# 1 "Dynamic preferences"

- Gul and Pesendorfer's (2001) Econometrica is a two-period model. No dynamic inconsistency; derive temptation and desire for commitment in a model with dynamically consistent preferences.
- Even better, especially advertising example (credit Kyle): Becker, Gary. S. and George J. Stigler, "De Gustibus Non Est Disputandum," The American Economic Review, Vol. 67, No. 2 (Mar., 1977), pp. 76-90
- Simpler: Becker, G. S. and K. M. Murphy (1993), Simple Theory of Advertising as a Good or Bad, Quarterly Journal of Economics, 942-64.
  - Their firms are my firm. Their consumers are my government
  - Kyle's lit review talkes about 'persuasive,' 'informative,' and 'complementary' views of advertisting. This is complementary.
  - -e and  $\tau$  enter objective function. Gov't is sophisticated, can make commitment that alters e (i.e. behavior of another actor). But  $CS + \gamma(e)PS + \ldots$ , just like u(X, Y, A); says consumer could work to pass law about number of adds on TV each hour.
  - Use newly drawn extensive form to explain this, lays out when welfare is realized
  - Addresses James' concern about needing to be more precise about when  $\gamma$  is evaluated)
    - \* Skeptical of comparative-static style result: can I really compare governments with different  $\gamma$ 's?
- Mostafa, Nuno, Giovanni, Anson to some extent: Cardinal vs. ordinal
  - Giovanni: if I can show properties survive monotonic transformation, I'm fine
  - They don't like gov't choosing its own preferences. May just need to change wording
- Bob: what is fundamental structure of preferences?
- The way e affects preferences doesn't change!!! Preferences are wrapped up in  $\gamma$ !
  - "How the assumption of a non-unitary legislature translates into this incentive constraint. In the non-unitary legislature, if the current period incentive constraint includes any future value of lobbying effort, this would mean the current-period median legislator evaluating her current-period incentive constraint using a mixture of her

own political-economy weight with those of the legislators who are median in the future in the trade agreement and trade-war scenarios. The first major step I have taken to clarify the incentive constraint is the analysis in Appendix B.1 of the unitary model (described above), which I would guess is the model you had in mind. I discuss the differences between the unitary and non-unitary models in the beginning of that Appendix."

- "Note that the median legislator, whose identity is determined by the lobby's effort level  $e_b$ , evaluates future payoffs according to her own political economy weight,  $\gamma(e_b)$ . Of course, depending on legislator  $e_b$ 's choice, either legislator  $e_a$  or legislator  $e_{tw}$  will be the decision maker in those future periods. But legislator  $e_b$ , who is the decision maker in the current period, maximizes her own welfare given the predicted behavior of future decision makers."
- Devashish: Utility fcn didn't change. Just got evaluated at a different point
  - Preferences don't change. It's persuasion that affects decision-making. 2nd story: Giovanni's "expost  $\gamma(e)$  as effort to elect/choose ex-post decision-maker"

### 2 Lobbying cost included in gov't welfare

- Rick Bond: need lobbying to use up resources: if it changes net profits, it should also change  $\pi$  in  $W(\tau, \tau^*)$
- Kyle: why doesn't government (dis)value expenditure by lobby? Needs to be counted in government welfare function or justify why not
  - Rohan:  $(1-a) \cdot C + a \cdot W \equiv C + a \cdot (W C)$
  - When weights on  $\pi_X$  are not linear, what are the implications for resource waste? Is it the same as +C/-C?
- Try subtracting e and see what it does to the graphs. Does it give me the kind of non-monotonicity I'd like? YES
  - Does it do anything to the analysis?
- JIE\_revision: I have also verified that *none* of the results of the model change if lobbying effort is subtracted from the legislative/executive welfare function (except, of course, the evaluated level of welfare). I have refrained from adding the "-e" to the welfare function out of a desire to be consistent with the existing literature.

## 3 BS2005 vs. MRC2007

- Review appendix of JIE\_revision to see what connections I want to make
- Dangerous to build on JLS paper; better to connect to bigger cites or will limit impact, where it can be published
  - Perhaps higher level model like BS GE model or some alternative approach that is not so rinky dink (my words)
- I like the way you use Bagwell and Staiger (2005) as your benchmark. But I also wondered whether Maggi and Rodriguez-Clare (2007, henceforth MRC) also offered a useful benchmark. I know you did have comparisons to their paper in many places but it would be useful if this could be more systematic, and if your paper could draw careful parallels to your assumptions and theirs. In both papers, the government wants to set a tariff cap in order to be able to extract rents from lobbies afterwards. But your mechanisms seem quite different. They have capital mobility whereas your factors are specific to each sector. If capital is highly immobile they have a hold-up problem, which creates an incentive for lobbies to try to prevent too much liberalization under the agreement. What drives this feature in your model? Here I think it would be useful to explain carefully the sequence of events in your set-up more carefully. What is the relationship between lobby effort level and tariff policy? Is effort fixed first, after which the government sets its tariff? If so it seems to me that would drive a kind of hold-up because lobbying effort is sunk. It would be useful to be clearer about this so we can really understand where the results are coming from and how they compare to MRC. Having done that, you could bring in ex-ante lobbying and treat it the same way.
- In general it seems to me that you seem to "dependent" on Bagwell and Staiger... (e.g. beginning of Sections 4 and 6).
- DGH / MRC analogy from JIE\_revision
  - I've supplied the suggested results to connect my model to that of Dixit, Grossman and Helpman (1997) in Appendix B.2, along with some text pointing to it at the end of Section 2.2 on page 10. The results from the DGH-style model are qualitatively different in a minor way. I discuss this difference in Appendix B.1 where I present a unitary government/legislature version of the model that most closely matches Maggi and Rodriguez-Clare 2007.
  - The model does admit an interpretation in which the same branch of government both negotiates the trade agreement and decides on the applied tariff ex-post. In this

- sense, the structure of the one-shot game shares much in common with Maggi and Rodriguez-Clare 2007.
- The fact that the applied tariffs are equal to the negotiated binding is reminiscent of Maggi and Rodriguez-Clare 2007. Exactly the same dynamic is at play here: specifying trade agreement tariffs as caps instead of strong bindings keeps the lobby active during periods where the trade agreement is honored. In Appendix B.3, I analyze the model with strong bindings and show that the results would be altered in magnitude but not in spirit by assuming that the trade agreement tariffs are strong bindings instead of tariff caps. The only change to the model is that under strong bindings there would be zero lobbying effort during a trade agreement phase as the lobby would not need to exert effort to bid protection levels up to the trade agreement tariff. There would still be no disputes in equilibrium, but the lobbying constraint is easier to satisfy with strong bindings because the gap between trade war and trade agreement profits shrinks when the lobby stops exerting effort to receive the trade agreement tariff. Because lower trade agreement tariffs can be sustained under strong bindings, executive and legislators with small political economy weights prefer a strong-binding agreement and legislators with high political economy weights prefer a weak-binding agreement.
- Consider the following, alternative interpretation of the model. Assume there is only one decision-making body but the lobby is not active during the ex-ante phase, that is, when the trade agreement is being negotiated. For ease of exposition, take this single decision-making body to be the legislature so that the single decision-making body has the preferences in Expression 2. At the ex-ante stage, the welfare function would reduce to that in Expression 4. This interpretation fits into the framework of Maggi and Rodriguez-Clare 2007 by assuming that capital is perfectly mobile in the long run so that it is not worthwhile for the lobby to expend resources to influence the negotiation of the trade agreement. Note that this remains a non-unitary model. Out of a single decision-making body, the level of lobbying effort determines a different decisive member depending on the situation, e.g. during ex-ante negotiations (e =0) versus a trade war  $(e = e_{tw})$ . A unitary model—in which a single actor makes different decisions depending on how much lobbying effort she experiences—results in minor, qualitative changes to the results. I discuss the unitary version of the model in Appendix B.1. Note that in either case, it is only the realization of  $\gamma(\cdot)$  that changes with e, not the preferences themselves which are embodied in  $\gamma(\cdot)$ .
- The model admits this 'one-branch' interpretation only if the one branch is non-unitary

<sup>&</sup>lt;sup>1</sup>To match the assumption of a social-wefare maximing executive, this requires the additional assumption that  $\gamma(0) = 1$ . The model is qualitatively unchanged for other values of  $\gamma(0)$  as long as the analogue of Assumption 2 below holds.

- the model analyzed in the body of this paper can be given an interpretation in line with Maggi and Rodriguez-Clare 2007 if capital is completely mobile in the long run and the single decision-making body is non-unitary. In Appendix B.1, I compare the results of this paper to those from a model with a unitary government, as this would seem to bring the model most closely into alignment with Maggi and Rodriguez-Clare 2007 and a large part of the literature. Then, in Appendix B.2, since the government welfare function used in this paper can be interpreted as a special case of the one proposed by DGH97, I will show that a model patterned after DGH97 and specialized to this environment—which is also a unitary model—provides results that are qualitatively similar to the unitary model.

#### - I have added Appendix B.1 with analysis of the unitary model

- \* In the model with a non-unitary government, the lobby's effort e determines the identity of the decision maker. Thus the decision maker at the time the lobby is pushing for the agreement to be broken ( $e = e_b > e_a$  in order to have a median legislator who will break the agreement) is different from the decision maker during the trade war phase ( $e = e_{tw}$ ) and the decision maker during a trade agreement phase ( $e = e_a(\tau^a)$ ). The weight on the lobbying industry's profits changes with lobbying effort because lobbying effort determines a different median voter in the legislature or government more generally. However, when the median voter during a 'break' phase is evaluating her incentive constraint, she values future tariff choices which will be determined by whoever is median in the future with her own preferences. Although she will not be the decision maker in the future, there is no reason for her to evaluate future welfare according to some other legislator's preference.
- \* If the model is interpreted as having a unitary government, there is only one decision maker. There is a fixed mapping from lobbying effort to the weight the decision maker places on the lobby's profits, and the realization of this weight changes with the realization of lobbying effort. Thus, predicting future lobbying effort, the decision maker knows what the realization of her weight on the lobby's profits will be and evaluates the incentive constraint accordingly. Expression (10) would be modified while the lobbying constraint is unchanged.

#### - Appendix B.2 with analysis of DGH model

- \* I claim that the government welfare function presented in this paper can be interpreted as a special case of the general welfare function proposed in DGH97. They specify government welfare as G(a,c) where a is the policy vector  $((\tau,\tau^*))$  and c is a vector of payments from each lobby (e).
- \* Here I examine a version of the DGH97 model specialized to this environment.

- Because the DGH97 model is fundamentally a unitary government model, the relevant benchmark is the unitary version of the model. The results of the two unitary models are qualitatively the same.
- \* To be clear about the differences, the non-unitary model examined in the body of the paper assumes that different levels of lobbying effort result in different decision-makers. In the unitary model of DGH97, one decision maker makes different decisions depending on the level of lobbying effort. This distinction is mainly important in the context of the repeated game. Whereas the unitary decision-maker evaluates future welfare according to the lobbying effort she expects to experience in the future, the non-unitary decision-maker knows that different decision-makers will be in power and evaluates future welfare with her own preferences.
- \* In the auction-menu set-up of the DGH97 model, there does not seem to be a natural alternative to the unitary government interpretation. The lobby offers a contribution schedule of effort levels and tariffs and the government chooses among these pairs. In the non-unitary model, each different effort level determines a different government, so the government cannot choose between elements of a schedule. To analyze this model, I make the standard assumptions of a unitary government and that the lobby has all the bargaining power.
- \* Denote the government's welfare function as  $W_G(\tau, \tau^*, e(\tau)) = W(\tau, \tau^*) + g(e(\tau))$ where  $W = CS_X + PS_X + CS_Y + PS_Y + TR$  is social welfare. Then do analysis...
- Appendix B.3 with analysis of the strong binding case.
  - \* If the trade agreement involves strong bindings instead of tariff caps (i.e. weak bindings), the legislature must deliver  $\tau^a$  and the lobby's optimal effort during a period in which the trade agreement holds is  $e_a = 0$ . That the lobby pays less—here, nothing—for the protection it receives under the trade agreement is the only change from the base model. This means that nothing changes in the trade war. Likewise the legislature's repeated-game incentive constraint is unchanged. But the lobby's incentive constraint IS changed...
  - \* As in MRC, tariff caps in this model serve to keep the lobby 'in the game.' A tariff cap makes the lobby's self-enforcement constraint harder to satisfy and thus requires a higher trade agreement tariff for self-enforcement. From the ex-ante point of view, strong bindings are therefore preferable. Tariff caps could be viewed as a way to commit to setting higher trade agreement tariffs and therefore as a mechanism for ensuring that rents are distributed to protectionists ex-post.

#### 4 Numeraire

Do I need to add a numeraire so I can put *e* in terms of it?

#### 5 Lit review

- Find MRC cites (maybe some in Ethier) for why PE shocks can't be addressed
  - Bagwell and Staiger 1999 AER
- Have to make connection to endogenous papers clearer
  - and make clear that GH is isomorphic / provides microfoundations for Baldwin objective function
  - More on Coates & Ludema (2001)
- I think that I need to bring people along more carefully from GH/MRC to what I'm doing
- Paola: How do I want to sell the paper?
  - In relation to what literature?
    - \* What literature does endogenous? Coates-Ludema 2001, MRC, GH
    - \* What literature doesn't?
- Review Bown, Bagwell & Staiger
- Do I include papers like BS2001 (non-repeated) in lit review?
- Read Rosendorff & Milner (2001) [from Cristiane Carneiro at PEIO]
- Kyle: McLaren in his chapter calls the Grossman and Helpman setup with contributions 'felonious'
- David DeRemer: Safeguards have dropped off in use around the world
  - Look at U.S. vs. ROW (he sent papers)
- Limao and Tovar 2011
  - 1. Their 2nd (and final) stage is Nash bargaining. Is there an isomorphism to my setup?
  - 2. It IS clear to take their first, limited case of commitment to tariff cap only (ignore NTB) as analogy for gov't in my model choosing commitment to different tariff level. Need to answer Q1 above in order to answer points 3 and 4:

- 3. Their gains from commitment derive from improvement in bargaining power vis-avis the lobby (Schelling conjecture invoked). How does this relate to the gain from commitment in my model?
- 4. Top of page 6: "large enough bargaining power." Can I make connection to  $\gamma(e)$ ?
- 5. Note: in their equation 3, C enters expression for NBS's  $(\tau)$  in equilibrium, it doesn't disappear as in GH

# 6 More on escape clause / WEC

- The part I really liked was when you analysed the exogenous and endogenous effects on gamma simultaneously around page 28. In fact I was itching to get to that part right from when you discussed it in the introduction.
  - The paper makes the extremely important point almost in passing. I would be interested to see a more detailed examination of how this works. It's particularly interesting that in the presence of a shock the governments will use the escape clause as intended but without a shock a lobby group would always 'step into the breach' and cause it to be abused. I would like to see the paper devote more attention to the conditions under which this problem arises and when it does not.
  - Then the paper begins to address the equally important question of what can be done about this problem, but again stops short of providing a really compelling answer. I think it would be worth exploring this in detail. The paper does get to the heart of the issue, which is that 's' can be observed by the DSB but e cannot. Get to the bottom of how to design a dispute settlement system that resolves the conflict created by 'e vs s'.
- 'Withdrawal of equivalent concessions' (WEC).
  - Zissimos (2007): a government 'chooses the severity of its own punishment' by the extent of its initial deviation. I'm wondering whether your framework offers an answer for why WEC made sense as an approach to punishment.
  - Under WEC, it is worth deviating from the agreement in proportion to s because your partner deviates to the same extent and that keeps the agreement on track; the point first made by Bagwell and Staiger (1990).
  - But WEC might eliminate the incentive to respond to lobbying pressure e because when your trade partner deviates by WEC this takes away from you exactly (in a symmetrical framework) what you gained from the lobby for implementing a deviation of that size.

- \* Think about how WEC may mitigate LOBBY'S incentives through reaction of gov't
- \* Ben doesn't have any need for escape; have to put WEC into my framework
- \* Government feels  $\gamma$  the same whether it's elevated because of s or e
- \* What is the neutralizing that happens? Why would the government invoke EC when it knows that WEC is coming anyway? Because it's in another sector where it puts less weight right now?
- \* WEC should work against TOT, not PE shock?
- I would find an examination of WEC much more compelling that the approach to punishment that you currently discuss on page 20, whereby two bindings are negotiated.
- Puzzle to explain: WEC has an effect here, and that effect is weakened by the change in EC rules during the Uruguay Round, even though no retaliation for 3 yrs
  - "Why Are Safeguards under the WTO So Unpopular?" (World Trade Review 2002),
  - Need to understand better what changed, both with safeguard and with other policy instruments
  - Note that safeguards agreement states that safeguard can only be at level necessary to remedy injury, and must liberalize as possible
  - perhaps better able to respond to  $\gamma(e)$  before dispute settlement?
    - \* Lack of effective enforcement before WTO?
- What does WTO *really* want? To discourage rent-seeking lobbying but allow governments to escape when there's a real shock.
  - There may be legitimate lobbying to communicate about the shock, so can't look at the presence of lobbying as a sufficient statistic
- Need to go to continuous value of EC tariff
  - There will be optimal tariff for whatever value of s is realized
    - \* Not sure how fine I want to go with s
  - Lobby will choose its optimal level of e. Will this be constrained in any way? Probably not, if there isn't a fixed EC-binding.
- After s realized, e choosen by lobby. Then government can choose  $\tau$ 
  - 1. consistent with s, no retaliation

- 2. consistent with s and e and be retaliated against according to WEC (need to work WEC into model—repeated game incentives necessary)
  - Is responding to e in some cases worth it?
  - Does WEC help or hurt vs. grim trigger, T period Nash reversion?

### 7 Costly state verification

• Have you seen the work that Beshkar and Bond have done on what they call 'contingent protection'? I can't remember if they are drawing on the work of other people when they refer to the escape clause as 'costly state verification.' This seems to provide an alternative way of separating genuine shocks from those created by lobby groups. How does your approach relate to costly state verification?

### 8 Dynamic use constraint

When would lobby exert effort to top up?

• Do I want correlation between endogenous/exogenous parts?

#### 9 Motivation

- What it's missing: intersection with reality
  - Anecdotes
  - How policy is used
    - \* I thought that escape clause implications were this
  - Something like how GH predicts export taxes but it doesn't work that way in the real world
  - Well articulated question / paradox
- Look at "Theory of Managed Trade" model motivation (BS)
- Intro doesn't reflect body of paper
- What kinds of empirical questions might we ask with this model?
- What would be different because we use this model?

- Starting from the introduction, I think you make a convincing case that it is important to endogenize the extent of political pressure and I believe this would be THE selling point of the paper. However, you have not completely sold your contribution and its novelty that you bring in the issue of the objective function of the government. Is this aspect crucial for the point you want to make? If yes, it should be integrate with the previous object from the beginning. If not, it should be postponed a bit.
- I also find the introduction too long. You could/should split the literature review that begins on page 4 to a separate section. And in any case, I found that you don't engage with the literature in terms of how you contribute/differentiate from it. Again, your main point seems to get lost into the discussion instead of standing out.
- You need to think a bit more about the objective(s) of the paper and how best to achieve them.
- Intro: GH gives micro foundations. But there are real consequences of endogenous politics

#### 10 Big picture of which changes do what

	rigid	escape
BS2005	on-schedule (truthtelling): trivial;	need cost
	off (repeated): optimal static if patient enough	
$\gamma(e)$	on: trivial	no need, but revisit side payments
	off: mabye not $b/c$ of lobby	
$\gamma(e,s)$	ignore for now	is s verifiable? def not $w/\gamma(s,e)$

- Make sure this story is clear in text: I establish baseline tariff cap case, then add escape clause. We can already see a story of . . . emerge...
- Need to be clear when it is flexibility, enforcement, endogenous  $\gamma$  that screws things up. THEN need to bmake sure it comes out in paper
- May want to ditch repeated game part...

## 11 Structured differently from most papers

- How did Devashish structure his AER paper: the argument, the model?
  - This paper is structured differently than the norm—is there a good reason to do it?

- Don't want to challenge what people are used to unless I really need to
- In general, how do AER papers look?
- If above I suggest to add a section, I think that the paper is already too long and divided into too many sections but that goes back to my first comment about identifying the key issue/contribution: endogeneity of political pressure and/or objective function. The analysis is also split between strict and weak commitments. Which scenario clearly develops the point/contribution you want to make? Shouldn't the other one occupy a smaller place (i.e. space) of the paper?)

## 12 One good idea / do too much

- You can have one good idea in a paper, the rest get lost
- At the moment, I find the paper a bit unstructured in that it does a lot but it doesn't sell in a neat and clear way what it is doing.
- The paper is already too long and divided into too many sections but that goes back to my first comment about identifying the key issue/contribution: endogeneity of political pressure and/or objective function.
- So I'm wondering whether you could dispense with most of the static analysis and get into the repeated game more quickly.

#### 13 Take out repeats

Especially of references to BS2005: In some parts the paper also seem repeating itself: you review Bagwell and Staiger (2005) in Section 2.2 but you provide another summary of the same paper in Section 3. Again, a revised structure may reduce the overlap, make the paper shorter, and be more to the point.

#### 14 Misc.

- Define  $\gamma$  before using it
- If add back in assumption 1, add Ethier footnote
- standardize  $\gamma(e,s)$ ,  $\gamma(e)$ ,  $\gamma(s)$  throughout the text

- Peter:  $\gamma(e)$  and  $\gamma(s)$  combination is interesting, so it dynamic choice of protection over time, gov't turnover [add to conclusion, it's in slides]
- Ben: I'm wondering how you view the time-frame over which your model is set. On one hand a specific-factors set-up is normally associated with the short-run. But on the other hand you have an infinite time horizon which suggests very long run.
- Clarify information structure

# 15 Make a bigger deal of the idea of $\gamma$ decreasing function of tariffs—move out of footnote

Ethier 2012 for protection decreasing function of  $\tau$  [NEED TO REVISIT IN TEXT]. "The Political-Support Approach to Protection," Global Journal of Economics

- Making W quadratic in  $\gamma$  such as  $\gamma \gamma^2$  gives a nice interior max
- I think what I have already has returns to e decreasing in  $\tau$ . Don't I show it? If not in this paper, in RoIE paper.
- What embodies returns to lobbying?
  - $-e \rightarrow \gamma(e)$  is how lobbying is translated into weight in political process. It's not 'returns.'
  - $-\tau$  isn't even returns.  $\pi(\tau(e_2)) \pi(\tau(e_1))$  is returns.
- To get returns decreasing in  $\tau$ , maybe weighting can't be confined to PS

# 16 Lobby's optimal effort

Need to be clear about when lobby's optimal  $\tau$  is higher than gov'ts: that is, when TA would want to rein in lobby and escape clause would ruin that

### 17 Add empirics / evidence?

# 18 Existence proofs?

#### Current structure of paper (August 25, 2016)

- 1. Introduction
- 2. Model
- 3. Rigid Tariffs with Endogenous Political Pressure
  - 3.1 Perfect External Enforcement. Proposition 1: weak bindings and ext. enforcement imply applied tariff = binding and may use binding to encourage or restrain lobbying
  - 3.2 Self-Enforcing Trade Agreements
    - 3.2.1 Repeated Game
    - 3.2.2 Prop 2: No ext enforcement: self enforcing implies  $\tau^a \leq$  optimal binding with external enforcement
- 4. Endogenous Political Pressure and the Escape Clause
  - 4.1 Strong bindings: no cost when  $\gamma(e)$  only
  - 4.2 Side payments: spirit not upheld, but IC
  - 4.3  $\gamma(s,e)$ , Prop 3: lower binding never used
  - 4.4 EC for endogenous politics
- 5. Conclusion