

International Economics 1: Class # 1

Introduction

Universitat Pompeu Fabra
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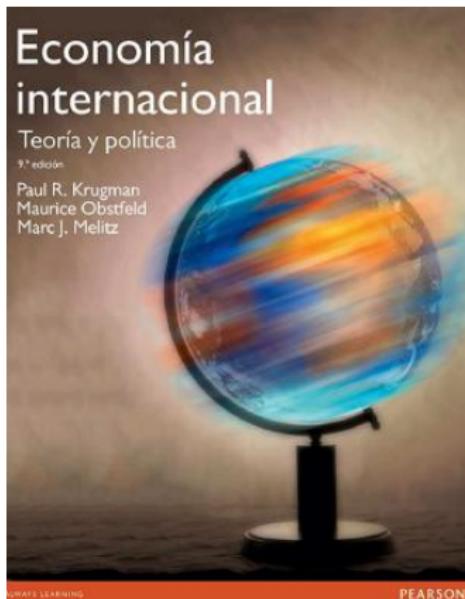
9, January, 2020

Plan for today

- ▶ Take a look at the syllabus and define the rules for the course
- ▶ Motivation of the course
 - ▶ What is globalization?
 - ▶ What is international trade? Are there welfare gains from international trade?
- ▶ Some “stylized facts”
- ▶ Some questions we'll try to answer during the course
- ▶ Plan for next week

Important aspects of the course

- ▶ Text-book: Krugman P., M. Obstfeld y M.J. Melitz (2012), International Economics: Theory and Policy. 9a Edición, Editorial Pearson. (KOM)
- ▶ The theory classes will be based on the original articles (simplified and summarized)
- ▶ However, all the topics are also covered in the book



Requirements for the course

- ▶ Evaluation

- ▶ 20% Seminars
- ▶ 80% Final Exam

- ▶ Seminars

- ▶ The problem sets will be assigned one week in advance
- ▶ Some students will randomly be picked to solve a problem in the whiteboard (it's not necessary to deliver the problem sets solved)
- ▶ Attendance is **Compulsory**: if someone is missing, she/he will be assigned a zero
- ▶ Final grade of seminars = $0.8 * \text{solutions} + 0.2 * \text{attendance}$

Requirements for the course

- ▶ Seminars calendar:
 - ▶ # 1: week 4
 - ▶ # 2: week 6
 - ▶ # 3: week 7
 - ▶ # 4: week 8
 - ▶ # 5: week 9
 - ▶ # 6: week 10
- ▶ Final Exam:
 - ▶ In order to pass: final grade ≥ 5
- ▶ Make-up:
 - ▶ The students whose final grade is not above 5 will be able to take the make up exam
 - ▶ In this case: Final grade = $1.00 * \text{make-up}$
 - ▶ **Only those students with a grade above 5 in seminars will be allowed to take the make-up exam**

Goal of the course and methodology

- ▶ **Goal:** To be able to understand and analyze the basic aspects of the global economy
- ▶ **Methodology:**
 - ▶ We will base our analysis in economic models
 - ▶ It's important to be familiar with the concept of a derivative and an integral.
 - ▶ Basic knowledge in microeconomics: consumption and production theory, equilibrium, surplus, etc.
 - ▶ I will try my best to motivate the models with examples and evidence

Preliminaries

- ▶ What is international trade?
 - ▶ The exchange of goods and services across borders
 - ▶ It's part of the process of globalisation, which also includes movements of capital, labor, ideas, etc.
- ▶ How is international trade different from trade, for instance, across provinces within the same country?
 - ▶ Fundamentally speaking is the same: the incentives are the same
 - ▶ However...
 - ▶ Governments can impose barriers to international trade
 - ▶ The movement of goods and services is more restricted across countries than within
 - Geography, language, etc.
 - Legislation issues: contract enforcement

Preliminaries

- ▶ How does international trade affect countries' welfare?

The Dark Side's weapon!!



A miracle that solves every problem!



- ▶ Usually **extreme views** in the media, social networks, politics, etc.
- ▶ In this course we will acquire the tools to analyze with rigor the facts related to international trade
- ▶ Like almost every question in economics: very complicated!!

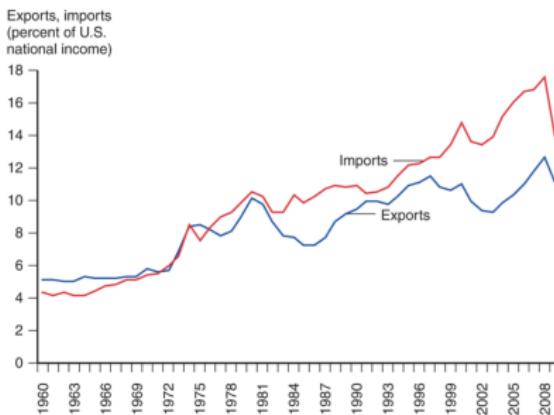
Some “facts” to start

1. An increase in international trade after the Second World War
 - ▶ Reduction in transportation costs
 - ▶ Better political context
2. Who trade with whom?
 - ▶ Size matters
 - ▶ Closeness matters
3. What kind of goods are traded most?
 - ▶ Goods [=merchandise = agr. + ind.] (80%) vs Services (20%), en 2011
 - ▶ Rich countries trade the same type of goods (intra-industry) with other rich countries
 - ▶ Different types of goods (inter-industry) with developing countries
4. Who exports/imports in a given country?
 - ▶ A very small fraction of firms. The most productive ones!
5. An increase of the “offshoring”: externalize services and de-locate production

Some “facts” to start

1. An increase in international trade after the Second World War

- ▶ Since 1960: $\frac{\text{Imports} + \text{Exports}}{\text{GDP}}$...
 - ▶ Germany (31% → 130%), Spain (12% → 58%), UK(30% → 69%)
 - ▶ USA (10% → 29%), China (4% → 44%), South Korea (9% → 83%)
- ▶ USA:



Some “facts” to start

1. An increase in international trade after the Second World War

Potential causes:

- ▶ Technological Improvements in communication and transports
 - ▶ Trains: from 0.18\$ per tone/mile in 1890 to 0.02\$ in 2000
 - ▶ Costs of freight aircrafts: -92% between 1955 and 2004
 - ▶ Costs of international phone calls: -90% between 1955 and 2005 (in Germany)
- ▶ Better political context for cooperation and integration after the Second World War (Marshall's plan, etc.)
- ▶ Economic policies: a fall in tariffs and non-tariff barriers (GATT, etc)
 - ▶ the average tariff fell from 14% in 1952 to 3.9% in 2005 (in rich countries)

Some “facts” to start

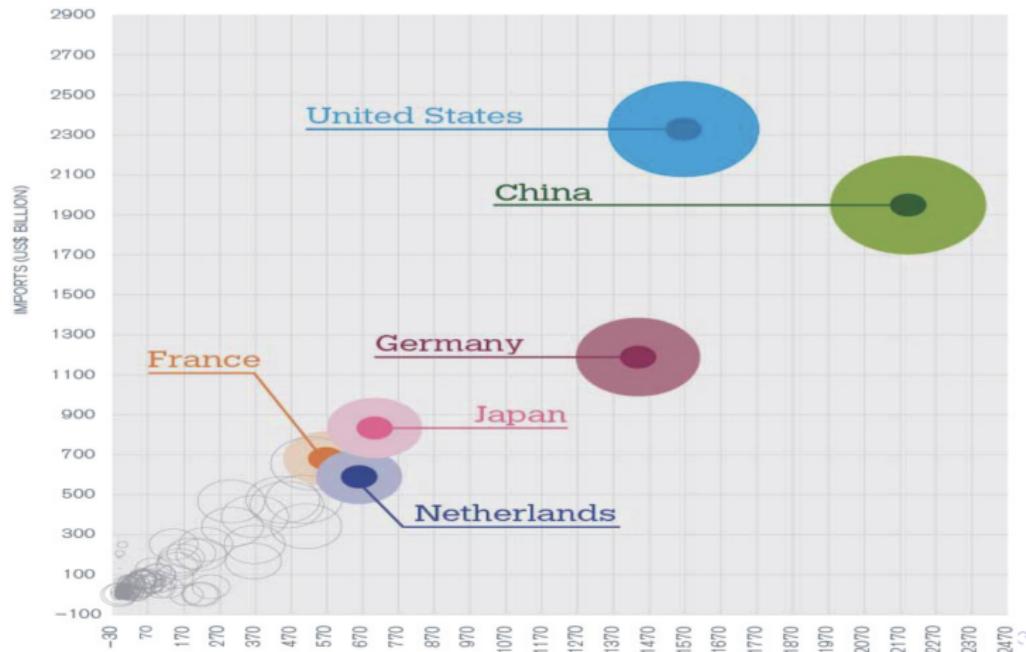
2. Who trade with whom?

- ▶ Size matters

- ▶ exports/GDP
 - ▶ 24% in low income countries
 - ▶ 37% in middle income countries
 - ▶ 42% in high income countries
- ▶ the countries in the world that trade the most
 - ▶ USA
 - ▶ China
 - ▶ Germany
 - ▶ Japan
 - ▶ France

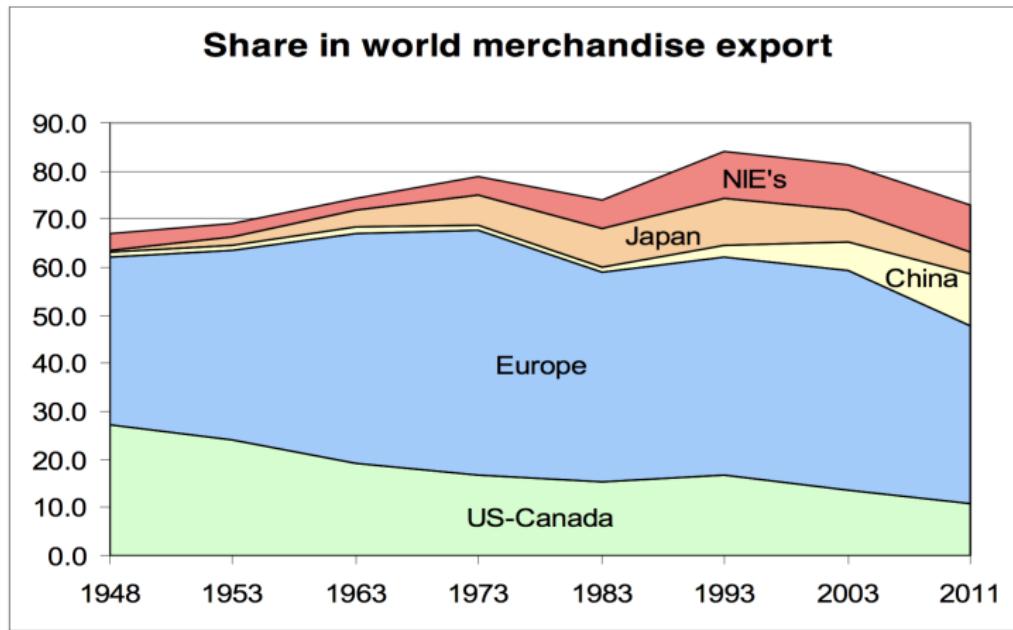
Some “facts” to start

2. Who trade with whom?



Some “facts” to start

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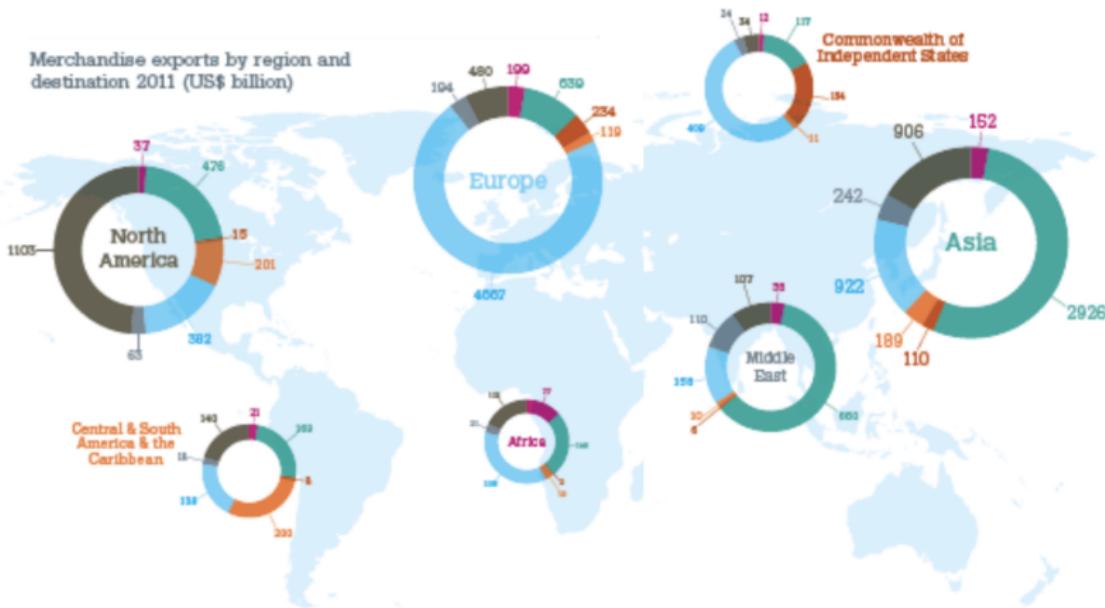
2. Who trade with whom?

► Structure of international trade

- ▶ By level of development
 - ▶ developed-developed countries \simeq 40% of World's international trade
 - ▶ developed-developing countries \simeq 40% of World's international trade
 - ▶ developing-developing countries \simeq 20% of World's international trade
- ▶ By geographic zones
 - ▶ EU-EU = 71% of EU exports
 - ▶ North America-North America = 48% of NA exports
 - ▶ Asia-Asia = 53% of Asia exports

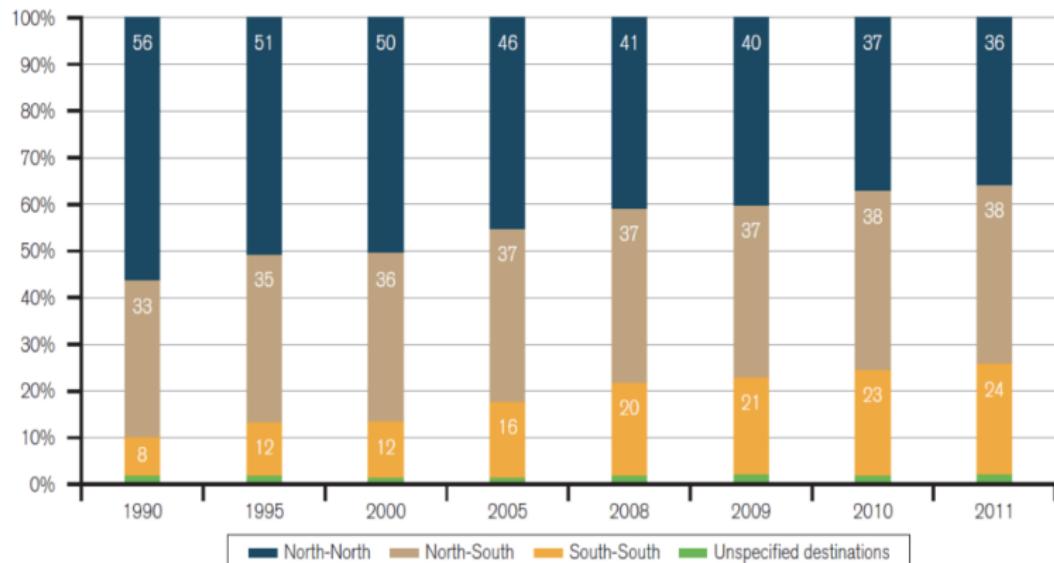
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2. Who trade with whom?



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Some “facts” to start

2. Who trade with whom?

THE GRAVITY model

- ▶ Empirical regularity: it explains surprisingly well trade across countries
- ▶ Imagine that T_{ij} is the amount of trade between countries i y j :

$$T_{ij} = \frac{A \times Y_i^\alpha \times Y_j^\beta}{D_{ij}^\gamma} \quad (1)$$

- ▶ Again: size (GDP= Y_i, Y_j) matters:
 - ▶ Ex: the main European trade partners of the USA: Germany, UK, France (the biggest economies in the EU in terms of GDP)
- ▶ Distance (D_{ij}) matters:
 - ▶ 1st trade partner of the USA: Canada
 - ▶ 3rd trade partner of the USA: Mexico

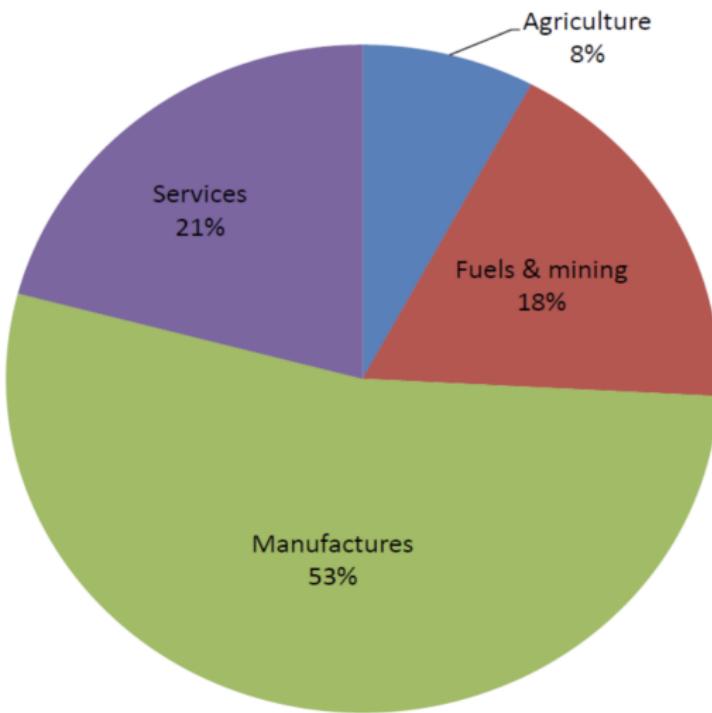
Some “facts” to start

2. What type of goods are traded most?

- ▶ 80% are goods [=merchandise = agr. + ind.] and 20% are services
- ▶ The patterns change a lot over time
 - ▶ Trade in agriculture decreased from 40% in 1950 to 7% in 2008 (and still going down)
 - ▶ developing countries: they went from being the main exporters in agriculture to be the main exporters in manufacturing
 - ▶ the developed countries are the ones which export most in "high-tech"
- ▶ Developed countries trade:
 - ▶ similar goods (intra-industry trade) with other developed countries
 - ▶ different goods (inter-industry trade) with developing countries

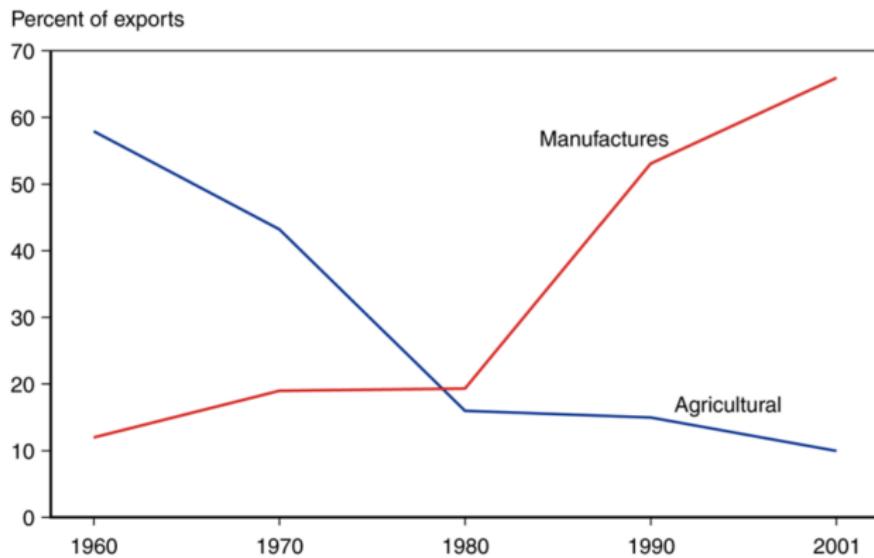
Some “facts” to start

2. What type of goods are traded most?



Some “facts” to start

2. What type of goods are traded most?



Some “facts” to start

3. Who exports in a given country?

- ▶ Not all firms export
- ▶ Only the most productive ones
- ▶ Of which only the most productive ones are multinationals

Share of exporting firms in total number of manufacturing firms

	Year	Share of exporters in total number of manufacturing firms
United States	2002	18
Norway	2003	39.2
France	1986	17.4
Japan	2000	20
Chile	1999	20.9
Colombia	1990	18.2

Some “facts” to start

4. A rise in “offshoring”: re-allocation of production and/or supporting processes

An Example: the iPad 3

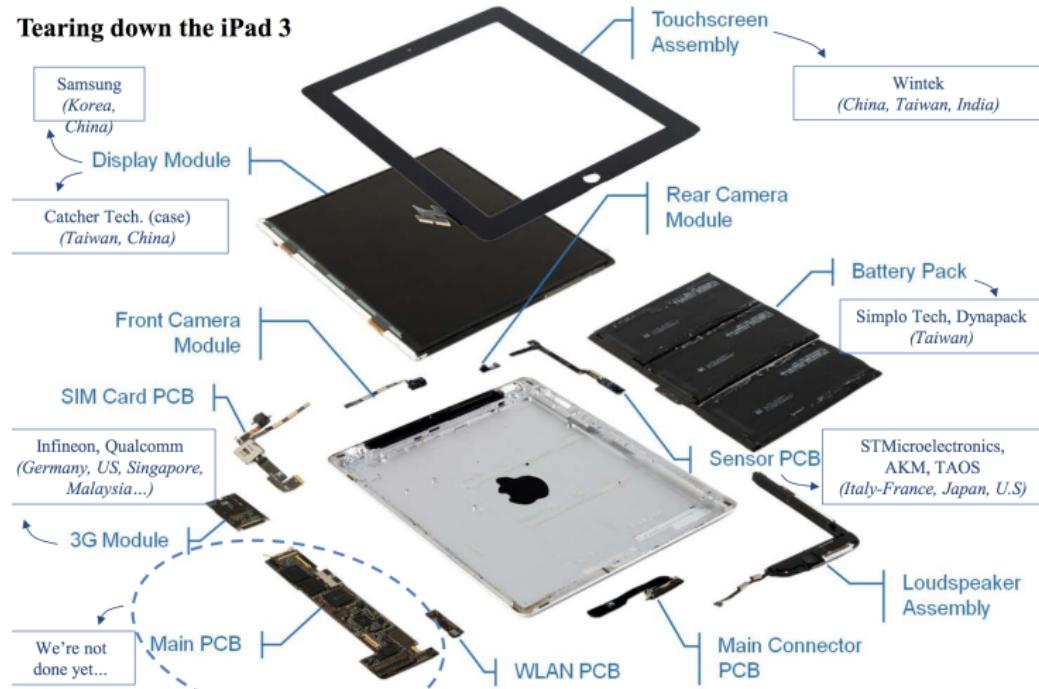


- Assembled in China (and now also Brazil) by Taiwan-based Foxconn and Pegatron

Some “facts” to start

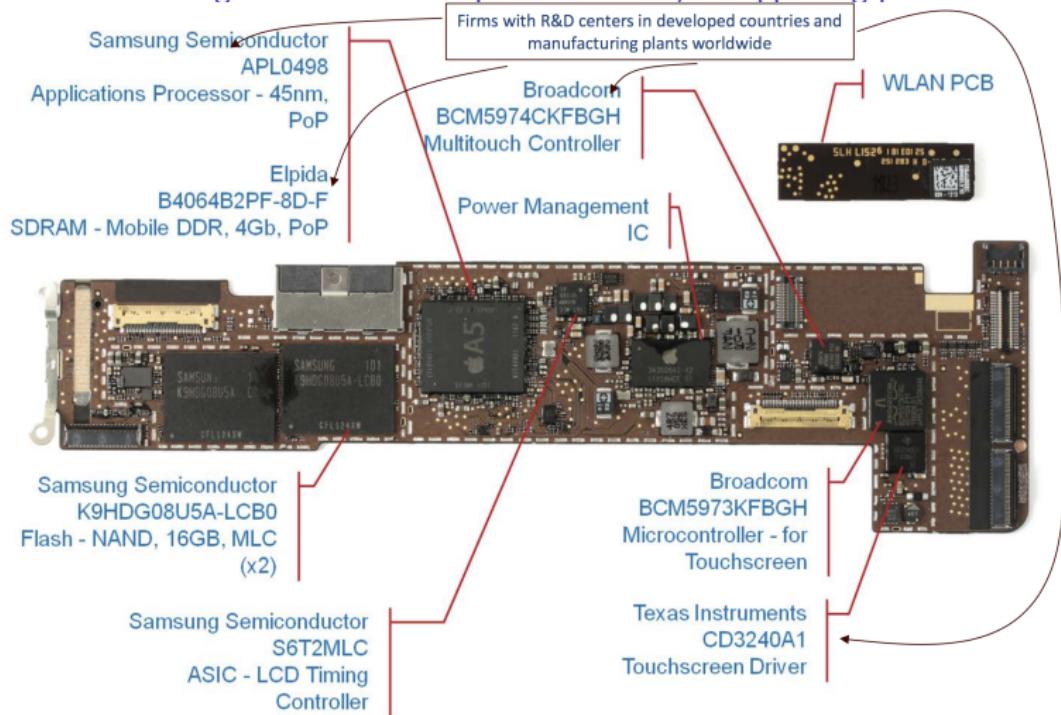
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Tearing down the iPad 3



Some “facts” to start

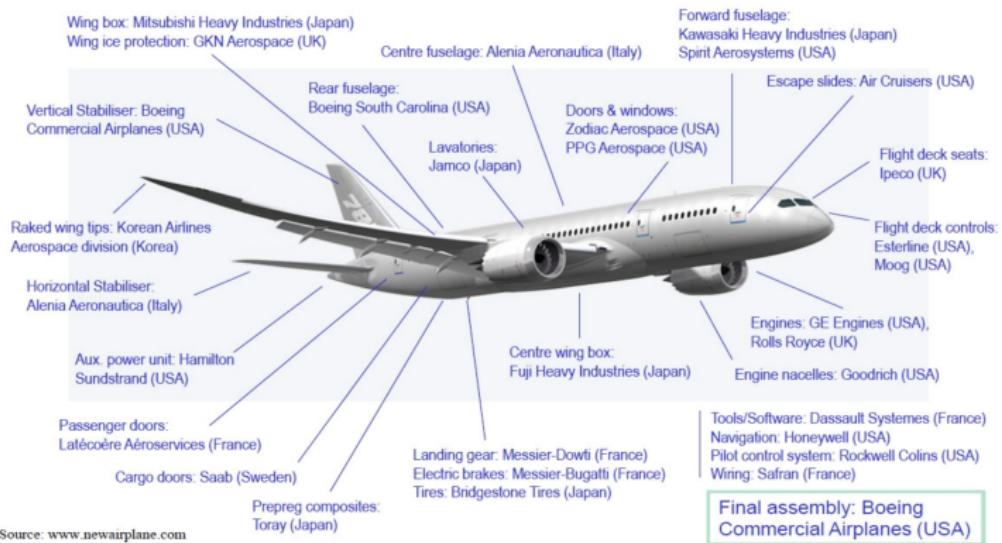
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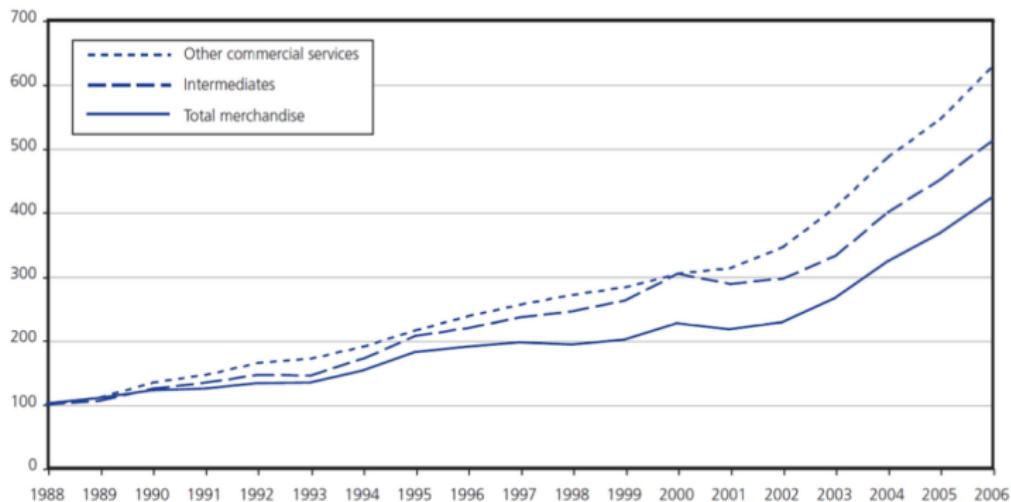
4. A rise in “offshoring”: re-allocation of production and/or supporting processes

Fragmentation of production: the example of the Boeing 787 Dreamliner



Some “facts” to start

4. A rise in “offshoring”: re-allocation of production and/or supporting processes



Questions that we'll try to answer throughout the course

- ▶ Why do countries trade?
- ▶ Why do countries trade some goods and not others?
- ▶ How do the trade patterns change over time and across development?
- ▶ Why not all firms export? Why are not all firms multinationals?
- ▶ How does international trade affect unemployment and inequality?
- ▶ How do trade barriers exist? How are the trade policies determined?

Plan for Tomorrow

- ▶ We will study a classic model of international trade
- ▶ We will define our economy and solve the autarky equilibrium
- ▶ Key: specific factors in each sector
- ▶ This will help us understand the redistributive effects of international trade