
Divided government and U.S. trade policy: theory and evidence

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Researchers have proposed a variety of explanations to account for U.S. trade policymaking. The international political economy literature emphasizes the interaction between international power relations and commercial exchange, the effect of global regimes in fostering cooperation among trading states, and the impact of international market conditions on the domestic economy.¹ The scholars associated with this literature assert that trade policy is viewed most appropriately within the constraints imposed by international relations and market structures. Absent from their work, however, is a clear recognition of the effect of domestic conflicts and political institutions on trade policy. Even those scholars who emphasize the importance of domestic politics miss important recent insights in the American politics literature according to which institutions are themselves an object of political choice.²

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1. See Robert Gilpin, *The Political Economy of International Relations* (Princeton, N.J.: Princeton University Press, 1987); Stephen Krasner, ed., *International Regimes* (Ithaca, N.Y.: Cornell University Press, 1983); John A. C. Conybeare, *Trade Wars: The Theory and Practice of International Commercial Rivalry* (New York: Columbia University Press, 1987); and David Lake, *Power, Protection, and Free Trade: International Sources of U.S. Commercial Strategy, 1887-1939* (Ithaca, N.Y.: Cornell University Press, 1988). For an overview of this literature, see Edward D. Mansfield, "The Concentration of Capabilities and International Trade," *International Organization* 46 (Summer 1992), pp. 731-63.

2. See Helen Milner, *Resisting Protectionism* (Princeton, N.J.: Princeton University Press, 1988); Joanne Gowa, *Closing the Gold Window: Domestic Politics and the End of Bretton Woods* (Ithaca, N.Y.: Cornell University Press, 1983); Beth Yarbrough and Robert Yarbrough, *Cooperation and Governance in International Trade* (Princeton, N.J.: Princeton University Press, 1988); Peter Gourevitch, *Politics in Hard Times: Comparative Responses to International Economic Crises* (Ithaca,

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This article develops and tests a distributive politics model of U.S. trade policy that captures both the roles of domestic conflict and institutional design. In this model, legislators find themselves trapped into inefficient logrolling when passing trade legislation. We derive conditions under which Congress grants trade policymaking authority to the President in order to achieve more efficient outcomes. We also show that in the presence of partisan conflict and divided government, the members of the majority party in Congress may have incentives to constrain the President's use of delegated authority, thereby forcing the President to accommodate partially their protectionist pressures. As a consequence, divided government may be associated with higher levels of protection.

Two theories examine the role of institutions in forming U.S. trade policy. Presidential dominance and congressional dominance theories both link the policy preferences of the President and Congress to political outcomes.³ In their extreme form, these theories are diametrically opposed in their view of congressional-executive relations and consequently in the outcomes they predict.

Proponents of the presidential dominance hypothesis argue that Congress has delegated much of its authority to set trade policy to the President.⁴ Even if legislators retain some constraints over executive action, they are unwilling or unable to use their power. This hypothesis has been formulated in various ways. For example, I. M. Destler argues that legislators realize that they are unable to resist the protectionist pressures of special interest groups. Thus, they choose to bind their hands by delegating policymaking authority to the President (or an executive broker), who is less susceptible to protectionist pressures. This delegation of authority insulates Congress from interest group demands and allows legislators to shift the blame for the negative side-effects of trade liberalization.⁵ The policy predictions of this model are consistent with the observation that U.S. tariff rates peaked when Congress set tariffs item by item

N.Y.: Cornell University Press, 1986); and Susanne Lohmann, "Electoral Cycles and International Policy Cooperation," *European Economic Review* 37 (1993), pp. 1373-91.

3. For an overview of this literature, see Terry Moe, "The New Economics of Organization," *American Journal of Political Science* 28 (November 1984), pp. 739-77. For an application to trade policy, see Sharyn O'Halloran, *Politics, Process, and American Trade Policy* (Ann Arbor: University of Michigan Press, 1994).

4. See Arthur M. Schlesinger, *The Imperial Presidency* (Boston: Houghton Mifflin, 1973); Robert Pastor, *Congress and the Politics of U.S. Foreign Economic Policy, 1926-1976* (Berkeley: University of California Press, 1980); Lawrence Margolis, *Executive Agreements and Presidential Power in Foreign Policy* (New York: Praeger Publishers, 1986); I. M. Destler, *American Trade Politics* (Washington, D.C.: Institute for International Economics, 1992); Stephan Haggard, "The Institutional Foundations of Hegemony," *International Organization* 42 (Winter 1988), pp. 91-119; Judith Goldstein, "Ideas, Institutions and American Trade Policy," *International Organization* 42 (Winter 1988), pp. 179-217; and I. M. Destler, "U.S. Trade Policy-making in the Eighties," in Alberto Alesina and Geoffrey Carliner, eds., *Politics and Economics in the Eighties* (Chicago: University of Chicago Press, 1991).

5. For a similar argument, see Morris P. Fiorina, "Legislative Choice of Regulatory Forms: Legal Process or Administrative Process," *Public Choice*, vol. 39, no. 1, 1982, pp. 33-66.

in the 1930 Smoot–Hawley Tariff Act, whereas tariff rates declined precipitously once Congress delegated trade policymaking authority to the President in the 1934 Reciprocal Trade Agreements Act.

Proponents of the congressional dominance hypothesis, on the other hand, argue that the delegation of authority to the President does not imply a relinquishing of power.⁶ Administrative procedures, “fire-alarm” or “police-patrol” oversight, and the credible threat of sanctions effectively constrain the President’s leeway to set policy. As a consequence, executive decision making will mirror congressional interests.⁷ Applied to trade policy, the congressional dominance hypothesis in its extreme form suggests that even if Congress delegates power to the executive, the President’s discretionary powers are limited due to procedural constraints. The resulting trade policies, then, are identical to those that would be implemented by Congress if its members passed trade legislation without recourse to delegation. At first blush, the congressional dominance hypothesis is consistent with the observation that Congress repeatedly has constrained the President’s discretion by requiring presidential trade proposals to fulfill numerous consultation requirements and pass a variety of veto points, as in the 1974 Trade Reform Act and its 1984 amendments as well as the 1988 Omnibus Trade Act.

In our view, both the presidential and congressional dominance hypotheses provide an incomplete picture of trade policymaking. According to the presidential dominance hypothesis, the delegation of trade policymaking authority is a matter of political choice; but this approach fails to acknowledge that under certain circumstances, Congress may choose not to cede to the President complete discretion. On the other hand, the congressional dominance hypothesis allows Congress to set the terms of delegation; but this approach does not capture the possibility that legislators may deliberately design a delegation regime to implement policy outcomes different from those that would result if Congress enacted legislation on its own. We synthesize these different strands of literature in a more general model of delegation and accommodation in which both the presidential and congressional dominance

6. See Barry R. Weingast and Mark Moran, “Bureaucratic Discretion or Congressional Control: Regulatory Policymaking by the Federal Trade Commission,” *Journal of Political Economy* 91 (October 1983), pp. 765–800; Mathew McCubbins and Thomas Schwartz, “Congressional Oversight Overlooked: Police Patrols and Fire Alarms,” *American Journal of Political Science* 28 (February 1984), pp. 165–79; and Mathew McCubbins, Roger Noll, and Barry Weingast, “Administrative Procedures as Instruments of Political Control,” *Journal of Law, Economics, and Organization* 3 (Fall 1987), pp. 243–78.

7. The literature on the “new institutionalism” is often, and perhaps narrowly so, identified with the congressional dominance hypothesis. Recently, a number of scholars have modified the congressional dominance hypothesis to take into account the President’s veto powers. See, for example, Mathew McCubbins, Roger Noll, and Barry Weingast, “Structure and Process: Politics and Policy: Administrative Arrangements and the Political Control of Agencies,” *Virginia Law Review* 75 (March 1989), pp. 431–82; and D. Roderick Kiewiet and Mathew D. McCubbins, *The Logic of Delegation: Congressional Parties and the Appropriations Process* (Chicago: University of Chicago Press, 1991).

hypotheses are obtained as special cases. Such a synthesis in particular explains why Congress partially constrained presidential policymaking by granting the executive fast-track authority in the 1974 Trade Reform Act: the President may engage in international trade negotiations on behalf of Congress but presidential trade proposals must pass an up-or-down congressional vote. Subsequent acts and amendments have strengthened or weakened the implied constraint while retaining its partial nature.

The next section first presents an informal exposition of our theory and then formally develops the model. We subsequently provide empirical support for our theory through a brief historical overview of institutional changes in postwar U.S. trade policy and an econometric examination of changes in average tariff rates. The last section summarizes our conclusions. The appendix contains a formal derivation of the results.

A distributive politics model of delegation and accommodation

Collective dilemmas and delegation

Our model explains why a majority in Congress would delegate power to the President. We build on an extensive literature that examines how players engaged in a noncooperative game with inefficient outcomes might be able to achieve more desirable results by choosing delegates to play on their behalf.⁸ In these models, a principal delegates discretionary authority to an agent who is deliberately chosen to have *different* preferences than the principal. In contrast to standard principal-agent models, these models do not consider moral hazard or adverse selection. Nor are they driven by the desire of a political principal to shift the blame for unpopular decisions.⁹

In our model, individual members of Congress and the President have different constituencies and consequently differ in their trade policy goals. Each legislator cares only about the benefits and costs of protectionism to his or her own district. Thus, in passing trade legislation, Congress is trapped into distributive logrolling that results in inefficiently high levels of protection. The total marginal costs imposed on all sectors by each district-specific measure exceed the marginal benefits to the protected district. This inefficiency arises because each individual member weighs the marginal benefits and costs for his or her own district when proposing a trade policy measure, but ignores the

8. This idea has been developed in the context of central banking and taxation: see Kenneth Rogoff, "The Optimal Degree of Commitment to an Intermediate Monetary Target," *Quarterly Journal of Economics* 100 (1985), pp. 1169–89; Susanne Lohmann, "Optimal Commitment in Monetary Policy: Credibility Versus Flexibility," *American Economic Review* 82 (March 1992), pp. 273–86; and Nahum D. Melamud and Dilip Mookherjee, "Delegation as Commitments: The Case of Income Tax Audits," *RAND Journal of Economics* 20 (1989), pp. 139–63.

9. For an example of the latter, see Fiorina, "Legislative Choice of Regulatory Forms."

negative externalities that might be imposed on other districts.¹⁰ (We define a vector of trade policy measures as efficient if it minimizes the sum of the districts' losses. The efficient frontier is given by the set of such vectors that are obtained by varying the weights assigned to the districts. This concept of efficiency is more general than the widespread notion that an outcome is efficient only if the total benefits exceed the total costs.)

Inefficient logrolling procedures, together with a norm of universalism that assigns benefits to each district, are supported by the following logic.¹¹ Each legislator proposes to protect his or her own district, and the legislature votes on each of the proposals by majority rule. If any one legislator were to vote against another legislator's proposal, the former legislator would be punished: some other legislator would propose an amendment that assigns no protection to the defector's district but maintains the proposed levels of protection to all other districts. Given that all other legislators vote in favor of each others' proposals, no legislator's vote is decisive. Each district-specific measure passes, and it is individually rational for each legislator to vote for all proposals. Thus, the universalistic logrolling pattern is supported as an equilibrium by a particular set of beliefs.¹²

The President, on the other hand, has a national constituency and cares about the losses incurred by all districts. If given discretionary powers to set trade policy, the President would implement measures that trade off the marginal benefits derived from protecting industries in one district against the marginal costs imposed on all other districts. As a consequence, efficient outcomes would be achieved. Each member of Congress would be better off under this outcome than under the inefficient logrolling outcome. In this setting, the legislators would never choose to constrain the President's powers, since such constraints could only lead to less efficient policy.

In our view, institutional constraints might arise in the presence of partisan conflict between Congress and the President. We develop a constituency-based notion of partisan conflict. Consider the situation where the President weighs the marginal costs and benefits of protecting various constituencies according to partisan reelection considerations: a Democratic President places a relatively higher weight on Democratic constituencies, while a Republican President cares relatively more about Republican constituencies. If different parties are in control of the executive and legislative branches, the President's

10. See also Barry Weingast, Kenneth Shepsle, and Christopher Johnsen, "The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics," *Journal of Political Economy* 89 (August 1981), pp. 642–64.

11. This concept of universalism does not exclude the possibility that the district-specific benefits enjoyed by any one district are outweighed by the total costs incurred by that district.

12. The Folk Theorem applies to a situation in which the members of Congress can vote indefinitely on a sequence of proposals. This theorem implies that the set of proposal and voting strategies described above is sustainable as a Nash equilibrium for some set of beliefs about punishment strategies. Clearly, the equilibrium characterized above is only one out of multiple belief-driven equilibria.

response to district-specific economic conditions will differ *ex ante* from the response desired by the congressional majority party.¹³ In this situation, members of the majority party may choose to delegate authority to the President but constrain executive powers by making presidential proposals subject to an up-or-down vote. This constraint forces the President to accommodate partially congressional demands for more protectionist trade policy measures. The President will choose to accommodate those members who can be “bought off” at least expense and consequently will assemble a bipartisan majority to vote in favor of the proposal. In general, this majority will tend to include a higher proportion of members from the President’s party. Nevertheless, the President will exclude members of his or her party from districts with very unfavorable economic conditions and will include members of the other party from districts with favorable economic conditions.

Thus, our model suggests that voting on presidential trade bills may appear to be nonpartisan even in the presence of severe partisan conflict between Congress and the President. In contrast, the legislators’ party affiliations are crucial to votes on the institutional arrangements that underlie trade policy, since those votes are cast before the district-specific economic conditions are revealed.

Our model implies that protection levels are higher when economic conditions are unfavorable. Moreover, protection levels will be lower when the President alone sets trade policy than when Congress passes trade legislation, and a constrained President will tend to implement more protectionist trade policy measures than an unconstrained one. Finally, the President’s discretionary powers will be more constrained under divided than under unified government. As a consequence, divided government may be associated with higher levels of protection than unified government.

Policy preferences of the players

In this section, abstracting from the bicameral structure of Congress, we formally develop a model of the strategic interaction between Congress and the President that supports the implications discussed above. We first specify the preferences of the players. The country consists of n legislative districts, where n is odd. The political representation of the people in this country is determined geographically. In the legislature, each district is represented by one legislator, who is motivated to maximize that district’s utility function:

$$U_i(p_1, \dots, p_n) = \beta_i p_i - p_i^2 - \gamma \sum_{j \in N \setminus i} p_j^2, \quad (1)$$

13. While we do not explicitly model the role of party in Congress, our main results are robust with regard to the possibility that members of the majority party partially or fully exclude members of the minority party from distributive logrolling.

where $i \in N = \{1, \dots, n\}$; p_i is a district-specific trade policy measure that is restricted to be greater than or equal to zero; β_i (the weight on the district-specific benefits of protection) is the absolute value of a draw from a normal distribution $f(\beta_i)$ with mean zero and strictly positive but finite variance σ^2 ; and γ is a strictly positive weight on the costs district i incurs due to the trade policy measures that afford protection to other districts.

The formulation of the utility function captures the notion that the benefits of protectionism are concentrated, while the costs are dispersed. The benefits that the producers in district i derive from being protected by the district-specific trade policy measure p_i are given in the first term in equation 1, $\beta_i p_i$. The second term, p_i^2 , reflects the costs incurred by the consumers in district i due to district-specific protection. The linear formulation of the benefit term and the quadratic formulation of the cost term will allow us to derive a unique closed-form solution to the maximization problem.

The weight β_i determines the district's optimal trade-off between the benefits and costs generated by district-specific protection. We will interpret the realization of this weight as being a function of district-specific economic conditions. If the economic conditions in a district are favorable, then the district has a low realization of weight β_i on the benefits derived from district-specific protection; unfavorable economic conditions are associated with a high realization of β_i . The assumption that β_i is the absolute value of a draw from a normal distribution implies that the level of protection desired by the representative of a district is strictly positive, as is the efficient level of protection for that district. In addition, this assumption reflects the notion that extremely unfavorable economic conditions (high β_i) occur more rarely than do fairly favorable (low β_i) or fairly unfavorable (intermediate β_i) conditions.

The third term in equation 1, $\sum_{j \in N \setminus i} p_j^2$, captures the negative cross-district external effects that producers and consumers in district i experience as a result of the trade policy measures that afford protection to *other* districts. The severity of these external effects increases as γ increases, reflecting an increase in the degree to which local economies are interdependent. For simplicity, we assume that the districts' utility functions have identical weights γ and differ only in the weight β_i .

The President has a national constituency and maximizes the sum of the n districts' utility functions:

$$U_P(p_1, \dots, p_n) = \sum_{i=1}^n \omega_i \left(\beta_i p_i - p_i^2 - \gamma \sum_{j \in N \setminus i} p_j^2 \right), \quad (2)$$

where ω_i is the weight the President places on district i 's utility, $\sum_{i=1}^n \omega_i = n$.

We will focus on two cases. In the benchmark case of no partisan conflict, the President weighs all districts equally: $\omega_i = 1$ for all i . In the case of partisan conflict, the President places higher weights on those districts that support his

TABLE 1. *Nonpartisan and partisan weights (ω_i) for majority and minority party districts under unified and divided government, where n = the number of districts, m = the number of majority party members, and d = the severity of partisan conflict*

		Partisan case	
	Nonpartisan case	Unified government	Divided government
Majority party districts	1	$1 + d(n - m)$	$1 - d(n - m)$
Minority party districts	1	$1 - dm$	$1 + dm$

or her party than on the other party’s districts. Let m be the number of majority party members in Congress. The relative weights placed on majority and minority party districts under unified and divided government are given in Table 1. In our model, the severity of the partisan conflict is represented by the parameter d (see Table 1). For $d = 0$, the President weighs the districts’ utilities in the aggregate utility function equally (equation 2). As d increases, the partisan conflict becomes more severe, as is reflected in the increasing difference between the weights assigned to majority and minority party districts.

Time sequence

The formal model consists of two stages. At the institutional design stage, members of Congress choose by majority rule whether to retain or delegate their trade policymaking powers. If the members of Congress delegate power, they decide by majority rule whether to constrain partially the President by subjecting presidential trade proposals to an up-or-down (closed-rule) simple majority vote.

After the institution is set up, a one-shot game is played. For the duration of that game, the legislators are fully committed to respect the institutional constraints agreed upon at the institutional design stage.¹⁴ A simplified game tree is shown in Figure 1.

Once the institutional arrangement is set up, a vector of relative weights on the benefits and costs of district-specific protection, $[\beta_1, \dots, \beta_n]$, is realized and

14. An assumption that politicians can “solve” collective dilemmas by credibly committing to institutions is standard in institutional design models. This assumption is critically reviewed in Jonathan Bendor and Susanne Lohmann, “Institutions and Credible Commitment,” mimeograph, Graduate School of Business, Stanford University, February 1993.

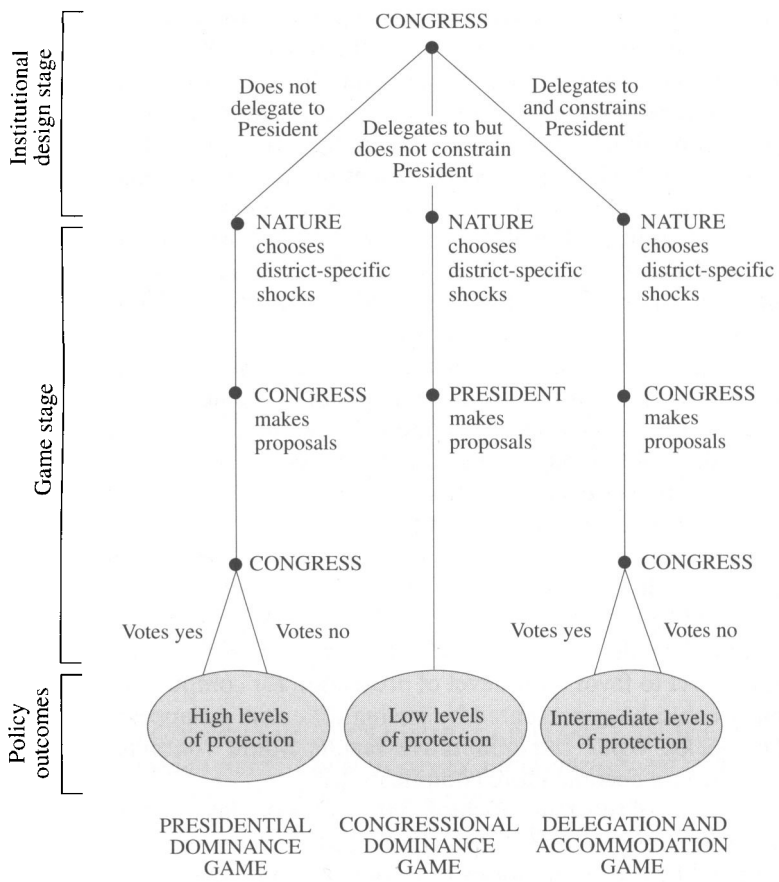


FIGURE 1. Time sequence of events

commonly observed by all players. This is the only source of uncertainty in the model.

The specific set of institutional constraints determine the sequence in which players can make or accept proposals. If the legislators do not delegate trade policymaking authority, they play the congressional dominance game. Each legislator proposes a district-specific trade policy measure, and each proposal is voted on by simple majority vote under an open rule. If the President is given unlimited powers, the presidential dominance game is played. The President unilaterally sets the district-specific trade policy measures. Finally, if the President's powers are constrained, then Congress and the President play the delegation and accommodation game. In this case, the President's trade policy proposal is subject to an up-or-down vote in Congress. If the President's proposal receives a majority vote, it is implemented. If the proposal fails,

Congress reverts to the congressional dominance game. Thus, the outcome of the congressional dominance game plays the role of a threat point.¹⁵

Trade policy outcomes will depend on the institutional constraints, the players' trade policy preferences, and the realization of the district-specific economic conditions. Rationally anticipating the play of the game once institutional constraints are specified, legislators form an expectation of the resulting trade policy outcomes. As a consequence, they have induced preferences over institutional arrangements. At the institutional design stage, a majority of legislators choose whether to delegate authority to the President and whether to constrain the President's authority by making presidential proposals subject to an up-or-down vote.

The legislature operates behind a "veil of ignorance" in choosing the institutional design that will affect trade policy outcomes. *Ex ante*, members of Congress do not know whether economic conditions in their districts will be favorable or unfavorable. Thus, all members of the majority party have identical preferences over institutional arrangements, as do all members of the minority party. The assumption that the members of the majority and minority parties have homogeneous preferences is not crucial. For instance, legislators who represent districts dominated by the automobile industry may know in advance that they are likely to favor a higher level of protection for automobiles in the future, while representatives of districts dominated by the computer industry expect to favor a low level of protection for computers. (Formally, this possibility could be represented by having different variances for the district-specific shocks. While our qualitative results would continue to hold, their derivation would become more complicated.)

The structure of the game, including the order of play and the preferences of all players, is common knowledge. (Of course, this assumption is not identical to or implied by the assumptions of perfect or complete information. Indeed, the game described above is a game of imperfect information since the district-specific shocks are unknown at the outset.) The equilibrium concept is perfect Bayesian equilibrium. Moreover, the players are constrained not to use weakly dominated strategies.¹⁶ The model is solved by backward induction. We first derive the equilibrium proposal and acceptance strategies for the game stage. Then we derive the institutional choice made by a majority in Congress at

15. We find this assumption more plausible than the alternative assumption that the status quo is maintained if the President's proposal is voted down. Moreover, this assumption allows us to view the congressional dominance hypothesis as a special case of our model. If Congress constrained the President's powers by making presidential proposals subject to an open rule vote, the President's discretionary powers would fully unravel due to the subsequent amendment activity. The resulting outcome would correspond to the one that is implemented in the congressional dominance game.

16. This constraint eliminates undesirable voting equilibria of the following type. Suppose all legislators believe that a proposal will pass by more than one vote so that no legislator can affect the outcome by changing his vote. As a result, each legislator is indifferent between voting for or against any proposal, and one proposal may in fact pass although a majority would be better off if it failed, and vice versa.

TABLE 2. *Game stage implications for levels of protection*

	<i>Congressional dominance game</i>	<i>Presidential dominance game</i>	<i>Delegation and accommodation game</i>	
			<i>Voting constraint not binding</i>	<i>Voting constraint binding</i>
Level of protection	High and inefficient	Low and efficient	Low and efficient	High and inefficient

the institutional design stage. In each case, we examine the implications of partisan conflict and unified or divided government. The equations to which we refer in the proofs of the propositions are provided in the appendix.

Game stage

An overview of the implications of the model for the game stage is given in Table 2. The trade policy outcomes implemented by the various games are characterized in the propositions below.

PROPOSITION 1 (CONGRESSIONAL DOMINANCE GAME). (i) *When retaining the authority to set trade policy, Congress passes a universalistic set of trade policy measures with inefficiently high levels of protection for all districts.* (ii) *The more unfavorable the economic conditions in a district (the higher is β_i), the higher is the level of protection (p_i) afforded to that district.*

Proof. After a vector of relative weights on the benefits and costs of protection, $[\beta_1, \dots, \beta_n]$, is realized, the members of Congress engage in universalistic logrolling.¹⁷ Each legislator proposes a trade policy measure p_i for his or her district. After each proposal, each member chooses whether to vote for or against the proposal.

The proof is based on the Folk theorem.¹⁸ The legislators have the following beliefs. If all legislators vote in favor of one another's proposal, then the game ends after each member has made a proposal and that proposal has been passed. If any one legislator j were to defect and vote against another legislator's proposal, then some other legislator subsequently will propose a

17. In the presence of partisan conflict, it is plausible that the members of the majority party might exclude members of the minority party from the distributive logrolling process or constrain them to propose lower levels of protection. The main conclusions of our article hold for both the universalistic and majoritarian logrolling processes.

18. This theorem applies to our setting, since we assume that Congress can vote indefinitely on a sequence of proposals.

zero-protection policy ($p_i^0 = 0$) for the defector's district. A majority then will vote in favor of that policy, thereby overturning the protective policy previously passed for that district. If the legislator who is assigned to make a punishment proposal fails to do so, then that legislator in turn is punished by having some other legislator propose the zero-protection policy for the former's district. Similarly, a legislator who deviates by proposing a zero-protection policy for a district whose representative did not defect is punished. Finally, if a legislator was expected to vote in favor of a punishment proposal but fails to do so, that legislator also is punished. This punishment process continues indefinitely until zero-protection policies are passed for all defectors.

Legislator i , who believes that his or her proposal will pass, proposes the trade policy measure that maximizes his or her utility function in equation 1 (see also equation A1). Given that representative j believes that all other legislators will vote for member i 's proposal, j 's vote is not decisive for the voting outcome. Member j 's vote does, however, affect whether the trade policy measure he or she desires for his or her own district is implemented. If member j votes in favor of the other member's proposal, member j expects his or her own proposal to pass; if j votes against the other proposal, j 's district will be punished. Thus, j has a dominant strategy of voting in favor of the proposal. This holds for all representatives and all proposals. The legislators' beliefs that each proposal will pass for sure are fulfilled in equilibrium.

In equilibrium, no legislator defects, and the punishment process is never played out. Each legislator proposes the trade policy measure p_i^{CD} for his or her district (see equation A1), and this proposal passes. (The superscript CD stands for congressional dominance.)

The trade policy vector p^{CD} is the equilibrium outcome of the congressional dominance game. For each district, the district-specific trade policy measure p_i^{CD} trades off the marginal benefits and costs generated for that district but ignores the negative external effects imposed on other districts. Consequently, levels of protection are inefficiently high. The more unfavorable the economic conditions in a district (the higher β_i), the higher is the level of protection (p_i) chosen by that district's representative (see equation A1). \square

PROPOSITION 2 (PRESIDENTIAL DOMINANCE GAME). (i) *If the President sets trade policy independently, she or he implements efficiently low levels of protection.* (ii) *As before, the more unfavorable the economic conditions in a district (the higher is β_i), the higher is the level of protection (p_i) afforded to that district.* (iii) *However, protection levels tend to be relatively higher in majority party districts under unified government and in minority party districts under divided government.*

Proof. After a vector of relative weights on the benefits and costs of protection, $[\beta_1, \dots, \beta_n]$, is realized, the President unilaterally implements the trade policy measures that maximize the presidential utility function (equation 2), given by

the trade policy vector \mathbf{p}^{PD} (see equation A2). (The superscript PD stands for presidential dominance.)

As in the congressional dominance game, districts that experience more unfavorable economic conditions (higher β_i) are protected to a greater extent. However, the district-specific trade policy measures implemented by the President in this game are less protectionist overall than those proposed by the districts' representatives in the congressional dominance game. In contrast to legislators who care only about their own districts, the President takes into account the negative external effects that the protection of each district imposes on other districts. Moreover, a partisan President cares more about the districts represented by members of the President's own party and thus assigns them higher levels of protection (see equation A2). \square

PROPOSITION 3 (DELEGATION AND ACCOMMODATION GAME). (i) *If the cross-district external effects in the congressional dominance game are severe (γ is large), the President does not accommodate any district, and presidential trade policy proposals are passed by a majority.* (ii) *If the cross-district external effects in the congressional dominance game are weak (γ is small), the President may have incentives to accommodate partially some legislators, depending on the distribution of favorable and unfavorable economic conditions (the realizations of β_i). In this case, the President assembles a bipartisan majority in favor of his or her proposal.* (iii) *As before, the more unfavorable the economic conditions in a district (the higher is β_i), the higher the level of protection (p_i) afforded to that district.* (iv) *However, the partisan pattern of protection for majority and minority party districts under unified and divided government is muted.*

Proof. After a vector of relative weights on the benefits and costs of protection, $[\beta_1, \dots, \beta_n]$, is realized, the President proposes a trade policy vector \mathbf{p}^{DA} . (The superscript DA stands for delegation and accommodation.) Each member of Congress votes for or against this proposal under a closed-rule vote. If a majority votes in favor of the President's proposal, it is accepted, and the outcome vector \mathbf{p}^{DA} is implemented. If the proposal is defeated, the congressional dominance game is played, resulting in the outcome vector \mathbf{p}^{CD} .

Whether the voting constraint is binding depends on the severity of the cross-district external effects and the realized economic conditions. If the external effects in the congressional dominance game are severe (γ is high), then a majority is always *ex post* better off under the outcome of the presidential dominance game (\mathbf{p}^{PD}) than under the highly protectionist outcome of the distributive logrolling process (\mathbf{p}^{CD} ; see equation A3). In this case, the voting constraint is never binding. The President is motivated to make the unconstrained proposal \mathbf{p}^{PD} , and this proposal finds a majority.

If the cross-district external effects are weak (γ is low), the voting constraint may be binding, depending on the distribution of favorable and unfavorable economic conditions (the realizations of β_i). If the voting constraint is binding,

then the unconstrained proposal p^{PD} would fail to get a majority of the vote, and Congress would play the congressional dominance game. The President is worse off under the highly protectionist policies implemented by the congressional dominance game than if he or she accommodates some members of Congress to ensure that the modified presidential proposal passes (see equation A5).

Legislators whose districts have experienced fairly favorable economic conditions (low β_i) have a strict preference for the President's proposal (p^{DA}) over the outcome of the congressional dominance game (p^{CD} ; see equation A6). They care less about the President's weak response to current economic conditions in their districts and more about avoiding the negative effects that would be imposed on their districts if other districts were to be protected. Districts characterized by unfavorable economic conditions have a strict preference for playing the congressional dominance game (see equation A6). The more unfavorable the economic conditions in a district (the higher is β_i), the stronger the incentives of that district's representative to vote against the presidential proposal p^{DA} (see equation A6).

Given the President's inclination to accommodate the protectionist demands of the districts controlled by his or her party, a legislator's incentive to vote against the President's proposal also depends on party affiliation (see equation A6). Under unified government, the representatives of majority party districts tend to have weaker incentives to vote against the President's proposal than do members of the minority party; under divided government, this tendency is reversed (see equation A6).

Subject to the constraint of getting her or his trade bill passed, the President is worse off the more districts she or he accommodates and the more she or he accommodates those districts (see equation A5). It follows that the President accommodates exactly the minimum required to get a simple majority for the proposal at stake. Moreover, she or he accommodates those members of Congress who can be "bought off" at least expense, and only to the point of making them indifferent between voting for or against the proposal.¹⁹

The implied patterns of accommodation are illustrated in Figure 2. Representatives of districts that have experienced favorable economic conditions (low β_i) are not accommodated since they have incentives to vote in favor of the President's proposal. Representatives of districts that have experienced extremely unfavorable economic conditions (high β_i) also are not accommodated since the costs of driving them to the point of indifference would be too high.

In deriving the pattern of accommodation for districts with intermediate economic conditions (intermediate β_i), it is crucial to recognize that the

19. In equilibrium, a legislator who is indifferent between voting for or against the President's proposal is assumed to vote in favor of the proposal. An equilibrium in which an indifferent legislator votes against the President with strictly positive probability does not exist unless the equilibrium concept is extended to that of ϵ -equilibrium. See James W. Friedman, *Game Theory with Applications to Economics* (New York: Oxford University Press, 1986).

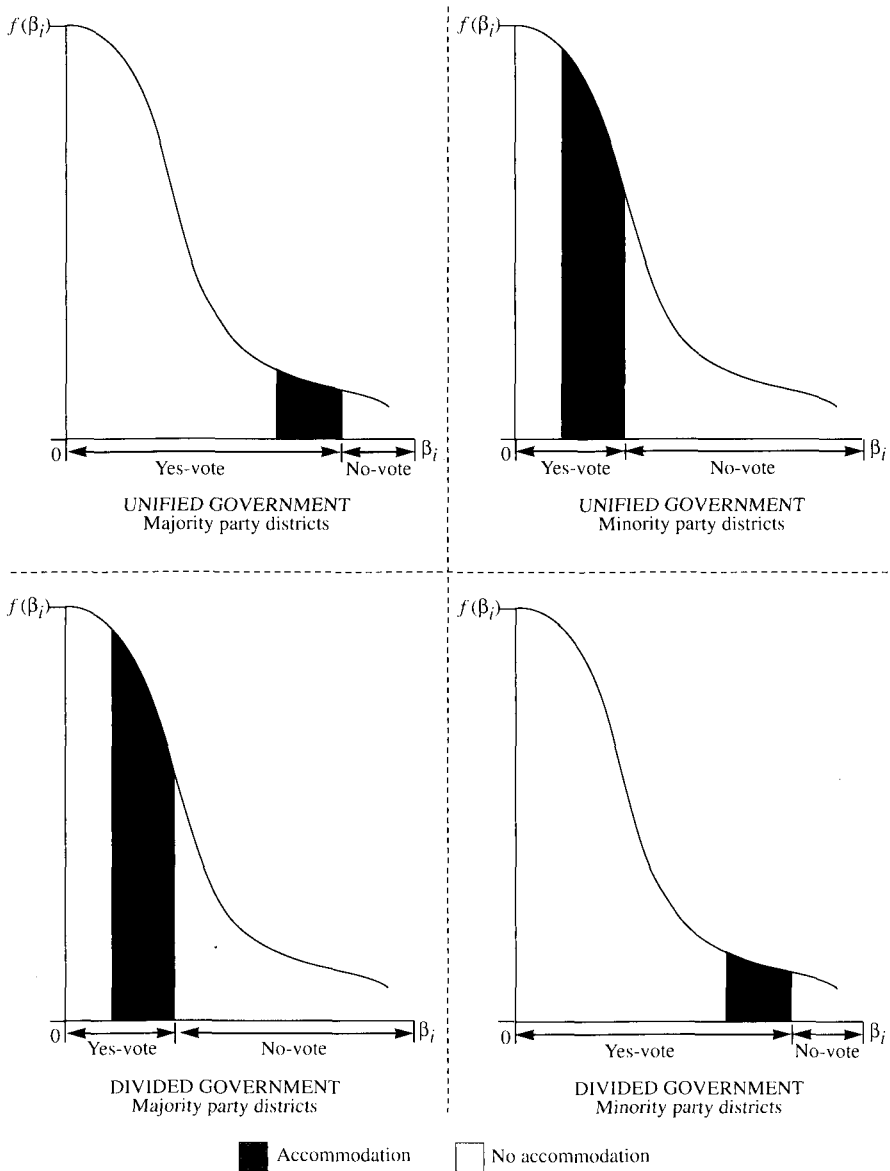


FIGURE 2. Patterns of voting and accommodation under unified and divided government

legislators' incentives to support the President's proposal as a function of β_i differ across majority and minority party members (see equation A8). Under unified government, a majority party district characterized by fairly unfavorable economic conditions (fairly high β_i) and a minority party district with fairly

favorable conditions (fairly low β_i) are both indifferent between voting for or against the President's proposal and vice versa under divided government (see equation A8). The levels of β_i that drive members of the majority and minority parties to the point of indifference will be referred to as indifference cut points. The majority and minority party districts that experience β_i levels just above their respective indifference cut points are accommodated. It follows that under unified government, majority party districts characterized by fairly unfavorable economic conditions and minority party districts with fairly favorable conditions are accommodated and vice versa under divided government. The President accommodates the representatives of these districts by proposing higher levels of protection for their districts, albeit never as high as the proposals made in the congressional dominance game (see equation A6). Within each accommodated group, the more unfavorable the economic conditions (the higher is β_i), the higher the degree of accommodation (see equation A6).

Given this pattern of accommodation, the following voting behavior results. Generally, the majority that votes in favor of the President's proposal will consist of the members whose districts have experienced favorable economic conditions (low β_i), while the minority of legislators that vote against the proposal face unfavorable economic conditions in their districts (high β_i ; see Figure 4). Under unified government, majority party members who have experienced fairly unfavorable economic conditions and minority party members who have experienced fairly favorable economic conditions vote for the President's proposal and vice versa under divided government. The President's accommodative proposal will pass by exactly a simple majority. However, if the model were extended to allow for some incomplete information, presidential trade policy proposals would include and be passed by a supermajority. \square

Institutional design stage

Proposition 4 characterizes the institutional constraints set at the institutional design stage. The results are summarized in Table 3.

PROPOSITION 4 (INSTITUTIONAL CHOICE). (i) *Under unified government, the President remains unconstrained, and the presidential dominance game is played.* (ii) *Under divided government, if the cross-district external effects in the congressional dominance game are severe (γ is large), the majority party in Congress delegates authority to the President but is indifferent toward constraining the President's powers since the outcomes of the presidential dominance and delegation and accommodation games are identical.* (iii) *If the cross-district external effects are weak and the partisan conflict is severe (γ is low and d is large), the majority party in Congress either does not delegate power to the President or, equivalently, fully constrains the President's powers; in each case, the congressional dominance game is played.* (iv) *Otherwise, the President's use of delegated authority*

TABLE 3. *Implications of the institutional design stage for the degree of delegation to the President*

		<i>Partisan case</i>	
		<i>Nonpartisan case</i>	
		<i>Unified government</i>	<i>Divided government</i>
Degree of delegation	Full delegation (presidential dominance)	Full delegation (presidential dominance)	Zero, partial, or full delegation (congressional dominance, delegation and accommodation, or presidential dominance)

may be partially constrained, in which case the delegation and accommodation game is played.

Proof. At the institutional design stage, members of Congress choose by simple majority rule whether to delegate authority to the President and whether to constrain the President's authority by making presidential proposals subject to an up-or-down vote. *Ex ante*, members of Congress do not know whether economic conditions in their districts will be favorable or unfavorable. Thus, all members of the majority party have identical preferences over institutional arrangements, as do all members of the minority party.

Under unified government, an independent President chooses those trade policy measures that maximize the sum of the utilities of the individual members of Congress. The President's maximization problem assigns higher weights to districts represented by members of the majority party. On the other hand, the outcome of the congressional dominance game is determined by the negative cross-district external effects. Each majority party member expects to be better off under the set of efficient trade policy measures implemented in the presidential dominance game than under the inefficient outcomes of the congressional dominance game. Thus, a majority of legislators vote in favor of delegating authority to the President (see equation A9).

The outcome of the presidential dominance game can be thought of as a point on the efficient frontier that is advantageous for the members of the majority party. If the President were forced to accommodate some members of Congress, the resulting outcomes would be inefficient, and minority party members would have a higher chance of being accommodated than would majority party members (see Figure 2). Thus, under unified government, the members of the majority party vote against constraining the President's powers (see equation A11).

Under divided government, the members of the majority party face a trade-off. By delegating power to the President, they avoid the negative cross-district external effects of distributive logrolling and achieve more efficient and lower levels of protection. On the other hand, a partisan President affords lower levels of protection to majority party districts. If the external effects are severe (γ is large), all members of the legislature unanimously agree to delegate trade policymaking authority to the President (see equation A9). They are indifferent toward constraining the President, since the outcomes of the presidential dominance and the delegation and accommodation games are identical.

If the cross-district external effects are weak and the partisan conflict is severe (γ is low and d is large), the members of the majority party vote against delegating power to the President (see equation A9). Equivalently, they may choose to allow the President to make trade policy proposals but then require presidential proposals to pass an open-rule vote. In this case, the President's powers would unravel due to the subsequent amendment activity.

If neither the external effects nor the partisan conflict is too severe (γ and d are low), the members of the majority party may choose to delegate power to the President and partially constrain that delegated authority (see equations A9, A10, and A11). That is, a member of the majority party would expect to be better off under the delegation and accommodation game if the expected negative external effects generated by the accommodation of other districts are dominated by the *ex ante* probability that the member's own district is accommodated, multiplied by the expected net benefits afforded to that member's district. Since majority party members have relatively stronger incentives to vote down any proposal made by a minority party President, they are more likely to be accommodated than are minority party members (Figure 2). (In some cases, legislators may prefer the outcome of the congressional dominance game over that of the presidential dominance game, while preferring the outcome of the delegation and accommodation game over that of the congressional dominance game. Since voting is sophisticated, they would initially vote in favor of delegating authority to the President and then vote in favor of constraining the President's powers.) \square

Trade policy outcomes

The main implication of our analysis is presented in proposition 5.

PROPOSITION 5 (TRADE POLICY OUTCOMES UNDER UNIFIED AND DIVIDED GOVERNMENT). *U.S. trade policy tends to be more protectionist under divided than under unified government if the cross-district external effects in the congressional dominance game (γ) are not too severe and the size of the majority party in Congress (m) is not too large.*

Proof. In proposition 4, we established that the members of the majority party in Congress would never choose to constrain their President under unified government. The members of the majority party may, however, choose to constrain fully or partially a minority party President.

Propositions 1–3 imply for a given regime of divided or unified government that levels of protection will be higher if the President is more constrained. To compare levels of protection *across* regimes, however, two counteracting effects must be taken into account. First, if the cross-district external effects are not too severe (γ is not too large), then the President will be more constrained under divided than under unified government, and the voting constraint will be binding for some realizations of the vector of relative weights on the benefits and costs of protection, $[\beta_1, \dots, \beta_n]$ (see proposition 4). As a consequence, protection levels will tend to be higher under divided than under unified government. Second, in the presence of partisan conflict ($d > 0$), the President cares more strongly about a minority of districts under divided government and about a majority of districts under unified government. Thus, for any given level of constraint, the President will tend to implement lower aggregate levels of protection under divided than under unified government. This difference between aggregate levels of protection under divided and unified government is more pronounced if Congress comprises a large number of majority party districts and a correspondingly small number of minority party districts; the difference approaches zero as the size of the majority m approaches $n/2$. It follows that if γ and m are not too large, the former effect dominates the latter, and overall levels of protection will tend to be higher under divided than under unified government. \square

Voting implications

Proposition 6 presents a testable implication for the voting patterns in Congress.

PROPOSITION 6 (VOTING PATTERNS). *Voting on institutional arrangements (such as the authorization of the fast-track provisions discussed below) tends to exhibit partisan cleavages to a greater extent than does voting on presidential trade policy proposals.*

Proof. At the institutional design stage, all members of the majority party are *ex ante* identical, as are all members of the minority party. Thus, all members of the majority party cast identical votes, as do all members of the minority party. In contrast, at the game stage, the legislators are distinguished by their party attachment and the district-specific realizations of the economic conditions. As established in proposition 3, the majority that votes in favor of the President's proposal includes both majority and minority party members, as does the minority that votes against the President's proposal. \square

Overview of postwar trade legislation

In this section, we review the major changes in trade legislation during the postwar period. We thus provide empirical support for proposition 4, which links changes in the partisan control of Congress and the presidency to changes in institutional arrangements. Our model asserts that increases in partisan conflict will be associated with a strengthening of institutional constraints on the President's use of delegated power; similarly, decreases in partisan conflict imply a relaxation of those constraints.²⁰

The history of postwar trade legislation shows that Congress frequently incorporates provisions that either force executive branch officials to comply more closely with congressional views or afford them greater latitude. Clearly, much of the pressure for these provisions comes from import-sensitive industries. However, part of legislators' willingness to limit executive authority stems from their concerns about whether the President's actions accurately will reflect their interests.²¹ The model presented above asserts that the constraints placed on executive action will depend on whether Congress and the President are of the same party. Table 4 highlights each of the major procedural innovations in trade legislation during the postwar period described below and demonstrates the correspondence between increased (decreased) partisan conflict and increased (decreased) restraints on the president's authority.²²

In the years following World War II, extensions of the 1934 Reciprocal Trade Agreements Act (RTAA) gave the President authority to negotiate tariff reductions. The major political battles subsequently centered on which industries would be exempt from those reductions. In 1948, the year of the first postwar extension of the RTAA, national government was divided between a Democratic President and a Republican Congress. When extending the RTAA, Congress added a "peril-point" provision that directed the Tariff Commission to investigate anticipated tariff adjustments and determine whether these would seriously injure import-competing industries. When the Demo-

20. Proposition 4 suggests that a President is either equally or more constrained under divided than under unified government, depending on the severity of the externalities. The severity of externalities across districts is not obviously empirically observable or easily measured. However, we can examine the joint hypothesis that the externalities are not too severe (γ is not too large) and that the President is more constrained under divided than under unified government. This joint hypothesis would be empirically supported by evidence showing that the President was in fact *more* constrained under divided than under unified government. If the evidence suggests that the President was *equally* constrained under divided and unified government, such evidence would be inconsistent with the joint hypothesis but not necessarily with proposition 4. The null hypothesis that unified versus divided government does not matter would not be rejected only if the President turned out to be *less* constrained under divided than under unified government.

21. See Robert Baldwin, *Trade Policy in a Changing World Economy* (New York: Harvester Wheatsheaf, 1988), p. 28.

22. For a more detailed discussion of the evolution of U.S. trade institutions, see O'Halloran, *Politics, Process and American Trade Policy*.

crats regained control of Congress in the following year, they repealed this provision, thereby restoring President Truman's latitude in reducing tariffs.

The President's tariff-cutting authority was renewed in the 1951 extension of the RTAA. For the first time, President Truman's authority was reduced by a Congress in which both houses had Democratic majorities. The act codified Truman's 1947 executive order regarding escape-clause actions, thus giving him less flexibility to modify or withdraw tariff reductions. Furthermore, the Democratic House renewed the peril-point provision. Forty-two out of 247 Democrats along with 183 out of 187 Republicans voted for the provision. Democratic support was concentrated largely in the textile-, oil-, and coal-producing areas that faced strong competition from abroad. Congressional voting reflected members' concern over Truman's unresponsiveness to those industries' problems.²³ The 1953 and 1954 acts each extended the trade agreement program for one year without further modifications.

The next instance of divided government occurred after the 1954 election. The Democratic Congress renewed President Eisenhower's authority to negotiate trade agreements, but it also enhanced safeguards to protect domestic industries, including an escape clause, staged tariff reductions, and disclosure requirements in the form of public hearings and annual reports. Congress also created exemptions for industries considered vital to national security; this clause was later invoked to protect the oil and coal industries—both strong Democratic constituencies.

Eisenhower's 1958 request for an extension of the trade program met with strong opposition from the Democrats. The House bill reported by the Ways and Means Committee extended the President's negotiating authority. But the Ways and Means Committee also renewed the peril-point provision and introduced a congressional veto over presidential disapproval of escape-clause actions. Two-thirds of the members of the House and of the Senate could now override the President's decision to disregard the Tariff Commission's recommendation by passing a concurrent resolution. The Senate Finance Committee introduced an even more restrictive provision, under which the Tariff Commission's recommendation would be final unless a majority of both houses upheld the presidential veto. In the end, the House and Senate agreed to extend the President's authority for four years and incorporate the less stringent House provision into the bill.

President Kennedy won the 1960 presidential election and thereby restored unified partisan control to the federal government. Congress subsequently approved the Trade Expansion Act of 1962, which increased Kennedy's tariff-cutting authority to 50 percent of existing rates for a five-year period. In addition, the peril-point provision was repealed, and qualifying for exemptions under the escape-clause and national security provisions was made more difficult.

23. See Baldwin, *Trade Policy in a Changing World Economy*.

TABLE 4. *Trade legislation and partisan conflict, 1948–90*

<i>President (party)</i>	<i>Senate majority</i>	<i>House majority</i>	<i>Legislation</i>	<i>Government</i>	<i>Authority delegated</i>
Truman (Dem) ^a	REP	REP	1948 extension of RTAA ^b	Divided	One-year extension granted Peril-point provision enacted
	DEM	DEM	1949 extension of RTAA	Unified	Two-year extension granted Peril-point provision repealed
	DEM	DEM	1951 extension of RTAA	Unified	Two-year extension granted Peril-point provision enacted
Eisenhower (Rep)	REP	REP	1953 extension of RTAA	Unified	One-year extension granted
	REP	REP	1954 extension of RTAA	Unified	One-year extension granted
	DEM	DEM	1955 extension of RTAA	Divided	Three-year extension granted National security provi- sion enacted
	DEM	DEM	1958 extension of RTAA	Divided	Four-year extension granted Congressional veto enacted over presi- dential disapproval of determinations made by the International Trade Commission National security provi- sion strengthened
Kennedy (Dem)	DEM	DEM	1962 Trade Expansion Act	Unified	Five-year extension granted Peril-point provision repealed National security provi- sion weakened
Nixon (Rep)	DEM	DEM	1974 Trade Reform Act	Divided	Five-year extension granted Congressional veto pro- cedures (fast track) enacted

TABLE 4. *continued*

<i>President (party)</i>	<i>Senate majority</i>	<i>House majority</i>	<i>Legislation</i>	<i>Government</i>	<i>Authority delegated</i>
Carter (Dem)	DEM	DEM	1979 Trade Agreements Act	Unified	Eight-year extension granted Material injury criteria specified for retaliation against unfair trade practices
Reagan (Rep)	REP	DEM	1984 Trade and Tariff Act	Split	Eight and one-half year extension of GSP authority granted ^c Congressional approval required for President's use of fast-track authority
	DEM	DEM	1988 Omnibus Trade Act	Divided	Five-year extension granted Reverse fast-track provision enacted

^aDEM = Democratic party; REP = Republican party.

^bRTAA = 1934 Reciprocal Trade Agreements Act.

^cGSP = Generalized System of Preferences.

Another shift in partisan conflict occurred in the 1968 presidential election, when Richard Nixon succeeded Lyndon Johnson. The Democratic Congress initially refused to extend the President's trade-negotiating authority, which had expired. In late 1969, President Nixon asked the Democratic Congress to extend his tariff-cutting authority by an additional 20 percent. Although the House passed a bill granting the President such authority, the equivalent Senate legislation died after being recommitted to the Finance Committee.

In 1973, President Nixon once again asked Congress for the right to adjust tariff and nontariff barriers over a five-year period. Congress ultimately passed the 1974 Trade Reform Act, but the final legislation considerably narrowed presidential authority relative to the administration's original request. The President's tariff-reducing powers were limited, and any agreement covering nontariff barriers (NTBs) now required congressional approval. These approval procedures, known collectively as fast-track procedures, marked a significant change from previous delegations of authority, which had not required subsequent congressional action. In addition, the criteria for import relief were eased further, and various products were excluded from duty-free treatment altogether.

President Carter negotiated the Tokyo Round Agreements under fast-track authority and submitted them to a Democratic Congress. The Trade Agree-

ments Act of 1979 not only approved these agreements but also extended the President's negotiating authority for eight years. Furthermore, with the support of the Democratic Congress, President Carter obtained legislation making retaliation against unfair trade practices more difficult.

When Ronald Reagan was elected President in 1980, the Republicans controlled one house of Congress for the first time in over a quarter century. In 1984 the President's authority to grant duty-free treatment to certain imports from developing countries under the Generalized System of Preferences (GSP) was about to expire. Reagan requested an extension of the GSP as well as authority to negotiate a U.S.–Israel Free Trade Agreement under fast-track negotiation procedures. The 1984 act extended GSP authority for eight and one-half years, but for the first time Congress tied preferential treatment to whether the target countries opened their markets to U.S. exports. Furthermore, although Congress granted the President authority to create a free trade zone between Israel and the United States, future agreements negotiated under fast track were made subject to approval by the House Ways and Means and Senate Finance Committees.

After the 1986 congressional elections, the Democrats regained control of the Senate. The 1988 Omnibus Trade Act extended the President's negotiating authority but also included many procedural constraints. For instance, reverse fast-track procedures were introduced, whereby Congress could repeal fast-track authority if the President failed to observe reporting and consultation requirements. In effect, presidential trade proposals were made subject to yet another congressional veto.

The evidence presented in this section thus provides some empirical support for proposition 4. Trade bills passed during times of high partisan conflict uniformly increased congressional control of the President's actions, while all acts passed during times of unified government, with the exception of the 1951 RTAA extension, led to an increase in authority.

Econometric analysis

This section tests proposition 5, which states that trade policy outcomes tend to be more protectionist under divided than under unified partisan control of government.²⁴ The econometric analysis suggests that partisan conflict between

24. The statement in proposition 5 is conditional on the parameters γ and m being "not too large." Given the problems inherent in determining whether this condition is empirically fulfilled, we test the joint hypothesis that the externalities are not too severe, that the size of the majority party in Congress is not too large, and that U.S. trade policy tends to be more protectionist under divided than under unified government. This joint hypothesis would be empirically supported by evidence suggesting that U.S. trade policy was in fact more protectionist under divided than under unified government. If instead U.S. trade policy turned out to be equally or less protectionist under divided than under unified government, such evidence would be inconsistent with the joint hypothesis but not necessarily with our model.

TABLE 5. *Descriptive statistics of trade data, 1949–90*

Variable	Description	Mean	Standard deviation
TARIFF	Value of duties collected divided by the value of total imports, $\frac{\text{Duties}}{\text{Imports}} \times 100$	5.28%	1.56%
UNEMPLOY	Unemployment rate	5.69%	1.62%
INFLATION	Rate of change of the producer price index, $\frac{ppi_t - ppi_{t-1}}{ppi_{t-1}} \times 100$ (1982 = 100)	3.54%	4.12%
PRESIDENT	Dummy variable equal to 1 if Republicans control the presidency; 0 otherwise	0.61	0.49
CONGRESS	Dummy variable equal to 1 if both the House and Senate are controlled by Republican majorities; –1 if the Democrats are the majority party; and 0 otherwise	–0.76	0.53
DIVIDED	Dummy variable equal to 1 if Congress and the presidency are controlled by opposing parties; 0 if split; and –1 if Congress and the presidency are controlled by the same party	0.00	0.93

Sources. U.S. Department of Commerce, *Historical Statistics of the United States* (Washington, D.C.: U.S. Government Printing Office, 1975), Table U 207–212: p. 818, Tables 236 and 248: pp. 892–93, and Table Y 204–210: p. 1083; Harold Stanley and Richard Niemi, *Vital Statistics on American Politics* (Washington, D.C.: Congressional Quarterly Press, 1988), Table 7-12: p. 178; U.S. Government, *Economic Report of the President* (Washington, D.C.: U.S. Government Printing Office, 1991), Table B-63: p. 357 and Table B-40: p. 331; and U.S. Department of Commerce, *Statistical Abstracts of the United States* (Washington, D.C.: U.S. Government Printing Office, 1988).

Congress and the President is a significant determinant of protection in the postwar era. First, we discuss the data and the estimation techniques used in the analysis. We then present our findings.

Data

We drew data from the years 1949–90. Table 5 presents the variables and data sources. The time series approach adopted here is similar to the approach employed in previous studies.²⁵ It contrasts, however, with most studies of the

25. See Wendy Takacs, "Pressure for Protectionism: An Empirical Analysis," *Economic Inquiry* 19 (October 1981), pp. 687–93; Grant W. Gardner and Kent P. Kimbrough, "The Behavior of U.S. Tariff Rates," *American Economic Review* 79 (March 1989), pp. 212–18; and Stephen Magee, William Brock, and Leslie Young, *Black Hole Tariffs and Endogenous Policy Theory* (New York: Cambridge University Press, 1989).

determinants of protectionism that use cross-sectional data to analyze the patterns of protection among industries or legislative voting on trade bills.²⁶

Our dependent variable is the level of protection, as measured by the value of duties collected as a percentage of the value of total imports (*TARIFF*).²⁷ Clearly, our analysis is limited by the difficulty of measuring aggregate levels of protection. One particular data-collection problem is the recent proliferation of NTBs. Unfortunately, accurate estimates of NTBs are not available for our sample period.²⁸ Our measure does identify some effects due to NTBs, including the imposition of antidumping or countervailing duties, escape-clause actions, and protection to industries under the national security provision that result in higher tariffs. The measure does not capture the barriers to trade due to voluntary export restraints or quotas. Nor do we

26. For industry-level studies, see Jonathan J. Pincus, "Pressure Groups and the Pattern of Tariffs," *Journal of Political Economy* 83 (August 1975), pp. 757–78; Richard E. Caves, "Economic Models of Political Choice: Canada's Tariff Structure," *Canadian Journal of Economics* 9 (May 1976), pp. 278–300; Edward John Ray, "The Determinants of Tariff and Nontariff Trade Restrictions in the United States," *Journal of Political Economy* 89 (February 1981), pp. 105–121; Howard Marvel and Edward Ray, "The Kennedy Round: Evidence on the Regulation of International Trade in the United States," *American Economic Review* 73 (March 1983), pp. 190–97; Bennett D. Baack and Edward Ray, "The Political Economy of Tariff Policy: A Case Study of the United States," *Explorations in Economic History* 20 (January 1983), pp. 73–93; Real Lavergne, *The Political Economy of U.S. Tariffs: An Empirical Analysis* (Toronto: Academic Press, 1983); and Robert Baldwin, *The Political Economy of U.S. Import Policy* (Cambridge, Mass.: MIT Press, 1985). For a voting behavior perspective, see Cletus Coughlin, "Domestic Content Legislation: House Voting and the Economic Theory of Regulation," *Economic Inquiry* 23 (July 1985), pp. 437–48; Baldwin, *Trade Policy in a Changing World Economy*; Stephen Marks and John McArthur, "Empirical Analyses of the Determinants of Protection: A Survey and Some New Results," in John Odell and Thomas Willett, eds., *International Trade Policies* (Ann Arbor: University of Michigan Press, 1990); and James M. Lutz, "Determinants of Protectionist Attitudes in the United States House of Representatives," *International Trade Journal* 5 (1991), pp. 301–28.

27. Two alternative tariff measures are commonly used: an unweighted average tariff rate or an average tariff rate weighted by the share of each dutiable import. These measures ignore duty-free imports and thus exaggerate the impact of rate changes and understate the impact of coverage (goods affected by tariffs) changes on the total value of imports. The import-share-weighted average used in our analysis is sensitive to changes in share weights and to changes in tariff rates. See Gardner and Kimbrough, "The Behavior of U.S. Tariff Rates."

28. Most studies that incorporate estimates of nontariff measures into the analysis use the number of actions before the International Trade Commission (ITC) as a dependent variable; see Judith Goldstein and Stefanie Ann Lenway, "Interests or Institutions: An Inquiry into Congressional-ITC Relations," *International Studies Quarterly* 33 (September 1989), pp. 303–27; Wendy Hansen, "The International Trade Commission and the Politics of Protection," *American Political Science Review* 84 (March 1990), pp. 21–46; and Michael O. Moore, "Rules or Politics? An Empirical Analysis of ITC Anti-dumping Decisions," *Economic Inquiry* 30 (July 1992), pp. 449–66. One problem with such analyses is their pooling of data across periods characterized by significant changes in the institutional arrangements underlying ITC decisions. Other studies calculate NTBs in terms of coverage. The dependent variable is whether an industry is covered by a nontariff measure. Usually, studies employing this measure are cross-sectional or they compare the change in an industry's coverage from one period to the next. Using estimates of industries covered by nontariff measures, several authors find that tariff and nontariff barriers are largely complements and are shaped by similar forces. These preliminary findings suggest that our analysis should hold for NTBs; see Ray, "The Determinants of Tariff and Nontariff Trade Restrictions"; and Marvel and Ray, "The Kennedy Round."

identify more oblique but equally pervasive impediments such as labeling requirements and health and safety standards that raise the costs of imports and in some cases prohibit them altogether.

A noticeable feature of the tariff trend is its sharp decline in the postwar era. Although the tariff measure rose soon after World War II, it never again reached prewar levels. The downward trend in this measure coincides with and is generally thought to be due to the emergence of U.S. international economic dominance and the General Agreement on Tariffs and Trade. However, the decline in the tariff has not been uniform over time. The analysis presented here examines the effects of macroeconomic conditions and domestic political variables in explaining variations around this trend.

We measure aggregate economic conditions by the rate of change of the producer price index (*INFLATION*) and the unemployment rate (*UNEMPLOY*).²⁹ These variables are proxies for protectionist demands. For instance, researchers usually postulate that affected industries intensify their efforts for protection as unemployment increases. Moreover, Alok Bohara and William Kaempfer find empirical support for a negative correlation between prices and the tariff.³⁰ They argue that higher inflation leads consumers and voters to demand less protection.

The political variables reflect the partisan composition of Congress and the presidency. The dummy variable *PRESIDENT* takes on the value of one if the President is a Republican and zero if the President is a Democrat. Partisan control of Congress is captured by the dummy variable *CONGRESS*, which takes on the value of 1 if Congress is controlled by the Republicans, -1 if the Democrats are in the majority in both the House and the Senate, and 0 under split partisan control.³¹ Finally, we create a measure of partisan conflict, labeled *DIVIDED*. In a given year, if Congress and the administration are controlled by opposing parties (divided government), this variable takes on the value of 1. If exactly one chamber of Congress and the administration are controlled by the same party (split partisan control), the variable is assigned the value of 0. If both houses and the President are dominated by the same party (unified partisan control), the variable takes on the value of -1. Table 6 shows the possible combinations of these political variables. In our sample, there are

29. These measures are similar to those used by Magee, Brock, and Young in *Black Hole Tariffs*; and by Alok Bohara and William H. Kaempfer, "A Test of Tariff Endogeneity in the United States," *American Economic Review* 80 (September 1991), pp. 952-60.

30. Bohara and Kaempfer, "A Test of Tariff Endogeneity in the United States."

31. Our model is based on the assumption that the legislature is unicameral, but it could be extended to incorporate the bicameral structure of Congress. In this extension, the House and Senate might strike a bargain under split partisan control of Congress. It is reasonable to assume that the outcome of this bargain would lie between the two houses' most preferred outcomes. As a practical matter, policy outcomes depend on the interaction between Congress and the President and thus on the presence of unified, split, or divided control of government. Making this distinction allows us to use the variability in our data set.

TABLE 6. Possible combinations of political variables

Combinations			Coded value		
President	Senate majority	House majority	President	Congress	Divided
DEM ^a	DEM	DEM	0	-1	-1
DEM	REP	DEM	0	0	0
DEM	DEM	REP	0	0	0
DEM	REP	REP	0	1	1
REP	DEM	DEM	1	-1	1
REP	DEM	REP	1	0	0
REP	REP	DEM	1	0	0
REP	REP	REP	1	1	-1

^aDEM = Democratic party; REP = Republican party.

eighteen cases of unified partisan control, six cases of split partisan control, and eighteen cases of divided control.

Estimation

We first test the tariff series for a unit root. To determine if the process generating the tariff is stationary, the simple first-order autoregressive equation

TARIFF_t = ρTARIFF_{t-1} + ε_t (3)

is estimated by least squares, using annual tariff data from 1949 to 1990. The null hypothesis ρ = 1 is tested against the alternative ρ ≠ 1 at the 5-percent significance level. The estimated *t* statistic is -1.02. W. A. Fuller's tables indicate that the critical value is -1.95.³² Thus, we cannot reject the null hypothesis of a unit root (ρ = 1) at the 5-percent level.³³

To induce stationarity, we difference the series until the hypothesis of a unit root can be rejected. Equation 3 is re-estimated in first differences. The

32. W. A. Fuller, *Introduction to Statistical Time Series* (New York: John Wiley Press, 1976).

33. Two additional tests for a unit root, one that incorporates a time trend and the other that incorporates a time trend and the possibility of drift have estimated *t* statistics of -2.57 and -1.36, respectively. As reported by Fuller, the critical values for these tests are -2.93 and -3.50; see his *Introduction to Statistical Time Series*. Again, we cannot reject the null hypothesis of a unit root.

estimated t statistic is now -6.75 . This time, we can indeed reject the hypothesis that the differenced tariff series has a unit root at the 5-percent significance level.³⁴

Next, to test whether the tariff and economic series tend to move together over time (are cointegrated), we estimate the tariff level by unemployment, inflation, and a constant term. We then test the null hypothesis of no cointegration using a Dickey–Fuller test for a unit root in the residuals. The estimated t statistic is -2.02 . MacKinnon’s tables indicate that the critical value is -3.78 .³⁵ Thus, we cannot reject the null hypothesis that the variables are not cointegrated at the 5-percent level.

Combining this result with the previous two findings indicates that the analysis should be undertaken in first differences. (We retain the original functional form by differencing both sides of the equation.) Furthermore, a White test supports the hypothesis that the tariff series is heteroscedastic. To correct for the inefficient estimates, we report White heteroscedastic-consistent variances and standard errors.

The basic economic model, then, is defined as follows:

$$\Delta TARIFF_t = \alpha + \beta_1 \Delta INFLATION_t + \beta_2 \Delta UNEMPLOY_t + \epsilon_t. \quad (4)$$

Subsequent models expand on the basic model by adding one or more differenced political variables to the right-hand side of this equation.

Results

We next conduct a sequence of nested tests to discriminate among the various models used to explain U.S. trade policy. Pressure group and political business cycle models predict that the economic variables have significant effects on the tariff. The presidential dominance hypothesis implies that partisan control of the presidency will have significant explanatory power for the tariff, while partisan control of Congress is insignificant; the opposite is true for the congressional dominance hypothesis. Furthermore, Stephen Magee, William Brock, and Leslie Young argue that Republicans have stronger preferences for trade liberalization than do Democrats.³⁶ They therefore predict that the coefficient for the variable *PRESIDENT* will be negative. Our model of delegation and accommodation does not impose any prior assump-

34. This result is consistent with the findings of Gardner and Kimbrough, who also find support for the hypothesis that the tariff has a unit root and is a stationary process after differencing. See Gardner and Kimbrough, “The Behavior of U.S. Tariff Rates.”

35. James MacKinnon, “Critical Values for Cointegration Tests,” in Robert Engle and Clive W. J. Granger, eds., *Long-run Economic Relationships: Readings in Cointegration* (London: Oxford University Press, 1991).

36. In *Black Hole Tariffs*, Magee, Brock, and Young use only midterm administration data; we expand their data set by using annual data.

tions about the parties' relative preferences for trade liberalization; it implies only that the coefficient for *DIVIDED* will be positive.

We report the results of the tests in Table 7. Column I shows that inflation is negatively and significantly correlated with the tariff at the 10-percent level. Unemployment is positively and significantly correlated with the tariff at the 5-percent level. These results reaffirm the assertion of the economic models that tariffs respond to changes in the business cycle.³⁷ A one unit increase in the rate of inflation decreases the average tariff by about 1.8 percent, while an increase in the unemployment rate increases the tariff 0.08 percent.

The results for the presidential and congressional dominance models are provided in columns II through IV of Table 7. The positive and significant coefficient for the variable *PRESIDENT* suggests that Republican presidents follow trade policies that are more protectionist than are those of their Democratic counterparts. According to our findings, a change from a Democratic to a Republican President causes, on average, a 0.15 percent increase in the tariff. This result is consistent with the findings of Magee, Brock, and Young, but they run counter to those authors' assumption that Republicans have stronger preferences for trade liberalization than do Democrats. Our analysis thus provides mixed evidence in favor of the partisan version of the presidential dominance hypothesis. The party of the President appears to matter, but in the opposite direction to that predicted by the partisan hypothesis.

Column III indicates that Republican congresses also increase tariffs. A shift from Democratic to Republican control of Congress causes the average tariff to increase by 0.05 percent. This effect, however, is not significantly discernible from 0 at the 10-percent level.

The model elaborated above postulates that party influences the tariff through the interaction between Congress and the President. Independent of any policy preferences of the parties, divided government leads Congress to delegate less authority to the executive, and therefore we should observe higher levels of protection. The results for our model (column V of Table 7) show that divided partisan control of government is positively correlated with and is a significant explanatory variable for the tariff.³⁸ A shift from unified to divided government, on average, increases the tariff rate by 0.24 percent.

One way to determine the relative influence of the political variables is to nest each of the alternative hypotheses into our model of delegation and accommodation. The results (columns VI–VIII of Table 7) indicate that once we introduce *DIVIDED* into the equation, none of the other variables affects tariff rates. Interestingly, partisan control of the presidency is no longer a significant explanatory variable when we include our conflict measure in the

37. Bohara and Kaempher, "A Test of Tariff Endogeneity," find similar results.

38. We conducted a number of sensitivity tests to examine whether our results are robust with regard to different specifications of the conflict measure; for example, we examined the consequences of distinguishing only between unified versus divided government. These variations led to qualitatively similar results.

TABLE 7. *Eight models of U.S. trade policy, 1949-90^a*

Independent variable	Model							
	I	II	III	IV	V	VI	VII	VIII
Constant	-0.06 (-1.18)	-0.07 (-1.26)	-0.06 (-1.16)	-0.07 (-1.27)	-0.07 (-1.24)	-0.07 (-1.23)	-0.07 (-1.22)	-0.06 (-1.18)
$\Delta \text{INFLATE}$	-1.78 (-1.54)*	-1.81 (-1.59)*	-1.75 (-1.52)*	-1.83 (-1.56)*	-2.67 (-2.28)**	-2.76 (-2.04)**	-2.67 (-2.21)**	-2.80 (-2.09)**
$\Delta \text{UNEMPLOY}$	0.08 (1.87)**	0.078 (1.78)**	0.085 (1.88)**	0.08 (1.72)**	0.05 (1.24)	0.05 (1.14)	0.06 (1.23)	0.05 (1.16)
$\Delta \text{PRESIDENT}$	—	0.15 (3.53)**	—	0.16 (2.78)**	—	-0.03 (-0.23)	—	-0.05 (-0.58)
$\Delta \text{CONGRESS}$	—	—	0.025 (0.43)	-0.012 (-0.17)	—	—	0.015 (0.41)	0.02 (0.98)
$\Delta \text{DIVIDED}$	—	—	—	—	0.12 (3.12)**	0.13 (2.00)**	0.12 (3.04)**	0.14 (2.39)**
No. of observations	42	42	42	42	42	42	42	42
R^2	0.13	0.15	0.13	0.15	0.18	0.18	0.18	0.18
Wald test $\sim \chi^2$ (Zero slopes)	9.14**	24.65**	9.81**	25.21**	25.02**	27.22**	26.00**	39.83**
Durbin-Watson test statistic	1.56	1.43	1.56	1.42	1.40	1.41	1.39	1.41
Wald test $\sim \chi^2$ (nested)	—	12.49**	0.18	13.13**	9.76**	0.16	0.05	1.61

* $\alpha \leq .10$.

** $\alpha \leq .05$.

^aListed by coefficient with *t*-test statistics within parentheses; the dependent variable is ΔTARIFF .

regression equation. Indeed, the sign of the coefficient switches so that Republican presidents are now associated with decreases in the tariff.

Another way to evaluate these alternative models is by a linear restrictions test. In this case, the F-test is inappropriate because the underlying error structure is heteroscedastic. The Wald test is preferable because it relaxes the normality assumption and can be calculated using only the unrestricted coefficient estimates. The null hypothesis is $\beta_1 = \beta_2 = \dots = \beta_i = 0$. The test statistic is calculated as $W = \hat{g}' \Sigma_g^{-1} \hat{g} \sim \chi_m^2$, where $\hat{g}' = g(\hat{\beta}_1, \hat{\beta}_2, \dots, \hat{\beta}_i)'$ is the vector of restrictions evaluated at the unrestricted coefficient estimates, $\Sigma_g^{-1} = (\partial \hat{g} / \partial \hat{\beta})' \hat{\sigma}^2 (X'X)^{-1} (\partial \hat{g} / \partial \hat{\beta})$ is the estimated variance-covariance matrix of \hat{g} , m is the number of restrictions, and $\hat{\sigma}^2$ is the estimated variance.³⁹

The first Wald statistic (zero slopes) shown in Table 7 tests the null hypothesis that the coefficients of all independent variables (except the constant term) are equal to zero. Thus the statistic tests the significance of the entire model. The values reported indicate that in all cases the models are significant at the 5-percent level. For example, the Wald statistic reported in column V, 25.02, exceeds the critical value of $\chi^2(3)$, 7.81. Thus, even though our R^2 statistics appear rather low, each model captures a significant amount of the total variation.

The second Wald statistic (nested) tests the addition of one or more independent variables relative to a base regression. The Wald statistic reported at the bottom of columns II–V indicates that the addition of the political variables (with the exception of *CONGRESS*) consistently improves the fit relative to the economic model in column I. For example, the Wald statistic reported in column IV, 13.13, exceeds the critical value of $\chi^2(2)$, 5.99, at the 5-percent significance level. Based on these results we reject the hypothesis that the political variables do not significantly improve the performance of the pressure group model.

The next set of linear restrictions tests, reported in columns VI through VIII, compares the alternative partisan variables to the divided government model presented in column V. The Wald statistic indicates that the performance of our model does not improve when other political variables are included. For example, the Wald statistic reported in column VIII, 1.61, is less than the critical value of 5.99. Thus, we are unable to reject the hypothesis that partisan control of Congress and the presidency does not significantly improve the performance of the divided government model.

These empirical results provide support for proposition 5: U.S. protectionism is related to partisan conflict between Congress and the President. Moreover, our model of delegation and accommodation performs better than the competing hypotheses in explaining the tariff.

39. For a discussion of linear restriction tests, see John Johnston, *Econometric Methods* (New York: McGraw-Hill, 1984).

These results also shed light on the mystery of Republican protectionism raised by Magee, Brock, and Young. They estimate a model similar to the one we present in column II of Table 7 and find, as do we, that Republican presidents are associated with *more* protectionist trade policies than are their Democratic counterparts. This empirical finding, however, contradicts the assumption of their model that Republican presidents have relatively stronger preferences for trade liberalization.⁴⁰ Our results suggest that the apparent Republican preference for protection is an artifact of divided government. In the postwar era, Republican presidents have faced congresses that were either partially or fully controlled by the Democrats with the exception of the Eighty-third Congress.

An example might clarify our argument. In 1980, there was a switch from unified partisan control under President Carter to split control under President Reagan. Based on the assumption that Republicans have more liberal trade policy preferences than do Democrats, endogenous tariff theory predicts that protectionism will decrease. In contrast, our model predicts that a switch from unified to split partisan control leads to an increase in the tariff. Our implication is consistent with the evidence.

Conclusion

This article develops a distributive politics model of delegation and accommodation. We argue that Congress delegates trade policymaking authority to the President in order to implement more efficient trade policy outcomes. However, under divided government, the majority party in Congress may be better off constraining the President's use of delegated authority, thereby forcing the President partially to accommodate congressional demands for more protection.

Our model includes as special cases some of the hypotheses concerning U.S. trade policy proposed by other scholars. In our model, Congress may choose to abdicate power to the President, as proponents of the presidential dominance hypothesis argue. Under divided government, the President's use of delegated authority may be constrained, but, depending on economic conditions, the constraints imposed on the President's power may not be binding. Moreover, if Congress chooses to delegate partially its policymaking authority, procedural constraints do not lead to the full unraveling of the President's discretionary powers, as the congressional dominance hypothesis suggests. When the

40. These authors suggest that Republican presidents tend to employ disinflationary monetary and fiscal policies. As a result, Republican administrations are more prone to experience recessions that in turn give rise to protectionism; see Magee, Brock, and Young, *Black Hole Tariffs*. However, as shown in Table 7, the negative sign on *PRESIDENT* remains even when we control for economic conditions.

constraints imposed on the President's powers are binding, the President must partially accommodate the *ex post* demands of Congress. The resulting outcome will then be closer to the one that would be obtained if Congress were to pass trade legislation itself.

We provide empirical support for our model with two findings. First, our historical overview demonstrates that the institutional constraints placed on the President's trade policymaking authority have been strengthened in times of divided government and loosened under unified government. Second, our econometric analysis suggests that U.S. trade policy is significantly more protectionist under divided than under unified government in the postwar era. In contrast to David Mayhew, who argues that divided government has no impact on policy,⁴¹ we conclude that partisan control of the executive and legislative branches significantly affected presidential and congressional policy-making.

For scholars of U.S. politics, the model we construct is an important first step toward explaining delegation in a distributive politics setting as a solution for collective dilemmas. In a legislature characterized by geographic representation, legislators propose policy measures that provide benefits to their districts but fail to take into account the negative external effects imposed on other districts. Since the President has a national constituency, she or he cares about and internalizes cross-district external effects. Thus, Congress may achieve more efficient outcomes by delegating policymaking authority to the President. In other words, Congress may deliberately grant discretionary powers to an agent whose preferences differ from those of any one member of Congress. Our analysis also shows, however, that legislators' incentives to delegate may be mitigated in the presence of partisan conflict and divided government. In this situation, the members of the majority party in Congress may design the delegation regime to ensure that the President is partially constrained and thus force the executive to be partially responsive to their pressures. These insights may guide future work on collective dilemmas, partisan cleavages, and delegation regimes.

For scholars studying trade policy from an international political economy perspective, our results caution against the easy translation of economic benefits into political decisions. The response of domestic political institutions to international opportunities and constraints depends on the power structure within national government (e.g., presidential versus parliamentary systems, uni- versus bicameral legislatures, etc.) and the degree of conflict between different branches of power (either partisan or factional). If hegemonic stability theory is empirically descriptive, these considerations may be important only for our understanding of the behavior of the hegemon; when power is more equally distributed, these insights may apply to a larger range of

41. David Mayhew, *Divided We Govern: Party Control, Lawmaking, and Investigations, 1946–1990* (New Haven, Conn.: Yale University Press, 1991).

countries. In any case, domestic political divisions and the institutions they foster have significant impact on international trade policy.

Appendix

We focus here on deriving the results for the partisan case. (The results for the nonpartisan case are easily derived by setting the partisan parameter d equal to zero.) For brevity's sake, define the parameters a , b , c , and e as follows: under unified government, $a \equiv 1 + d(n - m)$, $b \equiv [1 + d(n - m)][1 + \gamma(m - 1)] + (1 - dm)\gamma(n - m)$, $c \equiv 1 - dm$, and $e \equiv (1 - dm)[1 + \gamma(n - m - 1)] + [1 + d(n - m)]\gamma m$, and under divided government, $a \equiv 1 - d(n - m)$, $b \equiv [1 - d(n - m)][1 + \gamma(m - 1)] + (1 + dm)\gamma(n - m)$, $c \equiv 1 + dm$, and $e \equiv (1 + dm)[1 + \gamma(n - m - 1)] + [1 - d(n - m)]\gamma m$. Furthermore, let $M = \{1, \dots, m\}$ be the set of members of the majority party, where $(n + 1)/2 \leq m < n$.

Game stage (Propositions 1–3)

Congressional dominance game (Proposition 1). Legislator i proposes the trade policy measure that solves $\partial U_i / \partial p_i = 0$:

$$p_i^{CD} = \beta_i / 2. \quad (\text{A1})$$

Presidential dominance game (Proposition 2). The President proposes the trade policy measure for district i that solves $\partial U_P / \partial p_i = 0$:

$$p_i^{PD} = \begin{cases} (\beta_i / 2) a / b & \text{for } i \in M, \\ (\beta_i / 2) c / e & \text{for } i \in N \setminus M. \end{cases} \quad (\text{A2})$$

Delegation and accommodation game (Proposition 3). A necessary condition for the voting constraint to be binding with strictly positive probability is that the difference between the utilities experienced in the congressional and presidential dominance games, summed up for a majority of legislators, must be strictly positive for a nonempty set of possible realizations of the vector $[\beta_1, \dots, \beta_n]$:

$$\begin{aligned} & \sum_{i \in J'} [U_i(p^{CD}) - U_i(p^{PD})] + \sum_{i \in I'} [U_i(p^{CD}) - U_i(p^{PD})] \\ &= \sum_{i \in J'} (\beta_i^2 / 4) [(b - a)^2 / b^2 - \gamma(m' - 1)(b^2 - a^2) / b^2] \\ &+ \sum_{i \in I'} (\beta_i^2 / 4) [(e - c)^2 / e^2 - \gamma(m' - 1)(e^2 - c^2) / e^2] \\ &- \gamma m' \left\{ \sum_{i \in M \setminus J'} (\beta_i^2 / 4) (b^2 - a^2) / b^2 + \sum_{i \in (N \setminus M) \setminus I'} (\beta_i^2 / 4) (e^2 - c^2) / e^2 \right\}, \end{aligned} \quad (\text{A3})$$

where the set of majority party legislators that are part of this majority is given by J' ,

while the corresponding set for the minority party legislators is given by I' ; the total number of legislators contained in these two sets is given by $m' \geq (n+1)/2$. The expression in equation A3 is strictly positive for a nonempty set of possible realizations of the vector $[\beta_1, \dots, \beta_n]$ if γ is low and generally negative if γ is large.

An accommodative trade policy measure in the delegation and accommodation game can be written as a linear combination of the trade policy measure set in the congressional and presidential dominance games:

$$p_i^{DA} = \lambda_i p_i^{CD} + (1 - \lambda_i) p_i^{PD}, \quad (\text{A4})$$

where λ_i represents the degree to which the President accommodates legislator i . The President's utility under the delegation and accommodation game is given by:

$$\begin{aligned} U_P(p^{DA}) = & a \left\{ \sum_{i \in M} (\beta_i^2/4) [1 - (1 - \lambda_i)^2 (b - a)^2/b^2 - \gamma(m-1)[\lambda_i + (1 - \lambda_i)a/b]^2] \right. \\ & \left. - \gamma m \sum_{i \in N \setminus M} (\beta_i^2/4) [\lambda_i + (1 - \lambda_i)c/e]^2 \right\} \\ & + c \left\{ \sum_{i \in N \setminus M} (\beta_i^2/4) [1 - (1 - \lambda_i)^2 (e - c)^2/e^2 - \gamma(n-m-1)[\lambda_i + (1 - \lambda_i)c/e]^2] \right. \\ & \left. - \gamma(n-m) \sum_{i \in M} (\beta_i^2/4) [\lambda_i + (1 - \lambda_i)a/b]^2 \right\}. \quad (\text{A5}) \end{aligned}$$

The President's utility decreases in λ_i for all i . Legislator i 's incentive to vote against the President's proposal p^{DA} is a function of district i 's realization of β_i and legislator i 's party attachment:

$$\begin{aligned} U_i(p^{CD}) - U_i(p^{DA}) = & (\beta_i^2/4)(1 - \lambda_i)^2(b - a)^2/b^2 - \gamma \sum_{j \in M \setminus i} (\beta_j^2/4) [\lambda_j + (1 - \lambda_j)a/b]^2 \\ & - \gamma \sum_{i \in N \setminus M} (\beta_i^2/4) [\lambda_i + (1 - \lambda_i)c/e]^2 \quad (\text{A6}) \end{aligned}$$

for $i \in M$, and

$$\begin{aligned} U_i(p^{CD}) - U_i(p^{DA}) = & (\beta_i^2/4)(1 - \lambda_i)^2(e - c)^2/e^2 - \gamma \sum_{i \in M} (\beta_i^2/4) [\lambda_i + (1 - \lambda_i)a/b]^2 \\ & - \gamma \sum_{j \in (N \setminus M) \setminus i} (\beta_j^2/4) [\lambda_j + (1 - \lambda_j)c/e]^2 \quad (\text{A7}) \end{aligned}$$

for $i \in N \setminus M$. On average, members of the majority party have weaker incentives to vote against the President's proposal p^{DA} under unified government and stronger incentives to do so under divided government than do members of the minority party. This can be seen by comparing the incentives to vote against the President's proposal p^{DA} for two

members of the majority and the minority party, i and j , whose realized relative weights on the benefits and costs of protection are identical, $\beta_i = \beta_j$, and who are accommodated to the same extent, $\lambda_i = \lambda_j$:

$$\begin{aligned} & [[U_i(\mathbf{p}^{CD}) - U_i(\mathbf{p}^{DA})] - [U_j(\mathbf{p}^{CD}) - U_j(\mathbf{p}^{DA})]]|_{\beta_i=\beta_j, \lambda_i=\lambda_j} \\ &= -(\beta_i^2/4)\{(1 - \lambda_i)^2[(e - c)^2/e^2 - (b - a)^2/b^2] \\ &+ \gamma(1 - \lambda_i)[2\lambda_i(c/e - a/b) + (1 - \lambda_i)(c^2/e^2 - a^2/b^2)]\}. \end{aligned} \quad (\text{A8})$$

Institutional design stage (Proposition 4)

Ex ante, all members of the majority party derive identical expected utilities from each institution. Thus, we can compare the expected utilities under the congressional dominance game, the presidential dominance game, and the delegation and accommodation game for any member of the majority party. For $i \in M$ it holds that

$$\begin{aligned} & E[U_i(\mathbf{p}^{CD}) - U_i(\mathbf{p}^{PD})] \\ &= (\sigma^2/4)\{(b - a)^2/b^2 - \gamma[(n - 1) - (m - 1)a^2/b^2 - (n - m)c^2/e^2]\} \end{aligned} \quad (\text{A9})$$

$$\begin{aligned} & E[U_i(\mathbf{p}^{CD}) - U_i(\mathbf{p}^{DA})] \\ &= (\sigma^2/4) \{(b - a)^2/b^2 - \gamma[(n - 1) - (m - 1)a^2/b^2 - (n - m)c^2/e^2]\} \\ &+ \int \dots \int \left\{ \int_{\underline{I}(y_1, \dots, y_n)}^{\bar{I}(y_1, \dots, y_n)} (x_i^2/4) [1 - [1 - \lambda_i(b - a)/b]^2 \right. \\ &- \gamma(m - 1) \lambda_i^2(b - a)^2/b^2] f(x_i) dx_i \Big\} f(y_1) \dots f(y_n) dy_1 \dots dy_n \\ &- \int \dots \int \left\{ \int_{\underline{I}(y_1, \dots, y_n)}^{\bar{I}(y_1, \dots, y_n)} \gamma(n - m) \lambda_i^2(e - c)^2/e^2 f(x_i) dx_i \right\} f(y_1) \dots f(y_n) dy_1 \dots dy_n, \end{aligned} \quad (\text{A10})$$

$$\begin{aligned} & E[U_i(\mathbf{p}^{PD}) - U_i(\mathbf{p}^{DA})] \\ &= \int \dots \int \left\{ \int_{\underline{I}(y_1, \dots, y_n)}^{\bar{I}(y_1, \dots, y_n)} (x_i^2/4) [1 - [1 - \lambda_i(b - a)/b]^2 \right. \\ &- \gamma(m - 1) \lambda_i^2(b - a)^2/b^2] f(x_i) dx_i \Big\} f(y_1) \dots f(y_n) dy_1 \dots dy_n \\ &- \int \dots \int \left\{ \int_{\underline{I}(y_1, \dots, y_n)}^{\bar{I}(y_1, \dots, y_n)} \gamma(n - m) \lambda_i^2(e - c)^2/e^2 f(x_i) dx_i \right\} f(y_1) \dots f(y_n) dy_1 \dots dy_n, \end{aligned} \quad (\text{A11})$$

where J and I are the values of β_i for which equations A6 and A7, evaluated at $\lambda_i = 0$, are equal to zero for $i \in M$ and $i \in N \setminus M$, respectively; \bar{J} and \bar{I} are the maximum values of β_i for any accommodated district; the number of accommodated districts is exactly equal to $(n + 1)/2$ minus the number of minority and majority party districts for which equations A6 and A7, evaluated at $\lambda_i = 0$, are strictly negative; and the weights λ_i maximize the expression in equation A5.