



Political Costs of Policy Reform

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Political Costs: Issues & Question

- Typically regarded by economists as something of “a riddle, wrapped in a mystery, inside an enigma”
- If we accept our political-economy models, these political costs seem quite clear
- Can we use this for policy making?

Outline

- Model and Intuition
- Consequences of policy changes
- Application to tariff-cutting formulas

Grossman-Helpman Model

$$G(\mathbf{p}, u) = \sum_{i \in L} C_i(\mathbf{p}) + aW(\mathbf{p})$$

- $C_i(\mathbf{p})$ is contributions by lobby i
- W is aggregate economic welfare
- a is weight on welfare costs relative to contributions ≈ 50

Rearranging & differentiating

$$G^*(\mathbf{p}, u) = \frac{1}{a} t' \mathbf{C}(\mathbf{p}) + (-z(\mathbf{p}, u) + \mathbf{z}'_p (\mathbf{p} - \mathbf{p}^*))$$

Where $\mathbf{z} = \mathbf{e}(\mathbf{p}, u) - \mathbf{g}(\mathbf{p})$

$$dG^* = \left[\frac{1}{a} t' \frac{\partial \mathbf{C}}{\partial \mathbf{p}} + (\mathbf{p} - \mathbf{p}^*)' \mathbf{z}_{pp} \right] d\mathbf{p} = \mathbf{0}$$

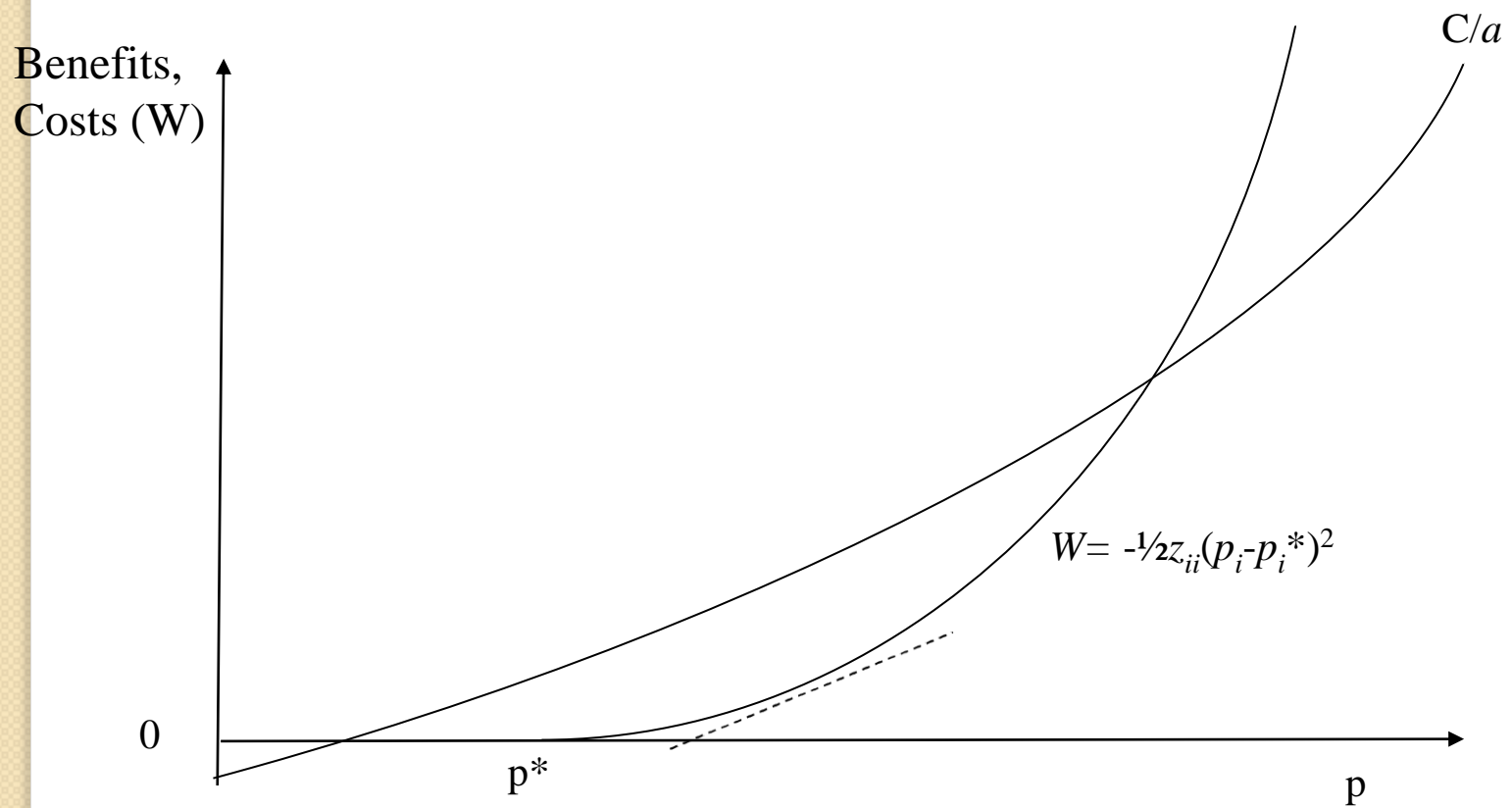
Short-Run First Order Condition

$$h + (\mathbf{p}^0 - \mathbf{p}^*)' \mathbf{z}^0_{pp} = 0$$

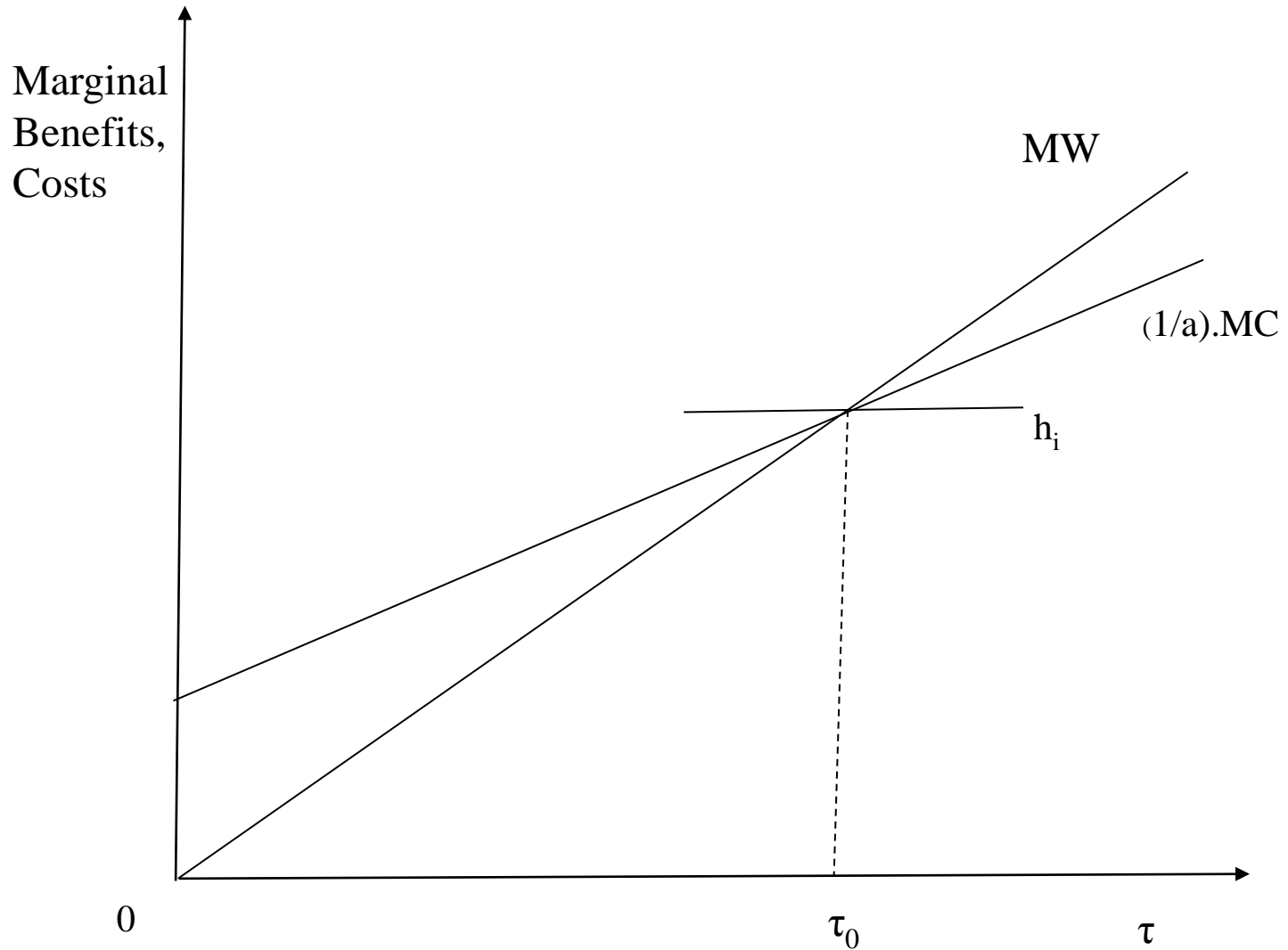
Long-Run First Order Condition

$$\frac{1}{a} \mathbf{g}'_p \mathbf{K} + (\mathbf{p} - \mathbf{p}^*)' \mathbf{z}_{pp} = 0$$

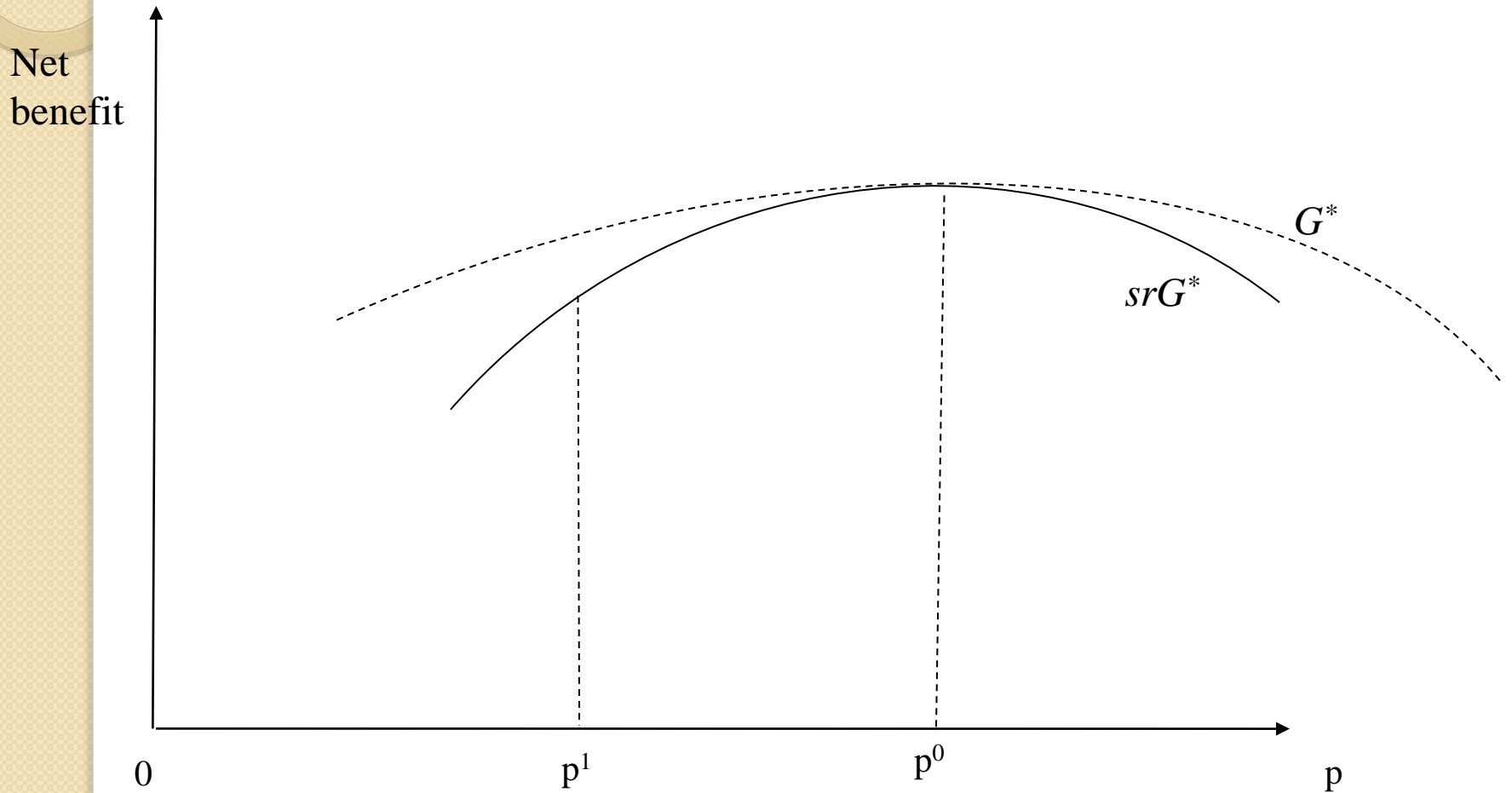
Benefits and Costs



Marginal benefits and costs



Net political welfare



Inferring political costs

$$\frac{\partial^2 srG^*}{\partial \mathbf{p}^2} = \mathbf{z}_{pp} + \mathbf{z}_{ppp}(\mathbf{p} - \mathbf{p}^*)$$

- Need G to be concave in \mathbf{p}
 - z is, by definition, concave in \mathbf{p}
 - But this does not guarantee G^* is concave
- Sufficient condition: z is generalized quadratic
 - Fully flexible— 2nd order approx to any function
 - With six-digit tariffs, over 12 million independent coefficients

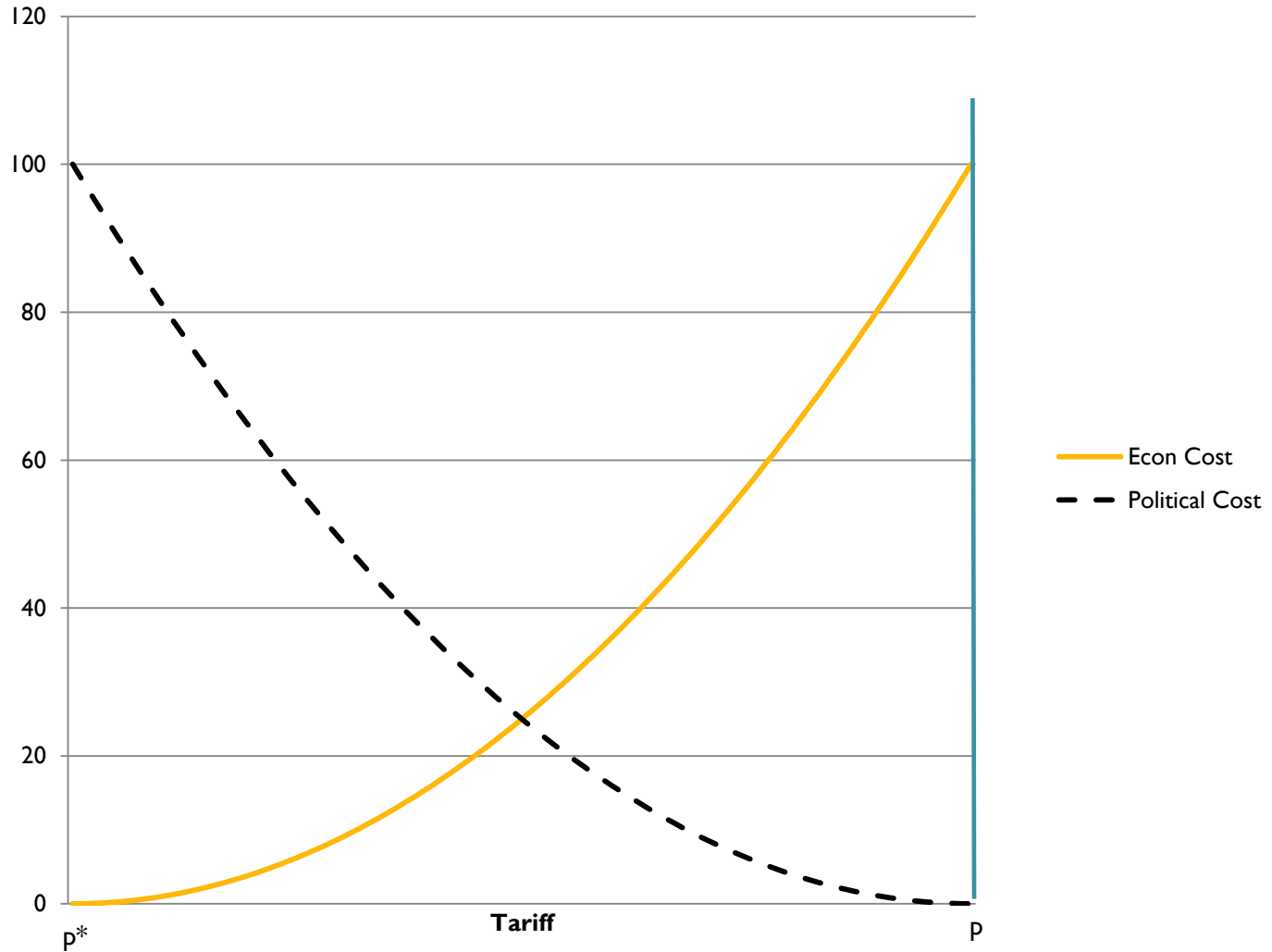
With quadratic trade expenditure fn

$$\Delta srG^* = \frac{1}{2} \Delta \mathbf{p}' \mathbf{z}_{pp} \Delta \mathbf{p}$$

$$\Delta G^* = \frac{1}{2} \Delta \mathbf{p}' \left[\frac{1}{a} \mathbf{g}_{pp} + \mathbf{z}_{pp} \right] \Delta \mathbf{p}$$

- No “political” parameters!
- SR and LR quite similar
 - ($|\mathbf{g}_{pp}| \leq |\mathbf{z}_{pp}|$, $a \approx 50$)

Economic vs Political Cost



Application to trade negotiations

- Cut tariffs to give partners market access
- Need formulas to internalize benefits
 - Request & offer died in the Kennedy Round
- Market access in partner markets creates (limited) political benefits to cover the political costs of liberalization
- What formulas generate the largest efficiency gains per unit of political cost?

Exploratory Analysis

Proportional Tariff Cut

$$t_f = c \times t_0$$

Swiss Formula

$$t_f = \frac{a \times t_0}{a + t_0}$$

Abs. Tariff Cut

$$t_f = \text{Max}(t_0 - d, 0)$$

Proportional Cut Power

$$t_f = \text{Max}(k(1 + t_0) - 1, 0)$$

Min Political Cost

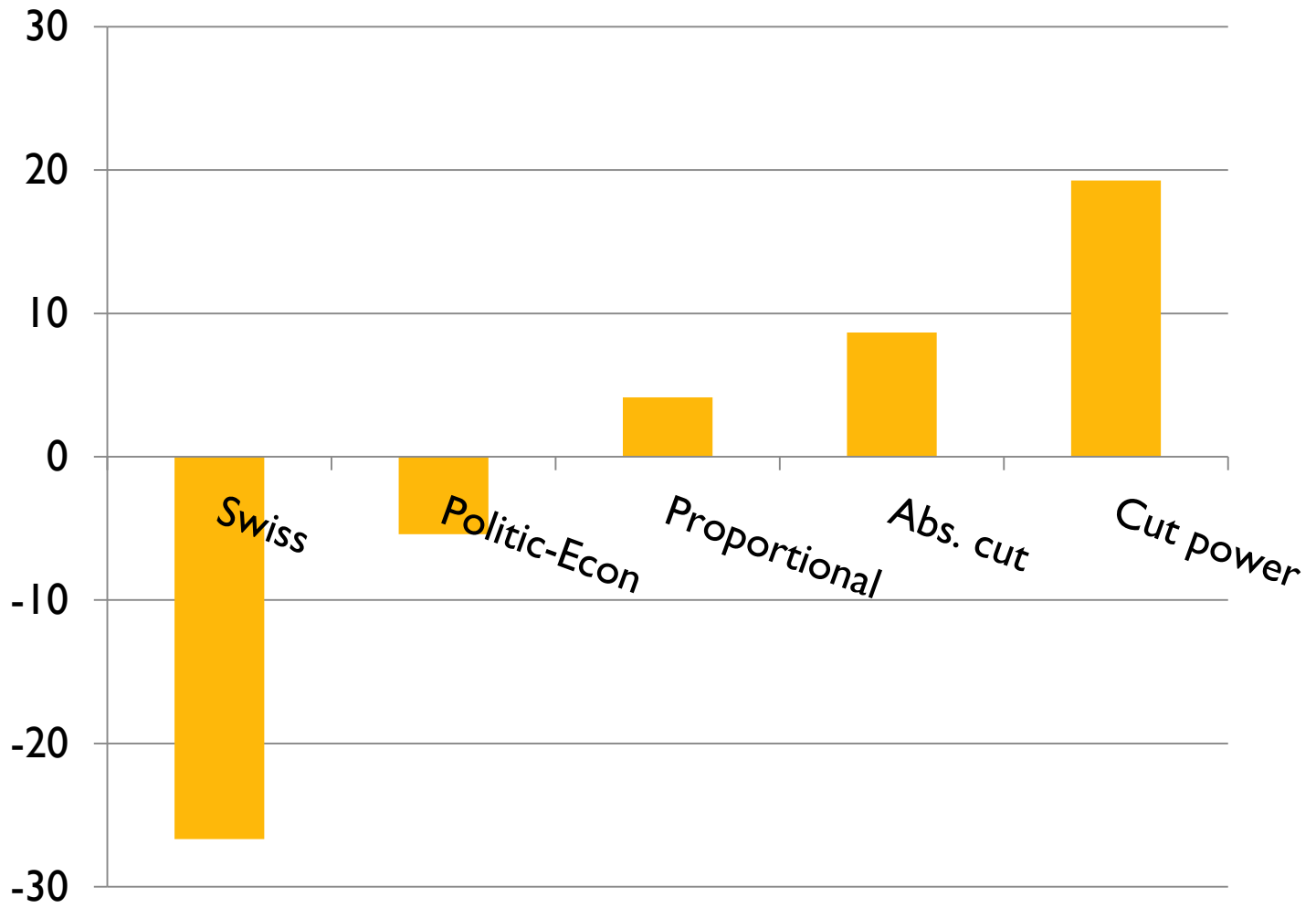
Consider 5% expansion in market access.

Assign 12 million Quadratic Parameters via CES with $\sigma=4$.

Efficiency Gain/Political Cost

	BRA	CAN	China	EU	IDN	IND	USA
Proportional	8.62	1.31	5.53	4.12	3.76	14.66	1.59
Swiss	6.55	1.25	5.49	2.20	2.27	5.32	1.30
Abs. cut	8.66	1.66	5.52	4.04	3.75	14.51	1.77
Prop. Cut power	8.94	2.00	5.53	4.76	4.11	16.05	1.86
Political-Economy	8.15	1.10	5.00	3.32	3.41	13.77	1.62
<i>% Cut Needed</i>	<i>0.21</i>	<i>0.87</i>	<i>0.31</i>	<i>0.39</i>	<i>0.42</i>	<i>0.13</i>	<i>0.77</i>

Average Efficiency Gain/Political Cost



Conclusions

- Political costs can be represented simply under Grossman-Helpman assumptions
- Short & long run political costs likely similar
 - Don't count on creating new interest groups
- Clear ranking of tariff-cutting formulas in efficiency/political costs
 - Simple cut in the power of the tariff better than Swiss or political-economy liberalization