

International trade: from theory, to data and return.

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Lecture 1

International Trade

Methodology:

- ▶ Since very recently (Davis, 2002) **International trade theory** was largely a matter of **applied logic** with little emphasis on empirical validation.
- ▶ From Adam Smith onward ...



... trade was essentially an issue of efficient allocation of resources in **general equilibrium**.

- ▶ **Basic ingredients**: countries (mobile vs immobile items: goods vs factors), competitive markets, homogeneity (sectors, firms, factors, consumers, ...), ...
- ▶ Theory was based on evidence (mercantile trade with colonies) and policy issues (corn laws) but **methodology was inductive**.

International Trade: fundamental questions (fq)

Evergreen questions (eq):

- ▶ Why do countries trade [what makes countries wealthy and powerful] ?
- ▶ What do countries trade?
- ▶ What is the link between trade and productivity?
- ▶ Is trade distributional-neutral [gainers and losers] ?

Some contemporary questions (cq):

- ▶ Why has trade increased so much [globalization]?
- ▶ Why do countries still trade so little?

Part I

Evergreen questions: one example

eq.1: Why do countries trade ?

[let's play the classics: answers from the class]

- ▶ ...
- ▶ ...
- ▶ ...

eq.1: Why do countries trade ?

Definition of Gains from (Free) Trade:

$$p_F \cdot c_F \geq p_F \cdot c_A$$

Three more definitions:

- ▶ Autarky:

$$c_A \geq x_A$$

- ▶ Trade equilibrium:

$$p_F \cdot c_F \leq p_F \cdot x_F$$

- ▶ Optimization:

$$p_F \cdot x_F \geq p_F \cdot x_A$$

Hence,

$$p_F \cdot c_F = p_F \cdot x_F \geq p_F \cdot x_A = p_F \cdot c_A$$

Free trade is preferable to autarky

eq.1: Why do countries trade ?

Gains from (Free) Trade: 2 goods case (Feenstra, 2002)

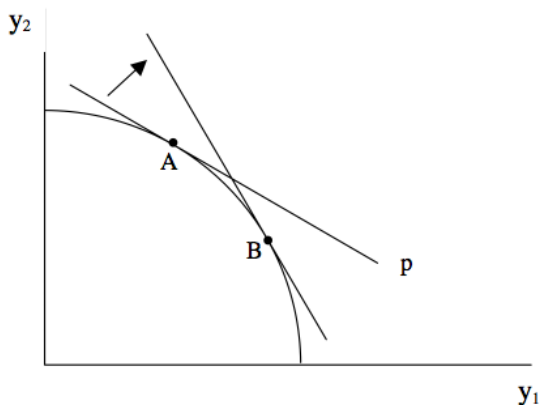


Figure 1.4

Free trade is preferable to autarky

Part II

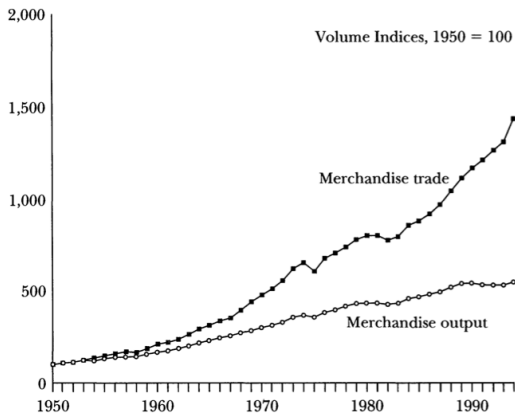
Contemporary questions: one example

cq1: Why has trade increased so much ?

Has it?

Figure 1

Long-term Trends of World Merchandise Trade and Output, 1950–1994



Source: WTO, Trends and Statistics 1995.

cq1: Why has trade increased so much ?

In growth rates

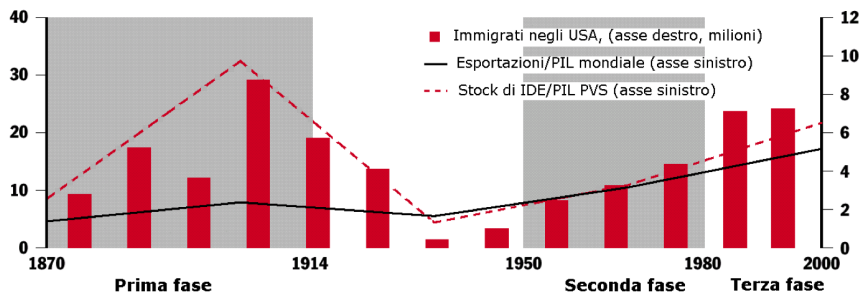
Figure 1: Growth in volume of world merchandise trade and GDP, 2000-10 (Annual percentage change)



Source: WTO Secretariat.

cq1: Why has trade increased so much ?

In history



From De Benedictis and Helg (2002)

Part III

Have you noticed something ?

Data:

From induction to data-driven theory



Data: what we now know from it?

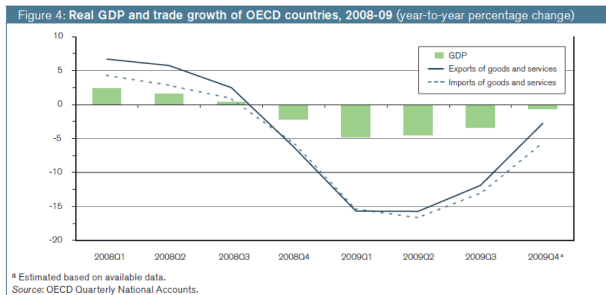
From induction to data-driven theory

Appendix Table 3: **Merchandise trade: Leading exporters and importers, 2009**
(Billion dollars and percentage)

Rank	Exporters	Value	Share	Annual per cent change	Rank	Importers	Value	Share	Annual per cent change
1	China	1202	9.6	-16	1	United States	1604	12.7	-26
2	Germany	1121	9.0	-22	2	China	1006	8.0	-11
3	United States	1057	8.5	-18	3	Germany	931	7.4	-21
4	Japan	581	4.7	-26	4	France	551	4.4	-22
5	Netherlands	499	4.0	-22	5	Japan	551	4.4	-28
6	France	475	3.8	-21	6	United Kingdom	480	3.8	-24
7	Italy	405	3.2	-25	7	Netherlands	446	3.5	-23
8	Belgium	370	3.0	-22	8	Italy	410	3.2	-26
9	Korea, Republic of	364	2.9	-14	9	Hong Kong, China	353	2.8	-10
						- retained imports ^a	91	0.7	-8
10	United Kingdom	351	2.8	-24	10	Belgium	351	2.8	-25

Data: what we now know from it?

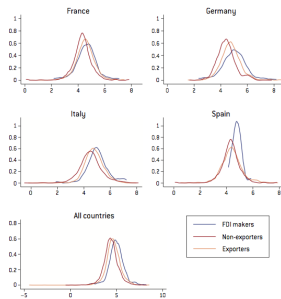
From induction to data-driven theory



Data: what we now know from it?

From induction to data-driven theory

Figure 1.1: Kernel density of productivity for non exporters, exporters and FDI makers



Source: Authors' calculations from EU-ETIS/Bruegel-UniCredit dataset.

Data: what we now know from it?

- ▶ Trade is essentially a North-North phenomenon (70%)
- ▶ Countries trade also in similar goods
- ▶ Trade is not only between producers and final consumers:
Intra-firm trade (30%), intermediate products (35%), final products (35%), according to WTO's estimates
- ▶ Countries do not trade, firms do. But very few of them do it.