample include the Republican Party in the United States, the Conservative Party in the United Kingdom, the Progressive Conservative Party in Canada from 1988 to 2000, the Conservative Party in Canada from 2004 to 2011, and the Liberal Party in Australia. The Left parties in the sample are the Democratic Party in the United States, Labour in the United Kingdom, the Liberal Party in Canada, and Labor in Australia.

75. See Volkens et al. 2018 for more on the Manifesto Project data.

76. This is Manifesto Project variable *per406* minus *per407*.

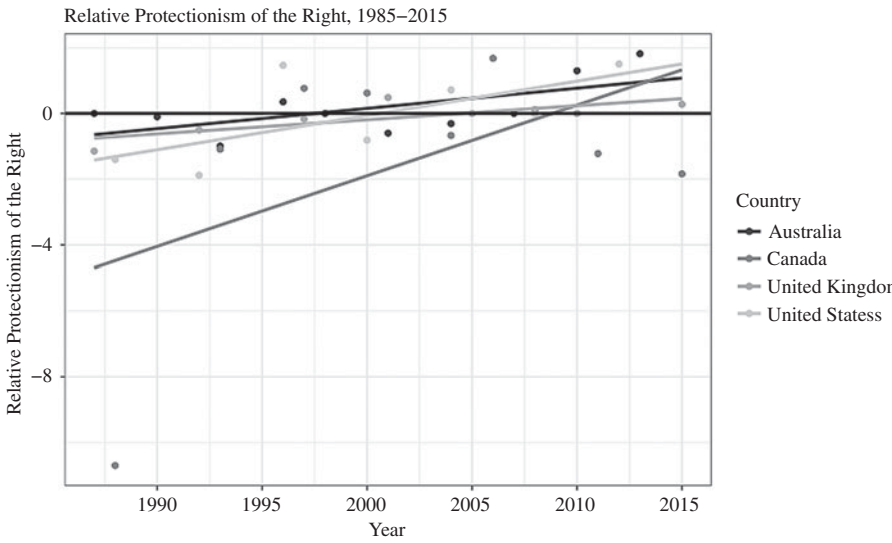

FIGURE 9. *The relative protectionism of Right parties has increased over time, especially in Canada*

party … Parties' relative proximity to voters is key, not their absolute distance from them."[77]

Figure 9 shows that in the 1980s most relative protectionism measures were negative, indicating relatively pro-trade Right parties; in the 2000s, most values are positive, indicating partisan realignments on trade. This trend is positive and statistically significant (see the online supplement). I also demonstrate there that the positive trend in the relative protectionism of the Right is robust to excluding the Canada 1988 outlier. I therefore demonstrate that Right parties in advanced plurality countries have become more protectionist over the last three decades, as predicted by the model.

Relative Skill of Right Voters

Finally, I assess whether there is empirical support for Proposition 3. To analyze trends in voting by skill level, I rely on post-electoral survey data. I divide each

77. Karol 2009, 10. Karol also notes that "there is no necessary connection between movement of the debate on an issue and change in the parties' relative positions … When the Cold War ended both parties favored reduced defense budgets, but Republicans remained relatively more supportive of military spending than Democrats." Furthermore, "Parties can also move in the same direction at different rates, altering their relative positions … When the GOP became the more conservative party on race in the 1960s it was still more supportive of racial equality in an absolute sense than either party had been for most of US history."

country's sample into voters with university education and above ("skilled") and those without ("unskilled"), and calculate the percentage of each voter type that supported the major Left (Right) candidate in their constituency's legislative election (I exclude survey respondents who did not vote).[78] I first calculate the *skill gap in voting,* which is the percentage of college-educated voters supporting a party minus the percentage of less educated voters turning out for the party. Positive (negative) values indicate that a party is more popular with college-educated (less educated) voters. I then subtract the major Left party's value of this measure from the Right's to generate the *relative skill of Right voters.* This measure is positive if the Right's electorate is more college-educated than the Left's, and negative if the Left's base of support is relatively more educated. The relative skill of Right voters has declined in all four countries (Figure 10). I examine the time trend for this measure in the online supplement, finding a negative and significant time trend in the relative skill of Right voters.

I therefore find empirical support for all predictions of my model; as the relative skill of Right constituencies declines, the relative protectionism of Right parties rises. The emergence of an increasingly protectionist Right coincides with a decline in the relative skill of Right voters.

Conclusion

Over the last three decades, two puzzling realignments have taken place in advanced plurality countries. Initially protectionist Left parties have increasingly become proponents of free trade, while formerly pro-trade Right parties have moved toward protectionism. At the same time, the Right has lost its appeal among college-educated citizens. The Left has gained these voters, at the expense of losing support among less educated voters. In this paper, I offer a formal theoretical framework for understanding these developments. Drawing on research in economic and political geography, I argue that exposure to trade causes skilled workers to move from low-density constituencies controlled by Right incumbents to high-density constituencies controlled by the Left. As the relative skill of Right constituencies decreases, the relative protectionism of the Right rises, yielding a corresponding decline in the relative skill of Right voters.

My research provides new causes for concern for the already embattled proponents of globalization in advanced countries. Rodden shows that advanced plurality systems are biased against urban citizens; as skilled workers sort into cities, the political power of globalization supporters will continue to wane, dimming the prospects for continued global economic integration.[79] Ultimately, my findings show the

78. To measure voter behavior, I use the American National Election Study, as well as the Australian, Canadian, and British Election Studies. In the United States, I assess voting for members of the House.
79. Rodden 2019.

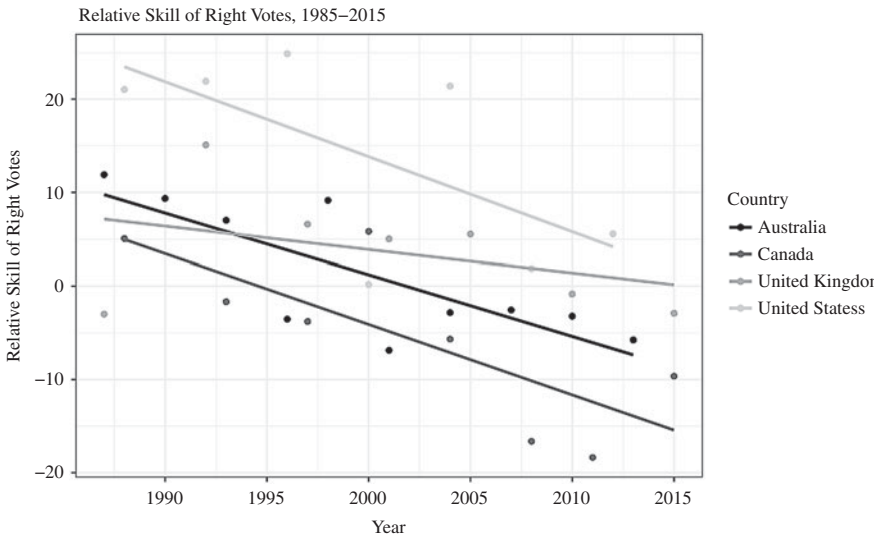

FIGURE 10. *The relative skill of Right voters has decreased over time in all four countries*

importance of economic geography not only for domestic electoral politics, but also for the international political economy. Future studies should further probe the political consequences of an ever-evolving spatial economy.

Data Availability Statement

Replication files for this article may be found at <https://doi.org/10.7910/DVN/YNVYO2>.

Supplementary Material

Supplementary material for this article is available at <https://doi.org/10.1017/S0020818321000217>.

References

Adams, Greg D. 1997. Abortion: Evidence of an Issue Evolution. *American Journal of Political Science* 41 (3):718–37.

Ahlin, Lina, Martin Andersson, and Per Thulin. 2018. Human Capital Sorting: The "When" and "Who" of the Sorting of Talents to Urban Regions. *Journal of Regional Science* 58 (3):581–610.

Aldrich, John H. 1995. *Why Parties? The Origin and Transformation of Political Parties in America*. University of Chicago Press.
Ansolabehere, Stephen, and Philip Edward Jones. 2010. Constituents' Responses to Congressional Roll-Call Voting. *American Journal of Political Science* 54 (3):583–97.
Autor, David. 2016. Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure. NBER Working Paper w22637. <https://www.nber.org/papers/w22637>.
Autor, David. 2019. Work of the Past, Work of the Future. NBER Working Paper w25588. <https://www.nber.org/papers/w25588>.
Bailey, Michael. 2001. Quiet Influence: The Representation of Diffuse Interests on Trade Policy, 1983–94. *Legislative Studies Quarterly* 26 (1):45–80.
Ballard-Rosa, Cameron, Mashail Malik, Stephanie Rickard, and Kenneth Scheve. Forthcoming. The Economic Origins of Authoritarian Values: Evidence from Local Trade Shocks in Great Britain. *Comparative Political Studies*.
Beck, Paul Allen. 1977. Partisan Dealignment in the Postwar South. *American Political Science Review* 71 (2):477–96.
Brown, Thad A. 1988. *Migration and Politics: The Impact of Population Mobility on American Voting Behavior*. University of North Carolina Press.
Burgoon, Brian. 2009. Globalization and Backlash: Polayni's Revenge? *Review of International Political Economy* 16 (2):145–77.
Campbell, Bruce A. 1977. Change in the Southern Electorate. *American Journal of Political Science* 21 (1): 37–64.
Canes-Wrone, Brandice, David W. Brady, and John F. Cogan. 2002. Out of Step, Out of Office: Electoral Accountability and House Members' Voting. *American Political Science Review* 96 (1):127–40.
Carmines, Edward G., and James A. Stimson. 1989. *Issue Evolution: Race and the Transformation of American Politics*. Princeton University Press.
Carsey, Thomas M., and Geoffrey C. Layman. 2006. Changing Sides or Changing Minds? Party Identification and Policy Preferences in the American Electorate. *American Journal of Political Science* 50 (2):464–77.
Caughey, Devin, and Christopher Warshaw. 2018. Policy Preferences and Policy Change: Dynamic Responsiveness in the American States, 1936–2014. *American Political Science Review* 112 (2):249–66.
Cerrato, Andrea, Federico Maria Ferrara, and Francesco Ruggieri. 2018. Why Does Import Competition Favor Republicans? Available at SSRN 3147169.
Cohen, Marty, David Karol, Hans Noel, and John Zaller. 2009. *The Party Decides: Presidential Nominations Before and After Reform*. University of Chicago Press.
Colantone, Italo, and Piero Stanig. 2018. The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe. *American Journal of Political Science* 62 (4):936–53.
Conconi, Paola, Giovanni Facchini, Max F. Steinhardt, and Maurizio Zanardi. 2020. The Political Economy of Trade and Migration: Evidence from the US Congress. *Economics and Politics* 32 (2):250–78.
Cook, Chris. 2010. *A Short History of the Liberal Party: The Road Back to Power*. Springer.
Coulombe, Serge. 2006. Internal Migration, Asymmetric Shocks, and Interprovincial Economic Adjustments in Canada. *International Regional Science Review* 29 (2):199–223.
Cox, Gary W. 1990. Centripetal and Centrifugal Incentives in Electoral Systems. *American Journal of Political Science* 34 (4): 903–35.
Curtis, Chris. 2017. How Britain Voted at the 2017 General Election. YouGov <https://yougov.co.uk/topics/politics/articles-reports/2017/06/13/how-britain-voted-2017-general-election>.
De la Roca, Jorge. 2017. Selection in Initial and Return Migration: Evidence from Moves Across Spanish Cities. *Journal of Urban Economics* 100:33–53.
Diamond, Rebecca. 2016. The Determinants and Welfare Implications of US Workers' Diverging Location Choices by Skill: 1980–2000. *American Economic Review* 106 (3):479–524.
Downs, Anthony. 1957. *An Economic Theory of Democracy*. Harper and Row.
Dutt, Pushan, and Devashish Mitra. 2005. Political Ideology and Endogenous Trade Policy: An Empirical Investigation. *Review of Economics and Statistics* 87 (1):59–72.

Evans, Geoffrey, and James Tilley. 2012. How Parties Shape Class Politics: Explaining the Decline of the Class Basis of Party Support. *British Journal of Political Science* 42 (1):137–61.
Ford, Robert, and Matthew J. Goodwin. 2014. *Revolt on the Right: Explaining Support for the Radical Right in Britain*. Routledge.
Fowler, Anthony. 2020. Partisan Intoxication or Policy Voting? *Quarterly Journal of Political Science* 15 (2):141–79.
Frendreis, John P. 1989. Migration as a Source of Changing Party Strength. *Social Science Quarterly* 70 (1):211.
Gaikwad, Nikhar, and Gareth Nellis. 2017. The Majority-Minority Divide in Attitudes Toward Internal Migration: Evidence from Mumbai. *American Journal of Political Science* 61 (2):456–72.
Gallego, Aina, Franz Buscha, Patrick Sturgis, and Daniel Oberski. 2016. Places and Preferences: A Longitudinal Analysis of Self-Selection and Contextual Effects. *British Journal of Political Science* 46 (3):529–50.
Ganong, Peter, and Daniel Shoag. 2017. Why Has Regional Income Convergence in the US Declined? *Journal of Urban Economics* 102:76–90.
Gelman, Andrew, and Gary King. 1990. Estimating Incumbency Advantage Without Bias. *American Journal of Political Science* 34 (4):1142–64.
Glaeser, Edward L., and Joshua D. Gottlieb. 2009. The Wealth of Cities: Agglomeration Economies and Spatial Equilibrium in the United States. *Journal of Economic Literature* 47 (4):983–1028.
Grossman, Gene M., and Elhanan Helpman. 1996. Electoral Competition and Special Interest Politics. *Review of Economic Studies* 63 (2):265–86.
Hainmueller, Jens, and Michael J. Hiscox. 2006. Learning to Love Globalization: Education and Individual Attitudes Toward International Trade. *International Organization* 60 (2):469–98.
Hakhverdian, Armen. 2010. Political Representation and Its Mechanisms: A Dynamic Left–Right Approach for the United Kingdom, 1976–2006. *British Journal of Political Science* 40 (4):835–56.
Karol, David. 2009. *Party Position Change in American Politics: Coalition Management*. Cambridge University Press.
Kendall, Chad, and Marie Rekkas. 2012. Incumbency Advantages in the Canadian Parliament. *Canadian Journal of Economics / Revue canadienne d'économique* 45 (4):1560–85.
Kennan, John, and James R. Walker. 2011. The Effect of Expected Income on Individual Migration Decisions. *Econometrica* 79 (1):211–51.
Kertzer, Joshua D., Stephen G. Brooks, and Deborah Jordan Brooks. 2017. Do Partisan Types Stop at the Water's Edge? Manuscript, Harvard University and Dartmouth College.
Kriesi, Hanspeter, Edgar Grande, Romain Lachat, Martin Dolezal, Simon Bornschier, and Timotheos Frey. 2006. Globalization and the Transformation of the National Political Space: Six European Countries Compared. *European Journal of Political Research* 45 (6):921–56.
Kuk, John, Deborah Seligsohn, and Jiakun Jack Zhang. 2018. The Partisan Divide in US Congressional Communications After the China Shock. Research Paper No. 2018-03, Twenty-first Century China Center, <https://ssrn.com/abstract=3218738>.
Kuziemko, Ilyana, and Ebonya Washington. 2018. Why Did the Democrats Lose the South? Bringing New Data to an Old Debate. *American Economic Review* 108 (10):2830–67.
Lindley, Joanne, and Stephen Machin. 2014. Spatial Changes in Labour Market Inequality. *Journal of Urban Economics* 79:121–38.
Lyons, William, and Robert F. Durant. 1980. Assessing the Impact of Inmigration on a State Political System. *Social Science Quarterly* 61 (3/4):473–84.
Mayda, Anna Maria, and Dani Rodrik. 2005. Why Are Some People (and Countries) More Protectionist than Others? *European Economic Review* 49 (6):1393–1430.
McCarty, Nolan, and Eric Schickler. 2018. On the Theory of Parties. *Annual Review of Political Science* 21:175–93.
Milner, Helen. 1988. Trading Places: Industries for Free Trade. *World Politics* 40 (3):350–76.
Milner, Helen V., and Benjamin Judkins. 2004. Partisanship, Trade Policy, and Globalization: Is There a Left–Right Divide on Trade Policy? *International Studies Quarterly* 48 (1):95–119.

Milner, Helen V., and Dustin H. Tingley. 2011. Who Supports Global Economic Engagement? The Sources of Preferences in American Foreign Economic Policy. *International Organization* 65 (1):37–68.
Mion, Giordano, and Paolo Naticchioni. 2009. The Spatial Sorting and Matching of Skills and Firms. *Canadian Journal of Economics / Revue canadienne d'économique* 42 (1):28–55.
Moretti, Enrico. 2011. Local Labor Markets. *Handbook of Labor Economics* 4:1237–1313.
Moretti, Enrico. 2013. Real Wage Inequality. *American Economic Journal: Applied Economics* 5 (1):65–103.
Mummolo, Jonathan, and Clayton Nall. 2017. Why Partisans Do Not Sort: The Constraints on Political Segregation. *Journal of Politics* 79 (1):45–59.
O'Rourke, Kevin H., Richard Sinnott, J. David Richardson, and Dani Rodrik. 2001. The Determinants of Individual Trade Policy Preferences: International Survey Evidence [with comments and discussion]. *Brookings Trade Forum*, 157–206.
Owen, Erica. 2017. Exposure to Offshoring and the Politics of Trade Liberalization: Debate and Votes on Free Trade Agreements in the US House of Representatives, 2001–2006. *International Studies Quarterly* 61 (2):297–311.
Pomirchy, Michael, and Bryan Schonfeld. 2019. Does Responsiveness Stop at the Water's Edge? Examining the Foreign Policy Electoral Connection. Available at SSRN 3436890.
Rickard, Stephanie J. 2018. *Spending to Win: Political Institutions, Economic Geography, and Government Subsidies*. Cambridge University Press.
Roback, Jennifer. 1982. Wages, Rents, and the Quality of Life. *Journal of Political Economy* 90 (6):1257–78.
Robinson, Tony, and Stephen Noriega. 2010. Voter Migration as a Source of Electoral Change in the Rocky Mountain West. *Political Geography* 29 (1):28–39.
Rodden, Jonathan. 2019. *Why Cities Lose*. Basic Books.
Rogowski, Ronald. 1989. *Commerce and Coalitions: How Trade Affects Domestic Political Alignments*. Princeton University Press.
Rosen, Sherwin. 1979. Wage-Based Indexes of Urban Quality of Life. *Current Issues in Urban Economics* 2:74–104.
Rosendorff, B. Peter. 2005. Stability and Rigidity: Politics and Design of the WTO's Dispute Settlement Procedure. *American Political Science Review* 99 (3):389–400.
Scheve, Kenneth F., and Matthew J. Slaughter. 2001. What Determines Individual Trade-Policy Preferences? *Journal of International Economics* 54 (2):267–92.
Schlesinger, Joseph A. 1994. *Political Parties and the Winning of Office*. University of Michigan Press.
Schonfeld, Bryan, and Sam Winter-Levy. Forthcoming. Policy or Partisanship in the United Kingdom? Quasi-Experimental Evidence from Brexit. *Journal of Politics*.
Selten, Reinhard. 1988. Reexamination of the Perfectness Concept for Equilibrium Points in Extensive Games. In *Models of Strategic Rationality*, 1–31. Springer.
Shoch, James. 2001. *Trading Blows: Party Competition and US Trade Policy in a Globalizing Era*. University of North Carolina Press.
Singer, David Andrew, and Kai Quek. Forthcoming. Attitudes Toward Internal and Foreign Migration: Evidence from a Survey Experiment in China. *Public Opinion Quarterly*.
Snyder, James M. 1994. Safe Seats, Marginal Seats, and Party Platforms: The Logic of Platform Differentiation. *Economics and Politics* 6 (3):201–13.
Soroka, Stuart N., and Christopher Wlezien. 2004. Opinion Representation and Policy Feedback: Canada in Comparative Perspective. *Canadian Journal of Political Science / Revue canadienne de science politique* 37 (3):531–59.
Stimson, James A., Michael B. MacKuen, and Robert S. Erikson. 1995. Dynamic Representation. *American Political Science Review* 89 (3):543–65.
Trubowitz, Peter. 1998. *Defining the National Interest: Conflict and Change in American Foreign Policy*. University of Chicago Press.
Tyson, Alec, and Shiva Maniam. 2016. Behind Trump's Victory: Divisions by Race, Gender, Education. Pew Research Center.
Volkens, Andrea, Pola Lehmann, S. Regel, et al. 2018. Manifesto Project Dataset. Manifesto Project.

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Key Words

International trade; realignment; political parties; economic geography; internal migration

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