PE Shocks To-Do list

1 "Dynamic preferences"

- 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 τ 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 ads 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 γ is evaluated
    - Skeptical of comparative-static style result: can I really compare governments with different γ'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 γ!
  - "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. 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

- 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 π_X are not linear, what are the implications for resource waste? Is it the same as $+C/-C$?
- Subtracting e gives me the kind of non-monotonicity I'd like in the graphs.
  - Does it do anything to the analysis? Just shifts govt's ideal point
- I think I'd like to just change to the "$-e$" version.
  - Worries: won't match literature. Want to make analogies to GH, DGH, MRC, LT.

3 BS2005 vs. MRC2007

- 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.

- DGH / MRC analogy from JIE_revision
  - Footnote fn:mrc1 is good place to start to put references to MRC 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, as long as the one branch is non-unitary. 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. 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.
  - 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.[1] 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

[1] 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.

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 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. 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.

– 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).
  - 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.

- Comparison to GH94
  - Contingent payments are hard to reconcile with uncertainty
  - It's the truthful contribution schedule in GH94 that implies the constant weighting of $1 + a$ for sectors represented by a lobby. Won't get this clean, constant weighting with other schedules.
  - Gov't doesn't care about *anything* because it gets the same payoff no matter what
    - With one lobby, this lobby-has-all-the-bargaining-power feature is an equilibrium implication of the menu-auction set-up where the lobby makes a TIOLI offer
    - Gov't gets all the surplus when there are two or more lobbies
    - This result holds in DGH97, p. 767. Footnote 10 explicitly says that this is because lobby makes TIOLI offer.
    - So go to MRC07 where bargaining power can be manipulated
  - Menu auction eqm requirement: $(C(\tau), \tau)$ must maximize joint surplus
    - NB: τ that maximizes gov't welfare doesn't generically maximize joint surplus (unless it also maximizes lobby payoff)

    - In my model, optimum for lobby would be prohibitive tariff, $e = 0$. Joint optimum determined by $\frac{\partial \gamma}{\partial e}\pi_X = 2$ and $\frac{\partial CS_X}{\partial \tau} + [1 + \gamma(e)]\frac{\partial \pi_X}{\partial \tau} + \frac{\partial TR}{\partial \tau} = 0$. Not clear how this is related to lobby's problem, but likely to have higher τ and lower e than government's optimum (unless γ changes very steeply between the two points e_J and e_G)
    - Careful of transferable vs. non-transferable utility
  - Not sure if contingent vs. non-contingent payments are a big deal
  - If I change nothing else but subtract C from gov't welfare function, no qualitative change b/c of 0 bargaining weight

- MRC07
  - Need case of fixed capital ($z = 0$)
  - NB (p. 1391): optimal trade agreement if lobbies have all the bargaining power and no ex-ante lobbying is free trade
    - Page 26-28 of working paper has government with all the bargaining power (and no capital mobility, but remember that the capital owners choose where to invest in the first period). Here, could be free trade but could be interior to get some rents.
  - Then re-do MRC07 with $W(\tau) + g(e)$, and version where I subtract e
    - Should have gov't make lobby indifferent and maximize joint surplus. But again, this doesn't necessarily maximize gov't welfare
    - Or rather, should I follow Limao and Tovar?

- Approach: denote the government's welfare function as $W_G(\tau, \tau^*, e) = W(\tau, \tau^*) + g(e)$ where $W = CS_X + PS_X + CS_Y + PS_Y + TR$ is social welfare.
  - This is like DGH97 (they write as $G(a, C)$, so no problem putting an e in there), BS1999 'Economic Theory of GATT' (I think), $W(p, \tilde{p}^w)$
    - I've already written $W(\gamma(e, s), \tau, \tau^*)$
    - I think people are most concerned with underlying economic model. I need a numeraire anyway. DGH97 doesn't have numeraire b/c small country
  - Then specialize to BS2005 when necessary (tariff cap example, picture for interior max of gov't obj fcn)
  - Menu auction framework doesn't work with one lobby because gov't doesn't get any surplus. Switch to MRC07 (bargaining). But want decreasing returns (LT).
  - Make argument that want this version like Baldwin-style literature for comparison

    - Want to make argument that things go wrong in standard model when you insert e into γ (also, when e goes into γ need to subtract e too, and this often results in interior optimum)
    - This is an easier way to get the result from MRC07 / LT, can make comparisons, develop design results more easily
  - Want non-contingent set-up for different assumptions on timing / meaning of s; contingent only makes sense if e chosen after s and s is completely verifiable to lobby. If s is political uncertainty, it probably realizes after/contemporaneously with e
    - I can leave general, then specify for escape clause. Or I can just go with my order of s then e, which assumes s is an economic shock.
  - Bargaining framework is not appealing when gov't is non-unitary
  - Limao & Tovar: lobby objective the same as mine. $G = \Psi(C) + aW(p)$. Gov't decides whether to commit in int'l agreement, then Nash bargains with lobby over C and policies (t, τ) where τ is a NTB
    - Section 3.3: They show exactly what I need to show. If gov't can commit with this obj fcn, it will as long as it doesn't have all the bargaining power and there are decreasing returns to lobbying.
    - Gov't does not have an interest in maximizing joint surplus, because it doesn't appropriate all the gains
  - Only difference between Limao / Tovar and mine is $\Psi(e)$ vs. $[\gamma(e) - 1]\pi_x(\tau)$
    - This means there's a positive cross partial between e and τ in my formulation, so that an incraese in τ increases W more the higher is e

4 Numeraire

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

- Does DGH97 or similar have 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)
  - Check out Ben and James new paper

- 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)
  - Wouters and Zissimos (2016 WP): Appellate Body failed to give clear direction in cases in early 2000s as to when Safeguards can be applied. See Sykes (2003).
- 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-a-vis 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 (τ) 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.
- '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 γ 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.
  - I say I'm going to do this on Page 27. Need to decide and either do it or take this out.

- 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
- 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?
- I say that I'm going to provide a result along the lines of Beshkar 2010b. Same or different from costly state verification? Which is more helpful?
- Need to check this for sure in new section. I don't have cost to 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: Well articulated question / paradox (I think it's just not well-articulated)
- 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 γ 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 γ 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
- Move footnote about TOT externality (fn:tot) into text and make paragraphs flow together
- Add ref to JIE R&R to fn:krw ?
- Expand Proposition 2 (res:repeated) to compare to exogenous case, say what $\tau^R_{W,e}$ IS. Perhaps not all of that IN the proposition.
- Need more sign-posting in the three last paragraphs of Section 4.2. Maybe make Section 4.3 a new top-level section.
- Streamline notation. If not doing strong binding anywhere (except in sec:strong), don't need R subscript on τ and e.

15 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

For Later

1. Add export lobby.
    - Extension or appendix b/c want to make comparison to existing literature.