

Public Affairs 856
Trade, Competition, and Governance
in a Global Economy
Lecture 29
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Instructor: Prof. Menzie Chinn
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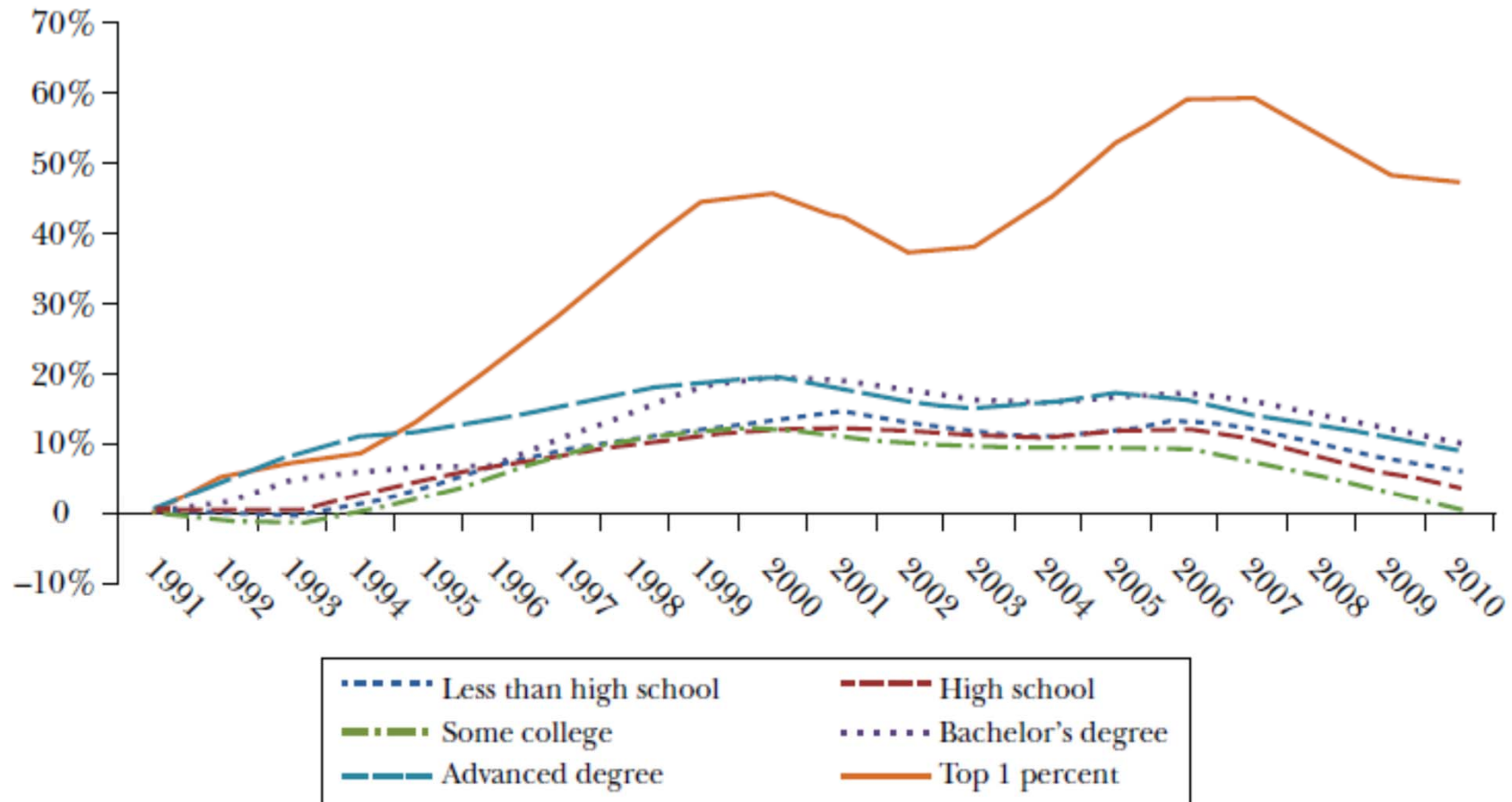
Outline

- Inequality
- China
- Labor standards

Inequality

Figure 1

Changes in U.S. Real Income, Working Adults, by Education and for Top 1 Percent



China

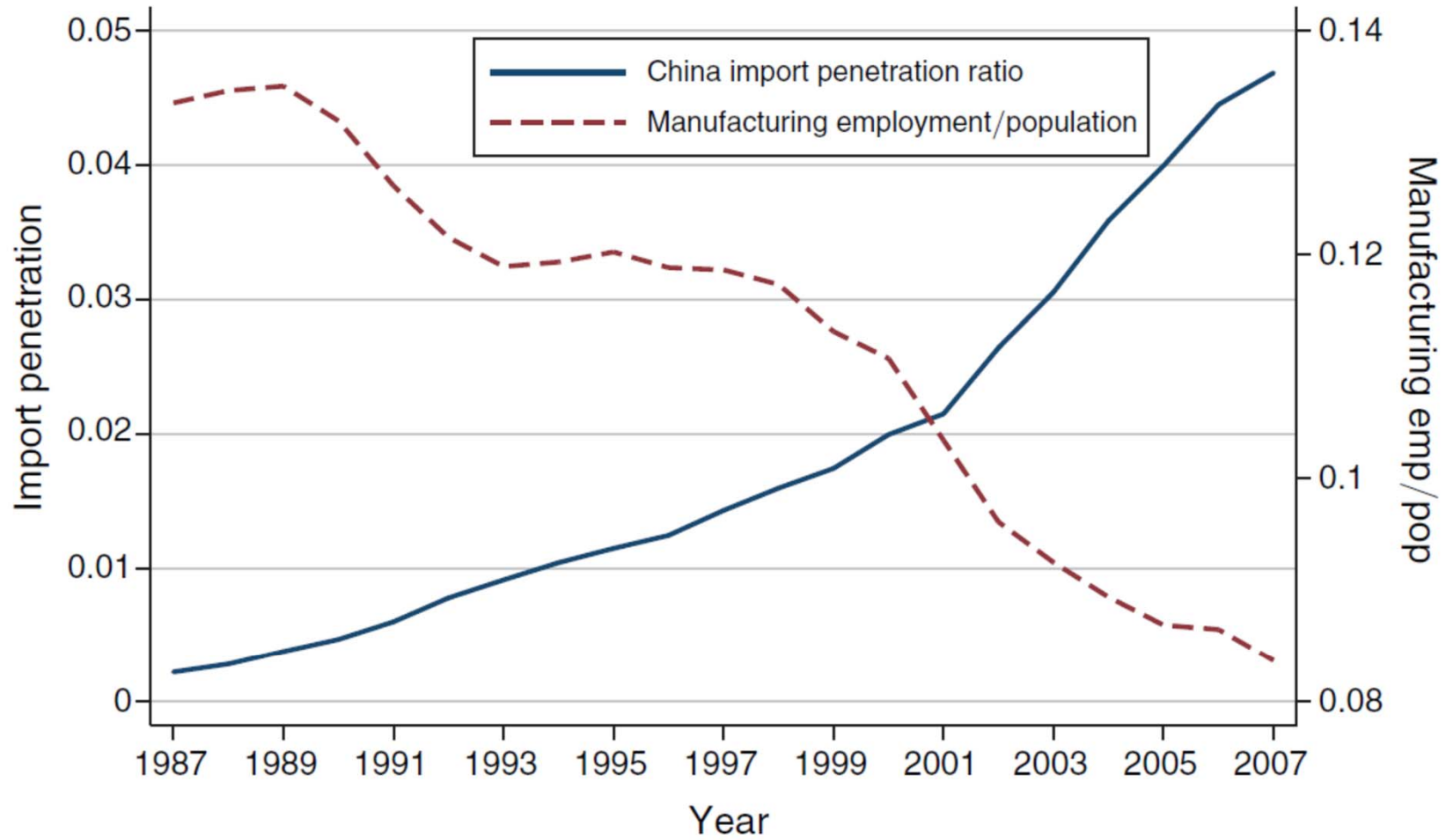


FIGURE 1. IMPORT PENETRATION RATIO FOR US IMPORTS FROM CHINA (*left scale*), AND SHARE OF US WORKING-AGE POPULATION EMPLOYED IN MANUFACTURING (*right scale*)

China

TABLE 1—VALUE OF TRADE WITH CHINA FOR THE US AND OTHER SELECTED HIGH-INCOME COUNTRIES AND VALUE OF IMPORTS FROM ALL OTHER SOURCE COUNTRIES, 1991/1992–2007

	I. Trade with China (in billions 2007 US\$)		II. Imports from other countries (in billions 2007 US\$)		
	Imports from China (1)	Exports to China (2)	Imports from other low-inc. (3)	Imports from Mexico/ CAFTA (4)	Imports from rest of world (5)
<i>Panel A. United States</i>					
1991/1992	26.3	10.3	7.7	38.5	322.4
2000	121.6	23.0	22.8	151.6	650.0
2007	330.0	57.4	45.4	183.0	763.1
Growth 1991–2007	1,156%	456%	491%	375%	137%
<i>Panel B. Eight other developed countries</i>					
1991/1992	28.2	26.6	9.2	2.8	723.6
2000	94.3	68.2	13.7	5.3	822.6
2007	262.8	196.9	31.0	11.6	1329.8
Growth 1991–2007	832%	639%	236%	316%	84%

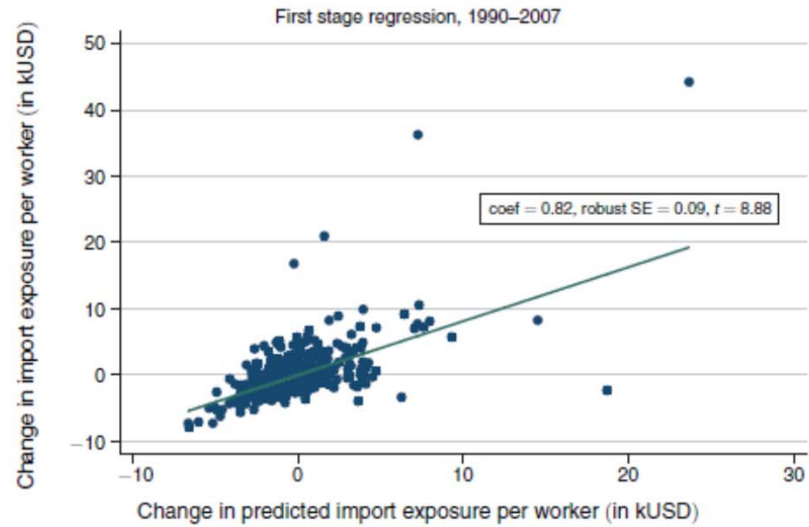
Notes: Trade data is reported for the years 1991, 2000, and 2007, except for exports to China which are first available in 1992. The set of “other developed countries” in panel B comprises Australia, Denmark, Finland, Germany, Japan, New Zealand, Spain, and Switzerland. Column 3 covers imports from all countries that have been classified as low income by the World Bank in 1989, except for China. Column 4 covers imports from Mexico and the Central American and Caribbean countries covered by the CAFTA-DR. Column 5 covers imports from all other countries (primarily from developed countries).

Table 2 presents initial estimates of the relationship between Chinese import exposure and US manufacturing employment. Using the full sample of 722 CZs and weighting each observation by start of period CZ population, we fit models of the following form:

$$(5) \quad \Delta L_{it}^m = \gamma_t + \beta_1 \Delta IPW_{uit} + \mathbf{X}'_{it} \beta_2 + e_{it},$$

where ΔL_{it}^m is the decadal change in the manufacturing employment share of the working-age population in commuting zone i . When estimating this model for

Panel A. 2SLS first stage regression, full sample



Panel B. OLS reduced form regression, full sample

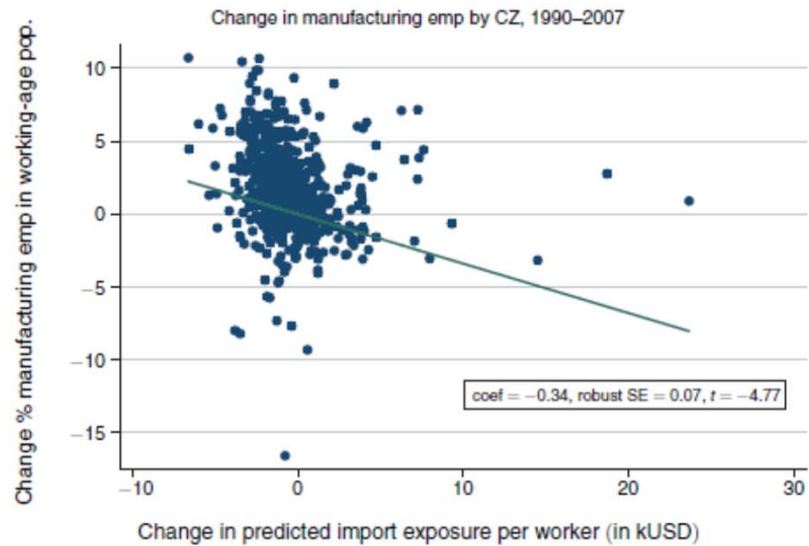


FIGURE 2. CHANGE IN IMPORT EXPOSURE PER WORKER AND DECLINE OF MANUFACTURING EMPLOYMENT: ADDED VARIABLE PLOTS OF FIRST STAGE AND REDUCED FORM ESTIMATES

Notes: $N = 722$. The added variable plots control for the start of period share of employment in manufacturing industries. Regression models are weighted by start of period CZ share of national population.

TABLE 2—IMPORTS FROM CHINA AND CHANGE OF MANUFACTURING EMPLOYMENT
IN CZs, 1970–2007: 2SLS ESTIMATES

Dependent variable: 10 × annual change in manufacturing emp/working-age pop (in % pts)

	I. 1990–2007			II. 1970–1990 (pre-exposure)		
	1990–2000 (1)	2000–2007 (2)	1990–2007 (3)	1970–1980 (4)	1980–1990 (5)	1970–1990 (6)
(Δ current period imports from China to US)/worker	−0.89*** (0.18)	−0.72*** (0.06)	−0.75*** (0.07)			
(Δ future period imports from China to US)/worker				0.43*** (0.15)	−0.13 (0.13)	0.15 (0.09)

Notes: $N = 722$, except $N = 1,444$ in stacked first difference models of columns 3 and 6. The variable “future period imports” is defined as the average of the growth of a CZ’s import exposure during the periods 1990–2000 and 2000–2007. All regressions include a constant and the models in columns 3 and 6 include a time dummy. Robust standard errors in parentheses are clustered on state. Models are weighted by start of period CZ share of national population.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

TABLE 3—IMPORTS FROM CHINA AND CHANGE OF MANUFACTURING EMPLOYMENT
IN CZs, 1990–2007: 2SLS ESTIMATES
Dependent variable: $10 \times$ annual change in manufacturing emp/working-age pop (in % pts)

	I. 1990–2007 stacked first differences					
	(1)	(2)	(3)	(4)	(5)	(6)
(Δ imports from China to US)/ worker	–0.746*** (0.068)	–0.610*** (0.094)	–0.538*** (0.091)	–0.508*** (0.081)	–0.562*** (0.096)	–0.596*** (0.099)
Percentage of employment in manufacturing ₋₁		–0.035 (0.022)	–0.052*** (0.020)	–0.061*** (0.017)	–0.056*** (0.016)	–0.040*** (0.013)
Percentage of college-educated population ₋₁				–0.008 (0.016)		0.013 (0.012)
Percentage of foreign-born population ₋₁				–0.007 (0.008)		0.030*** (0.011)
Percentage of employment among women ₋₁				–0.054** (0.025)		–0.006 (0.024)
Percentage of employment in routine occupations ₋₁					–0.230*** (0.063)	–0.245*** (0.064)
Average offshorability index of occupations ₋₁					0.244 (0.252)	–0.059 (0.237)
Census division dummies	No	No	Yes	Yes	Yes	Yes
	II. 2SLS first stage estimates					
(Δ imports from China to OTH)/ worker	0.792*** (0.079)	0.664*** (0.086)	0.652*** (0.090)	0.635*** (0.090)	0.638*** (0.087)	0.631*** (0.087)
R^2	0.54	0.57	0.58	0.58	0.58	0.58

Notes: $N = 1,444$ (722 commuting zones \times 2 time periods). All regressions include a constant and a dummy for the 2000–2007 period. First stage estimates in panel II also include the control variables that are indicated in the corresponding columns of panel I. Routine occupations are defined such that they account for 1/3 of US employment in 1980. The offshorability index variable is standardized to mean of 0 and standard deviation of 10 in 1980. Robust standard errors in parentheses are clustered on state. Models are weighted by start of period CZ share of national population.

TABLE 4—IMPORTS FROM CHINA AND CHANGE OF WORKING-AGE POPULATION
IN CZ, 1990–2007: 2SLS ESTIMATES

Dependent variables: Ten-year equivalent changes in log population counts (in log pts)

	I. By education level			II. By age group		
	All (1)	College (2)	Noncollege (3)	Age 16–34 (4)	Age 35–49 (5)	Age 50–64 (6)
<i>Panel A. No census division dummies or other controls</i>						
(Δ imports from China to US)/worker	–1.031** (0.503)	–0.360 (0.660)	–1.097** (0.488)	–1.299 (0.826)	–0.615 (0.572)	–1.127*** (0.422)
R^2	—	0.03	0.00	0.17	0.59	0.22
<i>Panel B. Controlling for census division dummies</i>						
(Δ imports from China to US)/worker	–0.355 (0.513)	0.147 (0.619)	–0.240 (0.519)	–0.408 (0.953)	–0.045 (0.474)	–0.549 (0.450)
R^2	0.36	0.29	0.45	0.42	0.68	0.46
<i>Panel C. Full controls</i>						
(Δ imports from China to US)/worker	–0.050 (0.746)	–0.026 (0.685)	–0.047 (0.823)	–0.138 (1.190)	0.367 (0.560)	–0.138 (0.651)
R^2	0.42	0.35	0.52	0.44	0.75	0.60

Notes: $N = 1,444$ (722 CZs \times two time periods). All regressions include a constant and a dummy for the 2000–2007 period. Models in panel B and C also include census division dummies while panel C adds the full vector of control variables from column 6 of Table 3. Robust standard errors in parentheses are clustered on state. Models are weighted by start of period commuting zone share of national population.

TABLE 5—IMPORTS FROM CHINA AND EMPLOYMENT STATUS OF WORKING-AGE POPULATION
WITHIN CZs, 1990–2007: 2SLS ESTIMATES

*Dependent variables: Ten-year equivalent changes in log population counts
and population shares by employment status*

	Mfg emp (1)	Non-mfg emp (2)	Unemp (3)	NILF (4)	SSDI receipt (5)
<i>Panel A. 100 × log change in population counts</i>					
(Δ imports from China to US)/worker	−4.231*** (1.047)	−0.274 (0.651)	4.921*** (1.128)	2.058* (1.080)	1.466*** (0.557)
<i>Panel B. Change in population shares</i>					
<i>All education levels</i>					
(Δ imports from China to US)/worker	−0.596*** (0.099)	−0.178 (0.137)	0.221*** (0.058)	0.553*** (0.150)	0.076*** (0.028)
<i>College education</i>					
(Δ imports from China to US)/worker	−0.592*** (0.125)	0.168 (0.122)	0.119*** (0.039)	0.304*** (0.113)	—
<i>No college education</i>					
(Δ imports from China to US)/worker	−0.581*** (0.095)	−0.531*** (0.203)	0.282*** (0.085)	0.831*** (0.211)	—

Notes: $N = 1,444$ (722 CZs × two time periods). All statistics are based on working age individuals (age 16 to 64). The effect of import exposure on the overall employment/population ratio can be computed as the sum of the coefficients for manufacturing and nonmanufacturing employment; this effect is highly statistically significant ($p \leq 0.01$) in the full sample and in all reported subsamples. All regressions include the full vector of control variables from column 6 of Table 3. Robust standard errors in parentheses are clustered on state. Models are weighted by start of period CZ share of national population.

TABLE 6—IMPORTS FROM CHINA AND WAGE CHANGES
WITHIN CZs, 1990–2007: 2SLS ESTIMATES

Dependent variable: Ten-year equivalent change in average log weekly wage (in log pts)

	All workers (1)	Males (2)	Females (3)
<i>Panel A. All education levels</i>			
(Δ imports from China to US)/worker	−0.759*** (0.253)	−0.892*** (0.294)	−0.614*** (0.237)
R^2	0.56	0.44	0.69
<i>Panel B. College education</i>			
(Δ imports from China to US)/worker	−0.757** (0.308)	−0.991*** (0.374)	−0.525* (0.279)
R^2	0.52	0.39	0.63
<i>Panel C. No college education</i>			
(Δ imports from China to US)/worker	−0.814*** (0.236)	−0.703*** (0.250)	−1.116*** (0.278)
R^2	0.52	0.45	0.59

Notes: $N = 1,444$ (722 CZs \times two time periods). All regressions include the full vector of control variables from column 6 of Table 3. Robust standard errors in parentheses are clustered on state. Models are weighted by start of period CZ share of national population.

Labor Standards and Trade

Labor principles and standards are not subject to World Trade Organization (WTO) rules and disciplines. The International Labor Organization (ILO), an arm of the United Nations founded in 1919, is the multilateral organization with responsibility for labor issues. For nearly 90 years, the ILO has been working to create, through adoption at its annual International Labor Conferences of Member countries, *Conventions*, which set international standards.

The ILO has adopted at least 183 Conventions, eight of which define four “core labor” principles. This occurred when first, a U.N. Social Summit in Copenhagen, Denmark, in 1995 declared that four categories of principles and rights at work are fundamental: (1) freedom of association and collective bargaining; (2) the elimination of forced labor; (3) the elimination of child labor; and (4) the elimination of discrimination in respect of employment and occupation.² The ILO then responded by pulling these together as the 1998 *ILO Declaration on Fundamental Principles and Rights at Work and its Follow-Up*. The *Declaration* commits all ILO Member States, whether or not they have ratified the specific conventions, to respect the labor principles in these four key areas. *The Follow-Up*, among other things, calls for reports by developing countries that have not ratified one or more of the core Conventions, on the status of their implementation of the various rights.³

Standards in FTAs

- Model 1: Nafta

Side agreement, not enforceable through same mechanism as commercial clauses

- Model 2: Jordan

Labor and commercial issues use same dispute resolution procedure

- Model 3: Seven FTAs

One enforceable clause, “nonenforcement”

- Model 4: May 10th Agreement

May 10th Agreement

- (1) a fully enforceable commitment that Parties to free trade agreements would adopt and maintain in their laws and practices the *ILO Declaration*;
- (2) a fully enforceable commitment prohibiting FTA countries from lowering their labor standards;
- (3) new limitations on “prosecutorial” and “enforcement” discretion (i.e., countries cannot defend failure to enforce laws related to the five basic core labor standards on the basis of resource limitations or decisions to prioritize other enforcement issues); and
- (4) the same dispute settlement mechanisms or penalties available for other FTA obligations

TPP

The TPP is based on the May 10 agreement, plus a few additional provisions designed to strengthen adherence to labor principles. Under these new provisions: (a) each country shall “adopt and maintain” statutes and regulations governing acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health; (b) Each party shall discourage “through initiatives it considers appropriate” the importation of goods produced in whole or in part by forced labor, including forced child labor; (c) Each party shall “endeavor to encourage” businesses to “voluntarily adopt” corporate social responsibility initiatives on labor issues “endorsed or... supported” by that party; and (d) Parties may use “corporate labor dialogue” to resolve labor issues expeditiously, to help them mutually agree on a course of action.

Issues

- Only some provisions are enforceable
- Different Enforcement Procedures for and Caps on Penalties for Labor Provisions
- Limits Placed on Scope of Definition of a Term in Labor Provisions
- Differentials in Procedures for Considering Disputes on Labor vs. Other Provisions

Empirics

- Kamata (2014) tabulates RTA's
- Evaluates labor clauses
- Investigates whether labor conditions vary when RTA's include labor clauses
- RTA's with labor clauses sometimes have an effect
- Sometimes decrease trade flows

**Table 4.1. Overall Impacts of RTA intensity on Labor Conditions:
RTA intensity based on the current trade shares**

	Dependent variable: Labor Condition Measure			
	Mean Monthly Earnings	Mean Weekly Hours actually worked	Fatal Occupational Injury Rate (%)	No. of ILO Core Conventions ratified
	(log)			
RTA intensity _{t-1}	.303 (.729)	-9.58 (11.5)	2.13 (1.83)	-.188 (0.382)
ln(GDP per capita)	-15.7 (9.95)	230.6 (149.7)	-4.80 (17.4)	11.3 (3.60)
ln(GDP per capita) ²	1.04* (.547)	-14.8 (11.0)	.179 (1.08)	-.575*** (.198)
Industry employment (% in total emp.)	.0160 (.0742)	-2.85* (1.44)	.0090 (.180)	-.0226 (.0332)
Manufacturing VA (% of GDP)	-.0455 (.0583)	-.977 (1.24)	-.0598 (.137)	-.0254 (.0277)
Political rights index	-.0544 (.357)	9.35** (4.54)	1.52 (1.01)	-.173 (.120)
Civil liberty index	-.627 (.391)	-3.77 (5.19)	-.650 (0.888)	.0272 (.170)
N	193	173	134	324
Adjusted R ²	.765	.674	.658	.820

Fixed-effect regressions for countries. Time dummies are also included. Clustered standard errors are reported in parentheses. *, **, and *** indicate the significance at the 10%, 5%, and 1%, respectively.

Table 5.1. Impacts of Labor-clause Inclusive vs. Non-inclusive RTA on Labor Conditions: RTA intensities based on the current trade shares

	Dependent variable: Labor Condition Measure			
	Mean Monthly Earnings (log)	Mean Weekly Hours actually worked	Fatal Occupational Injury Rate (%)	No. of ILO Core Conventions ratified
RTA intensity t_{-1} with Labor Clauses	5.19*** (1.60)	-6.79 (37.3)	-14.9 (24.0)	-.204 (.690)
RTA intensity t_{-1} w/o Labor Clauses	-3.55 (.579)	-9.91 (13.5)	2.50 (2.12)	-1.85 (.418)
ln(GDP per capita)	-20.1** (9.89)	226.6 (139.1)	-1.78 (19.0)	11.3*** (3.63)
ln(GDP per capita) ²	1.31** (.541)	-14.5 (10.2)	-.0194 (1.17)	-.576*** (.199)
Industry employment (% in total emp.)	.0705 (.0622)	-2.80 (1.90)	.0206 (.188)	-.0227 (.0342)
Manufacturing VA (% of GDP)	-.0383 (.0500)	-.966 (1.24)	-.0666 (.139)	-.0255 (.0281)
Political rights index	.136 (.310)	9.43** (4.41)	1.61 (1.00)	-.173 (.121)
Civil liberty index	-.696* (0.401)	-3.79 (5.15)	-.764 (.918)	.0275 (0.169)
N	193	173	134	324
Adjusted R ²	.778	.670	.654	.819

Fixed-effect regressions for countries. Time dummies are also included. Clustered standard errors are reported in parentheses. *, **, and *** indicate the significance at the 10%, 5%, and 1%, respectively.

**Table 6.1. Impacts of Labor-clause Inclusive vs. Non-inclusive RTA on Labor Condition for Countries in Different Income Levels:
RTA intensities based on the current trade shares**

	Dependent variable: Labor Condition Measure			
	Mean Monthly Earnings (log)	Mean Weekly Hours actually worked	Fatal Occupational Injury Rate (%)	No. of ILO Core Conventions ratified
RTA intensity $t-1$ with LC, Hi income	-3.87 (2.87)	156.9 (235.2)	-3.82 (24.8)	2.31 (1.99)
RTA intensity $t-1$ w/o LC, Hi income	-.482 (.630)	-2.08 (14.1)	.760 (1.60)	.204 (.492)
RTA intensity $t-1$ with LC, Md income	6.14*** (1.28)	-16.9 (36.4)	-764.9*** (267.7)	-.410 (.644)
RTA intensity $t-1$ w/o LC, Md income	-.125 (.863)	28.8 (22.1)	6.85*** (2.78)	.688 (.516)
RTA intensity $t-1$ with LC, Lo income	N.A. (--)	N.A. (--)	N.A. (--)	N.A. (--)
RTA intensity $t-1$ w/o LC, Lo income	23.0 (14.5)	368.3 (342.4)	47.4 (35.6)	-17.1*** (4.10)
ln(GDP per capita)	-18.9* (10.2)	238.1 (145.1)	-13.3 (18.6)	9.81*** (3.37)
ln(GDP per capita) ²	1.24** (.564)	-14.9 (10.6)	-.829 (1.10)	-.498*** (.174)
Industry employment (% in total emp.)	.0581 (.0604)	-3.15 (2.10)	-.0500 (.232)	-.0177 (.0329)
Manufacturing VA (% of GDP)	-.0394 (.0560)	-.195 (1.28)	-.101 (.125)	-.0288 (.0280)
Political rights index	.150 (.313)	9.45** (4.57)	1.67 (1.02)	-.184 (.126)
Civil liberty index	-.711* (0.402)	-1.62 (5.47)	-.753 (.873)	.0711 (0.163)
N	193	173	134	324
Adjusted R ²	.779	.669	.680	.827