U.S. Foreign Direct Investment and Its Influence on the U.S. Generalized System of Preferences

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Does FDI Induce Trade Lib. in Source Country?

Central Hypothesis:

- When MNEs engage in export-oriented (vertical) FDI, their home government has incentive to improve market access for imports from foreign affiliates.
  - Overseas ownership partially internalizes TOT externality.
  - Mechanism strengthened by lobbying.
  - No commensurate effect of import sector (horizontal) FDI.

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Can We Expect to Find FDI Influence on Trade Policy in Data?

- Tariffs generally bound by MFN, but preferential treatment such as FTAs and GSP exempt.
- But: GSP meant to help poor exporting countries, should in principle not be governed by potential benefit for rich importing countries.

Preview of Findings

- Among potentially GSP eligible countries,
  10% increase in U.S.-bound MNE sales
  $\rightarrow$ 14.7%pt increase in share of imports entering under trade preferences in general and 14.9%pt increase in share of imports entering under GSP in particular.

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U.S. GSP Program

- Instituted on Jan. 1, 1976, based on Trade Act of 1974 and GATT Enabling Clause of 1979.
- Generally eligible are countries with low or medium income as defined by GSP statute (based on World Bank statistics).
- Country exceptions: communist or terrorist countries, members of commodity export cartels, no reasonable market access for U.S. goods or no adequate protection of U.S. intellectual property rights, no reduction of trade-distorting policies, expropriation of U.S. firms or citizens without compensation.
- Product exceptions: e.g. most textiles, watches, footwear, handbags, luggage, steel, glass, electronics.
- Duty-free access for eligible imports.

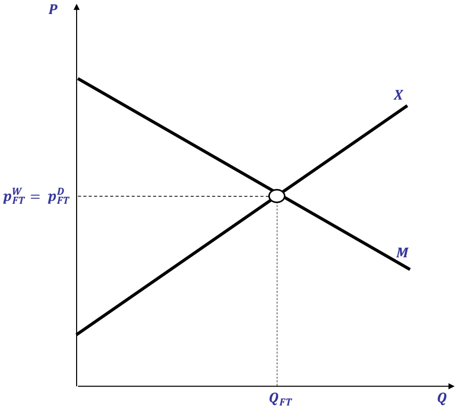
Changes in GSP Eligibility

- Annual review of GSP program by an interagency committee chaired by USTR.
  - Competitive need limitations based on dollar value of imports (170 million USD in 2015) or market share >50%.
  - Petition by any person to end country eligibility.
  - Petition by any interested party to end product eligibility.
- Changes in eligibility typically implemented on July 1.

Theoretical Model

- Partial equilibrium model, FDI given.
- Government chooses trade policy by either choosing directly an import tariff t_{cj} or for given MFN tariff a duty-free import share $\theta_{cj} \in [0, 1]$ for product j from country c.
- Government maximizes (weighted) sum of
  - producer surplus (domestic firm profits and profits of domestic multinationals from FDI abroad),
  - consumer surplus,
  - tariff revenue.

ToT Logic



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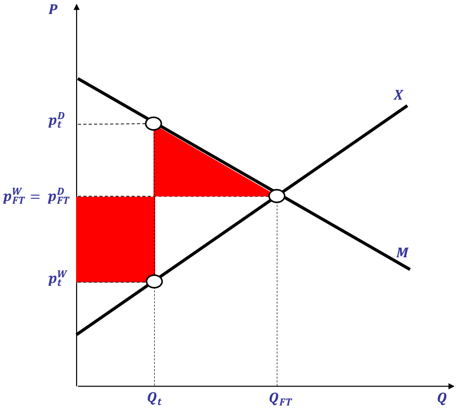

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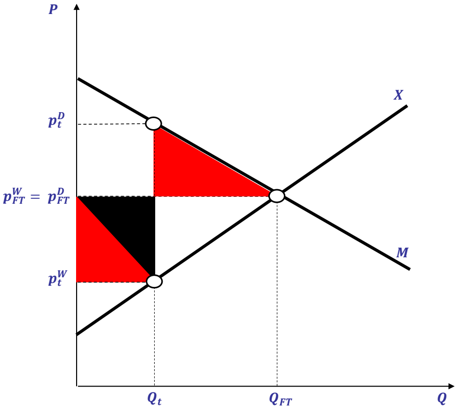

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Theoretical Predictions

The welfare-maximizing θ_{cj} is:

- (+) increasing in export-oriented FDI in j in c,
- (−) decreasing in domestic production of j,
- (−) decreasing in imports of j from c,
- (+) increasing in total imports of j from ROW,
- (−) decreasing in export-oriented FDI in j in ROW.

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Empirical Model

$$\theta_{cit} = \alpha_0 + \alpha_1 FDI_{cit-1} + \beta \cdot X_{cit-1} + \gamma_c + \gamma_i + \gamma_t + \epsilon_{cit},$$

mit:

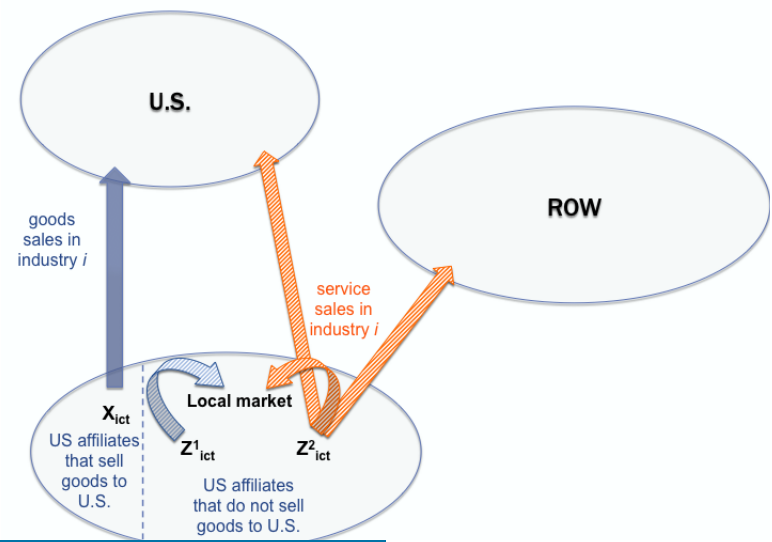
- θ_{cit}: preference measure for i: industry, c: exporting country, t: year,
- FDI_{cit}: U.S. sales of U.S. affiliates located in country c in industry i in year t,
- X_{cit}: additional controls,
- with fixed effects γ_c, γ_i, γ_t; ϵ_{cit} iid,
- linear IV panel model as baseline,
- data set: 1997-2006, 135 potentially GSP-eligible countries, 80 industries.

Empirical Difficulties and Solutions

Extensive U.S. panel data set exploits variation across industries, countries, and time.

1. *Policy Discretion.* Define dependent variable as *preferential* trade policy – FTAs and GSP not subject to MFN.
2. *FDI Differentiation.* Use BEA data on U.S. foreign affiliates' goods sales *to the U.S.*
3. *Endogeneity.* Instrument for vertical FDI using horizontal FDI.

Instrumentation Strategy



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Trade Preference Data

- Data source: U.S. customs authority.
- Trade preferences at HTS-8 level, aggregated to NAICS-4.
- Our trade preference measure:
  value of goods imported under GSP program divided by all imports in NAICS-4 category from country c in year t.
- Alternatives:
  - share of goods eligible for GSP, weighted by historic import weights, in NAICS-4 category from country c in year t.
  - share of HTS-8 categories eligible for GSP, unweighted, in NAICS-4 category from country c in year t.
  - previous three measures, but for all trade preferences granted.

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Data Overview:

N=42849; (*de iure* GSP eligible countries)

Variable	Mean	Std. Dev.	Min.	Max.
NAICS-4			1110	3399
Any Pref Share	.276	.377	0	1
GSP Share	.193	.326	0	1
El GSP (hwt)	.327	.416	0	1
El Any Pref (hwt)	.348	.422	0	1
El GSP (unwt)	.434	.326	0	1
El Any Pref (unwt)	.461	.317	0	1
country curr. GSP el.	.910	.287	0	1
affiliate U.S. sales (billions USD)	.006	.127	0	*D*
affiliate U.S. sales, prorated	.006	.127	0	*D*
affiliate local sales (billions USD)	.014	.111	0	*D*
affiliate service sales (millions USD)	.087	3.31	0	*D*
...				

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Panel IV (42849 Obs., Any & GSP)

	Any, over-id., c-cl.	GSP, over-id., c-cl.
MNE goods sales to U.S.	1.47**	1.49***
[ln, billions USD]	(.620)	(.575)
U.S. domestic sales	−1.34***	−.971***
[ln, billions USD]	(.400)	(.316)
sq. U.S. domestic sales	4.74***	3.04***
[ln, billions USD]	(.843)	(.661)
c- i-t exports to U.S.	−.346***	−.401***
[ln, billions USD]	(.098)	(.096)
ROW MNE sales to U.S.	−.007	−.003
[ln, billions USD]	(.006)	(.005)
U.S. total imp. (all countries)	−.052***	−.059***
[ln, billions USD]	(.010)	(.008)
MFN ad-valorem tariff	2.03***	1.11***
[ln]	(.204)	(.162)
KP Wald F-stat	3.91	3.91
Hansen's J stat p-value	.875	$\sim$ 1.0

IV Tobit (42849 Obs., just id.)

	Any Pref Share	GSP Share
MNE goods sales to U.S.	1.57***	2.01***
[billions USD, ln]	(.547)	(.541)
U.S. domestic sales	−.774	2.04***
[billions USD, ln]	(.705)	(.723)
U.S. domestic sales, sq.	6.56***	−.953
[billions USD, ln]	(1.55)	(1.72)
total c- i- t- exports to U.S.	−.215*	−.405***
[billions USD, ln]	(.115)	(.113)
ROW MNE sales to U.S.	−.004	−.006
[billions USD, ln]	(.012)	(.012)
U.S. total imp. (all countries)	−.157***	−.189***
[billions USD, ln]	(.030)	(.029)
ad valorem MFN tariff rate	3.33***	2.24***
[ln]	(.115)	(.110)

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Simultaneous Equations: 3SLS

	Any	GSP
FDI Equation		
preference measure	$-.011^{***}$	$-.014^{**}$
	(.004)	(.006)
MNE local goods sales	$.095^{***}$	$.096^{***}$
[ln, billions USD]	(.004)	(.004)
MNE service sales	$.274^{***}$	$.273^{***}$
[ln, billions USD]	(.068)	(.068)
...		
Preference Equation		
MNE sales to U.S.	1.48^{***}	1.50^{***}
[ln, billions USD]	(.293)	(.257)
...		

Alternative Specifications

reported: coefficient on affiliate U.S. sales

	Any Pref	GSP Pref	El Any (hwt)	El GSP (hwt)
Panel IV [country cl.]	1.47***/**	1.49***/***	1.41***/–	1.61***/–
IV Tobit [FE]	1.57***	2.01***	.77	1.14*
Panel OLS [country cl.]	.34***/***	.30***/***	.31***/***	.34***/***
Pooled OLS [country cl.]	.28***/*	.22***/**	.29***/**	.29***/**

Conclusion

- Hypothesis: USTR would prefer less protection against imports from U.S. MNEs' foreign affiliates.
- We find strong evidence for a positive causal link running from U.S. FDI to all trade preferences in general and U.S. GSP in particular.
- A cycle where higher FDI spurs increased trade liberalization appears possible.
- The same mechanism could lead to substantial trade and investment diversion.