Advanced Topics in Trade
Lecture 1 - Institutional Comparative Advantage

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Agenda

1. An important paper by John Romalis (American Economic Review 2004): combines Krugman with Heckscher-Ohlin.

2. Simple econometrics to examine how the HO forces still drive trade flows to the US.

3. Use similar econometric techniques to examine how domestic institutions (legal, financial, and labor institutions), above and beyond economic fundamentals (technology, factor endowments, etc.), shapes world trade (Nunn, 2007; Nunn and Trefler, 2013).

Preliminaries

- In a neoclassical trade model, comparative advantage is manifested as differences in relative autarky (closed-economy) prices.
- Differences in autarky prices can arise from cross-country differences in:
  - Demand (periphery of the field).
  - Supply (core of the field).
    - Technological levels (The Ricardian trade theory);
    - Factor endowment (The HO trade theory)

Romalis (2004): Combining Heckscher-Ohlin and Krugman

- ▶ Goal: Examine how a country's factor endowment determines the structure of trade.

- ▶ Integrate a many-country version of a HO model with a continuum of products in Krugman's (1980) model.

- ▶ Theory (skipped): continuum of products; products differ in capital intensity; each product is composed of n (and n*) possible varieties.

- ▶ The structure of bilateral trade (between any two countries) and production can be solved in closed form.

- ▶ Unlike the standard HO model, each country exports some varieties of each product.

- ▶ The paper proposes a simple empirical framework to test
  - ▶ The HO theorem.
  - ▶ The Rybczynski theorem: Countries that accumulate a factor faster should experience a shift of their production and export structures towards sectors that use that factor intensively.

Romalis (2004)

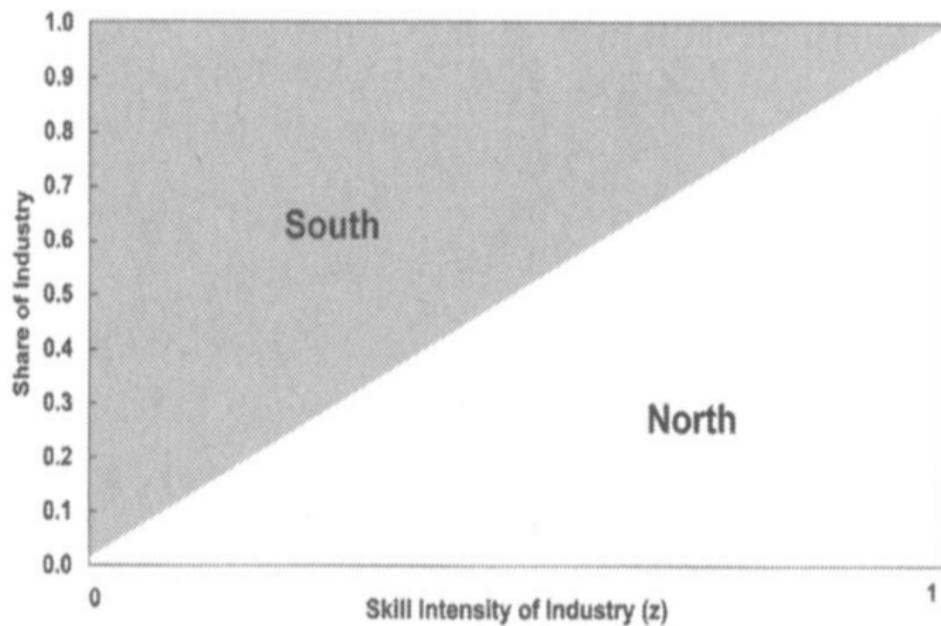Theoretical Prediction: Location of production

FIGURE 3. THE LOCATION OF PRODUCTION

Romalis (2004)

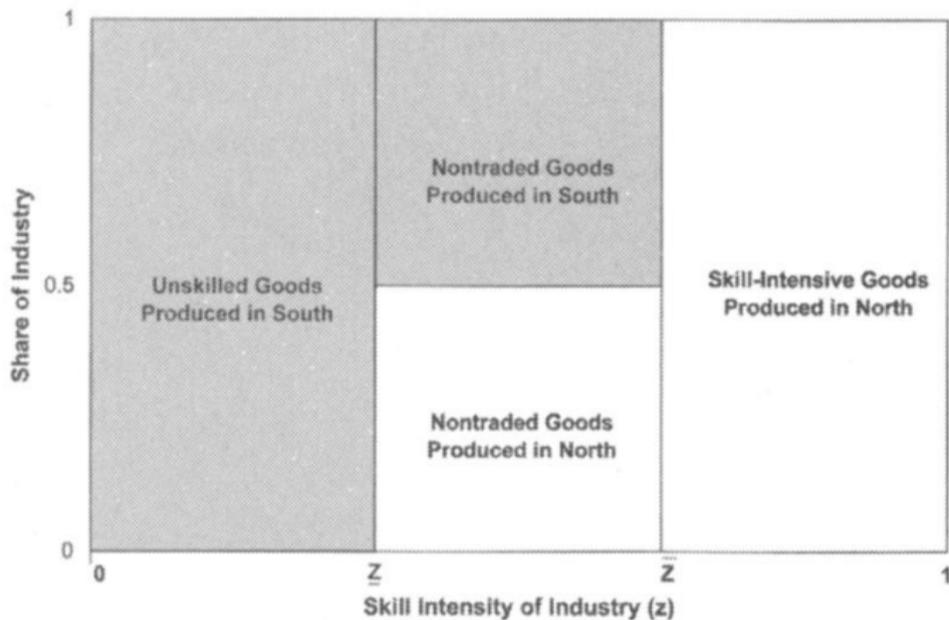Theoretical Prediction: Location of production with trade costs

FIGURE 4. LOCATION OF PRODUCTION IN DFS MODEL WITH TRANSPORT COSTS

Romalis (2004)

- Industry-level Measures (370 industries; NBER; US-based):
  - Labor intensity
    - total compensation/ value added of the ind.
  - Capital intensity
    - 1 - Labor intensity
  - Skilled labor intensity
    - Labor intensity*(nb. non-production workers/nb. production workers)
  - Unskilled labor intensity
    - Labor intensity*(1-(nb. non-production workers/nb. production workers))
  - U.S. imports from all countries and industries (UN Comtrade + Feenstra (2000))

- Country-level Measures:
  - GDP and population (from Penn World and World Bank)
  - Capital abundance (K/L) (from Hall and Jones (1999))
  - Skill abundance (H/L) (from Barro and Lees (2000))

Romalis (2004)

Context

TABLE 1—INDUSTRIES WITH EXTREME FACTOR INTENSITIES

10 Most Skill-Intensive Industries

3764 Space propulsion units and parts
3826 Analytical instruments
3769 Space vehicle equipment
3812 Search and navigation equipment
3547 Rolling mill machinery
2711 Newspapers
3721 Aircraft
3699 Electrical equipment and supplies
3827 Optical instruments and lenses
3541 Machine tools, metal cutting types

10 Most Capital-Intensive Industries

2111 Cigarettes
2087 Flavoring extracts and syrups
2043 Cereal breakfast foods
2046 Wet corn milling
2047 Dog and cat food
2879 Agricultural chemicals
2095 Roasted coffee
2085 Distilled liquor, except brandy
2834 Pharmaceutical preparations
2813 Industrial gases

10 Most Unskilled Labor-Intensive Industries

3321 Gray iron foundries
3543 Industrial patterns
2299 Textile goods
2397 Schiffli machine embroideries
3149 Footwear, except rubber
3151 Leather gloves and mittens
2517 Wood TV and radio cabinets
2393 Textile bags
3544 Special dyes, tools, jigs and fixtures
3731 Ship building and repairing

10 Least Skill-Intensive Industries

2111 Cigarettes
2043 Cereal breakfast foods
2087 Flavoring extracts and syrups
2032 Canned specialties
2047 Dog and cat food
2322 Men's and boys' underwear
2284 Thread mills
2035 Pickles, sauces and salad dressings
2676 Sanitary paper products
2085 Distilled liquor, except brandy

10 Least Capital-Intensive Industries

2299 Textile goods
3534 Elevators and moving stairways
3321 Gray iron foundries
3543 Industrial patterns
3547 Rolling mill machinery
3731 Ship building and repairing
3542 Machine tools, metal forming types
3544 Special dyes, tools, jigs and fixtures
2397 Schiffli machine embroideries
3671 Electronic computers

10 Least Unskilled Labor-Intensive Industries

2087 Flavoring extracts and syrups
2111 Cigarettes
2721 Periodicals
2731 Book publishing
2834 Pharmaceutical preparations
2879 Agricultural chemicals
2813 Industrial gases
2046 Wet corn milling
2095 Roasted coffee
3571 Electronic computers

Romalis (2004)

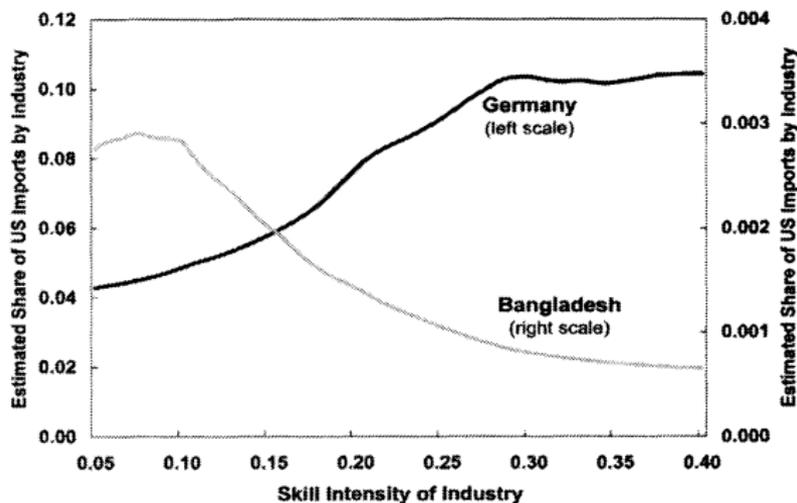Motivating graph

FIGURE 1. HECKSCHER-OHLIN EFFECT FOR GERMANY AND BANGLADESH: SKILL INTENSITY AND U.S. IMPORT SHARES IN 1998

Romalis (2004)

Evolution of skill intensity of exports across time (Asian miracle economies)
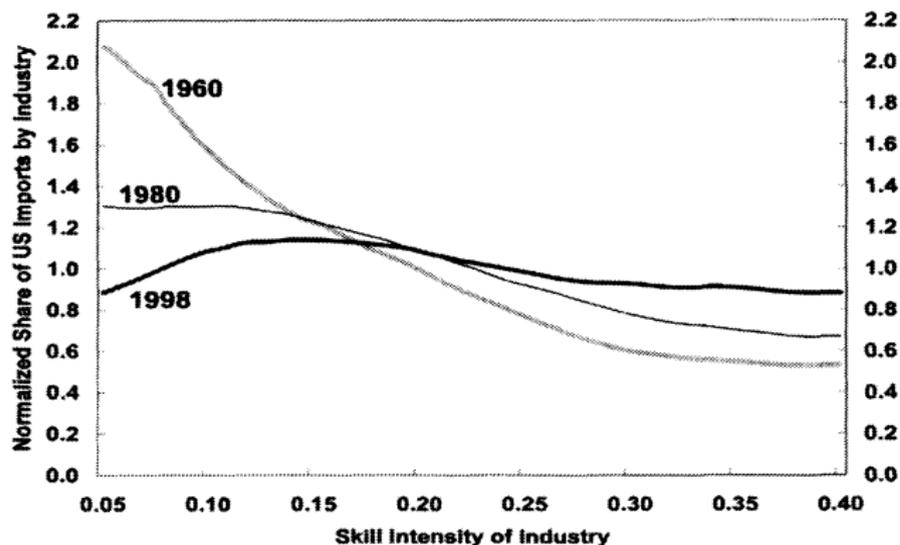

FIGURE 2. RYBCZYNSKI EFFECT FOR THE ASIAN MIRACLE ECONOMIES: COMBINED U.S. IMPORT SHARES 1960−1998

Note: Asian miracle economics are: Singapore, Hong Kong, Taiwan, and Korea.

Romalis (2004): Regressions at the exporter-industry level

$$x_{cz} = \alpha_c + (\beta_1 + \beta_2 F_c) f_z + \varepsilon_{cz},$$

where F_c is the measure of factor endowment (k, l, sk, or $unsk$) of exporting country c (to the US).

TABLE 9—POOLED REGRESSION OF IMPORT SHARE ON FACTOR INTENSITIES
(Dependent Variable: X_{cz})

Variable	(1)	(2)	(3)	(4)
z	−16.66***	−9.52***	−17.18***	−8.07***
	(1.32)	(0.62)	(1.17)	(0.54)
$Skill \times z$	23.26***		24.32***	
	(1.83)		(1.60)	
$GDPPC \times z$		17.87***		15.52***
		(1.05)		(0.84)
k	−0.77***	−1.91***	−1.37***	−2.03***
	(0.26)	(0.31)	(0.27)	(0.29)
$Capital \times k$	1.30***		2.26***	
	(0.37)		(0.35)	
$GDPPC \times k$		3.66***		3.83***
		(0.53)		(0.45)
m			−0.28	−0.25
			(0.17)	(0.17)
$Raw \times m$			0.40***	0.38***
			(0.04)	(0.04)
Country dummies	Yes	Yes	Yes	Yes
Countries	124	123	120	120
Observations	45,880	45,510	44,400	44,400

Note: Standard errors are in parentheses.
  * Significant at the 10-percent level.
  ** Significant at the 5-percent level.
  *** Significant at the 1-percent level.

Romalis (2004): The impact of changing factor endowments on trade patterns
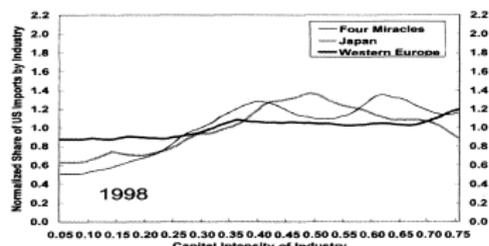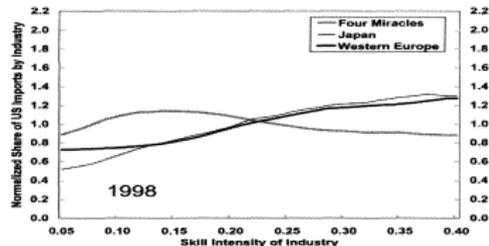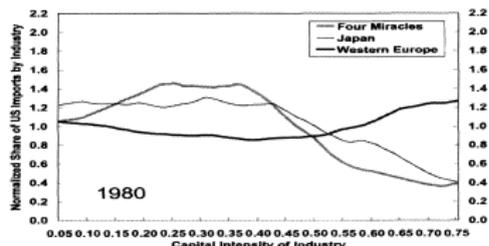

FIGURE 13. SKILL INTENSITY AND US IMPORT SHARES, 1960–1998

FIGURE 14. CAPITAL INTENSITY AND US IMPORT SHARES, 1960–1998

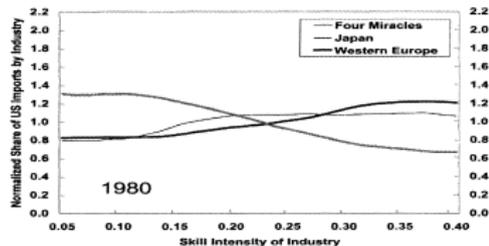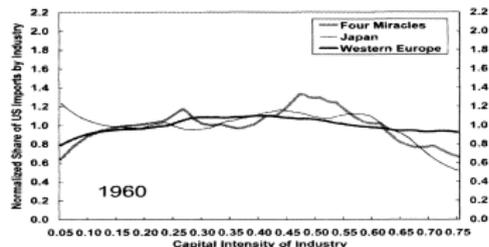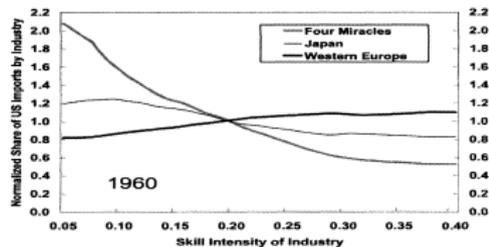# Romalis (2004): The impact of changing factor endowments on trade patterns

$$\triangle x_{cz} = \triangle \alpha_c + (\triangle \beta_1 + \beta_2 \triangle F_c) f_z + \triangle \varepsilon_{cz},$$

TABLE 12—POOLED RYBCZYNSKI REGRESSIONS
(Dependent Variable: ΔX_{cz})

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
z	2.48***	2.37***	0.99**	−19.41**	−17.34**	−7.83***	−11.15***	−3.59	−4.44*
	(0.52)	(0.46)	(0.46)	(6.89)	(7.07)	(2.37)	(2.62)	(2.45)	(2.44)
$\Delta College \times z$	0.17			−0.73		−1.42		1.95	
	(3.43)			(3.51)		(3.45)		(3.50)	
$\Delta Education \times z$		4.01			5.61		12.89***		7.11*
		(3.99)			(5.07)		(4.33)		(4.13)
$TestScores \times z$				22.44***	20.21***				
				(6.91)	(7.07)				
$EdnQual1 \times z$						0.20***	0.26***		
						(0.05)	(0.05)		
$EdnQual2 \times z$								0.11**	0.12***
								(0.04)	(0.04)
$\Delta GDPPC \times z$			16.31***						
			(3.32)						
k	0.53**	0.53**	−0.05	0.77***	0.78***	0.49**	0.50**	0.47**	0.46*
	(0.24)	(0.24)	(0.23)	(0.26)	(0.26)	(0.24)	(0.24)	(0.24)	(0.24)
$\Delta Capital \times k$	1.35*	1.33*		1.68**	1.61**	1.70**	1.65**	1.82**	1.88***
	(0.70)	(0.70)		(0.78)	(0.77)	(0.71)	(0.70)	(0.73)	(0.73)
$\Delta GDPPC \times k$			6.70***						
			(1.62)						
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Countries	49	49	103	25	25	47	47	47	47
Observations	15,533	15,533	32,651	7,925	7,925	14,899	14,899	14,899	14,899

Note: Standard errors are in parentheses.
* Significant at the 10-percent level.

Institutions and Comparative Advantage

- A recent literature shows that countries' comparative advantages and trade can arise not only from differences in technology and factor endowment, but also from differences in domestic institutions.

- Domestic institutions, which include contracting, financial, labor market institutions, have been shown to shape cross-country differences in economic growth and development (Acemoglu and Robinson "Why Nations Fail")

- North (1990) famously defines institutions as the "rules of the game".

- Recent studies in trade, starting with Levchenko (2007) and Nunn (2007), show that contractual frictions can affect whether and how trade occurs between countries.

- Countries with poor contracting environments specialize in (standardized) industries which are not "contract-dependent". See Nunn (2013) for a comprehensive review.

A simple illustrative example, Nunn and Trefler (Handbook of International Trade, 2013)

- Consider two products: commercial aircraft (A) and blue jeans (J).

- The production of A requires high levels of innovative effort by all parties, which are difficult to verify in courts.

- Only incomplete contracts can be written between parties.

- The production of J, on the other hand, does not require any relationship-specific, non-contractible inputs (e.g., standardized cotton can be readily purchased in a thick market).

- Thus, a country with better contracting institutions will have relatively lower costs of producing A, and relatively higher costs of producing J.

- Therefore, contracting institutions become a source of comparative advantage.

Institutions and Comparative Advantage

- Similarly, cross-country differences in financial and labor market institutions can be a source of comparative advantage: Manova (2007), Cunat and Melitz (2012), Tang (2012), etc.

- Key Question: What are the consequences of trade when comparative advantage is partly shaped by institutional features?

- Next time, we will discuss how trade reversely shapes institutions (Levchenko and Do (2007) on financial market development and Maystre et al. (2013) on how trade shapes cultural values).

Contractual Frictions in International Trade

- When there are contract disputes in international trade, which country's laws should be applied?
- This "choice-of-law" clause is not always included. Even when it is included, adjudicating courts may not uphold it.
- Local courts may be unwilling to enforce a contract signed between residents from two different countries.
- What if the party having to pay damages does not have any assets in the court's country?
- Imperfect contract enforcement is particularly detrimental for international commerce because of
  - (usually) longer time lags between order and delivery;
  - Different cultures.
  - Different legal systems, etc.

A quantitative measure of the quality of legal (contracting) institution

Duration of a legal procedure aimed at collecting a bounced check
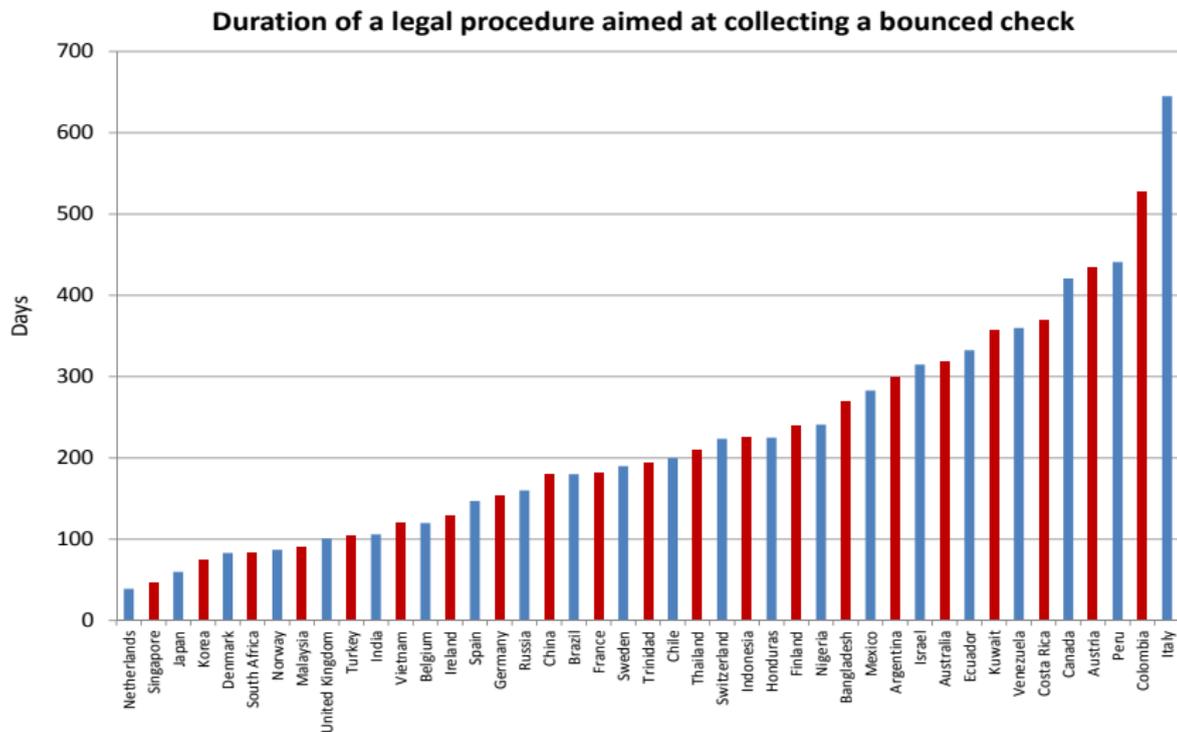
Ways to tackle contractual frictions (1)

1. UN Convention on Contracts for the International Sale of Goods or Vienna Convention

- Pros: uniform rules to govern contracts for the international sale of goods
- Cons:
    - several countries (e.g., Brazil, India, the UK) have yet to sign it;
    - other countries do not apply certain parts of the agreement;
    - private parties can opt out of it via Article 6: "The parties may exclude the application of this Convention or, subject to article 12, derogate from or vary the effect of any of its provisions."

Ways to tackle contractual frictions (2)

2. International Arbitration (e.g., Intl Chamber of Commerce (http://www.iccwbo.org/))

- can be invoked via a forum-of-law clause in a contract
- appealing because
    - lower uncertainty as to which law will be applied;
    - arbitrators tend to have more commercial expertise and rule faster;
    - arbitration rulings are confidential and are generally perceived to be more enforceable (New York Convention).
- But international arbitration is rarely used because it is very costly.

Ways to tackle contractual frictions (3)

3. Resort to implicit contracting to sustain 'cooperation'
   - implicit contracts may be harder to sustain due to limited repeated interactions;
   - collective or community enforcement hampered by long distance and differences in cultural values.

Ways to tackle contractual frictions (4)

Two key organizational decisions of firms:

1. Where to produce:
   - Slicing up the value chain, such as RD and product development, parts and components production, assembly, etc. in different countries.

2. Extent of control that firms exert over different production stages:
   - Should these production stages be kept within firm boundaries?
   - Should they be contracted out to suppliers or assemblers?

Will come back to this discussion in Part 5. Multinational Firms and Foreign Direct Investment.

Empirical evidence of institutional comparative advantage

- ▶ Anderson and Marcoullier (2002): controlling for standard determinants of trade flows, countries with weaker contracting institutions tend to import less from their trading partners (relative to the U.S.).
- ▶ Berkowitz, Moenius and Pistor (2006) demonstrate that the institutions of a country can shape its exports. In particular:
  - ▶ signing of the New York convention (a very specific measure of the quality of institutions) enhances exports, after controlling for country fixed effects. In other words, the identification comes from the time-series variation in the quality of institutions.
  - ▶ the effects are concentrated in 'complex' goods rather than in 'simple' goods (to be explained below).

Main Results of Berkowitz, Moenius and Pistor (2006)

Regression column	1	2	3	4[t]
GDP importer	0.81	0.81	−0.10	−0.15
	(39.07)	(38.53)	(−0.43)	(−0.52)
GDP exporter	0.77	0.76	−0.13	−0.19
	(39.78)	(39.13)	(−0.60)	(−0.65)
GDP per capita importer	0.72	0.53	1.00	1.18
	(23.30)	(11.16)	(3.80)	(4.00)
GDP per capita exporter	1.04	0.74	1.20	1.39
	(32.09)	(13.96)	(4.50)	(4.63)
Distance	−1.12	−1.16	−1.02	−1.03
	(−27.30)	(−27.97)	(−27.09)	(−27.11)
Adjacent	0.31	0.35	0.40	0.40
	(2.33)	(2.43)	(2.64)	(2.65)
Links	0.51	0.42	0.45	0.45
	(4.91)	(4.07)	(4.42)	(4.40)
Language similarities	−0.09	0.09	0.99	1.00
	(−0.54)	(0.51)	(5.72)	(5.74)
Remoteness	0.37	0.58	1.46	1.79
	(3.79)	(6.04)	(2.21)	(2.31)
Quality of importer legal institutions		0.61	0.17	0.05
		(5.41)	(0.18)	(0.51)
Quality of exporter legal institutions		0.91	0.32	0.36
		(7.12)	(3.07)	(3.26)
Probability that the quality-of-legal-institution coefficients are the same		0.076	0.035	0.035
Country dummies			Yes	Yes
Time dummies			Yes	Yes
Constant	−20.04	−21.45		
	(−12.13)	(−13.16)		
Number of clusters (country pairs)	2792	2792	2792	2792
R^2	0.69	0.70	0.77	0.77
Observations	26,577	23,564	23,564	23,564

t-statistics reported in parentheses are computed from robust standard errors that allow for within-group correlation.

Main Results of Berkowitz, Moenius and Pistor (2006)

TABLE 3.—IMPORT REGRESSIONS POOLED FOR 1982–1992, COMPLEX VERSUS SIMPLE GOODS

Regression column	1	2	3	4
Goods	Complex	Simple	Complex	Simple
	0.34	−1.50	0.08	−1.06
GDP importer	(1.65)	(−4.59)	(0.27)	(−2.52)
	0.58	−1.81	0.32	−1.38
GDP exporter	(2.82)	(−5.55)	(1.08)	(−3.26)
	0.77	2.35	1.17	2.03
GDP per capita importer	(3.16)	(6.05)	(4.05)	(4.70)
	0.71	2.27	1.10	1.95
GDP per capita exporter	(2.92)	(5.77)	(3.86)	(4.48)
	−0.98	−1.26	−0.98	−1.26
Distance	(−24.90)	(−22.76)	(−24.98)	(−22.72)
	0.44	0.27	0.44	0.27
Adjacent	(2.62)	(1.55)	(2.62)	(1.54)
	0.54	0.18	0.54	0.18
Links	(5.11)	(1.21)	(5.09)	(1.22)
	1.27	0.11	1.28	0.11
Language similarities	(6.73)	(0.41)	(6.77)	(0.40)
	−0.81	7.83	0.74	6.69
Remoteness	(−1.30)	(7.91)	(0.96)	(5.50)
	−0.51	0.66	−0.44	0.66
Quality of importer institutions	(−5.18)	(4.54)	(−4.24)	(4.42)
	0.85	−0.53	0.93	−0.53
Quality of exporter institutions	(7.92)	(−3.66)	(8.41)	(−3.45)
Probability that the absolute value of the quality of institutions coefficients are the same	0.02	0.54	0.00	0.53
Country dummies	Yes	Yes	Yes	Yes
Time dummies			Yes	Yes
Number of clusters (country pairs)	2755	2550	2755	2550
R^2	0.79	0.50	0.79	0.38
Observations	22,669	18,948	22,669	18,948

t-statistics reported in parentheses are computed from robust standard errors that allow for within-group correlation.

Finer identification of comparative advantage

- Recent studies have pointed out that the effect of weak contracting institutions should vary across sectors, since some sectors are more "contract dependent" than others
- Different papers offer alternative measures of contract dependence at the industry level
    - Costinot (2009): complexity measured as average number of months necessary to be fully trained and qualified in an industry.
    - Levchenko (2007): complexity measured as the Herfindahl index of input use according to input-output tables.
    - Nunn (2007): relationship-specificity (below).

Nunn (QJE, 2007): Measures of Countries' Contracting Institutions

- Trade data for 146 countries and 222 industries classified according to the BEA's I-O industry classification system in 1997.
- Contract-enforcing (legal) institutions across countries:
  - 'Rule of Law' variable from the Governance Matters III Database:
  - Weighted average of 17 measures of judicial quality and contract enforcement.
  - Examples of these measures:
    - 'Enforceability of Private Contracts' Index from Global Insight Inc.
    - 'Enforceability of Contracts' Index from Economist Intelligence Unit.
    - 'Strength and Impartiality of the Legal System' Index from Political Risk Services.

Nunn (2007): Measures of Industries' Contract Intensity (Concept)

- Contract intensity is the proportion of an industry's intermediate inputs that are relationship-specific.
- An investment is relationship-specific if its value inside the buyer-seller relationship is significantly higher than outside the relationship (e.g., printing company's logo on pens)
- In other words, both parties within a relationship can hold each other up.

Nunn (2007): Measures of Industries' Contract Intensity (Construction)

1. Use the United States Input-Output Accounts to identify the intermediate inputs used to produce each good and their proportions.
2. Identify which inputs are relationship-specific (based on Rauch (1999)).
3. Based on the information available in international trade publications, Rauch (1999) classifies products into 3 groups:
   3.1 Products that are sold on an organized exchange (standardized);
   3.2 Products that have reference prices in trade publications;
   3.3 Neither (most relationship-specific).
4. Construct the weighted average share of "non-standardized" inputs.

Table 1: The least and most contract intense industries.

20 Least Contract Intense: lowest z_i^{rs1}		20 Most Contract Intense: highest z_i^{rs1}	
z_i^{rs1}	Industry Description	z_i^{rs1}	Industry Description
.024	Poultry processing	.810	Photographic & photocopying equip. manuf.
.024	Flour milling	.819	Air & gas compressor manuf.
.036	Petroleum refineries	.822	Analytical laboratory instr. manuf.
.036	Wet corn milling	.824	Other engine equipment manuf.
.053	Aluminum sheet, plate & foil manuf.	.826	Other electronic component manuf.
.058	Primary aluminum production	.831	Packaging machinery manuf.
.087	Nitrogenous fertilizer manufacturing	.840	Book publishers
.099	Rice milling	.851	Breweries
.111	Prim. nonferrous metal, ex. copper & alum.	.854	Musical instrument manufacturing
.132	Tobacco stemming & redrying	.872	Aircraft engine & engine parts manuf.
.144	Other oilseed processing	.873	Electricity & signal testing instr. manuf.
.171	Oil gas extraction	.880	Telephone apparatus manufacturing
.173	Coffee & tea manufacturing	.888	Search, detection, & navig. instr. manuf.
.180	Fiber, yarn, & thread mills	.891	Broadcast & wireless comm. equip. manuf.
.184	Synthetic dye & pigment manufacturing	.893	Aircraft manufacturing
.190	Synthetic rubber manufacturing	.901	Other computer peripheral equip. manuf.
.195	Plastics material & resin manuf.	.904	Audio & video equipment manuf.
.196	Phosphatic fertilizer manufacturing	.956	Electronic computer manufacturing
.200	Ferroalloy & related products manuf.	.977	Heavy duty truck manufacturing
.200	Frozen food manufacturing	.980	Automobile & light truck manuf.

Notes: The measures have been rounded from seven digits to three digits.

Nunn (2007): First Pass

- ▶ Do countries with better contracting institutions produce and export relatively more contract-dependent products on average?
- ▶ Compute the weighted average contract intensity of a country's exports and output.
- ▶ Data on production at the industry level (for 78 countries) are from United Nations's Industrial Statistics Database.

Nunn (2007): Cross-country Evidence

JUDICIAL QUALITY AND THE AVERAGE CONTRACT INTENSITY OF PRODUCTION
AND OF EXPORTS

	Output regressions		Export regressions	
	$\bar{Z}_c^{rs1}$	$\bar{Z}_c^{rs2}$	$\bar{Z}_c^{rs1}$	$\bar{Z}_c^{rs2}$
Judicial quality: Q_c	.392**	.465**	.290**	.291**
	(.109)	(.109)	(.081)	(.065)
Number of obs.	78	78	146	146
R^2	.15	.22	.08	.08

The dependent variables are the average contract intensity of production or exports. Standardized beta coefficients are reported, with robust standard errors in brackets. ** indicates significance at the 1 percent level.

Nunn (2007): Main regression specification

$$\ln(x_{ic}) = \underbrace{\alpha_i + \alpha_c}_{\text{ind and country FE}} + \beta z_i Q_c + \underbrace{\beta h_i H_c + \beta k_i K_c}_{\text{H-O}} + \varepsilon_{ic}$$

- x_{ic} = total exports in industry i from country c to all other countries in the world
- z_i = a measure of the importance of relationship-specific investments (i.e., contract intensity) in industry i
- Q_c = a measure of country c's quality of contract enforcement
- H_c and K_c represent country c's endowments of skilled labor and capital; while h_i and k_i are the skill and capital intensities of industry i

Nunn (2007): Main Empirical Evidence

THE DETERMINANTS OF COMPARATIVE ADVANTAGE

	(1)	(2)	(3)	(4)	(5)
Judicial quality interaction: $z_i Q_c$	.289**	.318**	.326**	.235**	.296**
	(.013)	(.020)	(.023)	(.017)	(.024)
Skill interaction: $h_i H_c$			.085**		.063**
			(.017)		(.017)
Capital interaction: $k_i K_c$			.105**		.074
			(.031)		(.041)
Log income × value added: $va_i \ln y_c$				−.117*	−.137*
				(.047)	(.067)
Log income × intra-industry trade: $iit_i \ln y_c$				.576**	.546**
				(.041)	(.056)
Log income × TFP growth: $\Delta tfp_i \ln y_c$				.024	−.010
				(.033)	(.049)
Log credit/GDP × capital: $k_i CR_c$				.020	.021
				(.012)	(.018)
Log income × input variety: $(1 - hi_i) \ln y_c$				.446**	.522**
				(.075)	(.103)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
R^2	.72	.76	.76	.77	.76
Number of observations	22,598	10,976	10,976	15,737	10,816

Dependent variable is $\ln x_{ic}$. The regressions are estimates of (1). The dependent variable is the natural log of exports in industry i by country c to all other countries. In all regressions the measure of contract intensity used is z_i^{rs1}. Standardized beta coefficients are reported, with robust standard errors in brackets. * and ** indicate significance at the 5 and 1 percent levels.

Reverse Causality?

- Can the correlation identified by Nunn (2007) and others in this literature be a result of reverse causality?
- Specifically, can trade and thus specialization shape countries' domestic institutions?
- Nunn (2007) solved this issue by using countries' legal origins (British, French, German, and Scandinavian) as instruments for contracting institutions.
- A small but growing literature has started examining how trade in turn shapes countries' domestic institutions (next lecture).