



# Lecture 24

## AAE 374 Fall 2008

### Institutions & Inequality

1. Factor endowments, trade, and institutions?
2. Where was slavery centered in the Americas?
3. What ramifications of slavery on institutions?



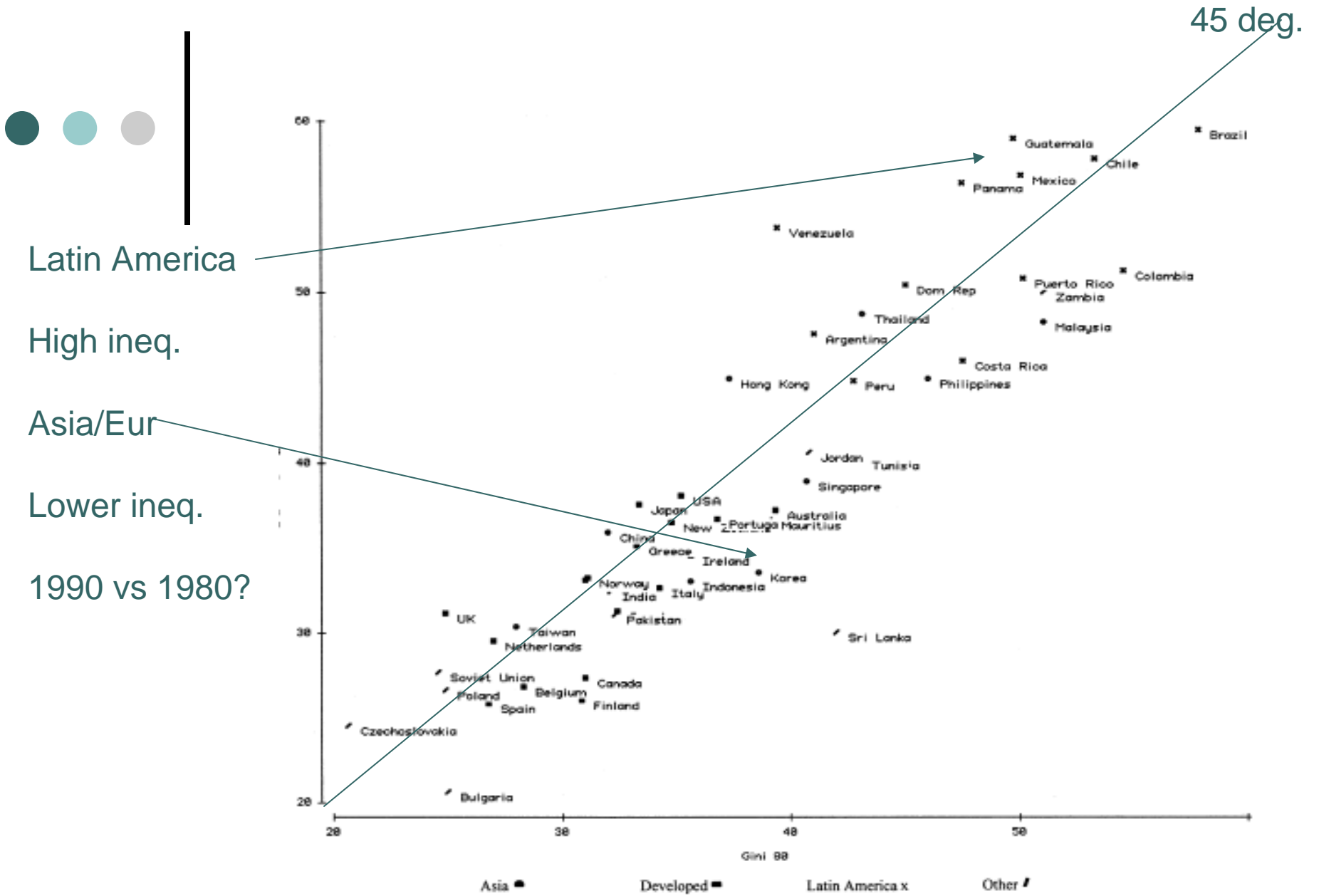


Fig. 1. Gini coefficients, 1990 vs. 1980 (Deininger and Squire, 1996).



# Overview Lecture 24

- Institutions: What are they? Why they matter?
- Institutions & Inequality – How inequality gives rise to dominated institutions and visa versa?
- Institutions, natural resource abundance, and development paths in Latin America



# Institutions - Introduction

**Commerce and manufactures can seldom flourish long in any state which does not enjoy a regular administration of justice, in which the people do not feel themselves secure in the possession of their property, in which the faith of contracts is not supported by law, and in which the authority of the state is not supposed to be regularly employed in enforcing the payments of debts from all those who are able to pay. Commerce and manufactures, in short, can seldom flourish in any state in which there is not a certain degree of confidence in the justice of government.**

**Adam Smith, Wealth of Nations**

## **Opening Discussion Questions**

1. When did Adam Smith write the Wealth of Nations?
2. What was happening in England at the time?
3. What does this quote have to do with “institutions”?



# What are institutions?

- Sokoloff and Engermann
  - Security of property rights
  - Prevalence of corruption
  - Structures of the financial sector
  - Investment in public infrastructure (roads, schools) and social capital
  - Inclination toward working hard or to be entrepreneurial
  - Democratic decision-making (broad or narrow franchise)
- Rodrik et al:
  - Role of property rights, rule of law
  - As an instrument “European Settler mortality” or Fraction of developing country (former colonies) speaking European language, fraction speaking English.

Others?

1. Freedom of assoc.
2. Freedom of speech
3. Human rights



# Institutions and Growth

- Savings & investment of physical capital
- Investment in human capital (private & public)
- Technological innovation
- Technological change
- Overcoming inequality and polarization
- Managing globalization/integration
- How do institutions shape these processes?



WI and institutional economics:  
John R. Commons, Kenneth Parsons,  
Dan Bromley, Michael Carter

- ([http://www.secfac.wisc.edu/senate/1999/1101/1460\(mem\\_res\).pdf](http://www.secfac.wisc.edu/senate/1999/1101/1460(mem_res).pdf)),
- Bromley: <http://www.aae.wisc.edu/dbromley/>
- Carter <http://www.aae.wisc.edu/carter/>



## Inequality and Institutions: Engerman and Sokoloff

- **Basic Argument:** Differential paths of development in the New World (N and S America), especially since the 19th century rooted in:
  - Factor endowments (soils, minerals, crop characteristics, settlement patterns),
  - Inequality (how rights to those land mineral endowments were distributed),
  - Institutions that formed out of those activities and ownership patterns, and
  - Subsequent patterns of industrialization



# US and Canada versus Latin America & the Caribbean

- US and Canada
  - Heartland grains
  - Family-farm ag
  - Frontier, open immigration
  - Public schools and democracy
  - Tech advance and industrializ.
- Latin Am/Caribbean
  - Minerals/plantations
  - Large-scale ext/ag
  - Scale economies, forced labor
  - Private schools and colonial/elite rule
  - Primary products and rent extraction



# Reinforcing inequality-institution links

- Economic equality or inequality and institutions that formed along with those features were mutually reinforcing, and they led to divergent paths of institutional and economic development.
- Institutions, such as public education, democratic decision-making, and ... went along with equality, and elitist institutions went with the inequality elsewhere.
- In 19th century, industrialization arose in the places with greater economic and political equality, while it did not in the others.
- Up until this time, there were not discernible differences between the levels of GDP/capita in the region. With industrialization in US and Canada comes divergence with the rest of the hemisphere.
- These historical paths of institutional and economic development help to explain current differences between U.S, Canada, Australia, and most of Latin America.



## Deeper view of American colonies

- 3 basic types of colonies in the New World
  - Colonies with climates and soils well suited for the production of sugar, tobacco, and cotton, crops all characterized by extensive scale economies associated with the use of slaves.
  - Spanish colonies, such as Mexico, Peru, Bolivia, with a substantial native population that survived contact and control by a privileged few of enormous blocs of land, mineral resources, and controlled labor
  - Canada, Northern US with climate and crops better suited for family-farm production and use of family labor from European immigrants with more human capital and technological capability
  - Few “inbetweener” colonies such as Argentina, Uruguay, SE Brazil. E&S discuss Argentina case.



# The Role of Institutions in the Persistence of Inequality

- Empirical Evidence:
  - Tight migration policies of Spain vs Loose ones of British. After independence in 1820s, LA countries loosened up European immigration policies, but perhaps too little too late as industrialization in N America made that area more attractive (Argentina would be an exception here).
  - Land policy: U.S. land policy made land widely available (1762 Homestead Act was the culmination of a broad access land policy. Canada pursued similar policies). Similar Argentinean and Brazilian policies in late 19th century were insufficient to overcome two centuries of restrictive land policies. Mexico, by contrast, pursued policies of moving land held by Native Americans into the hands of non-Native Americans.
  - Why should labor and land institutions and policies matter?



Restrictions on franchise to vote

Open franchise in US/Canada

Note historical differences well into 20<sup>th</sup> century.

Table 2  
Laws Governing the Franchise and the Extent of Voting in Selected American Countries, 1840–1940

		<i>Lack of Secrecy In Balloting</i>	<i>Wealth Requirement</i>	<i>Literacy Requirement</i>	<i>Proportion of the Population Voting</i>
<i>1840–80</i>					
Chile	1869	Y	Y	Y	1.6%
Costa Rica	1890	Y	Y	Y	—
Ecuador	1856	Y	Y	Y	0.1
Mexico	1840	Y	Y	Y	—
Peru	1875	Y	Y	Y	—
Uruguay	1880	Y	Y	Y	—
Venezuela	1880	Y	Y	Y	—
Canada	1867	Y	Y	N	7.7
	1878	N	Y	N	12.9
United States	1850 <sup>a</sup>	N	N	N	12.9
	1880	N	N	N	18.3
<i>1881–1920</i>					
Argentina	1896	Y	Y	Y	1.8 <sup>b</sup>
	1916	N	N	N	9.0
Brazil	1914	Y	Y	Y	2.4
Chile	1920	Y	N	Y	4.4
Colombia	1918 <sup>c</sup>	N	N	N	6.9
Costa Rica	1912	Y	Y	Y	—
	1919	Y	N	N	10.6
Ecuador	1894	N	N	Y	3.3
Mexico	1920	N	N	N	8.6
Peru	1920	Y	Y	Y	—
Uruguay	1900	Y	Y	Y	—
	1920	N	N	N	13.8
Venezuela	1920	Y	Y	Y	—
Canada	1917	N	N	N	20.5
United States	1900	N	N	Y <sup>d</sup>	18.4
	1920	N	N	Y	25.1
<i>1921–40</i>					
Argentina	1937	N	N	N	15.0
Bolivia	1951	—	Y	Y	4.1
Brazil	1930	Y	Y	Y	5.7
Colombia	1930	N	N	N	11.1
Chile	1931	Y	N	Y	6.5
Costa Rica	1940	N	N	N	17.6
Ecuador	1940	N	N	Y	3.3
Mexico	1940	N	N	N	11.8
Peru	1940	N	N	Y	—
Uruguay	1940	N	N	N	19.7
Venezuela	1940	N	Y	Y	—
Canada	1940	N	N	N	41.1
United States	1940	N	N	Y	37.8

Source: Engerman, Haber and Sokoloff (2000).



Huge differences in literacy rates well into 20<sup>th</sup> century

Guatemala – 20% of 10 year olds literate in 1946, US over 90%.

Argentina, Chile, and Costa Rica much higher in 1925 and 1945 than rest of LA

*Table 3*  
**Literacy Rates in the Americas, 1850–1950**

	<i>Year</i>	<i>Ages</i>	<i>Rate</i>	
Argentina	1869	+6	23.8%	
	1895	+6	45.6	
	1900	+10	52.0	
	1925	+10	73.0	
Barbados	1946	+10	92.7	
Bolivia	1900	+10	17.0	
Brazil	1872	+7	15.8	
	1890	+7	14.8	
	1900	+7	25.6	
	1920	+10	30.0	
	1939	+10	57.0	
Chile	1865	+7	18.0	
	1875	+7	25.7	
	1885	+7	30.3	
	1900	+10	43.0	
	1925	+10	66.0	
	1945	+10	76.0	
Colombia	1918	+15	32.0	
	1938	+15	56.0	
	1951	+15	62.0	
Costa Rica	1892	+7	23.6	
	1900	+10	33.0	
	1925	+10	64.0	
Cuba	1861	+7	23.8	
	1899	+10	40.5	
	1925	+10	67.0	
	1946	+10	77.9	
Guatemala	1893	+7	11.3	
	1925	+10	15.0	
	1945	+10	20.0	
Jamaica	1871	+5	16.3	
	1891	+5	32.0	
	1911	+5	47.2	
	1943	+5	67.9	
Mexico	1900	+10	22.2	
	1925	+10	36.0	
	1946	+10	48.4	
Peru	1925	+10	38.0	
Uruguay	1900	+10	54.0	
	1925	+10	70.0	
Venezuela	1925	+10	34.0	
Canada	1861	All	82.5	
	English-majority counties	1861	All	93.0
	French-majority counties	1861	All	81.2
United States				
	North Whites	1850	+10	96.9
	South Whites	1850	+10	91.5
	All	1870	+10	80.0
				(88.5, 21.1) <sup>a</sup>
	1890	+10	86.7	
			(92.3, 43.2) <sup>a</sup>	
	1910	+10	92.3	
			(95.0, 69.5) <sup>a</sup>	

*Source:* Engerman, Haber and Sokoloff (2000).

<sup>a</sup> The figures for whites and nonwhites are reported respectively within parentheses.



# Inequality and timing of industrialization

- US – Why earlier:
  - Decentralized technological progress and synergies in the late 19th century reflect a broad pattern of incremental improvements in technological productivity that were made possible by the broad access to opportunity (inc. education) in a more equal society.
- Latin America – Why later and limited:
  - Inequality in land distribution or control over resources growth fundamental to understanding institutional shortcomings, later industrialization, and slow human capital accumulation and high inequality outcomes.

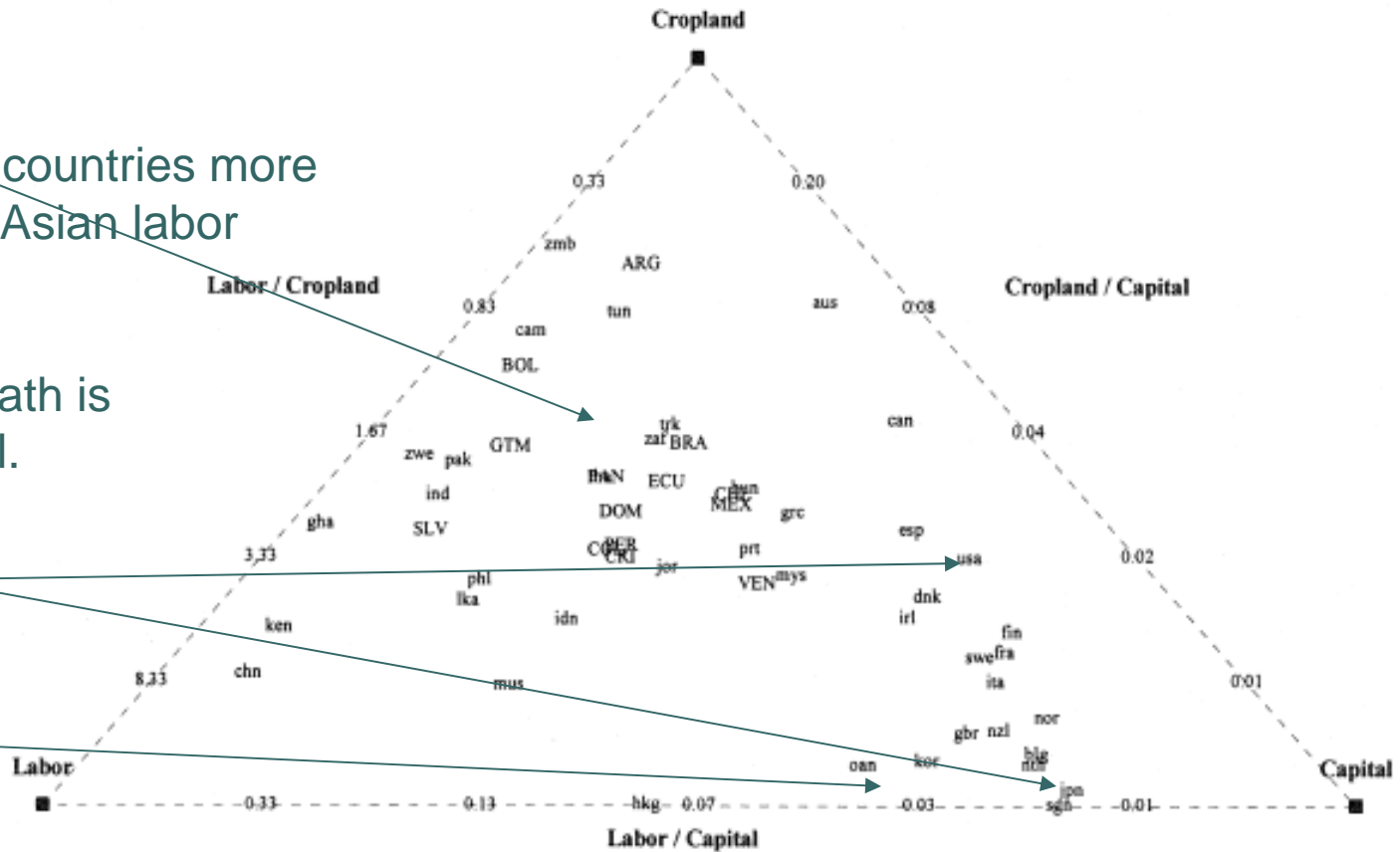


## Current Reflections of Endowments and Inequality in Latin America

- Paper by Ed Leamer and others in Journal of Development Economics, 1999 provides evidence on current endowments and export orientation and inequality.
- Strongly suggestive evidence that current reality reflects historical roots in certain types of export emphasis, paths of accumulation, and inequality.



1990 Endowment Triangle  
(Latin American Nations in Capital Letters)



Latin American countries more land abundant, Asian labor abundant.

Accumulation path is to higher capital.

Japan/US

E Asia

Units: Labor/Cropland is workers per hectare; Labor/Capital is workers per (\$000); and Cropland/Capital is hectare per (\$000).

Fig. 6. 1990 Endowment triangle (Latin America in capital letters).



Gini of income rise with greater permanent net export share tropical goods

Gini of income falls with greater net expt share of labor abundant or machinery exports.

What is one of Wisc's major manufactured exports?

What is Wisc's agrarian legacy in terms of inequality?

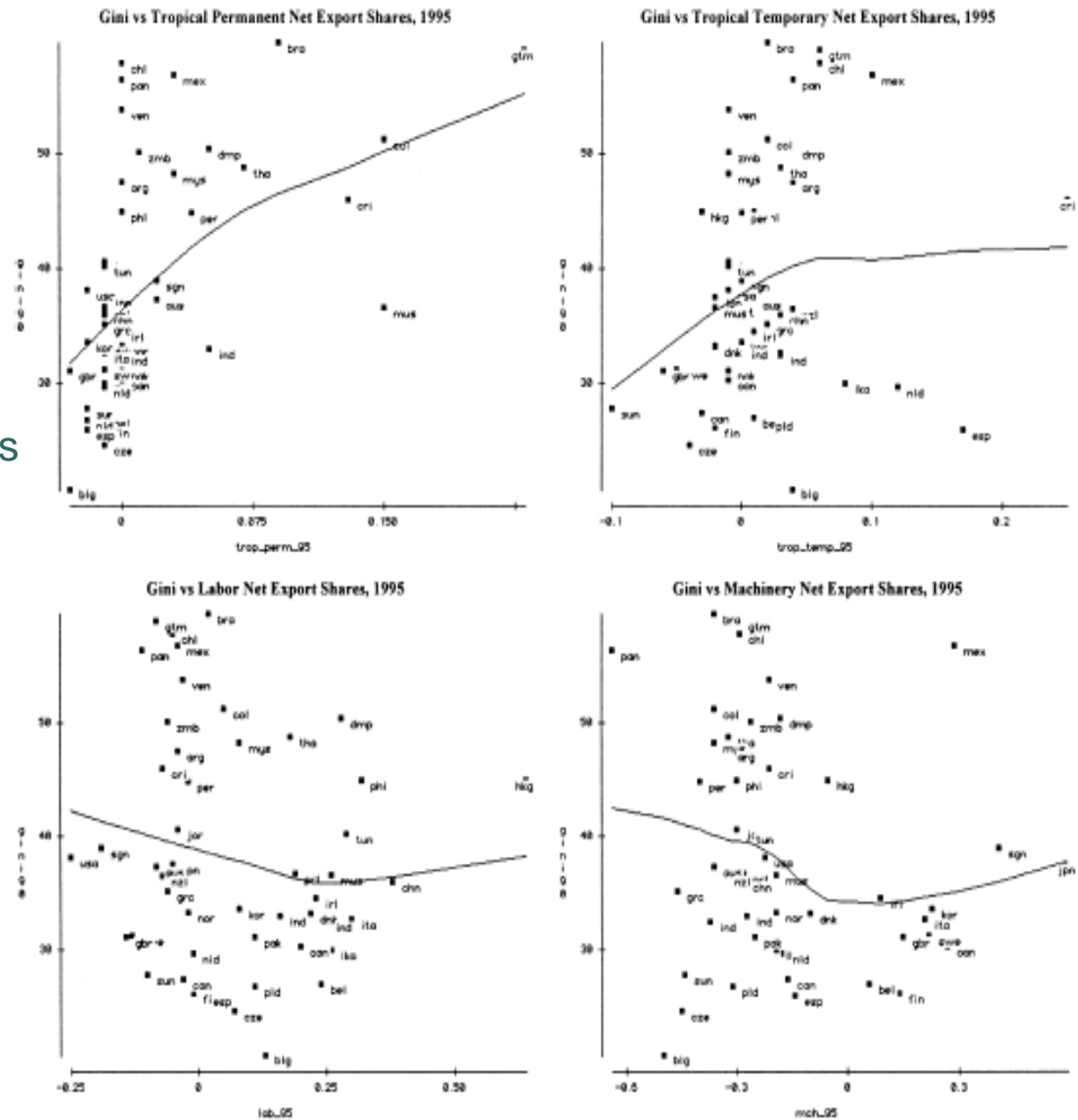


Fig. 5. 1990 Ginis vs. select 1995 net export shares (each plot is fitted with a non-parametric Lowess smoother).