PIER Working Paper 11-026

"The Political-Support View of Protection"

by

Wilfred J. Ethier

http://ssrn.com/abstract=1924261

The Political-Support View of Protection

Wilfred J. Ethier

Department of Economics
University of Pennsylvania
Philadelphia, PA

26 July 2011

The Political-Support View of Protection

Wilfred J. Ethier

Department of Economics

University of Pennsylvania

Philadelphia, PA 19104–6297

tel: 215–898–5105

fax: 215–573–2072

email: ethier@sas.upenn.edu

Abstract: This paper offers a selective, interpretative survey of the literature on the political-support component of the political economy of international trade policy. Much of the literature is characterized either by a discrepancy between what policymakers say they are doing and how the theory models their actions (the Cognitive Dissonance problem) or by a lack of a detailed microeconomic and micro-political foundation (the Black Box problem).

Outline:

The Political-Support View of Protection

Wilfred J. Ethier*

University of Pennsylvania

This paper addresess the political-support approach to the political-economy of international trade policy. I do not attempt to be comprehensive. I instead focus on what I regard as the central issues.

I. Introduction

International trade theory has traditionally taken a *normative* perspective: What are the consequences of trade policy for national welfare and when is it justified from that point of view? Beginning in the 1980s increasing attention has been paid to a *positive* perspective: What actually determines trade policy? These two approaches are complementary — both are necessary. This paper addresses the major component of the latter. Other, more comprehensive, surveys are provided by Nelson (1988), Magee (1994), Rodrik (1995) and Ethier (forthcoming).

I address the ability of the political-support approach adequately to explain trade policy. My bottom line will be tentative: There has been much progress, but the nature of that progress is widely misunderstood, and we have a good way to go. We should make the effort.

II. An Analytical Framework

A common theoretical framework helps enormously to facilitate comparison across contributions. I use the following.

There are two countries (*H*ome and *F*oreign), two factors (*K*apital and *L*abor), and $N + 1$ traded goods (*0, 1, ... , N*). Good *0* is a numeráire good, produced by labor alone. Goods *1* to *N* are produced by capital and labor, with capital specific to each sector. *H* imports goods *1* to *n* and exports goods $n + 1$ to *N*.

I follow the preponderant part of the political-economy literature in assuming a sector-specific factor. Specific factors, together with the demand separability discussed below, allows the analysis to employ simple partial-equilibrium techniques.

Ownership of each specific factor *i* is distributed uniformly over a fraction α_i of the population (labor force), with each individual owning some of at most one of the specific factors. Let $\alpha = \alpha_1 + ... + \alpha_N$ denote the fraction of the population owning the specific factors. Choose units so that a unit of good *0* is produced by a unit of labor. Thus, assuming good *0* is actually produced, the wage $w = 1$.

In each country individual preferences are summarized by the utility function

$$U = c_0 + u_1(c_1) + . . . + u_N(c_N)$$

where c_i denotes consumption of good *i*. This implies individual demand functions $d_i = d_i(Q_i)$, $i = 1, ... , N$, where Q_i denotes the domestic relative price of good *i* in terms of good *0*. Residual income is all spent on the numeráire good *0*. I assume that endowments in both countries are such that each both produces and consumes good *0*. Then an individual's utility can be expressed in the indirect form

$$v(Q_1, _{. . .}, Q_N; y) = \sum s_i(Q_i) + y \tag{1}$$

where $S_i(Q_i) = u_i(d_i(Q_i)) - Q_i\, d_i(Q_i)$, the consumer surplus derived from good *i*, and *y* denotes the individual's income.

Each country may tax or subsidize either imports or exports. For *H*, let Q_i and P_i denote, respectively, the domestic and international relative price (in terms of the numeráire) of good *i*, and τ_i one plus the *ad-valorem* trade tax t_i. Thus

$$Q_i = \tau_i P_i$$

for $i = 1, \ldots, n$, and

$$Q_j = P_j / \tau_j$$

for $j = n + 1, \ldots, N$. Analogous F variables will be distinguished by asterisks.

Equilibrium in the world market for good i, $i = 1, \ldots, n$, is represented by

$$M_i(\tau_i P_i) = X_i^*(P_i / \tau_i^*) \tag{2}$$

where M_i and X_i^* respectively denote H import demand and F export supply. H's import tax and F's export tax thus determine P_i, independently of other sectors. This in turn implies the following.

$$(\tau_i / P_i)(dP_i / dt_i) = - e_i / (e_i + f_i^*) \tag{3}$$

and

$$(\tau_i / Q_i)(dQ_i / dt_i) = (\tau_i / P_i)(dP_i / dt_i) + 1 = - f_i^* / (e_i + f_i^*) \tag{4}$$

where $e_i \equiv - (\tau_i P_i M_i')/M_i > 0$ and $f_i^* \equiv (P_i X_i')/(\tau_i^* X_i^*) > 0$.

The equilibria in the world markets for goods $n + 1$ to N can be represented analogously. H imports of goods $1 \ldots n$ need not equal in value H exports of goods $n + 1, \ldots, N$: Trade balance is reached with a net exchange of good 0.

III. Unilateral Trade Policy

The subject of this paper, the political-support portion of the literature on the political economy of protection, focuses on the behavior of an incumbent government in office rather than on the electoral process.

The general political-support approach. Hillman (1982) introduced the political-support function to analyze the behavior of an incumbent government confronted by a special-interest group. [See also Hillman (1989, 1990), Long and Vousden (1991) Hillman, Long, and Moser (1995), and Hillman and Moser (1996)].

Suppose, in the model of Section II, that the owners of capital specific to an import sector *i* constitute an interest group desiring tariff protection. The incumbent government wishes to set a tariff that will maximize its political support. Assume that the separability of our model allows the government to do this sector by sector, so that, for each *i*, it wishes to maximize:

$$W^i = f^i(\psi_i(Q_i) - \psi_i(P_i), Q_i - P_i). \tag{5}$$

Here ψ_i measures the concerns of the interest group. The first argument of f^i accounts for the influence of the interest group on political support and the second argument that of the population at large. In both arguments, political support depends not only on the outcome (Q_i) but on how that outcome differs from what it would be were the government to take no action. The government is held politically accountable only for what it has done. This is a potentially important distinction. But it is relevant only when the economy is subject to an external shock that influences the free-trade equilibrium [Hillman (1982), for example]. So subsume for now the free-trade situation into the functional form. Assuming that f^i is increasing in its first argument and decreasing in its second, the government will maximize its political support W^i in **(5)** by trading off the general welfare for that of the interest group.

Assume, more specifically, that the measure of interest-group benefit is the income of the corresponding specific factor $\pi_i(Q_i)$ and that the measure of the effect of policy on the general welfare is the effect on the per-capita consumer surplus derived from the corresponding good: $S_i(Q_i)$. Trade tax revenue is, for now, not included in either term. Then, suppressing for convenience the index *i*, **(5)** can be expressed as follows

$$W = W(\pi(Q[t]), S(Q[t])) \tag{6}$$

with *W* increasing in both arguments.

Note that the political-support function is not derived from economic fundamentals: It is assumed directly. I refer to this feature, often regarded as undesirable, as the *Black-Box Problem* **[BB]**.

Differentiating **(6)** with respect to *t* and rearranging terms yields

$$(1/PW_2)(dW/dt) = I(Q)x - M \qquad \textbf{(7)}$$

where *x* denotes the output of the sector, and $I(Q) \equiv (W_1 - W_2)/W_2$ can be interpreted as an index of the political influence of the special-interest group. Call the interest group *influential* if the right-hand side of **(7)** is positive when $t = 0$; that is, an influential interest group is able to obtain protection.

A tariff will increase *x* in **(7)** and lower *M*, so, *unless I* also falls sufficiently rapidly, the government will impose a prohibitive tariff whenever confronted by an influential interest group.

There are two ways to alter the model to avoid this extreme result. One is to add trade-tax revenue to the arguments of **(6)**. In this case, lowering the tariff below its prohibitive level, which will generate trade-tax revenue, would increase the government's political support if trade-tax revenue is given significant weight. The chosen tariff or subsidy will depend *crucially* upon its effect on trade-tax revenue. But we observe, with industrial countries, no real interest in trade tax revenue (Regan (2006)). Still, such revenue exists, so it could logically be included in our models, but the critical role it then assumes in the theory seems totally at odds with its apparent negligible practical importance. I refer to this as the Cognitive-Dissonance (**CD**) problem. I assign it a label because, as will become apparent, it is pervasive in the literature on the political economy of trade policy, including the political-support component.

The second way to alter the model is to suppose that the influence of an influential special-interest group is limited, that is, that *I* declines as *t* (and so *Q*) increases. In other words, as an interest group gets more of what it wants, its influence declines at the margin (diminishing returns to lobbying). If *I* declines rapidly enough, **(7)** will have an interior solution corresponding to a non-prohibitive tariff. Consider this possibility in more detail.

The influence of a special-interest group can be measured by the value of *I* when $t = 0$, that is, $I(P)$, and also by the rate of its decline: $I' < 0$. Assume for simplicity that these measures are in accord: $I(P)$ is larger when the absolute value of I' is smaller.
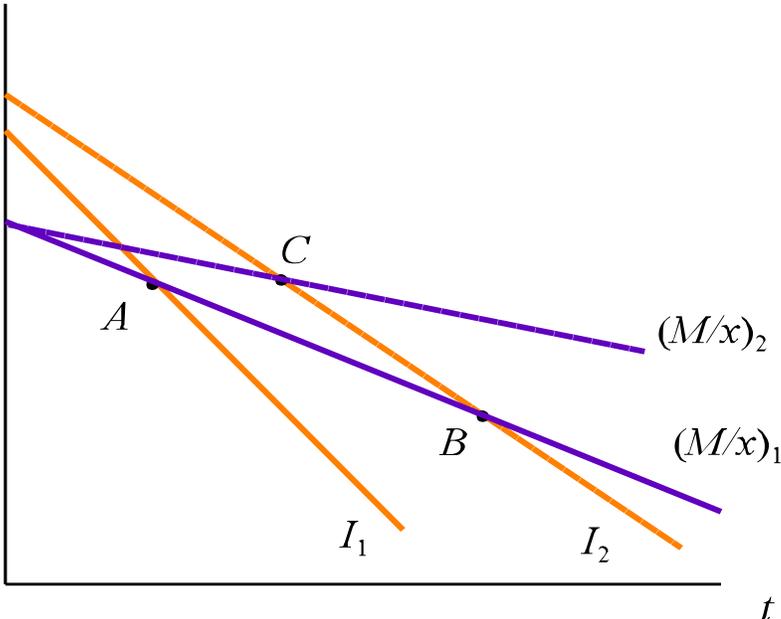
Figure 1

The Equilibrium Tariff

Figure 1 shows the case of an influential interest group (the right-hand side of **(7)** is positive when $t = 0$) where I falls rapidly enough to give an interior solution (at point A). I_2 (where point B indicates the equilibrium) shows more influence than I_1. Other things equal, a greater influence implies a larger t and a lower import-penetration ratio M/x.

The elasticity e of import demand plays an important role in many tariff issues,[1] so it is of interest to examine its effect. This is more complex. In Figure 1 $(M/x)_2$ reflects a lower elasticity than $(M/x)_1$. Along a given I_1 the reduction in e lowers t and raises M/x. But a lower e also implies a lower deadweight loss to increasing t, so the lobby should become more influential, which is reflected in I_2 replacing I_1. This raises t and lowers M/x, so the net effect is ambiguous. For a given reduction in e, as reflected in given $(M/x)_1$ and $(M/x)_2$, this net effect depends upon the sensitivity of lobby influence to e. With low sensitivity, t falls and M/x increases; with intermediate sensitivity, t and M/x both increase; with high sensitivity, t increases and M/x falls. In other words, at a given level of import penetration, t is negatively related to e.

An influential interest group will of course be concerned that any protection it receives not be undone by the government of a trading partner subsidizing its exports. That the home government shares this concern is implied by **(5)**, which says that the home government is rewarded on the basis of the net effects of its actions. Thus we should expect the government to implement a countervailing duty law, providing that any foreign subsidy be countervailed by an increase in the home tariff. To my knowledge, the political-support literature has not actually made this point, but it seems a clear inference from its approach.

The above discussion applies to an influential interest group. But what happens when it is not influential? There are again two alternatives.

1 An interest group for which the right-hand side of **(7)** is negative when $t = 0$ will induce the government to subsidize imports without bound (or as much as the treasury will bear) unless I rises sufficiently rapidly as the subsidy is increased.

2 This literature seems based on the observation that import-competing interests are individually much more affected by trade policy regarding their goods then are the more numerous but more diffused consumers. Then such interests, even if not politically organized at all, are much more likely than consumers to vote on the basis of such policy. This suggests assuming that the right-hand side of **(7)** is never negative when $t = 0$: It is positive for an influential group and zero for a non-influential group. Thus the latter will result in $t = 0$.

---

[1] For contrasting recent examples from the trading partner's point of view, see Broda, Limão and Weinstein (2008) and Magee and Magee (2008).

Of these alternatives, **2** seems to me more in accord with the spirit of the general support-function approach, so I shall take it as characterizing that approach. But, to my knowledge, that literature again has not addressed these alternatives at all, much less provided a formal framework to indicate when one or the other might be more appropriate.

Suppose, finally, that the interest group corresponds to an export sector. Analogously to the above, an influential group would be able to induce the government to provide an export subsidy. However, if, as discussed above, foreign governments have adopted countervailing-duty laws, such a subsidy would amount to a cost that conferred no benefit on the interest group and so would not be adopted. Both the government and the interest group know this. The government is powerless to aid such a group with trade policy. Non-influential groups can be treated analogously to such groups in import-competing sectors. That is, $t = 0$ in export sectors with non-influential interest groups. Again, this seems to be a reasonable inference from the nature of the political-support approach, though it is not discussed in that literature.

Key points about the political-support approach. *First*, political support depends upon the effect of the government's actions on agents' well-being, not just the latter itself.

Second, the approach exhibits the **BB** problem: The political-support function is not derived from microeconomic fundamentals.

Third, for influential import-competing sectors the degree of influence is positively correlated with the tariff rate.

Fourth, for influential import-competing sectors the tariff is negatively correlated with the import-penetration ratio.

Fifth, for influential import-competing sectors the tariff is negatively correlated with the elasticity of import demand, at a given import-penetration ratio.

Sixth*, if the country has at least one influential import-competing sector it will adopt a countervailing-duty law.

Seventh*, non-influential import-competing sectors are likely to be characterized by an absence of trade-policy intervention.

Eighth, the government is unable to do anything for, and therefore to extract political support from, influential export sectors.

Ninth*, non-influential export sectors are likely to be characterized by an absence of trade-policy intervention.

(An asterisk indicates a point that reasonably characterizes the political-support approach but that, to my knowledge, has not been discussed explicitly in its literature).

The campaign-contributions variant of the political-support approach. This
variant of the political-support approach, due to Grossman and Helpman (1994, 2002),
identifies such support as financial contributions (or bribes). Following the authors, we can
denote this approach as Protection For Sale, or PFS. This has become the most widely used
political-economy model of protection, not because it is realistic – or even literally plausible –
but because it delivers an explicit tariff formula based squarely on a complete micro political-
economy description of behavior.

The distinguishing assumptions of this version of the political-support approach are as
follows. **i** The N specific factors are exogenously divided into N^1 that are politically organized
and N^0 that are not (so $N = N^0 + N^1$). **ii** Political support consists of campaign contributions
(or bribes). **iii** Each lobby, with an eye on the other lobbies, offers the government a *contribu-
tion schedule* detailing the contribution it will make as a function of the vector of all N trade
policies. The lobby wishes to maximize the excess of its specific-factor income over its actual
contribution. **iv** The government wishes to maximize a weighted average of national income
and total contributions,

$$W = \beta Y + (1 - \beta)\sum_i C^i \tag{8}$$

where C^i denotes the actual contribution of lobby i and $\beta \leq 1$ the weight the government
attaches to national income Y. The latter importantly includes trade-tax revenue. **v** The
outcome is modeled as a menu-auction equilibrium in the sense of B. Douglas Bernheim and
Michael Whinston (1986).

The PFS model yields equilibrium contributions and tariffs. The former are of little interest,
given the contrived nature of the model. But the latter, as pointed out by Goldberg and Maggi
(1999), follow directly as necessary conditions for maximizing the joint surplus of the
government and the lobbies, regardless otherwise of the actual bargaining model. The equilib-
rium tariffs are given by

$$t_i/(1 + t_i) = ([\xi_i - \alpha]/[\beta/(1 - \beta) + \alpha]) \cdot (1/[M_i/x_i] \cdot e_i) \tag{9}$$

where $\xi_i = 1$ if the industry is politically organized and 0 if it is not. This explicit formula is
regarded as the major contribution of the PFS approach. Derivation of the formula depends
crucially on the inclusion of trade-tax revenue in the objective function (the **CD** problem).

Note that if the government cares only about social welfare ($\beta = 1$) it adopts a policy of free
trade. This is also the result if everyone belongs to some organized lobby ($\alpha = 1$), but this latter

result is of little interest as it just reflects the extreme assumptions that all organized sectors are equally potent politically and that they all lobby equally about all trade policies.

Equation **(9)** implies the following. *Organized import-competing sectors* ($\xi_i = 1$) will receive positive protection that is positively related to the degree of influence ξ_i (though of course that is here constrained to be only either zero or unity), and negatively related to the import-penetration ratio and to the elasticity of import demand. This is exactly what the general political-support function approach predicts, of which the PFS model is a special case.

Unorganized import-competing sectors ($\xi_i = 0$) will be confronted with subsidized imports. This contrasts with my interpretation of the spirit of the political-support approach ($t = 0$), though, as pointed out above, that literature has not been explicit about this.

Organized export sectors ($\xi_i = 1$) will find their exports subsidized. This also contrasts with the predictions of the general political-support approach.

Unorganized export sectors ($\xi_i = 0$) will find their exports taxed. This again contrasts with my interpretation of the spirit of the political-support approach ($t = 0$), though, again, that literature has not been explicit about this.

Key points about the PFS variant. *First*, political support is identified with contributions (bribes).

Second, the approach is free of the **BB** problem: Both the contributions and the trade policies are derived from microeconomic and micro-political fundamentals.

Third, the PFS variant is subject to the **CD** problem.

Fourth, for politically organized import-competing sectors the degree of influence is positively correlated with the tariff rate.

Fifth, for organized import-competing sectors the tariff is negatively correlated with the import-penetration ratio.

Sixth, for organized import-competing sectors the tariff is negatively correlated with the elasticity of import demand, at a given import-penetration ratio.

Seventh, unorganized import-competing sectors are characterized by import subsidies.

Eighth, organized export sectors are characterized by export subsidies.

Ninth, unorganized export sectors are characterized by export taxes.

IV. Empirical Investigations

Empirical investigations of the PFS variant. The PFS model has received considerable empirical attention [most notably: Goldberg and Maggi (1999), Gawande and Bandyopadhyay (2000), Mitra, Thomakos, and Ulubaşoğlu (2002), and McCallum (2004)]. These papers uniformly claim support for the PFS model, but in a highly selective way. They have arbitrarily confined themselves to import-competing sectors. An important claim in this literature is that they are estimating **(9)**, an equation that comes directly from a detailed microeconomic and micro-political model (*i.e.*, no **BB** problem).

These papers do not employ actual tariffs[2] because they are constrained by international trade agreements, not part of the basic PFS model. So data on administered protection is used instead. It's not clear how much this helps, since administered protection very often involves a good deal of bilateral negotiation [as noted, *e.g.*, by Goldberg and Maggi (1999, p 159)]. But there are more fundamental concerns.

Administered protection using tariffs involves primarily antidumping and countervailing duties. These are imposed as a result of a well-defined legal procedure that, in sharp contrast to the PFS model, gives *no* weight to either national welfare or tariff revenue. So, if such data does fit **(9)**, even though we *know* it was not generated by what the PFS approach models, one must wonder what such a fit means[3]. Certainly this limitation is far more serious than the fact that bound tariff rates involve international negotiation.

Administered protection using non-tariff barriers involves, in data from the 1980s and before, primarily voluntary export restraints (VERs). The empirical literature calculates tariff equivalents. A key property of VERs is that the rents from the barriers are captured by exporters, whereas the assumption in the PFS model that the importing country captures those rents is crucial to the derivation of **(9)**. If the PFS model is altered to constrain the importing country from capturing the rents, necessary if VER data is used, the model predicts nothing like **(9)**. So a good fit to **(9)** with VER data is not at all a confirmation of the PFS model. Quite the contrary.

The empirical studies have also not investigated the predictions of the PFS model that most closely reflect its central assumptions: **i** import subsidies for all politically unorganized import-

---

[2]McCallum (2004) is an exception.

[3]Political organization also plays no role in the administrative procedure, but one might conjecture that politically organized sectors are also better able to file petitions.

competing sectors, **ii** export subsidies for politically organized export sectors and **iii** export taxes for all politically unorganized export sectors. Perhaps because it is obvious that these predictions are not borne out by the facts.

Neglect of prediction **ii** can be defended on the grounds that, like import tariffs, export subsidies are seriously constrained by trade agreements[4]. But predictions **i** and **iii** involve instruments that are *not* constrained by international trade agreements. They are therefore free of the issues that prevented the use of conventional bound tariffs. These are the predictions of the PFS approach that are the *most* consistent with the available data, and so they should be the last to be neglected[5].

The empirical literature on the PFS model uses its parameter estimates to infer the size of the structural parameter β, the weight the government attaches to social welfare. Typically this weight turns out to be quite high: The government is seen as valuing social welfare much more than contributions. But since that literature has not succeeded in confirming the structure specific to the PFS model, it is not clear what, if any, significance can be attached to this seemingly optimistic inference.

In summary, the empirical work has not provided support for the PFS model itself; apparently the **CD** issue dominates. See Ethier (2006, 2007). But this work has given powerful evidence that, in politically organized import-competing sectors, protection is negatively related to the import-penetration ratio, presumably reflecting the tug between sectoral special interests and consumer surplus central to most political-economy approaches to trade policy. Also in such sectors, protection appears to be negatively related to the domestic elasticity of import demand. Furthermore, and probably most significantly, this literature argues persuasively that distinguishing between politically organized and unorganized sectors is crucial to understanding the determinants of protection.

So we have support not for the PFS model in particular, but for "something else." What else? The general political-support approach makes just those predictions that have been verified and is free of the issues, attending the PFS model, mentioned above. Thus the empirical literature can be interpreted as providing strong evidence for the general political-support approach, but *not* for its PFS variant.

---

[4] They might also be ruled out by the existence of countervailing duty laws. But it is not at all clear that such laws are themselves consistent with the PFS model, and, to my knowledge, no one has argued that they are.

[5] Of course one might dispose of **i** and **iii** with arguments like those I have used above to characterize the implications of the general political-support approach. But to do this would be to defeat the basic purpose of the PFS variant, which is precisely to derive policy implications directly from a detailed microeconomic and micro-political model.

This is a notable accomplishment. In my mind it is the single most valuable contribution to date in the large empirical literature addressing the political economy of trade policy. And the PFS model, by supplying **(9)** in explicit form, was critical in stimulating this contribution. However, the more general approach does not derive the political-support function from microeconomic and micro-political fundamentals, so the **BB** problem has not in fact been dealt with. Thus the empirical literature, intriguing and valuable as it is, cannot be interpreted as successfully confirming a structural model derived directly from a theory based on microeconomic and micro-political fundamentals. More work is called for.

Empirical investigations of tariffs and trade elasticities. Recently, Broda, Limão and Weinstein (2008) investigated the empirical relation between tariffs and trade-partners' export elasticities for a set of non-WTO members (so that their tariffs were not constrained by GATT multilateral agreements). They concluded that actual tariffs are indeed explained by the classic optimum-tariff argument. This would imply that the entire literature on the political-support view of protection is, at best, of little practical significance.

Suppose that the home government wishes only to maximize home welfare. Because of the separability of our model, this will require that all imports be taxed according to the classical optimum-tariff formula:

$$t_i = 1/f_i^*$$ **(10)**

So the tariff is negatively related to t sector-by-sector in our model. Broda, Limão and Weinstein (2008) presented evidence that tariffs and foreign export-supply elasticities are indeed negatively related and based their assertion on this.

But this ignores the possibility that the empirical relation the authors have established might equally well be explained by something else entirely different from straightforward national welfare maximization. That is, they address necessity, not sufficiency.

Suppose instead, that the government cares not at all for national welfare, but wants to maximize tax revenue and regards a trade tax as the only available instrument.[6] Then, utilizing **(3)** and again exploiting the model's separability, the first-order condition for choosing t_i to maximize $t_i P_i M_i$ reduces to

$$t_i/\tau_i = ([f_i^* + e_i]/[f_i^* + 1])(1/e_i)$$ **(11)**

---

[6] While the governments of the industrial countries seem to care little about trade-tax revenue, that is not true for at least some of the countries in the sample used by Broda, Limão and Weinstein (2008).

Note that the left-hand side of **(11)** is positively related to t_i and the right-hand side negatively related to $f_i{}^*$, if $e_i > 1$. Thus, again, the tariff is negatively correlated with the foreign export-supply elasticity (as long as $e_i > 1$). Of course **(11)** could be consistent with a positive relationship, *if t_i* is not conditioned on e_i and if e_i is sufficiently negatively correlated with $f_i{}^*$. But this seems highly unlikely as the two elasticities measure the price sensitivity of the same good in the respective countries. So one might argue that Broda, Limão and Weinstein (2008) offer support for the position that countries levy tariffs to maximize government revenue.

But there is no reason to stop here. Suppose, next, that the government instead has a target, for whatever reason, for changing Q_i. Then the relative tariff change dt_i/τ_i required to achieve dQ_i/Q_i is immediately given by **(4)**,

$$dQ_i/Q_i = (f_i{}^*/[f_i{}^* + e_i])(dt_i/\tau_i). \tag{12}$$

So, if domestic price-change targets are determined exogenously by political concerns or what-not, tariff implementations will, once again, be negatively correlated with f^*.

A negative correlation between tariffs and foreign export elasticities seems to be consistent with a large variety of policy objectives. So it is useful to have such a correlation confirmed empirically. But it says nothing really about the objectives of policy makers. Note that **(10)** says that tariffs depend directly *only* on foreign export elasticities, whereas **(11)** and **(12)** also assign a direct role to home import elasticities. This might be a distinction worth exploring.

Key points about the empirical work. *First*, the empirical literature succeeds in supporting those predictions of the PFS model that overlap with the general support-function approach. This is a valuable contribution.

Second, that literature fails to support those predictions that distinguish the PFS model from the general support-function approach.

Third, that literature fails to offer support for a theory of protection based on microeconomic or micro-political fundamentals. The **BB** problem remains.

Fourth, the empirical literature gives support to a negative relation between tariffs and foreign export elasticities, consistent with various policy objectives.

Fifth, since this relation is consistent with many policy objectives, it does little to suggest what the actual policy objectives might be.

V. Concluding Remarks

In recent decades the political economy of trade policy has made significant progress. While before it was basically a footnote to the literature on international trade, it is now a major component. The lion's share of this progress has involved the political-support approach to protection.

I have argued that much of the literature is characterized either by the **DC** problem (a dramatic contrast between what policy-makers say they are doing and what trade theorists model them as doing) or by the **BB** problem (a lack of microeconomic and micro-political fundamentals). The significant empirical literature has been widely and fundamentally misinterpreted. That part of the political-support theory that has found valid empirical support remains quite confounded by the **BB** problem.

But this should not be viewed with dismay. It just means that, though we have come quite a way, we still have much more work to do.

References

Bagwell, K. and R. Staiger, 1999, "An Economic Theory of GATT," AMERICAN ECONOMIC REVIEW 89: 215–248.

Bagwell, K. and R. W. Staiger, 2002, THE ECONOMICS OF THE WORLD TRADING SYSTEM (Cambridge, MA: The MIT Press).

Bernheim, B. D. and M. Whinston, 1986, "Menu Auctions, Resource Allocation, and Economic Influence," QUARTERLY JOURNAL OF ECONOMICS 101 (1): 1–31.

Broda, C., N. Limão and D. E. Weinstein, 2008, "Optimal Tariffs and Market Power: The Evidence," AMERICAN ECONOMIC REVIEW 98 (5): 2032–2065.

Ethier, W. J., 2002, "Unilateralism in A Multilateral World," ECONOMIC JOURNAL 112: 266–292.

Ethier, W. J., 2004, "Political Externalities, Nondiscrimination, and a Multilateral World," REVIEW OF INTERNATIONAL ECONOMICS 12: 303–320.

Ethier, W. J., 2006, "Selling 'Protection for Sale,'" **ASIA-PACIFIC JOURNAL OF ACCOUNTING AND ECONOMICS** 13: 153–162.

Ethier, W. J., 2007, "The Theory of Trade Policy and Trade Agreements: A Critique," **EUROPEAN JOURNAL OF POLITICAL ECONOMY** 23 (3): 605–623.

Ethier, W. J., "The Political Economy of Protection." In: Bernhofen, D., R. Falvey, D. Greenaway, and U. Kreickemeier (eds.), **PALGRAVE HANDBOOK OF INTERNATIONAL TRADE**, forthcoming.

Gawande, K. and U. Bandyopadhyay, 2000, "Is Protection for Sale? Evidence on the Grossman-Helpman Theory of Endogenous Protection," **REVIEW OF ECONOMICS AND STATISTICS** 82: 139–152.

Goldberg, P. K. and G. Maggi, 1999, "Protection for Sale: An Empirical Investigation," **AMERICAN ECONOMIC REVIEW** 89: 1135–1155.

Grossman, G. and E. Helpman, 1994, "Protection for Sale," **AMERICAN ECONOMIC REVIEW** 84: 833–850.

Grossman, G. and E. Helpman, 2002, **INTEREST GROUPS AND TRADE POLICY** (Princeton: Princeton University Press).

Hauser, H., 1986, "Domestic Policy Foundation and Domestic Policy Function of International Trade Rules," **AUSSENWIRTSCHAFT** 41: 171–184.

Hillman, A. L., 1982, "Declining Industries and Political-Support Protectionist Motives," **AMERICAN ECONOMIC REVIEW** 72: 1180–1187.

Hillman, A. L., 1989, **THE POLITICAL ECONOMY OF PROTECTION** (Chur, London and New York: Harwood Academic Publishers). Reprinted 2001 (London: Routledge).

Hillman, A. L., 1990, "Protectionist Policies as the Regulation of International Industry," **PUBLIC CHOICE** 67: 101–110.

Hillman, A. L., Long, N. V., and Moser, P., 1995, "Modeling Reciprocal Trade Liberalization: the Political-economy and National-welfare Perspectives," **SWISS JOURNAL OF ECONOMICS AND STATISTICS** 131: 503–515.

Hillman, A. L. and P. Moser, 1996, "Trade Liberalization as Politically Optimal Exchange of Market Access." In: Canzoneri, M., W. J. Ethier, and V. Grilli, (Eds.), **THE NEW TRANSATLANTIC ECONOMY** (New York: Cambridge University Press): 295–312.

Johnson, H.G., 1953–54, "Optimum Tariffs and Retaliation," **REVIEW OF ECONOMIC STUDIES** 21: 142–153.

Long, N. V. and N. Vousden, 1991, "Protectionist Responses and Declining Industries," **JOURNAL OF INTERNATIONAL ECONOMICS** 30: 87 – 103.

Magee, C. and S. P. Magee, 2008, "The United States is a Small Country in World Trade," **REVIEW OF INTERNATIONAL ECONOMICS** 16 (5): 990–1004.

Magee, S. P., 1994, "Endogenous Protection: A Survey." In: Mueller, D. C. [ed.], **HAND-BOOK OF PUBLIC CHOICE** (Cambridge, MA: Basil Blackwell).

McCallum, P., 2004, "Protection for Sale and Trade Liberalization: An Empirical Investigation," **REVIEW OF INTERNATIONAL ECONOMICS** 12: 81–94.

Mitra, D., D. D. Thomakos, and M. A. UlubaÕolu, 2002, "'Protection For Sale' In a Developing Country: Democracy vs. Dictatorship," **REVIEW OF ECONOMICS AND STATISTICS** 84: 497–508.

Moser, P., 1990, **THE POLITICAL ECONOMY OF THE GATT** (Grüsch: Verlag Ruegger).

Nelson, D., 1988, "Endogenous Tariff Theory: A Critical Survey," **AMERICAN JOURNAL OF POLITICAL SCIENCE** 32: 796–837.

Regan, D. H., 2006, "What Are Trade Agreements For? -- Two Conflicting Stories Told by Economists, With a Lesson for Lawyers," **JOURNAL OF INTERNATIONAL ECONOMIC LAW** 9 (4): 951-988.

Rodrik, D., 1995, "Political Economy of Trade Policy." In: Grossman, G. and K. Rogoff [eds.], **HANDBOOK OF INTERNATIONAL ECONOMICS** (Amsterdam: North-Holland): 1457–1495.