# Lift the Embargo: US Agricultural Exports to Cuba

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Summary of economic history

Excess supply/demand model of US ag exports

# Free Trade with Cuba: The effects of a lifted embargo in Alabama Curtis Jolly, Henry Thompson Southern Economics and Business Journal (2008)

The Cuban embargo and Southeastern agricultural exports

Cassandra Copeland, Henry Thompson

Southern Economics and Business Journal (2010)

The history and potential of trade between Cuba and the US

Cassandra Copeland, Curtis Jolly, Henry Thompson

Journal of Economics and Business (2011)

## **Trade history**

**1800s** US expands south to FL & eyes Caribbean

Geography favors US trade, investment, expansion

Politics does not favor another slave state

Spanish colony but regular rebellions

Effective RTA between US & Spain

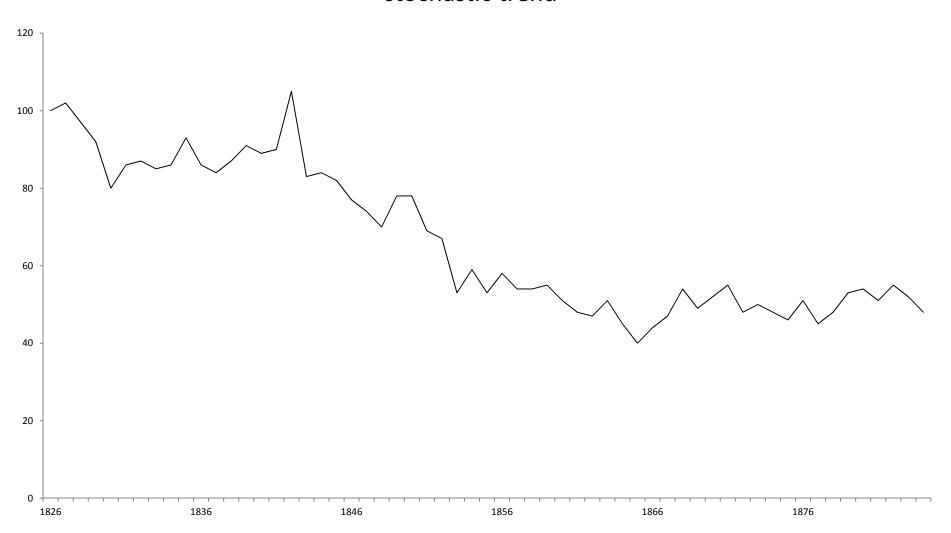
Cuba exports – sugar, tobacco, tropical products, copper, iron ore



US exports – grains, meats, manufactures, vegetable oils, fuels

# 1800s natural resource exports

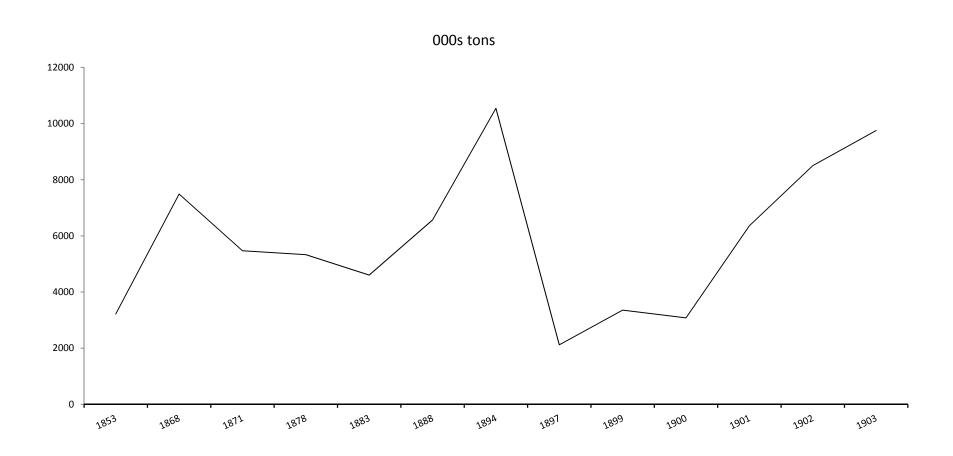
terms of trade stochastic trend



1800s
½ of land in sugar cane

US investment dominant – infrastructure, sugar refining

Sporadic sugar output due to weather, revolutions, competition



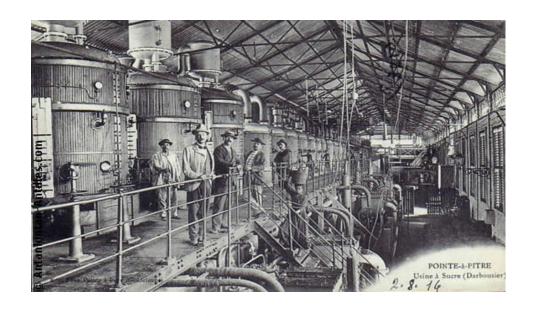
**1898** US acquires Cuba in SpanAm War & Treaty of Paris

US occupation  $\rightarrow$  land market, lower taxes, lower tariffs, expanded railways, improved communications, no Europeans

**1903** Teller Amendment prohibits annexation

Reciprocity Treaty recognizes Cuba

Protection for US sugar beet farmers, sugar cane, processing



## **US** immigration

**1903** 37 colonies

**1913** 64 colonies

**1913** Underwood-Simmons Tariff Act, low citrus tariffs

1914 Cuba accounted for 84% of US grapefruit imports, 1922 peak

#### 1920-30s Depression, Protection

**1922** Fordney-McCumber Act, US tariff  $9\% \rightarrow 14\%$ 

**1930** Smoot-Hawley doubled tariffs

1930s Military juntas, US intervenes to protect investment, immigrants leave

**1940s** Some political stability



1950s Batista US supported military dictator
US investment > 3 times rest of Latin Am
Most utilities, ½ of railways, ½ of sugar refining

**1959** Castro

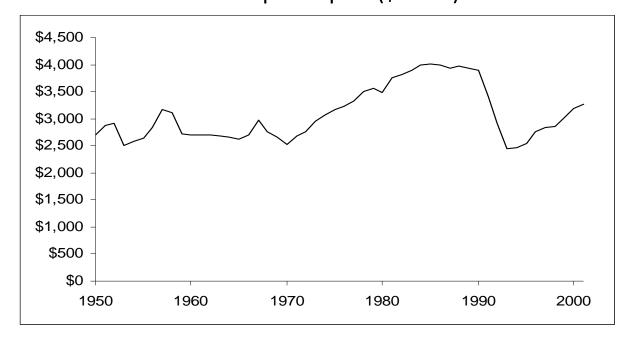


#### **1959** Castro seizes plantations, nationalizes assets

Trade agreement with Soviet Union – sugar for oil



Eisenhower eliminates sugar trade agreement paying  $11¢/lb > P_{world}$ Income per capita (\$2000)

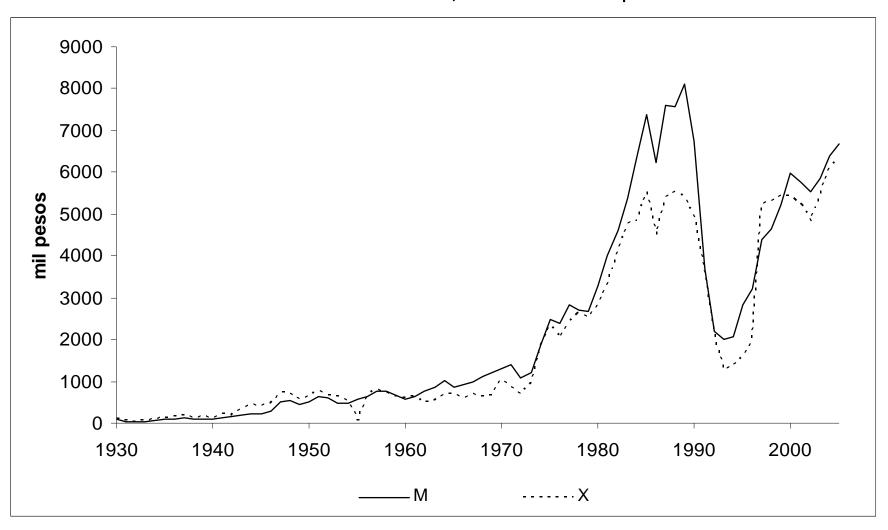


# Trade balance (\$2000)

Castro trade deficit

**1970-80s** Growth in trade

**1991** Lost Soviet subsidies, citrus not competitive



# X Sugar — 2006

Brazil	17.7 mil tons	39% Xworld	
EU	8.1	18%	
Australia	4.1	9%	
Thailand	2.6	6%	
South Africa	1.6	4%	
Guatemala	1.5	3.3%	
India	1.4	3.1%	
Persian Gulf	1.3	2.9%	
South Africa	1.3	2.9%	
Cuba	1.2%	2.7%	

## **Potential exports**

Sugar, cigars, fish, citrus

2<sup>nd</sup> largest nickel reserves

Cobalt, iron, copper, chromite, manganese, zinc, tungsten

Petroleum potential

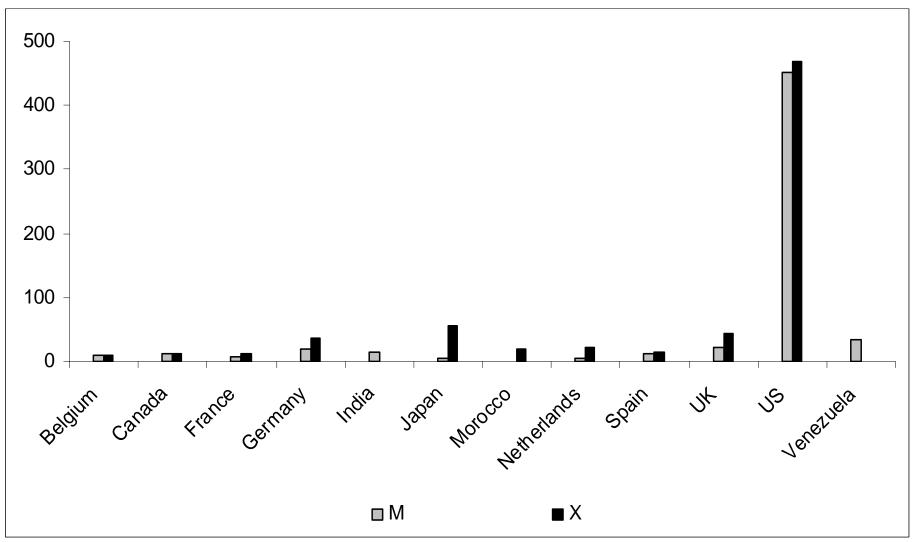


Some manufacturing, long term, maybe

## 1957 Pre-embargo trade

Back to the future?





**2001** Humanitarian trade - Lobbying by ag groups

**2004** Alabama X = \$126 mil

2006 Cuba accounts for quarter of Alabama X<sub>ag</sub>
Poultry, catfish, soybeans, eggs
Also utility poles, lumber, cotton

Exports continue through third countries & smuggling

## Lifting the embargo

US gains from trade in linear XS/XD model

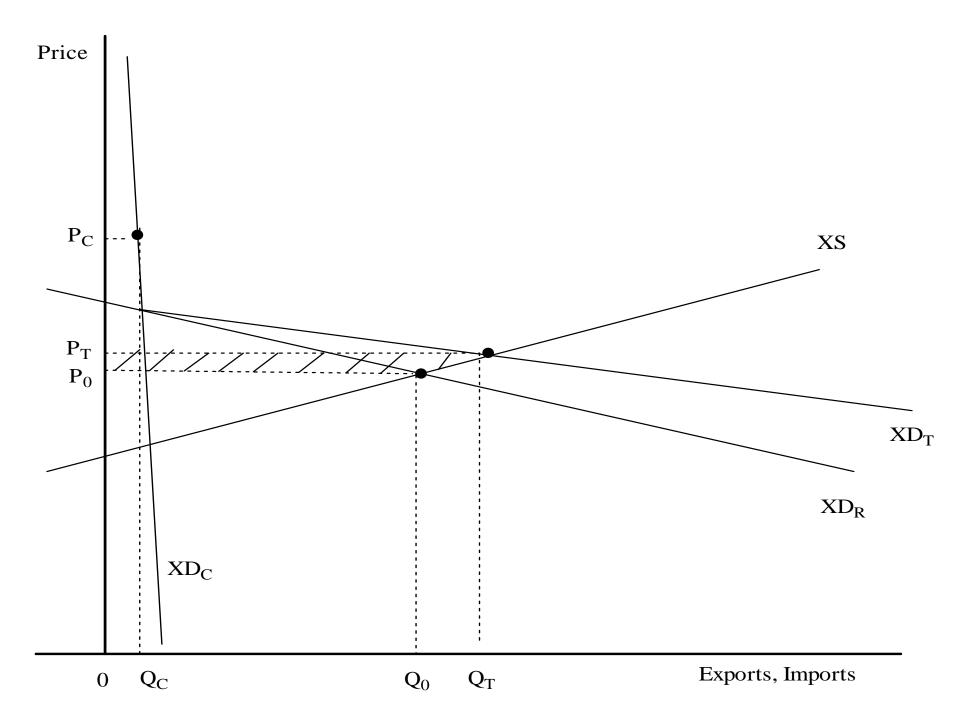
$$XDCuba + XDROW = XDTOT$$

Price elasticities of supply and demand from literature

Calibrated to price, production, exports

Assume US dominates Cuban markets

International equilibrium, total surplus



**Figure 3. Southeast Export Market** 

Ps & Qs

	P <sub>0</sub>	$Q_0$	P <sub>C</sub>	$Q_{c}$	P <sub>T</sub>	% <b>∆</b> P	$Q_T$	%ΔQ
Rice	\$215	1420	\$300	600	\$231	7.6%	2,238	57.6%
Grains	\$151	6141	\$360	600	\$156	3.1%	8,778	43.0%
Soybeans	\$220	8244	\$259	1473	\$225	2.1%	9,963	20.8%
Poultry	\$961	2967	\$1800	100	\$971	1.0%	3,183	7.3%
Pork	\$1042	1359	\$1500	8	\$1043	0.1%	1,432	5.4%
Meat	\$1886	5832	\$3000	8	\$1887	0.1%	5,838	0.1%

## **Market Gains**

	%XS <sub>US</sub>	% revenue	% surplus	
Rice	58%	70%	148%	
Grains	43%	47%	104%	
Soybeans	21%	23%	46%	
Poultry	7%	8.4%	15%	
Pork	5%	5.5%	11%	
Meat	0.1%	0.2%	0.2%	

Somewhat sensitive to Cuban imports Insensitive to other model parameters

## **Protection & Competition**

Sugar – US protection

Tobacco – US protection, health laws

Citrus – Some competition but big investment opportunity

## **Conclusion**

Noticeable US gains from lifted embargo focused on Southeast

Projected gains 7.7% revenue 3.2% surplus

Largest ag gains for rice, grains, soybeans

Yearly \$1.4 billion embargo loss in ag export markets

Substantial potential for US manufactures & services exports

