Rethinking competitiveness in a mutant world


I’ve seen things that you people wouldn’t believe…

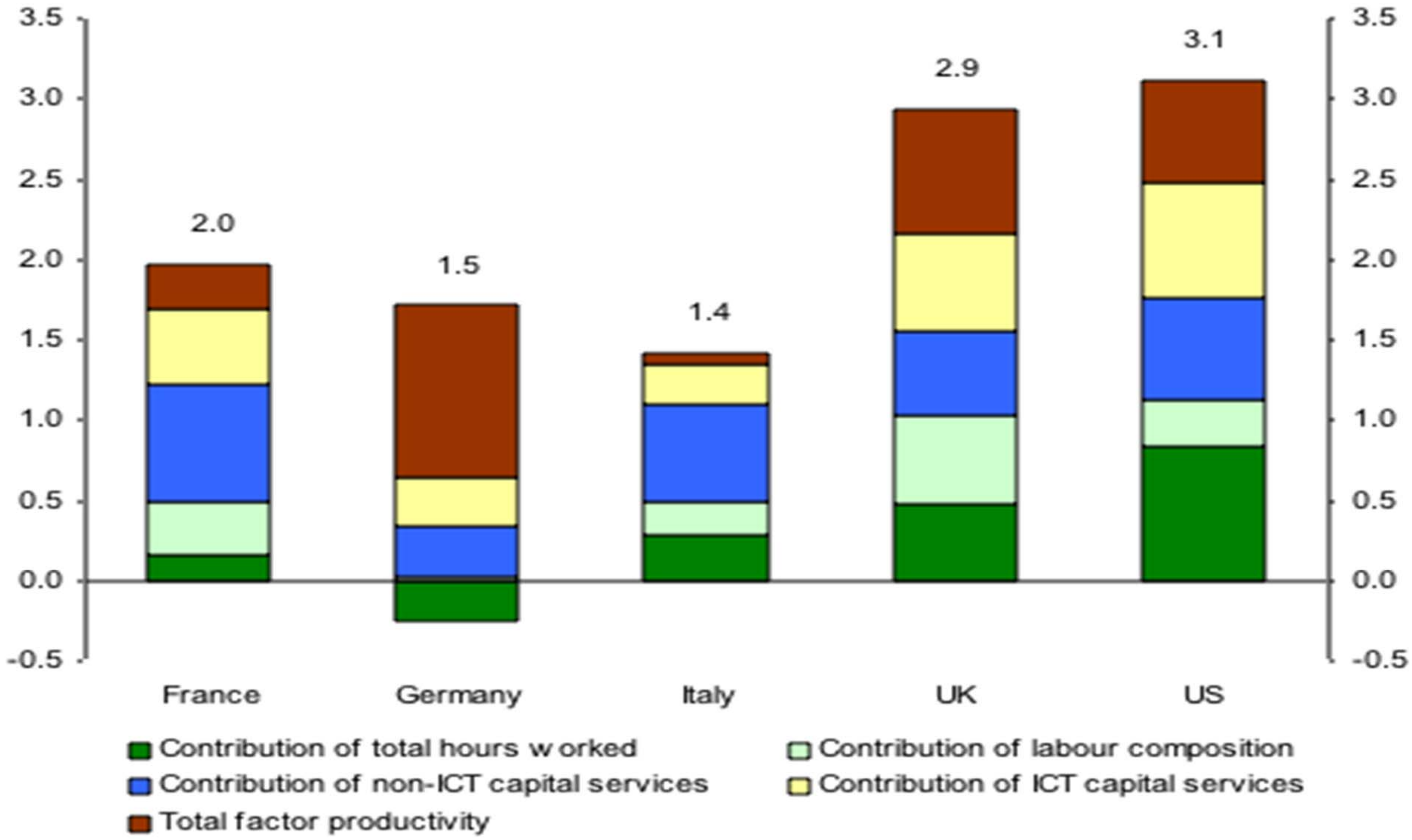
Competitiveness: three different meanings

The policy-maker’s view

My economy is competitive
if it grows rapidly and steadily.
How can I facilitate this
process?

Example: growth and its main components in selected countries

(average % rate of GDP growth in 1992-2007)



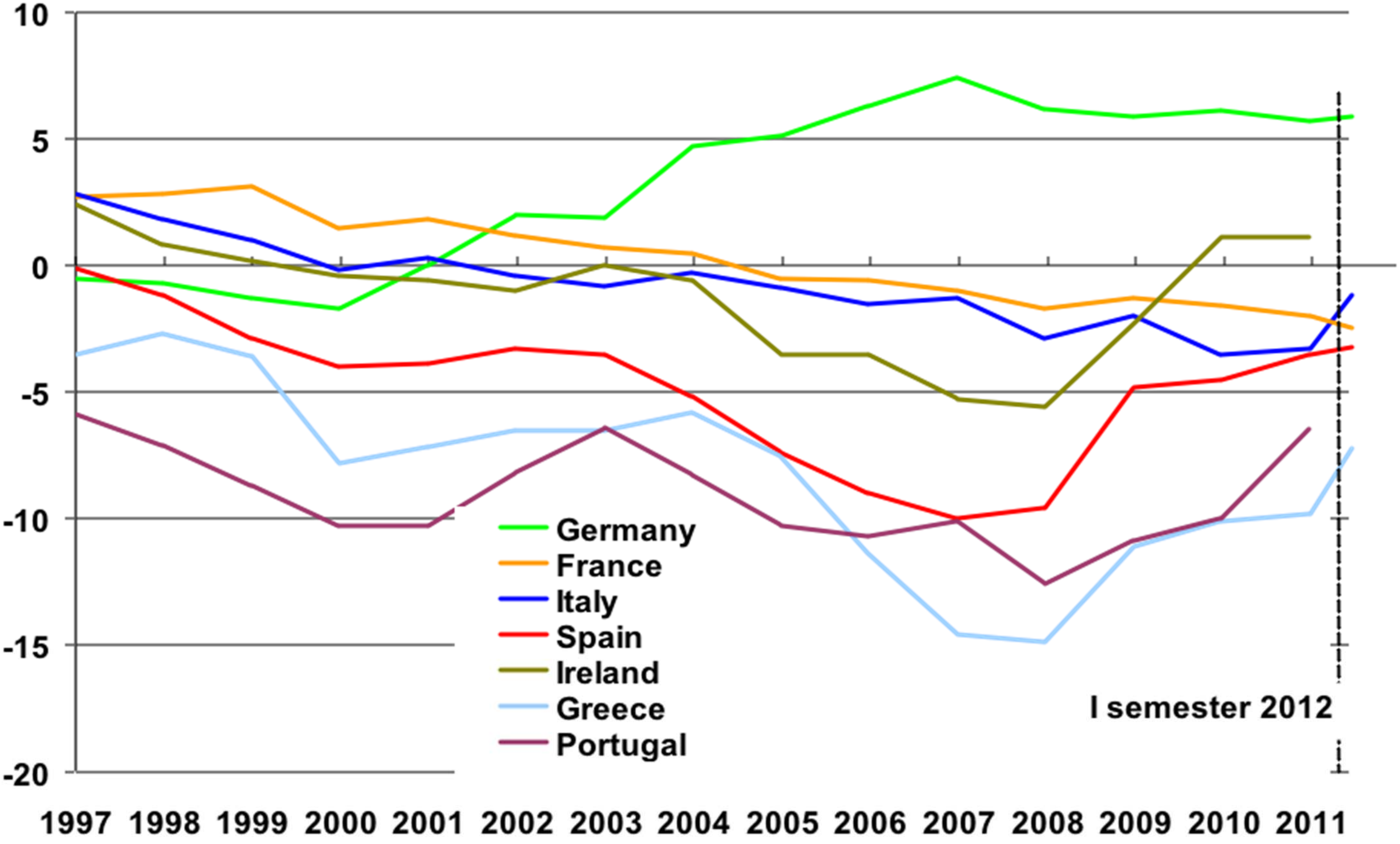
The macroeconomist's view

- How can I detect a competitive economy?

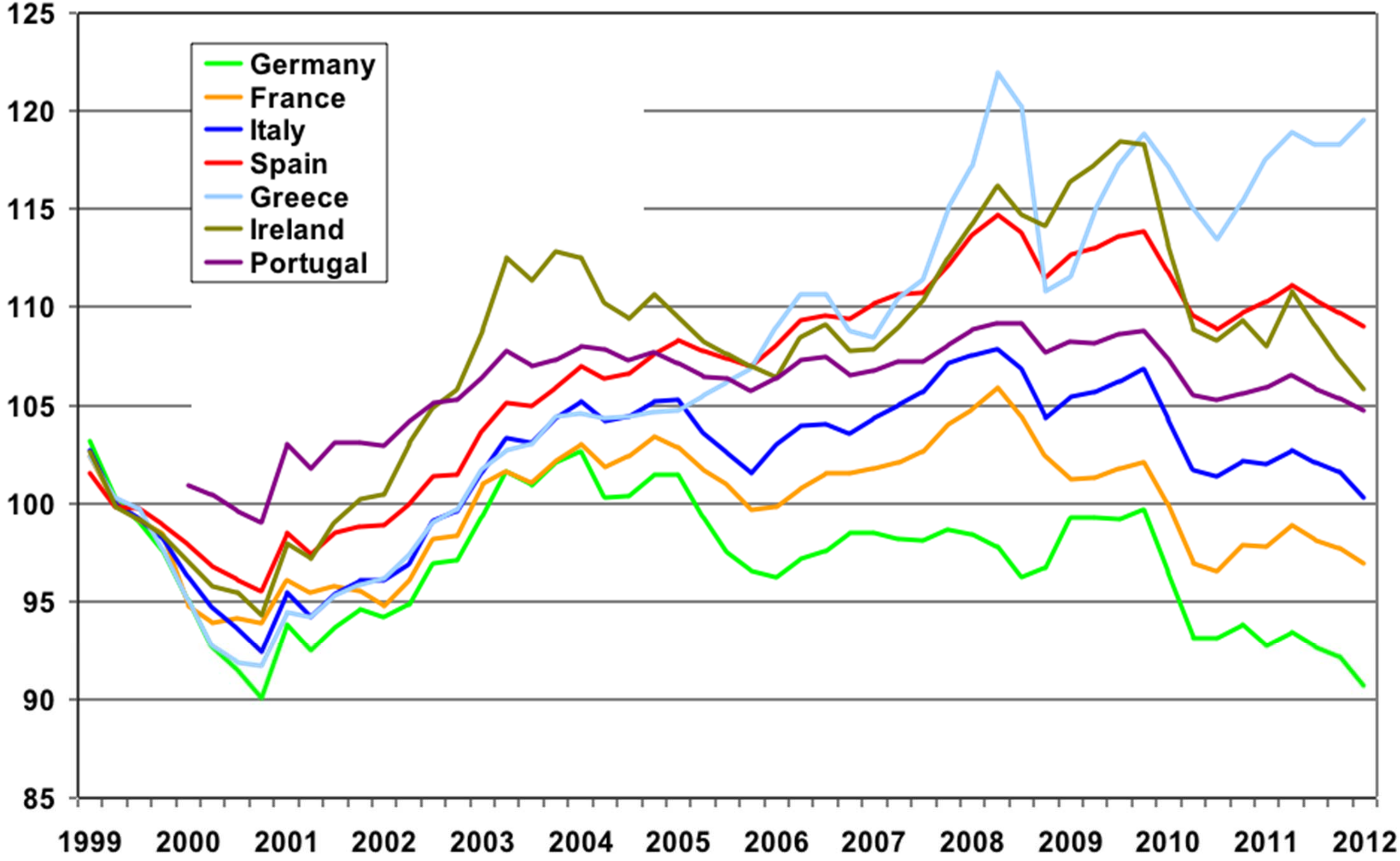
- **Ultimate macro result** (balance of payments)

- **Main macro determinants of it** (relative costs/prices, exchange rate, relative demand)

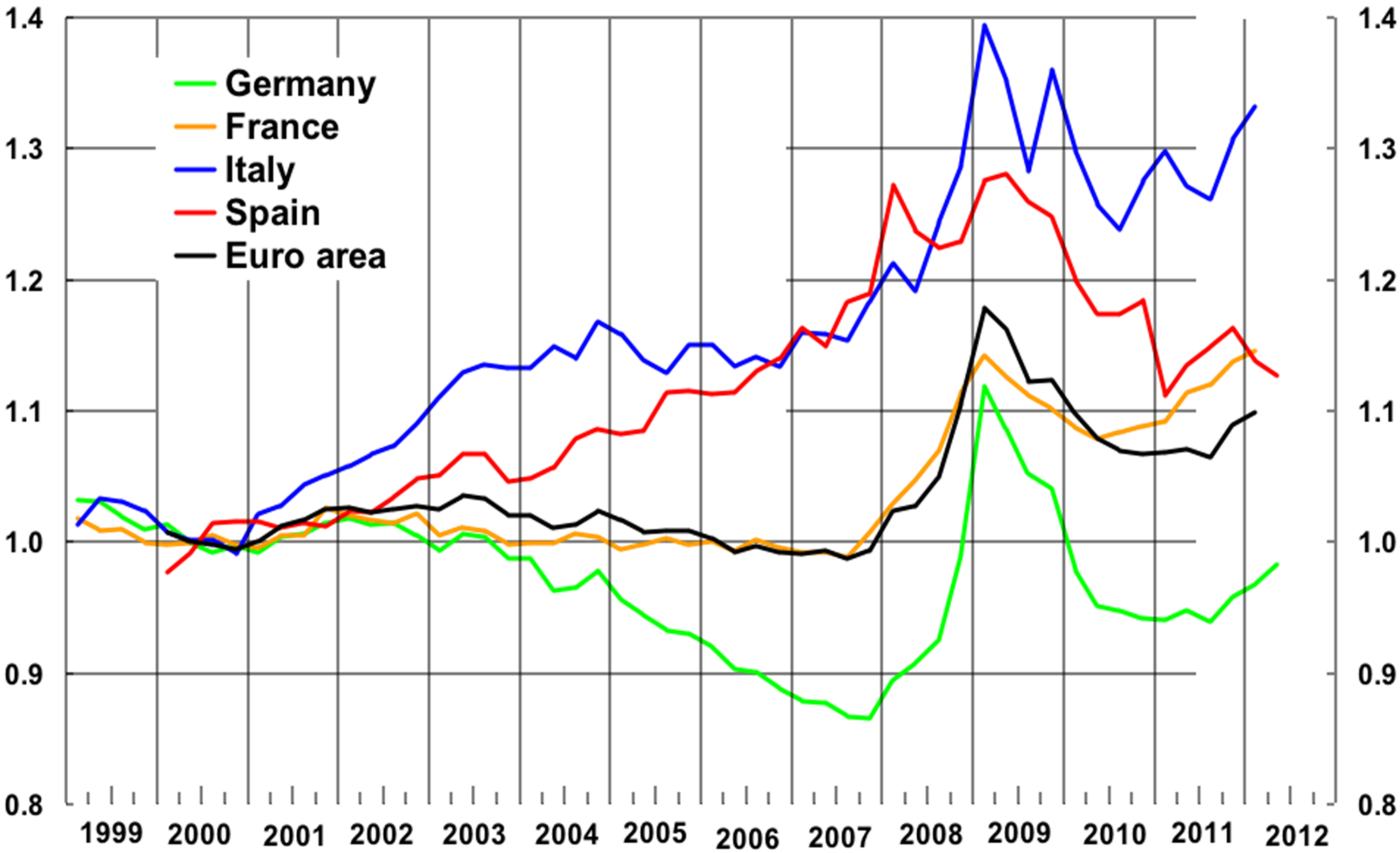
Example: BoP current account balance in selected European countries (% of GDP)



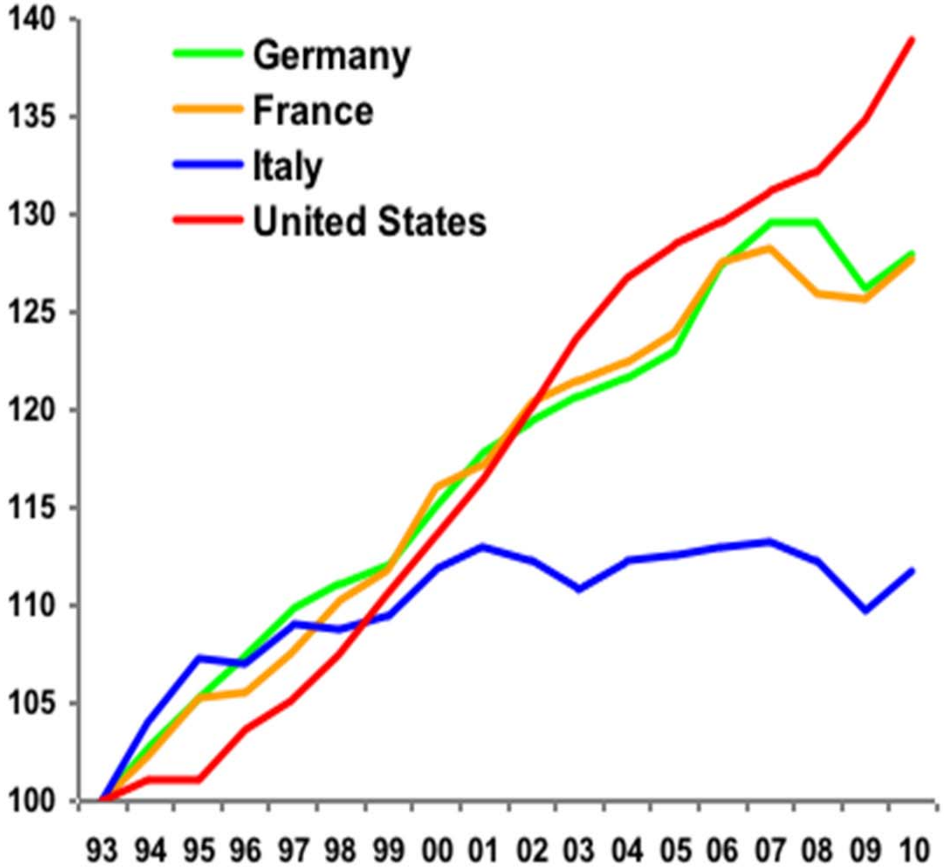
Production prices, in common currency, relative to RoW (1999=100)



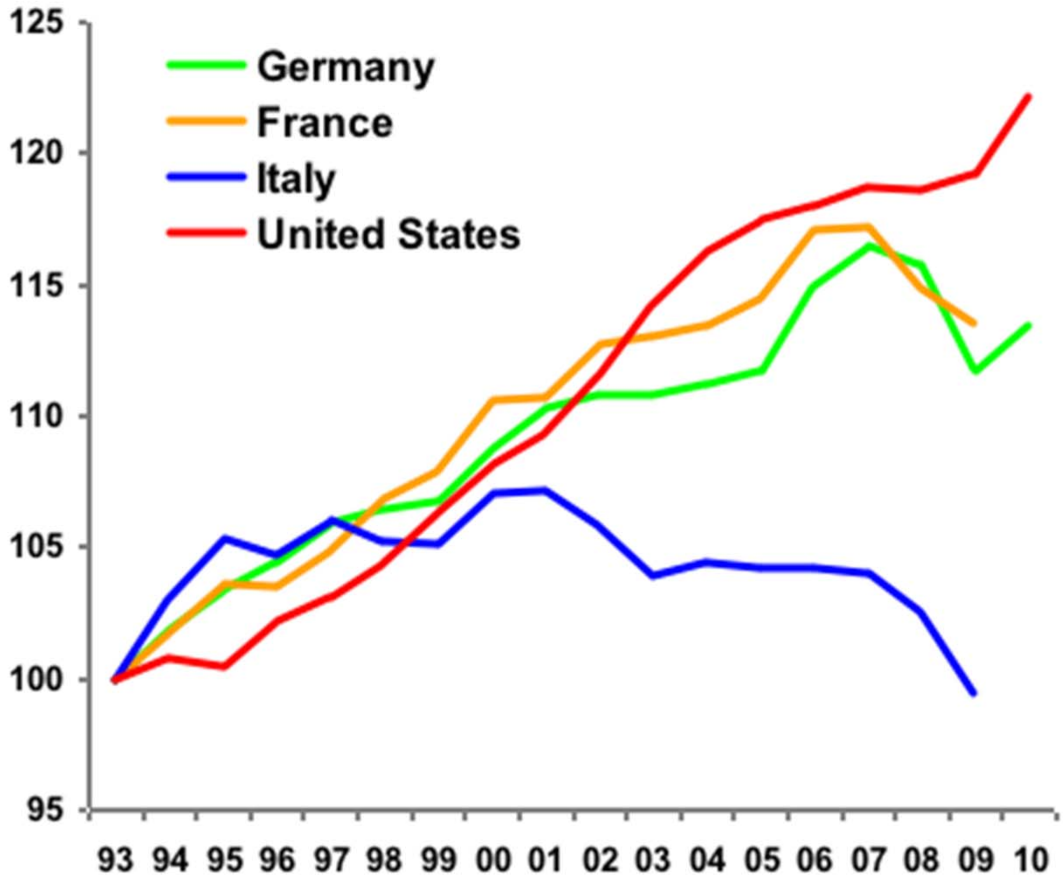
Unit labor costs, in common currency, relative to RoW (2000=1)



GDP per hour worked
(1993=100)



TFP
(1993=100)



The microeconomist (entrepreneur)'s view

- **In general:** a (my) firm is competitive if it minimizes costs and produces a good that is attractive to present and potential customers

- **Now:** I see that the world of production and trade is undergoing a mutation; how could the (my) firm mutate accordingly, in order to survive and evolve?

The mutation: fragmentation

- the production of every good (from computers to retail trade services) now consists of a series of separate tasks,

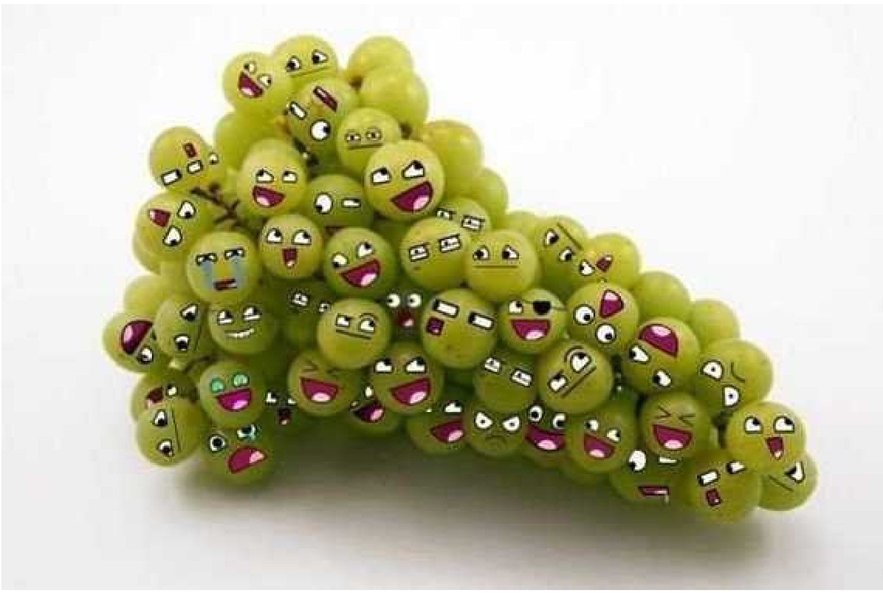
- each of which can be located outside the boundaries of the "final" firm (Blinder, 2006).

- International trade is increasingly in tasks rather than in goods (Miroudot and Ragoussis, 2009; Baldwin and Robert-Nicoud, 2010).

- Value (or supply) chains linking together all these tasks have become global and form the core of a new international division of labor.

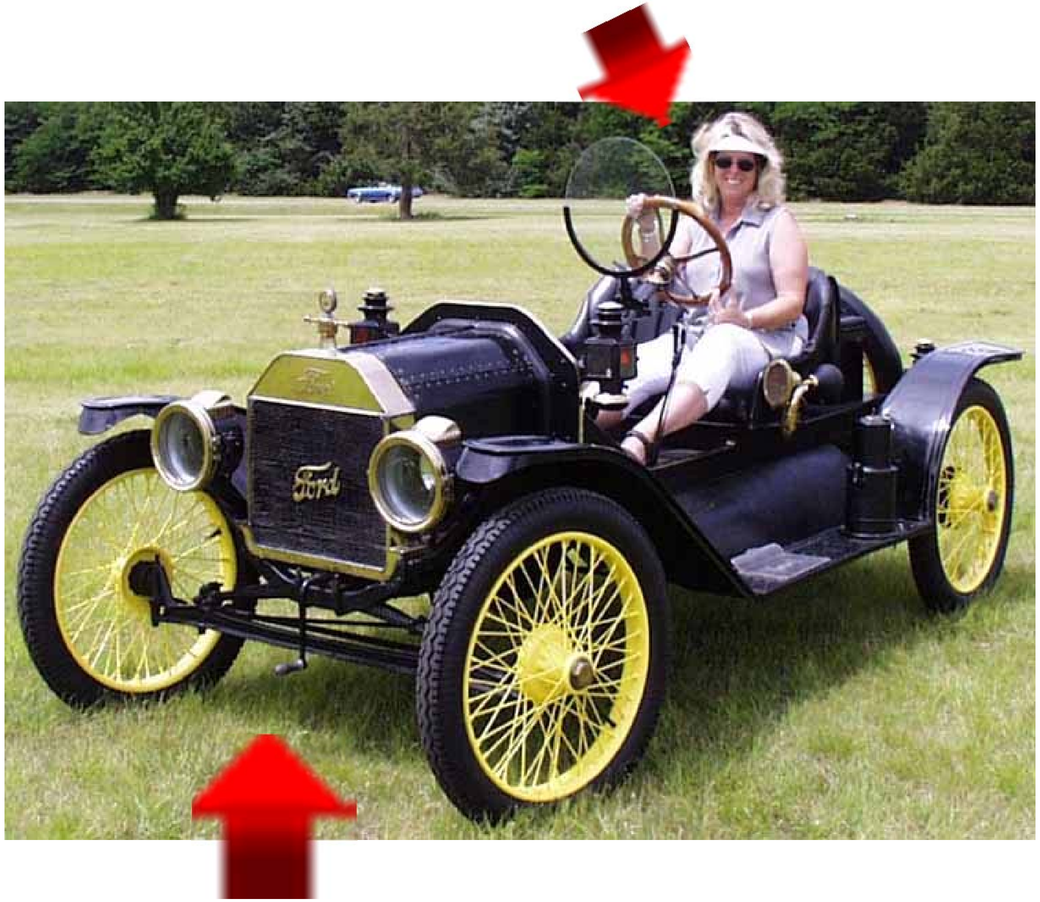
How are firms in advanced countries reacting to this?

- They can either be “Apples” (commanding a chain and all the strategic tasks therein: inventing, designing, engineering, deciding what inputs to buy and where, assembling, advertising, marketing),



- or can they be “Grapes”, belonging to a bunch (chain) maneuvered by others.
- In the latter case, how can such "intermediate" firms defend any advantage they may have with respect to competitors from emerging countries?

A first possible answer is: just offshore!



- An Italian firm A producing, say, brakes for a car "ModelT2.0",
- that is assembled and sold by a German firm B, can move at least part of the manufacturing in China or Vietnam, opening new factories there and closing plants at home, in order to benefit from lower unit labor costs.
- Alternatively, firm A can engineer a vertical dis-integration replacing some components produced internally with cheaper ones outsourced to an external supplier C, possibly located in a low-wage country.

Or, better: “improve” your position in GVCs

- Offshoring has has two implications: 1) firm A's boundaries shrink; 2) the value chain producing ModelT2.0 acquires one more segment (firm C) so that A moves upwards in the chain, being now relatively closer to the final assembler B

- In general, for a firm, a way to adjust to a world where GVCs dominate is to change the firm's positioning in the chains. But what does "improving" mean in the GVCs context?

Heterogeneity of intermediate firms

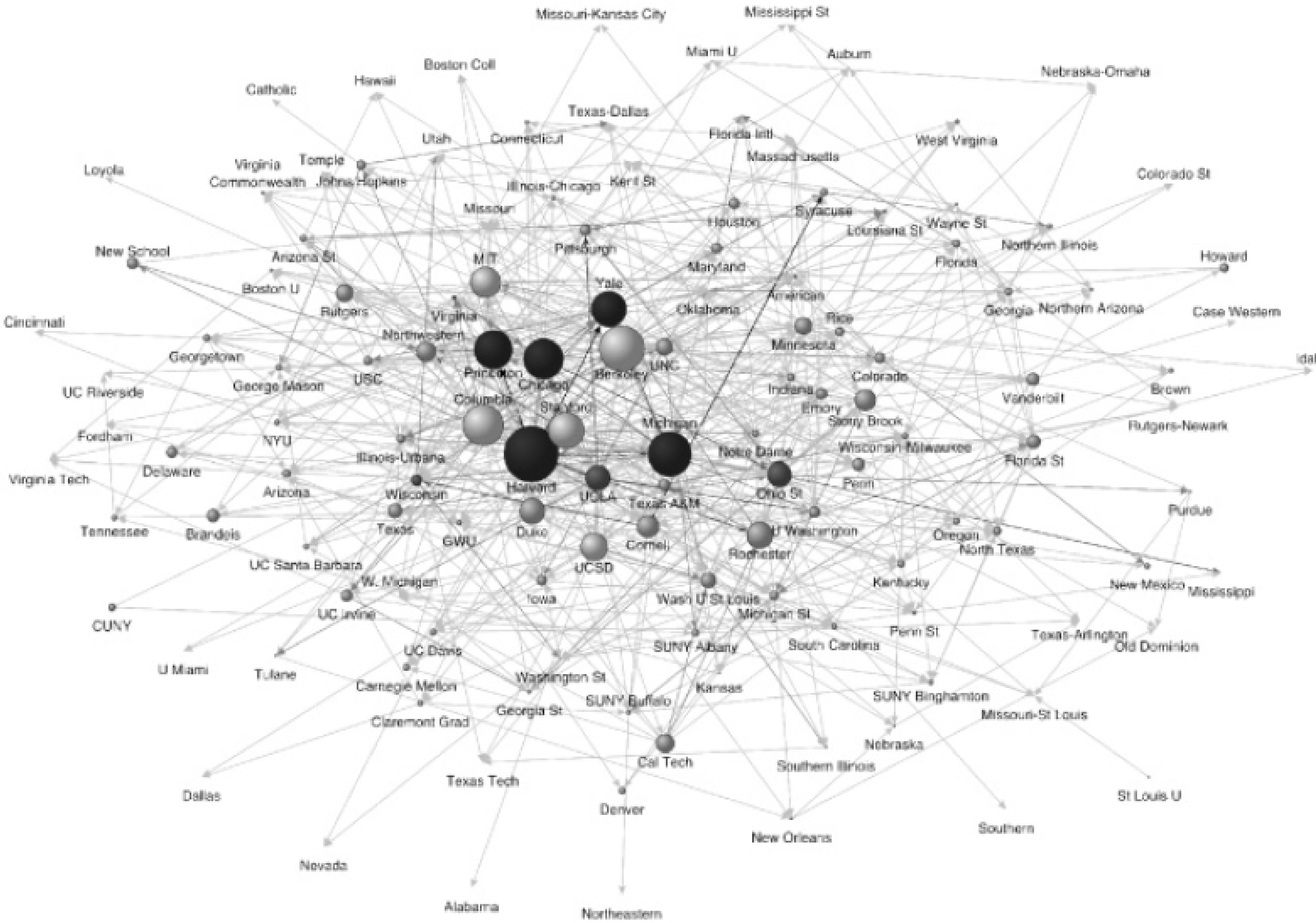
- An intermediate firm may have:
  - either few **buyers** of its core product (at the limit, only one), or many;
  - either few **suppliers** of sub-intermediate goods and services (at the limit, none), or many.
  - If it does have some suppliers of parts/components of its core product, they may have either few further productive segments down the value chain, or many.

Intermediate firms in a world of GVCs

- The whole set of GVCs in the world could be represented as a gigantic oriented graph (or network): a collection of "nodes" (firms) linked to each other by "arcs", i.e. bilateral relationships directed from one node to another (supply of an intermediate input).

- A single node of the network of GVCs may be located at the periphery of it, supplying a basic component to just one big buyer, or it may be located close to the center of the network, possibly being interconnected with many other nodes in both directions (a "hub" with many buyers and many suppliers).

- We can expect a hub to have more market power vis-à-vis both its buyers and suppliers, typically due to technological superiority. In the extreme case, it will be a monopolist on the "sell" side, and a monopsonist on the "buy" side.



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Texas-Dallas
Florida Intl
West Virginia
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Connecticut
Massachusetts
Virginia Commonwealth
Temple
Johns Hopkins
Loyola
Illinois-Chicago
Kent St
Colorado St
Missouri
Houston
Syracuse
Louisiana St
Wayne St
Northern Illinois
New School
Arizona St
Pittsburgh
Maryland
Florida
Howard
MIT
Yale
Boston U
Rutgers
Virginia
Oklahoma
American
Georgia
Northern Arizona
Case Western
Cincinnati
Northwestern
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Claremont Grad
Nebraska
Cal Tech
Southern Illinois
Texas Tech
Dallas
St Louis U
Denver
New Orleans
Southern
Nevada
Alabama
Northeastern

Improving a firm's positioning

- For an intermediate firm, improving its positioning within the network of GVCs means moving from the periphery towards the center, thus gaining competitive advantage and market power.

- Example: Italian firms were doing just that before the crisis (Accetturo, Giunta, Rossi, 2011, based on Invind Survey); Germans did it better, and this explains part of the performance gap between the two systems in the last years (Accetturo, Giunta, 2012, based on EFIGE Survey)

To sum up

- Fragmentation and GVCs are the latest mutation of a world economy revolutionized by ICTs and globalization
- The mutation started in the relationships between advanced and emerging countries; it will now continue on a global scale
- The Apples become rare and very big
- The Grapes can remain small, provided that they know how to innovate exploiting ICTs
- An economy based on such firms (factory economy) may prosper as much as a headquarter economy

A lot of analytical and statistical work to do

- Research in this field is essential to understand how our economies are working, and how will they work in the future. Micro data are crucial

- Existing micro databases were conceived for different goals, can be hardly adapted; we need ad hoc surveys and lots of case studies

- It's very much welcome that the European system of central banks is at the forefront in this overall effort