

*The GATT-WTO as an
Incomplete Contract*

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Goal of the Paper

- Analyze GATT-WTO as an incomplete contract
 - Endogenously determine its contract form
- Pursue for trade what has been done in other areas
- In particular
 - Optimality of Discretion and Rigidity
 - Applications
 - National Treatment Clause (NT)
 - Non Violation Clause (NV)
 - “Weak” Bindings

Basic Model

- Two country {H,F}, partial equilibrium
- One good imported by H
 - F: no policy instruments
 - H: domestic taxes, subsidies, import tariffs
- Domestic consumer (p) and producer (q) prices given by:

$$\begin{aligned} p &= p^* + T \\ q &= p^* + T + s \end{aligned} \quad \text{where} \begin{cases} T = \tau + t_f \\ S = s - t_h \end{cases}$$

- Assumptions:
 - Negative consumption externalities γ
 - Positive production externalities σ

Trade Agreement

- Governments: national welfare maximizers
- Without agreement, T suboptimally high (TOT)
- Scope for agreement to increase global welfare
- Agreement can include:
 - Policy variables (τ, t_f, t_h, s) \longrightarrow cost of c each
 - State variables (γ, σ, α) \longrightarrow cost of kc each
- **To improve on Nash, agreement must constrain T**

Complexity of Agreements

- Consumption Externality is Uncertain

$$\{FB\} = \{T = \gamma, S = \bar{\sigma} - \gamma\}$$

$$C = (4+k)c$$

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Add rigidity

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Add rigidity
Loss **CRTS**

$$C = (4+k)c$$

$$\{T, S\}$$

$$C = 4c$$

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↑ with $\Delta\gamma$

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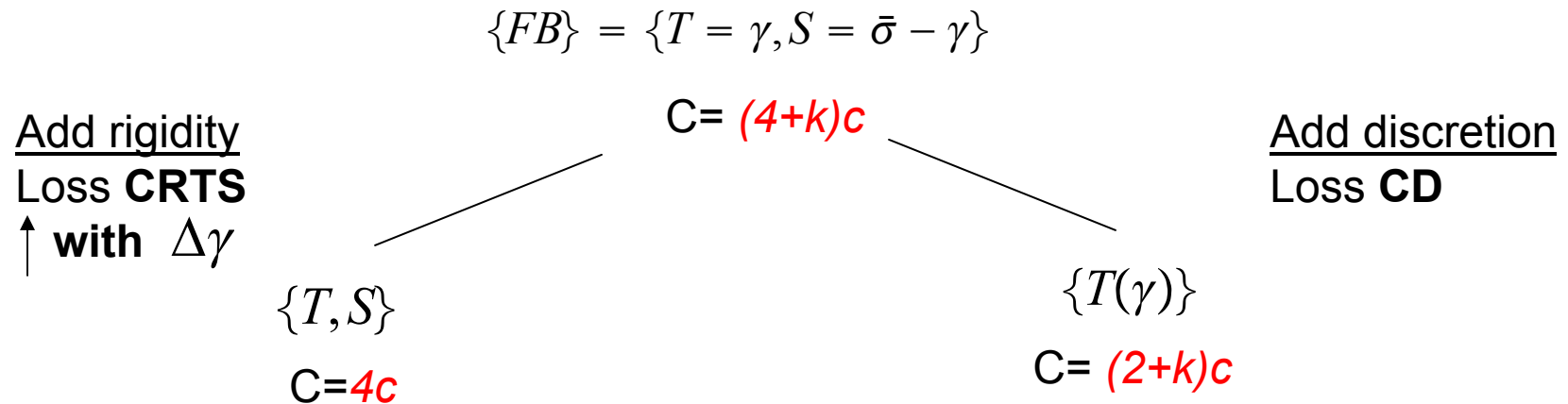
$$\{T, S\}$$
$$C=4c$$

$$C= (4+k)c$$

Add discretion

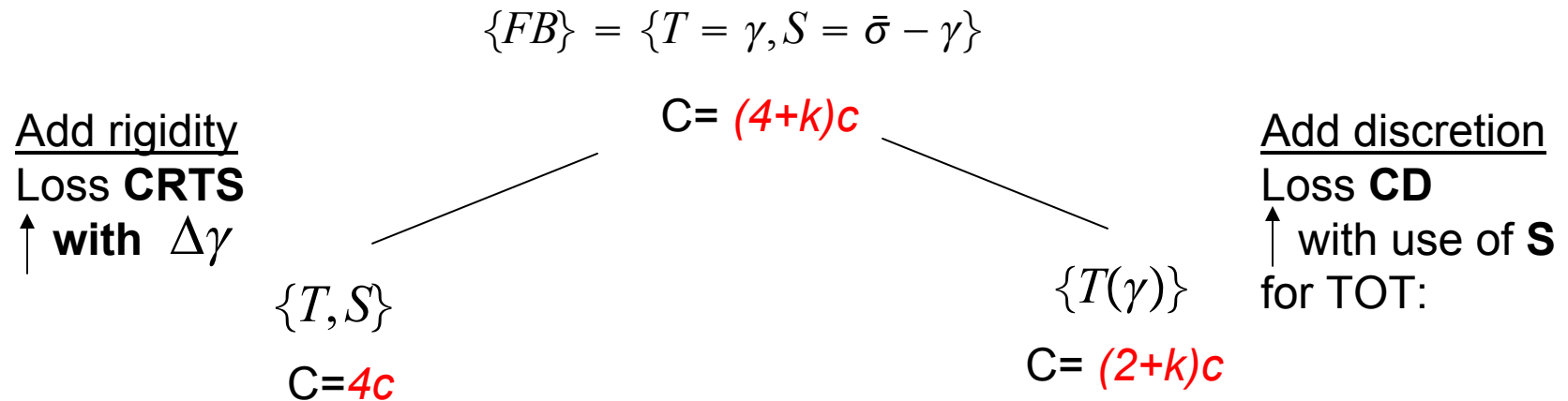
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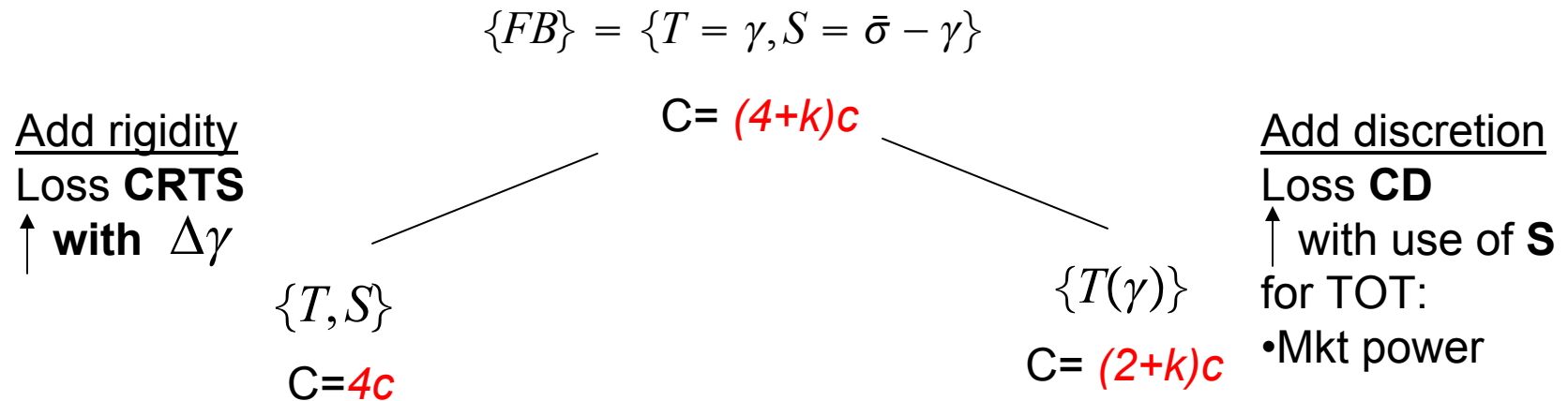
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$$\{T, S\}$$
$$C = 4c$$

$$C = (4+k)c$$

$$\{T(\gamma)\}$$

$$C = (2+k)c$$

Add discretion

Loss **CD**

↑ with use of **S**
for TOT:

- Mkt power
- Low demand elast.
- High supply elast.

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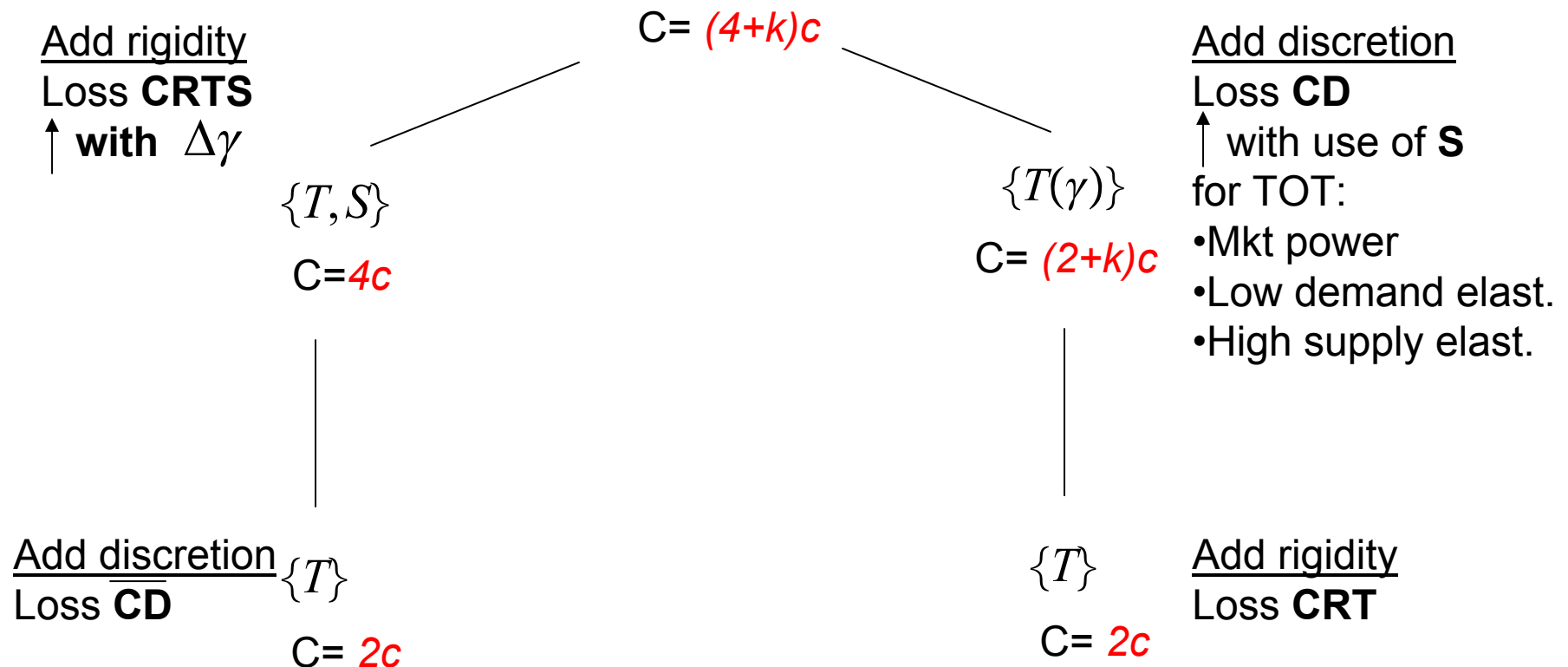
$$\{T\}$$

$$C = 2c$$

Complexity of Agreements

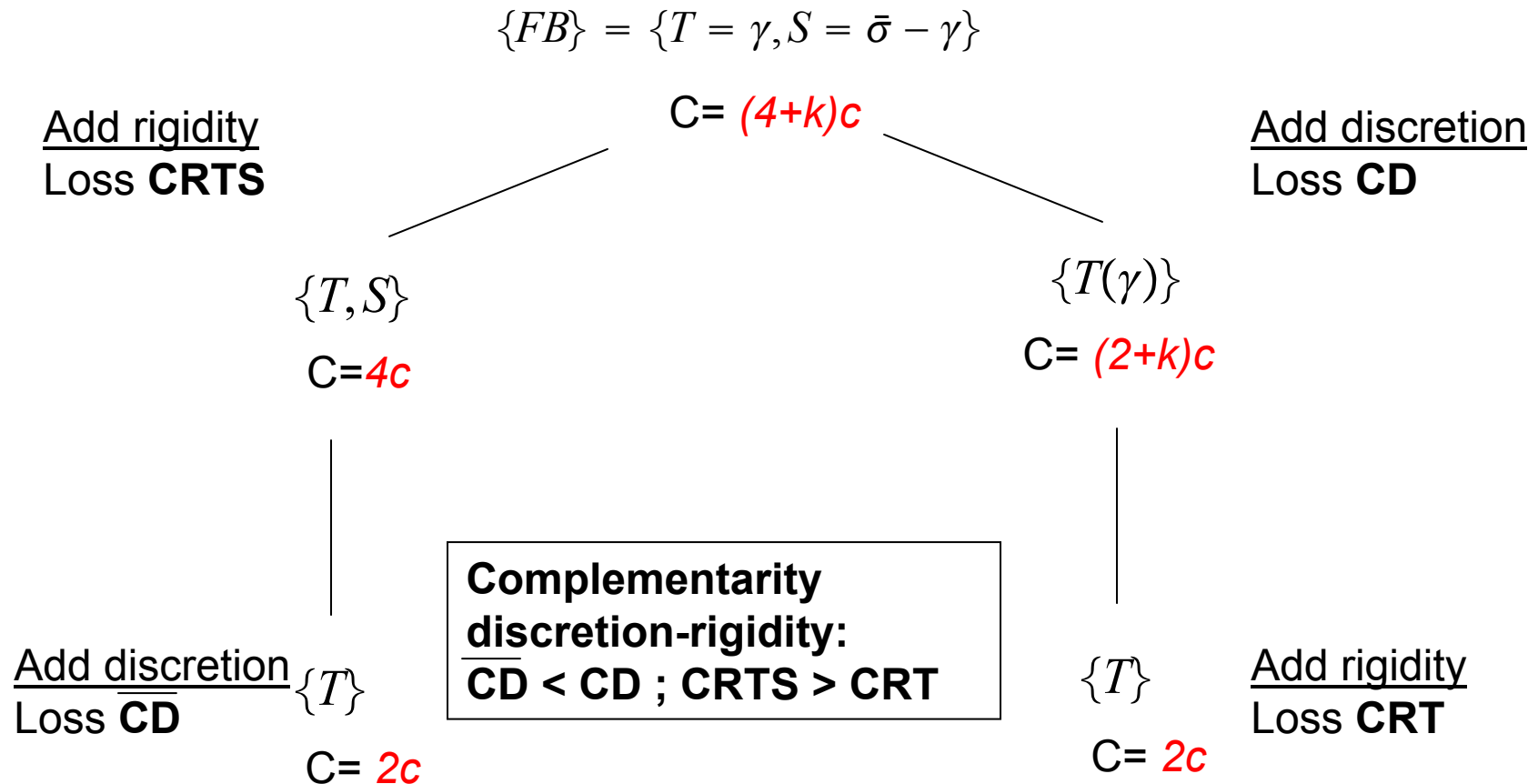
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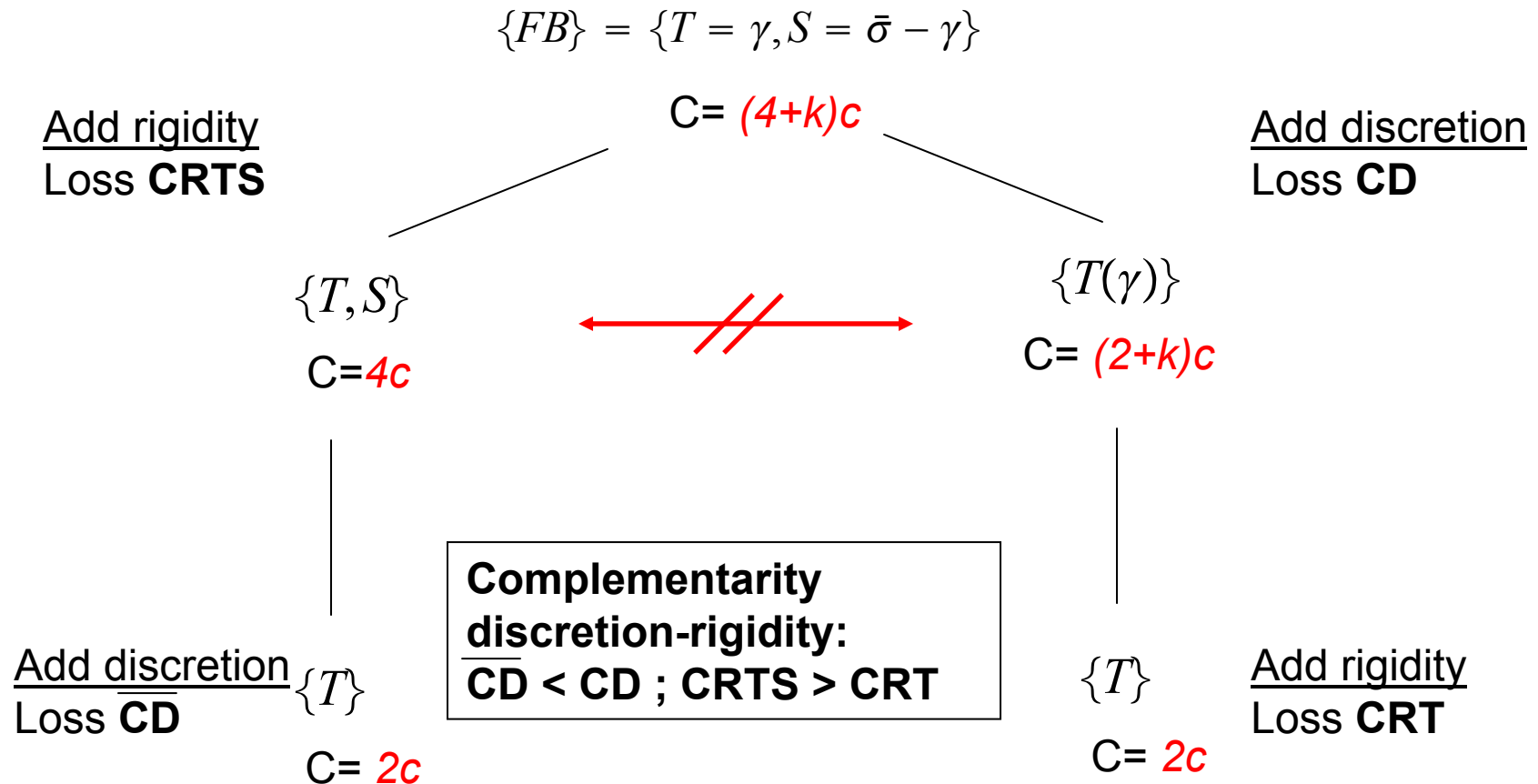
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Complexity of Agreements

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Environment with Uncertainty

- If uncertainty is on domestic demand:
 - FB agreement is rigid $\{T, S\}$ (non-contingent)
 - Other possibilities are to agree only on T: rigid or contingent
 - Contingent T may be appealing to limit the use of S
 - Difference with before: $\overline{CD} > CD$
 - Interaction between rigidity and discretion depends on uncertainty

Applications

National Treatment (NT) Clause ($t_h = t_f$)

- No tax discrimination between home and foreign origin
- H can only affect the demand price of the good (not supply)
- With uncertainty on demand externality, NT:
 - Beneficial flexibility to taxes
 - But taxes can be used to affect TOT
 - NT optimal if taxes poor substitutes for tariffs (i.e., elastic supply)
- Analysis depends on $t_h = t_f$ costing less than $t_h = 3 - t_f$
- *Is this reasonable? World with many goods and instruments*

Applications (II)

Non Violation (NV) Provision

- Preserve market access, i.e., p_s^*
- Government is free on instruments without affecting p_s^*
- Uncertainty does not affect optimal policies? k is crucial:
 - NV (state verification) vs. Policy agreements (inst. verification)
- Uncertainty does affect optimal policies?
 - For low cost: NV corresponding to contingent tariff
 - For low state contingency of p^* : NV corresponding to rigid tariff
- ***IN REALITY, WHY BOTH?*** *Imagine a world in which:*
 - *Price imperfect indicator of policy variables*
 - *Some policy variables important, other less so*
 - *Verification costs constant for all*
 - *It might be optimal to verify most important variables and get an imperfect estimator of all the others from the price*

Conclusions

- Overall:
 - Interesting model to explain incompleteness of trade agreements
- Applications could benefit from further development:
 - Specially, NV provision
 - Why look both at price and policy instruments?