

**Adjustment, Ambiguity
and Policy Interventions:
A Political Approach to
the Domestic Politics of Trade**

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To understand how domestic interests shape trade policy, political scientists rely on models from economics. Two particular models of the domestic distribution of the gains from trade have dominated recent work on the politics of trade: the Stolper-Samuelson and Ricardo-Viner extensions of the Heckscher-Ohlin (H-O) model. Each predicts interests divide along specific lines. Which approach is more useful – which cleavage occurs most often? Data gathered over decades has failed to answer that question. Viewing the varied evidence, scholars have instead attempted to determine when and where one cleavage would emerge. Some argue that they can determine which cleavage will dominate a country for an extended period of time, leading them to classify national economies over extended blocks of time as being closer to one set of economic assumptions or the other.¹ Such an approach makes sense only if trade politics exhibit stability, but often cleavages vary within short periods of time. In fact, episodes where trade policy became salient – such as Britain in the 1840s or the U.S. in the 1930s – draw our attention precisely because cleavages either switched rapidly or suddenly became less defined. To make sense of these dynamics, the two classic economic models of the domestic distribution of the gains from trade provide poor foundations.

The Stolper-Samuelson and Ricardo-Viner models are widely used because of their heuristic attributes, but their simplicity carries significant (and non-obvious) costs for political analyses. Neither is well-suited for exploring why cleavages change. The assumptions embedded in these models obscure essential elements of the politics of trade, since neither treats adjustment as a process. Instead, both give the impression that the political stance domestic groups will take can be easily predicted, because adjustment's impact is completely knowable before it occurs. By simplifying the adjustment process,

¹ Michael Hiscox, *International Trade and Political Conflict*, Princeton: Princeton University Press, 2002

politics becomes simpler too. Extreme assumptions about mobility eliminate uncertainties associated with policy changes. If everyone in society has clear, consistent interests on the subject, politics becomes straightforward. Moreover, if domestic actors' interests are unchangeable, trade policy cannot be an effective instrument in political competition. Less obviously, when political scientists employ these models they buy into assumptions reinforcing the divide between the micro- and macro-levels. While one might think these models link the international and domestic policy spheres, the effect is quite the opposite.

The Stolper-Samuelson and Ricardo-Viner models depict interests in stark and static terms. Since political leaders cannot alter the domestic distribution of these interests, their only choice concerns whether or not to emphasize trade over other issues. Once trade becomes salient, political outcomes are already determined by the clear, consistent and exclusive interests the models depict; politicians must live with the consequences. These models might be useful for explaining why some political leaders want trade policy to be the basis of party competition, allowing us to explain when trade policy dominates the political agenda – though if these models were accurate, trade politics would surely have some odd and easily observed characteristics. Given how stable and exclusive interests are depicted in these models, leaders from both sides of the issue should be able to calculate who wins and who loses quite easily. One side should embrace the issue, while the other flees from it. That is not what happens in cases where cleavages are fluctuating rapidly. Indeed, in many famous cases, such as the Reciprocity Election of 1911 in Canada or Joseph Chamberlain's pursuit of Tariff Reform in Britain after 1903, experienced politicians on both sides of the issue had trouble discerning the

dominant cleavage – leading those who proposed changing trade policy to lead their parties to disaster.

To explain instances where the cleavage changes, political scientists have naturally focused on the same limited range of causes economists identified. Chief among these are advances in technology, or in the country's relative endowments of the factors of production. Changes in these would surely alter domestic actors' preferences on trade policy, so political scientists have employed both to analyze the domestic politics of trade.² Since economists have separated these macro-level effects from micro-level causes, economists also relegate political factors to the outcome side of the equation. Political scientists have followed the same path. Political scientists might interject domestic institutions into the equation as intervening variables – institutions might distort the relationship between the sharp, exclusive economic preferences found in society and the actual policy selected.³

None of these three sources of change – technology, factor endowments, or political institutions – appear to shift as rapidly as cleavages do. It is hard to argue that technology, political institutions or factor endowments changed in Britain between 1841 and 1846, or in the U.S. between 1930 and 1934. Yet in these cases, we see major policy shifts driven by the realignment of domestic interests. In some cases, we see cleavages change from sector-based to factor-based, then back to sector-based within the same decade. In this paper, I explore the experiences of five countries between 1888 and 1911, as examples of such rapid shifts. These three sources of change simply fail in these

² Hiscox, op. cit.; Ronald Rogowski, *Commerce and Coalitions*, Princeton: Princeton University Press, 1989.

³ James Alt and Michael Gilligan, "The Political Economy of Trading States: Factor Specificity, Collective Action Problems, and Domestic Political Institutions," *Journal of Political Philosophy* 2 (2), 1994, 165-192.

instances – who would argue new political institutions or technological advances were adopted then abandoned? (If anything, the policy decisions trade-based politics drove *provide the explanations for later changes in political institutions and the widespread adoption of new technologies.*)

Trade had increased in volume and importance in the middle of the nineteenth century, altering countries' positions in terms of relative factor endowments. We can observe how the two traditional models might explain changes in political cleavages in the 1870s or even 1880s in reaction. These shifts affect the line-up of interests – not the dominant type of cleavage. The traditional models cannot explain why the type of cleavage would be in flux in the 1890s and early 1900s, as trade policy continued to take center stage in Germany, Sweden, Australia, Canada and even Britain between 1889 and 1913. If the traditional models were so useful (i.e. trade interests were exclusive and stable), we could easily describe trade-based politics in these cases. Political leaders should have been able to do the same simple calculations we do – if everyone has clear preferences set in stone, political leaders should have easily predicted who would win elections when trade dominated the agenda. The politics of trade should have a very distinct flavor; one side confident of winning, the other certain of defeat. Instead, in these cases politicians on opposite sides of the issue clearly thought trade policy would help them compete for seats. In fact, I present evidence showing politicians did pull voters from one side to the other using trade policy. As these voters switched sides, the dominant cleavage appeared to shift.

Voters may switch sides (making cleavages realign), because some actors cannot determine the full impact of policy change in advance. This uncertainty creates an

opportunity for political leaders to intervene in the trade adjustment process. By intervening in specific ways, political leaders can clarify these groups' interests as they relate to trade. By packaging specific domestic policies with trade policy, political leaders can get those groups with ambiguous interests to join one side of the issue. In my perspective, politicians and their parties craft policies in a competitive environment; this can be compared to most recent analyses, which depict parties as passive receptacles of domestic interests.

Which groups would have ambiguous interests? Can this ambiguity be reconciled with the essential elements of that H-O model we use to explain why trade takes place? Ambiguity stems from the mixed effects adjustment can have on some factors of production. When trade triggers changes in production, it effects both employment and the rates of return factors of production earn. Factors' income is a function of rates of return multiplied by time employed. Ambiguity occurs when trade drives a factor's rates of return and employment opportunities in opposite directions. In the Stolper-Samuelson and Ricardo-Viner models, economists eliminated this ambiguity. Since economists sought to understand the impact of trade (conceptualized as a macro-level force) separate from micro-level phenomenon (such as unemployment), they introduced the general equilibrium conditions (i.e. full employment of all factors of production). This isolates the impact of trade in a single variable: rates of return. Political scientists using either the Stolper-Samuelson or Ricardo-Viner models accept this separation, and perhaps unknowingly, also focus their attention on the gains from trade defined in terms of rates of return rather than income.

Economists are now exploring the impact of trade as the general-equilibrium conditions are relaxed, in order to explore links between the macro- and micro-level levels. Their analyses also extend the same H-O model, and therefore encompass the same extreme conditions found in the two traditional approaches. However, the beauty of the non-general equilibrium approach – from the perspective of a political scientist – comes from both the identification of groups with ambiguous preferences on trade, and these models’ understanding of why ambiguity arises. Most domestic actors still have clear and consistent preferences on trade. Particular groups cannot form clear preferences however, because they cannot resolve how the combined effect of changes in rates of return and employment will alter their future income. Since the source of this ambiguity lies in the interaction of these two variables, if politicians can alter returns and/or employment via domestic policies, they can reduce the ambiguity of these groups’ preferences. When they do, some groups alter their political stance, and the dominant cleavage on trade appears to shift.

The Davidson, Martin, and Matusz Model

The non-general-equilibrium model of the impact of trade I employ was created by C. Davidson, L. Martin and S. Matusz.⁴ Their model (hereafter referred to as the DMM model) exposes the links between macro- and microeconomic forces. Like the Stolper-Samuelson and Ricardo-Viner models, this model extends the fundamental two-factor, two-sector Heckscher-Ohlin model with constant-returns-to-scale, and competitive, frictionless product markets. Factors of production (capital and labor) are assumed to exist in indivisible units. Each sector requires a specific ratio of capital and labor to be

⁴ Carl Davidson, Lawrence Martin and Steven Matusz, “Trade and search generated unemployment,” *Journal of International Economics* 48 (1999), pp. 274-276.

productive; a sector's ratio of inputs cannot be changed. Importantly, each factor earns the value of its marginal product when employed and nothing when idle.⁵ Factors are assumed to cycle through periods of unemployment, based upon a break-up rate specific to each sector (denoted by b_h). When idle, factors search for employment in the sector offering the highest expected income.

I alter the original DMM model by assuming that each sector must match factors at a different ratio (i.e. in the simple two-factor version, one sector is labor-intensive, the other capital-intensive). With this information, we can describe the pools of factors of production, in order to begin calculating expected earnings for different sets of factors:

I_{sh} = the number of type- i factors searching in sector h

I_{eh} = the number of type- i factors employed in sector h

$I_h = I_{sh} + I_{eh}$ with $I = I_x + I_y$

Since expected income is a function of rates of return and employment, sectors must be described in both these characteristics. The arrival rate of new employment prospects for a type- i factor in sector h is denoted by e_h^i . Davidson, Martin and Matusz assume $E_h > 0$, and that E_h is a constant. The term s_h denotes the proportion of labor in the unemployed factors searching in sector h . Then:

$$e_h^l = (1 - s_h) E_h$$

$$e_h^k = s_h E_h$$

A change in s_h reflects a change in each factor's probability of finding employment in sector h . Intuitively, this measures the difference between the ratio of factors demanded by sector h , and the pool of idle factors seeking employment in h . Each employed factor

⁵ I use "unemployed" to cover all factors – i.e. the term also applies to idle capital or land.

shares in the returns to its sector. P_h represents the earnings of sector h , with the proportion going to each factor represented by alpha:

$$\alpha_h^l + \alpha_h^k = 1$$

To calculate expected income, an individual unit of a factor considers the difference between earnings while employed and earnings while unemployed. V_{sh}^i represents the expected income for the type- i factor searching for employment in sector h ; p represents a subjective discount rate factors use to assess their prospects for making a productive match with the other factor of production. V_{eh}^i represents the income the type- i factor earns while employed in sector h . Therefore the expected income for a factor seeking employment in sector h is:

$$pV_{sh}^i = e_h^i(V_{eh}^i - V_{sh}^i)$$

$$pV_{eh}^i = \alpha_h^i P_h - b_h(V_{eh}^i - V_{sh}^i)$$

Davidson, Martin and Matusz solve these two equations, finding:

$$pV_{sh}^i = e_h^i \alpha_h^i P_h / \Delta_{ih}$$

$$pV_{eh}^i = (p + e_h^i) \alpha_h^i P_h / \Delta_{ih}$$

$$\text{Where } \Delta_{ih} = p + b_h + e_h^i$$

While individual units of each factor will focus on how much each sector gains (P) when selecting where to seek employment, this model lets us examine the adjustment process by qualifying sector-based gains with fluctuations in employment. These fluctuations include risks arising from sector-specificity. Factors use a subjective rate to discount expected income, p , reflecting assessments about employment opportunities. One's perspective on sector-based gains depends on the odds of partaking in those gains, which requires finding a match there.

As a proxy for p in the early 1890s and early 1900s, I employ sustained peaks and troughs in the economic cycle. During a sustained peak (defined as two years or longer of prosperity, according to NBER data⁶), factors expect to find employment rather easily. During a sustained trough (two years or longer of recession), factors calculate employment will be more difficult to find, thus they will discount future income more severely, negating mobility. This shifting calculation of interests is critical, because it provides politicians with conditions when swing groups are more easily wooed to one policy stance or the other. (In contrast, political analyses based on economists' general equilibrium models consider forces such as the economic cycle irrelevant.)

To draw over the swing group, politicians will package specific domestic policies with trade policy. The DMM model identifies three variables politicians can manipulate to alter factors' expected incomes. These are:

e_h^i employment probability for factor i in sector h

P_h sector h earnings

b_h the break up rate of matches in sector h

To understand how politicians would use each, consider the link between specialization and factors' incomes, using subscript x and m to denote the abundant-factor-intensive (exporting) and scarce-factor-intensive (import-competing) sectors respectively. Trade would trigger changes in goods' prices and in the output of each sector, seen in P_m and e_m^i declining and P_x and e_x^i increasing.

For the abundant factor already employed in the abundant-factor-intensive sector, or mobile across sectors, trade liberalization offers greater opportunities for employment plus a share in rising returns. For the scarce factor employed in the export sector or

⁶ Wesley Mitchell, *Business Cycles*, New York: NBER, 1927, pp. 444-445.

mobile across sectors, there is also the possibility of sharing in rising returns as P_x rises, but this is tempered by the contradictory effects on employment and rates of return. Trade liberalization should reduce e_m^i and increase e_x^i , but the factor-intensity difference between the two sectors dictates that trade's impact will differ in terms of the opportunities for employment for each factor. By definition, sector m offers more employment opportunities per abundant factor demanded than does sector x . When specialization causes sector x to grow and sector m to shrink, m sheds factors at a different ratio than x hires them. For the abundant factor mobile across sectors, lost employment opportunities in m are more likely to be replaced by expanded opportunities in x , compared to the opportunities the scarce factor mobile across sectors faces. Consistent with the Stolper-Samuelson approach, the locally abundant factor mobile across sectors (or specific to sector x) will have greater opportunities for future employment, and at a higher rate of return, when trade increases. The locally abundant factor mobile across sectors (or specific to sector x) will expect a higher income from trade liberalization.

The scarce factor mobile across sectors (or specific to sector x) may have higher returns if able to find employment in the abundant-factor-intensive sector, but specialization increases the competition for the limited employment there. Changes in e_m^i and e_x^i caused by specialization will increase the volume of scarce factors searching for employment at a faster rate than opportunities for employment in sector x open up, leaving some unemployed. Consequently, units of the scarce factor mobile across sectors or specific to sector x have ambiguous interests on trade – trade creates opportunities for

higher earnings, but there are fewer opportunities for employment at this higher rate than there are units of the scarce factor seeking such employment.

Trade liberalization lowers the expected income of the factors specific to the scarce-factor-intensive sector. Opportunities for employment (e_m^i) and returns (P_m) decline, ensuring that these factors form the core of any protectionist coalition. As described above, the abundant factor specific to the abundant-factor-intensive sector or mobile across sectors will form the core of the pro-free trade coalition. Another way to put this, of course, is to reflect back on the Stolper-Samuelson and Ricardo-Viner approaches; they make identical predictions concerning the preferences of the abundant factor specific to the abundant-factor-intensive sector and of the scarce factor specific to the scarce-factor intensive sector.

Table 1. Factor-based cleavage

	Employed in Abundant Factor-Intensive-Sectors	Employed in Scarce Factor-Intensive Sectors
Abundant Factor(s)	for free trade	for free trade
Scarce Factor(s)	protectionist	protectionist

Table 2. Sector-based cleavage

	Employed in Abundant Factor-Intensive-Sectors	Employed in Scarce Factor-Intensive Sectors
Abundant Factor(s)	for free trade	protectionist
Scarce Factor(s)	for free trade	protectionist

Table 3. Comparing the two

	Employed in Abundant Factor-Intensive-Sectors	Employed in Scarce Factor-Intensive Sectors
Abundant Factor(s)	core support for free trade	Disagree
Scarce Factor(s)	Disagree	core support for protection

Any debate over which cleavage is observed must center on the behavior of the abundant factor in the scarce-factor-intensive sectors, or of the scarce factor in the abundant-factor-intensive sector. The DMM model introduces the option of mobility across sectors, as adjustment takes place, which splits the first of these groups into two sets, each with consistent preferences. By dividing the abundant factor employed in the scarce-factor-intensive sectors into those specific to those sectors, and those mobile across sectors, we can describe their preferences. If a unit of the abundant factor can exit the scarce-factor-intensive sectors, it faces better prospects when trade liberalization occurs. Units of the scarce factor mobile across the sectors, or fixed in the abundant-factor-intensive sector, have ambiguous preferences.

Table 4. Preferences on Trade, Extended DMM Model

	Specific to the Abundant-Factor- Intensive Sectors	Mobile Across Sectors	Specific to the Scarce-Factor- Intensive Sectors
Abundant Factor(s)	core support for free trade	core support for free trade	core support for protection
Scarce Factor(s)	ambiguous	ambiguous	core support for protection

If neither of the core consistent supporters of a stance on trade can control policy, their leaders must seek additional support. The only groups up for grabs in this competition are those with ambiguous preferences. The economic cycle creates opportunities when these groups are more vulnerable to appeals, since peaks and troughs accentuate the degree of risk associated with mobility. During peaks, increased employment opportunities decrease the discount rate factors use when assessing the potential costs of searching for new employment. Trade liberalizers would therefore find

it easier to bring the groups with ambiguous preferences over to their side. During sustained troughs, factors would raise the discount rate on future income, expecting it to be more difficult to find new employment in a different sector. As mobility becomes riskier, protectionists find it easier to woo those with ambiguous interests to their side.

The argument I suggested above, however, was not that the economic cycle alone explained these shifts, but rather that political leaders from the groups with clear consistent preferences could intervene in the adjustment process to reduce the ambiguity of the swing group. Since the ambiguity comes from the interaction of employment and rates of return specific to the scarce factor mobile across sectors or specific to the abundant-factor-intensive sectors, the domestic policy interventions should target these two variables.

Political leaders representing the core free trade groups can gain additional support for their preferred policy by not only reducing tariffs (lower P_m) but also by raising b_m (the break up rate of productive matches in the import-competing sector). Raising b_m compels mobile factors in the scarce-factor-intensive sector to consider exploiting their mobility, and also lowers the expected income of factors in that sector. Reducing b_x (the break up rate in the export-oriented sector) increases the expected income there. Increasing e_x^i – making matches in the export sector easier – also raises expected income in sector x . Decreasing e_m^i lowers expected income in sector m , encouraging mobile factors to abandon the import-competing sector. These interventions accelerate adjustment associated with specialization in pursuit of comparative advantage.

Protectionists can offer more than higher tariffs. By intervening in the adjustment process, they too can bid for the swing groups. A tariff can increase P_m , but

protectionists can also intervene to decelerate specialization, critical for maintaining employment opportunities for the scarce factors in the import-competing sector – the core of any protectionist coalition. By lowering b_m (i.e. binding factors in the scarce-factor-intensive sector for longer terms) they can increase the expected income for those in sector m . Raising e_m^i will have similar effects. Lowering e_x^i would negate the opportunity mobility offers to factors, making such an intervention attractive to protectionists, too. These policies would swing ambiguous interests to their side.

Table 5: Expected Interventions Combined with Trade Policy

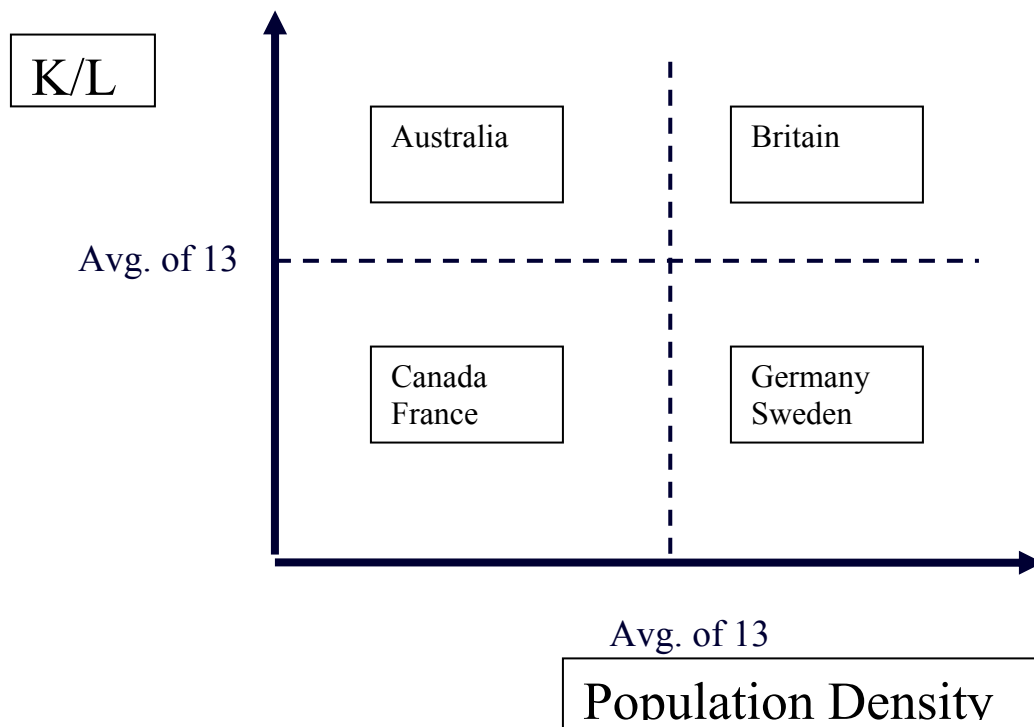
	Trade Liberalizers	Protectionists
Break-Up Rate, Exporting Sector	reduce	increase
Break-Up Rate, Import-Competing Sector	increase	reduce
Matching Rate, Exporting Sector	increase	reduce
Matching Rate, Import-Competing Sector	Reduce	increase

Since the argument is based on the assumption that political leaders use trade policy strategically in their competition for support, I test the argument by focusing on elections in these five countries between 1889 and 1913. To observe cleavages, I use election outcomes. Parties sought to control policy by taking office; they competed for seats. In each country, electoral constituencies are categorized by their factor endowments and locally dominant sector. The cross-tabs produced mirror Table 4 above. Not only will I look for the location of core political support for or against trade liberalization, I will also look for the offers these core supporters made alongside trade policy changes, and examine whether the expected groups switched sides. My claim is that these offers, in conjunction with changes in overall economic conditions, made groups swing, and as they did the dominant cleavage appeared to shift.

Part II. Empirical Applications

As a first step, the five national economies are classified in terms of their relative factor endowments. Employing a three-factor model (land, labor and capital), the five can be classified in the population of 13 countries in that era along two dimensions: the capital/labor ratio to determine the relative abundance of capital versus labor, and the labor/land ratio (i.e. population density) to determine relative abundance of land.⁷ This produces four categories, consistent with previous studies.

Figure 1: Categories of Cases by Factor Endowments (see Appendix 1)



⁷ The data used comes from M. Mulhall, *The Dictionary of Statistics*, London: Routledge, 1896, Plate II, and p. 419.

Australia 1890-1910: Was Labour's Success due to a Factor-Based Cleavage?

Based on this classification, the proponents of free trade in Australia were the owners of fixed assets in land-intensive agriculture, and in capital-intensive agriculture or industry, plus land or capital mobile across sectors. The core protectionists would have been owners of factors specific to labor-intensive agriculture or industry. The swing group would have been labor mobile across sectors, or specific to capital- or land-intensive sectors. These elements of labor should have swung to protection during economic hard times, making the dominant cleavage factor-based. Labor would have been drawn to protectionism not only by a tariff that increased labor's returns in labor-intensive sectors, but also by policies that tied down workers in labor-intensive sectors, packaged with policies that aimed to increase the break-up rate in other sectors. Free traders would have countered by increasing the break-up rate for labor-intensive sectors (i.e. reducing job security there), making mobility less risky (i.e. offering universal benefits), and trying to improve "matching" in capital- and land-intensive sectors. This last point could be achieved via easing access to land through settlement policies.

To observe the cleavages in elections, we need to identify differences across states in the local abundance of factors, plus in the dominance of particular sectors.⁸ For agriculture, Victoria, South Australia and Tasmania had smaller holdings, compared to the rest of the country. This was reinforced by the tendency for Victoria and Tasmania to also have higher levels of livestock per surface area. New South Wales had both high relative density of livestock and larger than average farms. Victoria was characterized by both capital- and labor-intensive farming, New South Wales by farms using both land and

⁸ These classifications are based on statistics in the *Official Yearbook of the Commonwealth of Australia*, 1911, pp. 121, 277, 307, and 476.

capital intensively, while Western Australia was more land-intensive. As a result, New South Wales and Western Australia are expected to have had the most consistent rural support for free trade. Victoria would have had sector-based splits in rural areas, since capital-intensive farming would have been more competitive than labor-intensive farming. As for industry, New South Wales, Victoria and South Australia had higher concentrations of labor in industry than the other states. The expectations generated by the DMM model are given in Table 6. (Unfortunately, the labor- and capital-intensive sectors were intermingled geographically – making observations of cleavages less clear. Urban areas held capital- and labor-intensive sectors in the same district. Rural areas with small farms also held differing sector-based interests together, though those in land-abundant regions presumably had better opportunities to increase the size of their holdings, making them more mobile across sectors.)

Table 6. Expected Distribution of Interests in Australia

	Land-intensive Agriculture	Capital- and Labor- intensive Agriculture	Industrial Sectors
Land Abundant States	<i>For freer trade</i> (rural Western Australia)	<i>Divided</i> (rural Queensland and South Australia)	<i>Divided</i> (urban seats in W. and S. Australia, Queensland)
Labor Abundant States	<i>Ambiguous</i> (rural New South Wales)	<i>Ambiguous</i> (rural Victoria, Tasmania)	<i>Divided</i> (urban seats in NSW, Victoria, Tasmania)

The table identifies labor – inside and out of the cities – in New South Wales, Victoria and Tasmania as the targets in a competition between free trade interests and protectionists.

This competition was shaped by the economic cycle. Beginning in 1890, Australia suffered a sharp economic downturn that persisted until 1895. This coincided with

strikes by labor in land-intensive agriculture (the shearers), whose strike was supported by workers in other sectors.⁹ As expected, the downturn enhanced the factor-based cleavage. A national Labour party coalesced in the 1890s, and was in place to contest the first federal elections. Even during this downturn however, a free trade party won the 1894 election in New South Wales. On the other hand, in Victoria a protectionist government was elected, and in 1896 it introduced minimum wages in labor-intensive sectors and spent government funds to construct crushing mills that could process small farmers' products at below-market-rates. These policies are in line with the manipulation of b_m and e_m^i the DMM model expects.

The country then experienced a sustained period of prosperity (1897-1900). Trade policy then sparked sector-based cleavages, as the labor elements of the swing groups now were lured back towards a preference for trade liberalization. The Labour Party – despite its obvious effort to represent the interests of the scarce factor of production – was now deeply divided over protectionism. Even as the other two national parties distinguished themselves on the basis of trade policy, Labour could not form a clear, comprehensive position on the tariff.¹⁰ Thus in the first decade of the twentieth century, the Labour Party took an ambiguous stance on trade policy.

The economic cycle should affect the direction Labour leaned, and the type of policies it promoted. Australia went through a sustained downturn 1902-1903, then sustained upturns in 1905-1907 and 1909-1912. Federal elections in 1903 should

⁹ P. Loveday and A. Martin, *Parliament, Factions and Parties: The First Thirty Years of Responsible Government in New South Wales, 1856-1889*, London: Cambridge University Press, 1966; Robin Gollan, *Radical and Working Class Politics: A Study of Eastern Australia, 1850-1910*, New York: Cambridge University Press, 1960

¹⁰ Ronald Norris, *The Emergent Commonwealth, Australian Federation: Expectations and Fulfillment 1889-1910*, Carlton, Victoria: Melbourne University Press, 1975.

demonstrate the broad appeal of protection among workers (so strength in the labor-intensive states), while elections in 1906 and 1910 should demonstrate enhanced sector-based cleavages (i.e. a stronger performance by the free trade interests in rural parts of New South Wales, Victoria and Tasmania). The results also depended on the policy interventions each side implemented to alter the risks groups faced in adjustment.

In the 1903 campaign, Labour sided for protection. The Protectionist and Labour Parties then formed a coalition government. Labour demanded that the government ensure that workers in protected sectors share benefits derived from tariff increases, through sector-based domestic policies. Moreover, Labour wanted these policies to increase job security as well as defend wages in these sectors. This protectionist platform won the coalition seats in urban areas, as well as a sizable majority of the rural seats in smallholding areas. The stronghold of the Free Trade Party was, surprisingly, the labor-abundant state with land-intensive agriculture (New South Wales), rather than the land-abundant region with land-intensive agriculture (Western Australia).

Table 7. Australian Election of 1903
(seats won by the Free Trade Party)

	Land-intensive agriculture	Capital- and Labor- Intensive Agriculture	Industrial Sectors	
Land-Abundant States	2 of 10 20%	1 of 9 11%	0 of 2 0%	3 of 21 14%
Labor-Abundant States	13 of 23 57%	6 of 24 25%	3 of 8 37%	22 of 55 40%
	15 of 33 45%	7 of 33 21%	3 of 10 30%	
	In All Agriculture:	22 of 66 33%		

This coalition was unstable. In 1904 Labour demanded an Arbitration Act to deliver the sector-based preferences for workers in protected sectors. This is in line with the desire to adjust b_m as well as P_m . Labour wanted similar regulations to cover government employees – but the Protectionist Party disagreed. The split left Labour to form a government on its own, but of course the Free Trade Party would not support this legislation either. Failing to get its agenda approved, Labour left office, and the Free Trade Party then had the opportunity to govern. Ironically, the Free Trade Party passed a bill on arbitration. This legislation was similar in some respects to the original bill the Protectionists had wanted, since it offered legal venues for arbitration. It differed significantly, however, since it would not establish preferential treatment for union members in the sectors receiving protection. The Free Traders wanted more universal rules, compared to Labour. The Free Traders naturally refused to cede preferential treatment for the scarce factor in the protected sectors, preferring instead to adopt policies that might ease the release of labor from those sectors for employment elsewhere.

The improved economic conditions after 1905 led to a sharper sector-based cleavage as the DMM model expects. The Protectionists and Labour Parties renewed their coalition in 1906, but now *both* stressed the need to link tariffs with domestic legislation that slowed trade adjustment – a package of policies known as the New Protection. The New Protection aimed at binding labor in protected, labor-intensive sectors through ensured wage levels, with union membership providing not only greater security of employment but also higher standards of regulation. To face this coalition, the Free Traders changed their label to “Anti-Socialist” in the 1906 campaign, presumably in hopes of drawing in more support from landowners.

Table 8. Australian Election of 1906
(seats won by the Anti-Socialist Party and allies)

	Land-intensive agriculture	Capital- and Labor- intensive agriculture	Industrial Sectors	
Land-Abundant States	5 of 10 50%	3 of 8 37%	1 of 3 33%	<i>9 of 21 43%</i>
Labor-Abundant States	9 of 23 39%	9 of 23 39%	2 of 6 33%	<i>20 of 52 38%</i>
	<i>14 of 33 42%</i>	<i>12 of 31 39%</i>	<i>3 of 9 33%</i>	
	In All Agriculture:	26 of 64 41%		

The results show Labour and Protectionists lost support in land-abundant states when the economy improved; these seats were in both the large landholding areas, and also some of the smallholding rural regions. Unfortunately, the sector-based splits are not easily observed since agricultural sectors were mixed together.

By 1909, the Labour Party felt popular enough to campaign on its own. The Protectionists and Free Traders thus found themselves uniting in opposition to Labour. Labour emphasized a desire to tax large landowners in the next election, with the New Protection too. It became the first party to control a majority in both the lower house and the Senate. Labour then could implement the New Protection. The Arbitration Court was finally authorized to set minimum wages by sector and to show preferences to union members. Thus the Labour Party did not introduce factor-wide policies with protection, but rather a set of sector-based policies.

Table 9: Australian Election of 1910*(seats won by the Liberals)*

	Land-intensive agriculture	Capital- and Labor- intensive agriculture	Industrial Sectors	
Land-Abundant States	5 of 10 50%	3 of 10 30%	1 of 3 33%	<i>9 of 23 39%</i>
Labor-Abundant States	8 of 22 36%	13 of 25 52%	1 of 6 17%	<i>22 of 53 41%</i>
	<i>13 of 32 41%</i>	<i>16 of 35 46%</i>	<i>2 of 9 22%</i>	
	In All Agriculture:	29 of 67 43%		

Australia's experience shows how the trade-based cleavage could change as the economic climate changed, but more clearly illustrates how politicians intervened in the adjustment process to win support for their preferred trade policy. Initially unsure of its stance on trade, Labour drew to the Protectionists in the economic hard times during the first years after federation. After the economy improved in 1905, however, Labour took an increasingly sector-based approach. The dominant cleavage therefore initially looked factor-based, but with the Labour Party's success became sector-based.

Britain 1890-1910: Why Farmers defeated Tariff Reform

In Britain, the proponents of free trade should have been the owners of sector-specific factors in capital- or labor-intensive sectors, plus labor or capital that can move freely across sectors. The protectionists would have been those factors of production stuck in land-intensive agriculture. The swing groups should have been landowners already in (or able to shift their production into) labor- or capital-intensive agriculture. Free trade interests would attempt to woo these landowners by reducing the risks they faced when

adjusting production to labor- or capital-intensive forms, as well as by making “matching” of factors easier for these sectors. They should also have advocated a higher break-up rate in land-intensive agriculture. Protectionists would have resisted those moves by tying down the factors employed in land-intensive agriculture, and by making it difficult to match factors of production in labor- or capital-intensive sectors. When the protectionists succeeded, the dominant cleavage would appear factor-based, by uniting landowners. When the trade liberalizers succeeded, the dominant cleavage would appear sector-based, since only land-intensive agriculture would prefer higher tariffs.

The cleavages are much easier to observe in Britain than Australia, because both labor and capital were relatively abundant. Thus urban areas would be expected to prefer free trade consistently, while rural areas can be divided along sectors defined by relative farm-size. Larger farms used less capital and labor per acre, compared to smaller farms.¹¹ This information is combined with Blewett’s classification of seats along class lines, which give us a sense of local factor abundance.¹² The focus will be on English seats only, since other issues might have skewed results in Wales, Scotland or Ireland.

Table 10. Expected Distribution of Interests in England

	Boroughs	County Seats in counties avg. farms less than 50 acres	County Seats in counties avg. farms above 50 acres
<i>Labor- and Capital-rich</i>	<i>Defend Free Trade</i>	<i>Defend Free Trade</i>	<i>Defend Free Trade</i>
<i>Land-rich (D, E)</i>		<i>Ambiguous</i>	<i>Support Tariff Reform</i>

¹¹ E.J.T. Collins, “Rural and Agricultural Change,” in *The Agrarian History of England and Wales, Volume VII, 1850-1914 (Part I)*, edited by E.J.T. Collins, Cambridge: Cambridge University Press, 2000, 72-223.

¹² Neal Blewett, *The Peers, the Parties and the People, The General Elections of 1910*. London: Macmillan, 1972.

British tariffs had been liberalized much earlier. The economic cycle created opportunities for protectionists and the defenders of free trade, with sustained economic downturns in 1892-1895 and 1900-1904 but sustained prosperity in 1896-1900, 1905-1907, and then 1910-1913. The politics of the 1890s presage some of the real battles to come. While the Liberals had promoted some policies in favor of adjusting agriculture towards smallholdings, in their few years in office in the early 1890s they had failed to develop legislation with real effect. Conversely, the Tories held office during the downturn, but had also not enacted serious legislation before the economy improved.

Tory leaders were uncertain of the appeal tariffs would hold – they seemed to realize how strong some opposition was, as well as why rural interests were often ambiguous. Joseph Chamberlain, a Tory, believed tariff reform would attract rural voters broadly speaking as well as specific urban interests, but even he believed this was more likely during economic hard times. Protection was pitched as a way to push agricultural prices higher, while also defending labor's employment. With the revenues garnered from the higher tariff, Chamberlain argued the government could institute new social policies.

The Liberals happily took up the challenge, finding renewed energy and unity by campaigning in defense of free trade. Trade therefore had very different impacts on each party, since Liberals saw reasons to believe it would solidify their base of support in the business sectors, give them a great platform to appeal to working class voters (an important point for the future), and, once the economy improved, the possibility of making greater inroads into rural areas. The Tories were divided over the strategy of focusing on trade, because their past experience (in the 1880s and 1890s) had shown any political benefits generated by protectionism were temporary. Appeals for landowners to

unite around protection never proved sustainable because only the larger farmers consistently desired protection. Thus many Tory leaders, including Arthur Balfour, thought tariff reform was a poor campaign issue. Others, such as Winston Churchill, thought it was terrible, because they were framing the long-run prospects for the party in terms of the coming competition for labor's votes.¹³ Once suffrage expanded, the Tories would need labor's support – and Churchill thought tariff reform would repel workers.

Chamberlain made his initial appeal in 1903, during a sustained economic downturn. However, by the time of the election, the economy was in the second year of prosperity. On the basis of free trade, the Liberals not only defended their strongholds but also scored victories among the swing groups. Free trade was not only widely appealing in working class districts, but also in rural smallholding areas. As Table 11 shows, the Liberals won the majority of the County seats in England where farms averaged 50 acres or less (and their near sweep of Wales complements this pattern).

Table 11. British Election of 1906 (English seats only)
(seats won by the Liberals and their allies)

	Boroughs	County Seats in counties avg. farms less than 50 acres	County Seats in counties avg. farms above 50 acres	
<i>Labor- and Capital-rich</i>	163 of 225 72%	28 of 31 90%	41 of 52 79%	232 of 308 75%
<i>Land-rich</i>		17 of 22 77%	86 of 127 68%	103 of 149 69%
	163 of 225 72%	45 of 53 85%	112 of 179 71%	

¹³ Bernard Mallet, *British Budgets 1887-88 to 1912-13*, London: Macmillan, 1913, p. 195.

The results show the proponents of free trade did extremely well appealing to capital and labor as factors, but were also able to split the landowners' vote along sector-based lines.

In office, the Liberals initiated policies aimed at accelerating adjustment in agriculture, cementing smallholders' preferences by reducing the risks they faced in adjusting their production – manipulating b_x , b_m and e_x^i in line with trade liberalization. Lloyd George submitted budgets that made large landholdings more expensive to maintain (by shifting tax burdens) and using the money raised to construct roads, rural housing and education, all intended to benefit small farmers getting established. Most importantly, the Liberals passed the Smallholders and Allotments Act, to break-up large landholdings and make it easier for those interested to find land for a new smallholding.

The Tories lost in 1906, but Chamberlain had wrested greater control over the party. In the subsequent campaign in January 1910, the election focused on trade policy. The result again reflected the same cleavage – unity of capital and labor for the Liberals, while a sector-based split persisted in agriculture.

Table 12: British Election of January 1910 (English seats only)

(Seats won by Liberals or allies)

	Boroughs	County Seats in counties avg. farms less than 50 acres	County Seats in counties avg. farms Above 50 acres	
<i>Labor- and Capital-rich</i>	114 of 225 51%	26 of 31 84%	35 of 52 67%	175 of 308 55%
<i>Land-rich (D, E)</i>		12 of 22 55%	37 of 127 29%	49 of 149 33%
	114 of 225 51%	38 of 53 72%	72 of 179 40%	

Tariff reform held appeal in rural areas with large-landholdings. The increased performance in boroughs was entirely due to middle-class voters, who believed a tariff was preferred to higher income taxes. While tariff reform was pitched as defense of rural interests (and political scientists using the Stolper-Samuelson theorem have followed this line) it clearly did not win a substantial majority of English County seats for the Tories. Tariff reform failed to rally landowners.

If all interests in trade had been clear and consistent in Britain, these elections would never have been fought over trade policy. Instead, Chamberlain would have floated tariff reform, and groups would have voiced their preferences. If the sector-based split had been apparent, Chamberlain would have seen the folly of his proposal. With the potential to make the factor-based cleavage dominant, Chamberlain pushed tariff reform in 1903. The Liberals' campaign focused on policies centered on trade adjustment, to compete for the votes of smallholders. Winning with free trade, the Liberals then intervened in the adjustment process to reduce the risks farmers faced as they entered into labor- and capital-intensive production, enhancing this cleavage. Tariff reform was beaten by a combination of seats representing the working class and smallholding farmers.

Germany & Sweden 1888-1910: Small Farmers Flip-Flop on Trade

In these two countries, the chief proponents of free trade would have been labor in labor-intensive industry or agriculture, or mobile across sectors. The core of the protectionist groups would have been land and capital specific to land- or capital-intensive sectors. The swing groups should have been owners of land and capital able to move across sectors or specific to labor-intensive sectors. The supporters of free trade would intervene in the domestic economy to bring over the swing groups by promoting a

higher break-up rate in the land- and capital-intensive sectors, and lowering the break-up rate in labor-intensive sectors. Also, they would have wanted to improve matching in labor-intensive agriculture and industry. As these two groups swung to free trade, the cleavage appeared sector-based, but when they sided with the protectionists the cleavage appeared factor-based.

In both cases, we can divide the country into labor-abundant or labor-scarce regions, based on population density (since labor is the single abundant factor). Sector-based divisions in urban areas are difficult to observe, but landholding patterns help isolate land-intensive sectors. Smallholding areas should represent a mix of labor- and capital-intensive sectors, as would urban areas. These results are given below.

Table 13. Expected Distribution of Interests in Germany and Sweden

	Urban Constituencies	Rural Constituencies Labor- or Capital- intensive agriculture (<i>Small holdings</i>)	Rural Constituencies Land-intensive agriculture (<i>Large holdings</i>)
Industrialized state or province	Free Trade	Mixed	Protectionist
Agricultural state or province		Ambiguous	Protectionist

These two countries experienced similar shifts in their trade-based cleavages in the late 1880s and early 1890s. In Germany and Sweden, earlier tariff policies had benefited large landowners (producers of land-intensive goods, i.e. grain). As the economies entered prosperous times in the late 1880s, small farmers joined with broad labor interests to ask for trade liberalization – reinforcing the sector-based cleavage in agriculture.

In Sweden the split is easily visible, with the division of the Agrarian Party into two separate parties, each taking a different stance on trade. While urban areas largely preferred free trade, these accounted for few seats in the Swedish parliament. Rural votes determined the outcomes. The election of 1887 resulted in a victory for the free traders – 85 protectionists were elected compared to 136 free traders, along with some independents. Since many of the urban areas held labor-intensive industrial sectors, which favored free trade, some 20-30 seats consistently voted for free trade. But the remaining 180 seats represented rural areas. These rural districts were almost evenly divided on trade policy.¹⁴ The result was continued deadlock, since the upper house wanted to raise tariffs, but the lower was controlled by the Free Trade Party. A second election, held in the fall of 1887, led to a similar outcome (96 protectionists versus 135 free traders), which would have resulted in a continued stalemate except for a legal dispute. Due to a ballot impropriety (the eligibility of a candidate was successfully challenged in court), the free trade slate in Stockholm had to concede their seats to Protectionists. This ruling swung 21 urban seats over to the protectionists. Only then could the protectionists pass tariff increases through both houses in 1888.¹⁵ In the subsequent election, in 1890, the results fell along the same lines as in the 1887 elections (minus the ballot irregularity).¹⁶

¹⁴ Leif Lewin, Bo Jansson, and Dag Sörbom, *The Swedish Electorate 1887-1968*, Stockholm: Almqvist & Wiksell, 1972, p. 149.

¹⁵ Leif Lewin, *Ideology and Strategy: A century of Swedish politics*, Cambridge: Cambridge University Press, 1988, (translated by Victor Kayfet), pp. 45-46; Dankwart Rustow, *The Politics of Compromise, A Study of Parties and Cabinet Government in Sweden*, Princeton: Princeton University Press, 1955, pp. 35-36.

¹⁶ Constituency classifications come from Sten Carlsson, *Lantmannapolitiken och industrialismen. Partigruppering och opinionsfoerskjutningar i svensk politik 1890-1902* (Stockholm: Lantsbruksfoerbundets Tidskriftsaktiebolag, 1953

Table 14: Swedish Election of 1890
(seats won by the free trade coalition)

	All Urban Constituencies	Rural Constituencies Labor- or Capital- Intensive agriculture <i>(Small Landholdings)</i>	Rural Constituencies Land-intensive agriculture <i>(Large Landholdings)</i>	
Industrializing Region	75 of 82 91%	4 of 5 80%	10 of 16 63%	89 of 103 86%
Agricultural Region		38 of 68 56%	12 of 57 21%	50 of 125 40%
		42 of 73 58%	22 of 73 30%	
		all rural:	64 of 146 44%	

The results show that the free trade parties won nearly half the rural seats, and won the majority of seats in rural areas with smallholdings. (The free trade interests did even better in the cities.)

When the economy was no longer prosperous, agrarian interests reunited for protection. The country experienced a sustained economic downturn between 1892 and 1894, associated with the resurgence of the factor-based cleavage. The Agrarian Party pulled back together, though by the election of 1896 the economy had begun to rebound thereby undercutting this trend. Trade liberalization would again appeal to small farmers after this election. These improved economic conditions enhanced the sector-based split in agriculture, causing the cleavage to appear to shift.

Table 15: Swedish Election of 1896
(seats won by the free trade coalition)

	All Urban Constituencies	Rural Constituencies Labor- or Capital- intensive agriculture <i>(Small Landholdings)</i>	Rural Constituencies Land-intensive agriculture <i>(Large Landholdings)</i>	
Industrializing Region	70 of 84 83%	4 of 6 67%	9 of 23 39%	83 of 113 73%
Agricultural region		40 of 68 59%	8 of 50 16%	48 of 118 41%
		44 of 74 59%	17 of 73 23%	
		All rural:	61 of 147	41%

This sector-based split was enhanced by the policies the labor movement offered to smallholders. These two groups would come together, with trade liberalization an important point of consensus. Sustained economic upturns in 1904-1907, and again in 1911-1913, gave these two groups significant opportunities to come together in favor of domestic policies that would accelerate trade adjustment by favoring smallholding agriculture. The Social Democrats developed policies attractive to smallholders (raising e_x^i in particular, by changing laws on land tenure, making it easier to establish cooperatives, and making credit available for small farmers, for example). These reforms not only cemented the cross-class alliance that formed, they accelerated trade adjustment. Smallholding agriculture became a major export sector for Sweden before World War I. Politically, nearly three-quarters of the seats in industrializing districts (some 80 plus

seats) were for free trade, so that when smallholding regions were also tilted towards free trade (attracting another 40 seats), they could command a majority.

In Germany, the pattern began in similar fashion, but ended with opposite results. In the late 1880s, with the economy in an upswing, Bismarck lost his hold on power. His replacement, Caprivi, decided to drive policy in another direction – the so-called “New Course”. The New Course meant trade liberalization, backed by a range of parties – the left liberal parties (representing small, labor-intensive businesses), the Center Party (representing small business and labor- or capital-intensive farming), and the Social Democrats.

Table 16: German Election of 1890

(seats won by parties supporting free trade)

	All Urban Constituencies	Rural Constituencies Labor- or Capital- intensive agriculture <i>(Small Landholdings)</i>	Rural Constituencies Land-intensive Agriculture <i>(Large Landholdings)</i>	
Industrialized state or province	58 of 79 73%	82 of 131 63%	4 of 11 36%	<i>144 of 221 65%</i>
Agricultural state or province		33 of 43 77%	1 of 23 4%	<i>34 of 66 52%</i>
		<i>115 of 174 66%</i>	<i>5 of 34 15%</i>	
		<i>all rural:</i>	<i>120 of 208 58%</i>	

As in Sweden, the economic upturn accentuated the sector-based split in agriculture.¹⁷

¹⁷ For Germany, constituency classifications come from Fritz Specht and Paul Schwabe, *Die Reichstagswahlen von 1867 bis 1907*, Berlin: Carl Henmanns Verlag, 1908; *Statistisches Jahrbuch für das*

This alignment of parties approved trade liberalizing treaties in the early 1890s, which would keep Germany's trade fairly open until they expired in 1904. The core protectionist elements – large landowners and capital-intensive industry – opposed these policies unsuccessfully, through the National Liberal and Conservative parties.

The free trade groups should have supported trade liberalization with domestic policy interventions accelerating adjustment. As expected by the DMM model, they desired the break-up of large landholdings, the end of cartels or monopolies in the heavy industries, though they were divided over how to improve matching in the more competitive sectors. On the first point, the break-up of land-intensive agriculture, Caprivi urged changes in Prussian land tenure, but was defeated by the Conservatives controlling the state-level government. On the second, the Reichstag initiated investigations into the operations of the cartels, but before any conclusions were reached the economy sagged, and small, labor-intensive businesses reduced their opposition to cartels. The issue of how to develop “matching” for labor-intensive sectors had never proceeded far, because the owners of capital in labor-intensive business did not want to fund universal unemployment or welfare benefits out of their own pocket – and could not push tax burdens on to large landowners or heavy industry. The only way to raise more money for the imperial government was through higher tariffs. Thus the pro-liberalization groups were unable to develop domestic policies supporting their preferred trade policy.

When the German economy entered a sustained downturn, the protectionists tried to form factor-based coalitions to re-fight the battle over trade policy. For the owners of factors specific to land-intensive agriculture, this meant creating a new organization

Deutschen Reich, Kaiserlichen Statistischen Amt (Berlin: Puttkamer & Mühlbrecht) 1901; and Brett Fairbairn, *Democracy in the Undemocratic State: The German Reichstag Elections of 1898 and 1903*, Toronto: University of Toronto Press, 1997.

binding themselves with smallholding agriculture. The economic downturn gave them the chance to do so, in 1893, when they founded the Bund der Landwirte (BdL). The owners of capital in heavy industry tried to do the same by trying to organize employers together, in opposition to labor. These efforts were intensified during the late 1890s, as exposed by Johannes Miquel's development of Sammlungsolitik.

The German economy entered a downturn in 1891, and did not recover until 1896. In terms of observable cleavages, the free trade parties continued to do better than expected in agricultural areas where small-holding dominated. This was thanks to the continued support of the Center Party for free trade, though its members in rural areas were swinging to protection.¹⁸

Table 17: German Election of 1893
(seats won by the free trade parties)

	All Urban Constituencies	Rural Constituencies Labor- or Capital- Intensive Agriculture (<i>Small Landholdings</i>)	Rural Constituencies Land-intensive Agriculture (<i>Large Landholdings</i>)	
Industrialized state or province	55 of 79 70%	64 of 133 48%	3 of 11 27%	122 of 223 55%
Agricultural state or province		33 of 43 77%	1 of 23 4%	34 of 66 52%
		97 of 176 55%	4 of 34 12%	
		all rural:	101 of 210 48%	

¹⁸ Brett Fairbairn, "Political Mobilization," in *Imperial Germany: A Historiographical Companion*, edited by Roger Chickering, Westport, CT: Greenwood, 1996, 303-342, p. 325; Jonathan Sperber, *The Kaiser's voters: Electors and elections in Imperial Germany*, New York: Cambridge University Press, 1997, p. 239.

As Caprivi's trade treaties neared expiration, the two sides geared up for a struggle over the new tariff rates. However, the German economy also enjoyed a sustained period of prosperity between 1896 and 1900. In this upswing, businesses interested in defending Caprivi's policies on trade formed the Bund der Industriellen (BdI), to challenge the position of the CDI. This signals the enhanced sector-based splits among the owners of industrial capital, with more internationally competitive labor-intensive sectors joining the BdI, and the already protected, capital-intensive heavy industries continuing as members of the CDI. While both these organizations had intended to rally all industrial capital together for their preferred position on trade, the BdI officially gave up on this task as the economy waned. Instead, it recognized its position as representatives of particular sectors of industrial capital.

This economic downturn set the stage for another round of disputes of the tariff, just as Caprivi's treaties were expiring. The economy entered a downturn in 1900, where it stayed until 1903 (and would not experience a sustained upturn again until 1906-1907). This downturn fueled support for the protectionist parties, and drove smallholding agriculture to swing. The end result made the cleavage appear factor-based. The various parties negotiated a new tariff increase in 1902, to go into effect as the treaties lapsed. Only the liberal parties and the Social Democrats voted solidly against the increases, with the National Liberals, Conservatives and the Center Party voting for higher tariffs. The Center Party had changed its stance on trade, or risked being outflanked in rural constituencies by other parties. The result can be seen in the election results of 1903, where voters reacted to the parties' actions on the tariff.

Table 18: The German Election of 1903*(seats won by the free trade parties)*

	All Urban Constituencies	Rural Constituencies Labor- or Capital- intensive agriculture <i>(Small Landholdings)</i>	Rural Constituencies Land-intensive Agriculture <i>(Large Landholdings)</i>	
Industrialized state or province	60 of 80 75%	34 of 131 26%	0 of 11 0%	94 of 222 42%
Agricultural state or province		2 of 43 5%	3 of 23 13%	5 of 66 8%
		36 of 174 21%	3 of 34 9%	
		<i>all rural:</i>	39 of 208	19%

In both Germany and Sweden between 1888 and 1910, the economic cycle helped drive smallholding agriculture to one side or the other in the competition over tariffs, making the cleavage shift. In Germany, attempts to accelerate adjustment came to naught – due to the unequal power of the two sides in the Prussian institutions. The smallholders wound up supporting higher tariffs, and throwing in their lot with the large landholders at the crucial point when Caprivi's treaties expired. In Sweden, there was no such pivotal point. Rather, long periods of sustained economic prosperity offered opportunities for labor and smallholders to develop (and enact) policies that supported trade adjustment instead. Therefore not only do we see the cleavage shifting in line with the economic cycle, we can also see how the domestic policy interventions in adjustment shaped whether the economy adjusted its production to become more integrated with the international economy, or built higher barriers to shield itself off.

France and Canada: The Weakness of the Core Supporters of Free Trade

The proponents of free trade will be owners of land in land-intensive sectors, or able to move into land-intensive agriculture. The proponents of protection will be the owners of capital and labor in capital- and labor-intensive industry and agriculture. The owners of capital and labor specific to, or able to move into, land-intensive agriculture are the swing groups here. The proponents of free trade proved too weak politically to gain control over policy. The barriers to mobility facing groups with ambiguous interests in many countries with similar factor endowments (such as France) were substantial; in Canada, there was the chance that landowners could move from a relatively small holding to a larger one. Yet even in Canada, owners of large landholdings could not account for many votes. Smallholders, the potential supporters for free trade, were easily drawn over to protection. The more numerous and powerful protectionist interests were not only in a position to implement a higher tariff consistently, but were positioned to reinforce that tariff with domestic policy interventions that decelerated adjustment.

Table 19: Expected Distribution of Interests in France and Canada

	Large Landholding Districts	Smallholding Districts	Urban Areas
Land-abundant departments or provinces	<i>For Freer Trade</i>	<i>Ambiguous</i>	<i>Protectionist</i>
Land-scarce departments or provinces		<i>Ambiguous</i>	<i>Protectionist</i>

In France, the protectionists could draw support from urban capital and labor, as well as from the large mass of peasant smallholders. The only proponents of freer trade would have been large landholders, but these were further weakened by two specific problems

in France. The first blow against the free traders was historical. The largest landowners were holdovers from the aristocracy. Politically, these groups could never account for many seats. The economic cycle therefore mattered more for how broadly protectionist interests could come together. In the early 1890s, France was in a sustained economic downturn, which led to the widespread support for the Méline Tariff of 1892, and the subsequent additional tariff increases of 1894. Economic recovery between 1897 and 1900 did not lead to any great changes however, since the only swing groups would have been farmers able to shift production into land-intensive operations – well-nigh impossible in France. Small farmers typically tried to do this – sinking their savings into more land purchases – but with only marginal effects on the average size holdings. Thus most farmers remained in labor- and capital-intensive production, despite the relative shortage of both those factors of production in France compared to other countries. It is difficult, however, to show changes in the political cleavages in France because of the ability of MPs to belong to multiple groups.

In Canada, land-intensive farming had some political voice, but also other landowners might be swung towards freer trade. The first crucial difference to observe is in the way political parties used trade policy in their competition. The Liberals finally challenged Tory hegemony in 1896, at the end of a period of poor economic performance. The Liberals did not rush to change the tariff however. Instead, they altered the way in which the National Policy – a package of policies supposedly fostering development associated with the tariff increase – was implemented. The Tories had promised that tariffs would be coupled with policies fostering growth on the western prairies, with the two regions

economically complementing one another. Railroad development would enable domestic trade to drive specialization.

Yet the Tories had not been able to attract sufficient settlers to the west, and the only railroad connections charged monopolistic prices. These policies reinforced the effect of tariffs, in the sense that they hindered specialization towards the country's comparative advantage in land-intensive production. When the Liberals came into office, they kept the tariff in place, but altered the other dimensions of the National Policy. They applied immigration policies to attract more qualified settlers for the prairies. They took land away from the railroads, opening it for settlement. They also regulated the rates the railroad charged, and funded the development of rival lines. These policies, plus almost uninterrupted prosperity between 1898 and 1907, helped transform Canada into a major grain exporter. Politically, the key cleavage now appeared sector-based.¹⁹

Table 21: Canadian Election of 1908

(seats won by the Liberals)

	Land-intensive Agriculture	Labor- or Capital-intensive Agriculture	Industrial Sectors	
Land-abundant province	15 of 28 54%	83 of 137 61%	9 of 21 43%	<i>107 of 186 58%</i>
Land-scarce province		25 of 30 83%	1 of 4 25%	<i>26 of 34 77%</i>
	<i>15 of 28 54%</i>	<i>108 of 167 65%</i>	<i>10 of 25 40%</i>	

The Liberals therefore held onto office without lowering the tariff, seemingly squaring the circle. The tariff continued to protect industrial sectors, but agricultural sectors were

¹⁹ Constituencies here are defined using census data.

also doing well thanks to the domestic policies promoting specialization in land-intensive agriculture. The possibility of a change in trade policy entered the agenda when Sir Wilfrid Laurier negotiated a deal on reciprocal reductions with the U.S. in the winter of 1910-1911. He presented the deal to Parliament, believing he had the ingredients for leading his party in another successful electoral campaign. He believed free trade would maintain the Liberals' support in rural areas. Instead, the promise of trade liberalization brought his party to defeat.

Laurier's miscalculation came from the weak appeal free trade had for farmers as a whole, which he apparently expected; once the economy appeared to weaken, the ambiguous voters – smallholders in Ontario and Quebec – swung towards protection.

Table 22: Canadian Election of 1911
(seats won by the Liberals)

	Land-intensive Agriculture	Labor- or Capital-intensive Agriculture	Industrial Sectors	
Land-abundant province	19 of 33 58%	44 of 137 32%	6 of 19 32%	<i>69 of 189 37%</i>
Land-scarce province		17 of 31 55%	2 of 4 50%	<i>19 of 35 54%</i>
	<i>19 of 33 58%</i>	<i>61 of 168 36%</i>	<i>8 of 23 35%</i>	

The Liberals' collapse in rural Ontario and Quebec cost them 47 seats and the election. In Canada, as in France, free trade was never likely to muster enough support to bring sustained trade policy change. The core supporters of free trade controlled too few seats, and the ambiguous interests too easily swung to protection, to ever sustain trade liberalization and the adjustment process.

Conclusions

The examples above demonstrate how, across four categories of states, the DMM model depicts cleavages, explains why these change (even in the short run), and describes how and why politicians used trade policy in electoral competition. The dominant cleavage on trade is always mixed between sector- and factor-based, but it appears more factor-based during economic downturns, and more sector-based during upturns. This shift is demonstrated by the stances parties took, but also by the voting patterns in these five countries between 1888 and 1911. The economic cycle helped drive these shifts, because it altered assessments of the risks certain groups faced in trade adjustment.

Interpretations based on a non-general equilibrium economic model of trade have several advantages over interpretations based on older models. First, this approach portrays politicians and parties as active competitors rather than passive actors buffeted by other forces. By relaxing assumptions on factors' mobility, we recognize the possibility that parties could use trade policy to vie for votes. Second, this approach identifies solid ways in which domestic and foreign policies are linked. These models let us see how rational political leaders could package trade with domestic policy interventions that shape adjustment. General equilibrium models give us no such leverage. Almost all current attempts to explain patterns of domestic policy in the face of globalizing economic forces are based on general equilibrium models; no wonder then that they perform poorly when trying to connect trade preferences with policies on unemployment benefits. How could general equilibrium models tell us about the links between the tariff and Australia's New Protection, or the Liberals' promotion of land policies in Britain after 1906? These policy packages only make sense politically when

we look inside the trade adjustment process. Similarly, political scientists have accepted that the economic cycle and trade policy preferences are unrelated, by believing that the traditional models' results hold even when the general equilibrium conditions do not. Third, by explaining how different policy packages and different economic conditions might change some limited groups' preferences, this approach shows how political factors can make cleavages dynamic, even in the short run. Short-run fluctuations in these cleavages which cannot be explained by underlying structural factors, such as relative factor endowments, technology, or political institutions, become explicable.

Finally, this approach yields important insight into political behavior that appears entirely irrational using the traditional models. What did Chamberlain or Laurier hope to gain by turning to trade policy? If interests were clear and consistent, how could these experienced politicians make such great mistakes in observing them? This approach suggests that trade policy leaves some interests in play, and these politicians gambled they could bring them over. This approach tells us how unexpected economic conditions or their opponents' counter-strategies shifted the odds against them. That seems an entirely more compelling political story, compared to the ones we currently have.