

# Bocconi

## **CAN THE EU COPE WITH TODAY'S GLOBAL CHALLENGES?**

Daniel Gros

In honor of 90 years of Niels Thygesen  
Copenhagen, January 13, 2025

Happy birthday Niels!

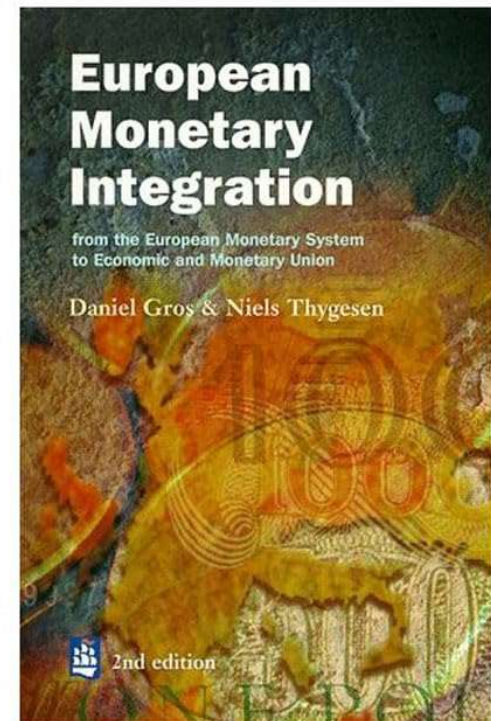
You have been a

***Mentor***

***Colleague***

***Coauthor***

***You remain a Friend***



**THE WORLD**

*A currency for Europe*



Niels Thygesen, Københavns  
Universitat, Denmark

European monetary union at the  
financial support under a grant from

unemployment and inflation. The studies undertaken in the 1950s and 1960s, which showed that this kind of relationship seemed to hold, have now been corrected. More recent studies indicate that, in the long run, employment is independent of the rate of inflation. We urge governments to accept the conclusion which follows from this, namely, that monetary policy, whilst influencing the rate of inflation, cannot reduce what has come to be called the "natural" rate of employment, ie, the rate of unemployment which is determined by labour market conditions, taxation policy, and a variety of structural and institutional factors. Accordingly, any attempt to drive the rate of employment below the "natural" rate by means of expansionary monetary policies will be self-

**THE WORLD**

*A currency for Europe*

**The All Saints' day manifesto for European monetary union**

*Nine prominent European economists have come together to recommend that EEC central banks should issue a Europa, which should be a European money of constant purchasing power. It should be purchasable by nationals of EEC countries with their national money, at a variable exchange rate. This is their manifesto. The Economist adds its own comments at the end of the article on page 36.*

political attention on exchange rate unification. It provided, therefore, intellectual justification for the "snake" arrangement, instituted by the community in March, 1972. The snake scheme is essentially tantamount to the formation of a cartel where each member retains the right of opting out of the system. The opt-out provisions were necessary because of the failure to implement a system of quotas based on credible money supply targets. It is hardly surprising that it did not stand up fully against some of the strains it

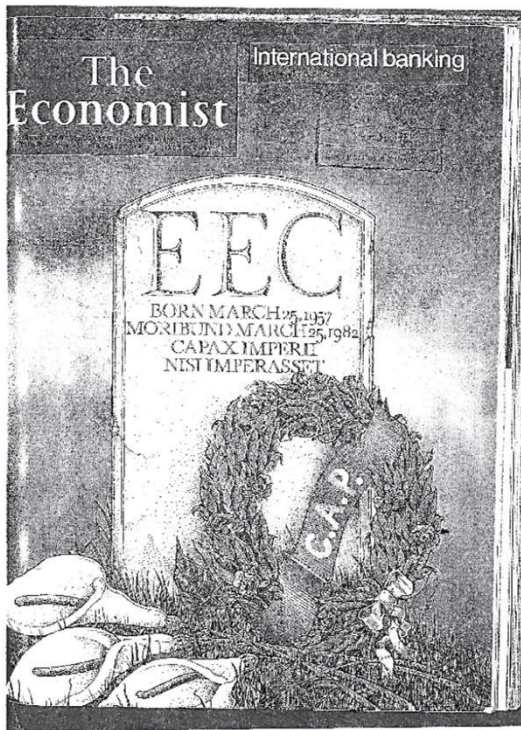
50 years ago, a young Niels shows his true passion

## *Challenges for the EU: from post-WWII to the return of history*

Outline, starting with two distinct longer periods:

1. **Post-WWII**: challenges mainly external, transatlantic, monetary
2. Post fall of wall with hope for **end of history**: challenges both internal (German unification) and external (sometimes US policy but fundamentally rise of China, earlier NICs).
3. Today: **return of history** with a weaker economy but strengthened institutions.
4. Growth of European economy disappointing (strong mainly in mid tech sectors, missing out on software/AI).

# European integration has had its ups and downs



After 25 years: Disarray  
After 50 years: Hubris

After 75 years: Safeguarding  
Europe's freedom?

Key decisions required this  
year.

## *Post-WWII (1950 to 1990)*

1. Economic background: European reconstruction boom, catching up to US.
2. Coincidence of boom with peace and European cooperation pays fosters acceptance of unification process.
3. Shared “trente glorieuses’ boom (DE, FR, IT) despite fundamental differences in economic policy and philosophy. FR dirigiste, DE liberal (reversal of pre-WWII pattern, Brunnermayer et al. The battle of ideas).
4. European (and Japanese) catch creates adjustment problems for US political system, hence ‘US shocks’ (Nixon, end of BW, Reagan). (Similar to today?)
5. European integration of little help in dealing with these challenges (money considered national competence (after 1971) and European cooperation not strong enough to overcome different economic approaches.

## *End of history (1990 to 2022)*

1. Economic background: Europe stops catching up to US.
2. Asymmetric internal shock (German unification) together with global credit boom in early 2000s creates conditions for unprecedented intra-EMU capital flows (from DE to periphery), with peak in 2007.
3. Boom turns to bust in periphery as capital flows stop.
4. Fundamental differences in economic policy and philosophy lead to slow reaction (Brunnermayer et al. The battle of ideas).
5. Emergence of China only marginal issue for EU, contrary to 'China shock' syndrome for US political system. European exports remain strong.
6. Euro seen as cause of problems during crisis, but this disappears as the crisis is overcome and long-term benefits of painful adjustment programs become apparent in several cases.

## *Return of history (2020/2)*

1. Economic background: European malaise, feeling of being sandwiched between US and China.
2. Reality is more nuanced: relative GDP per capita at PPP (=European way of life) holds up well, but weight in global economy (= geoeconomic power) falls.
3. Likely cause of slow growth: 'Mid-tech trap', needs action at national level to escape, EU integration of limited importance.
4. Emergence of Chinese competition now becomes politically relevant, fosters protectionist sentiment in Brussels, but tempered by diverging national interests.
5. Trump and Putin make the case for European integration on two fronts, trade policy and security.

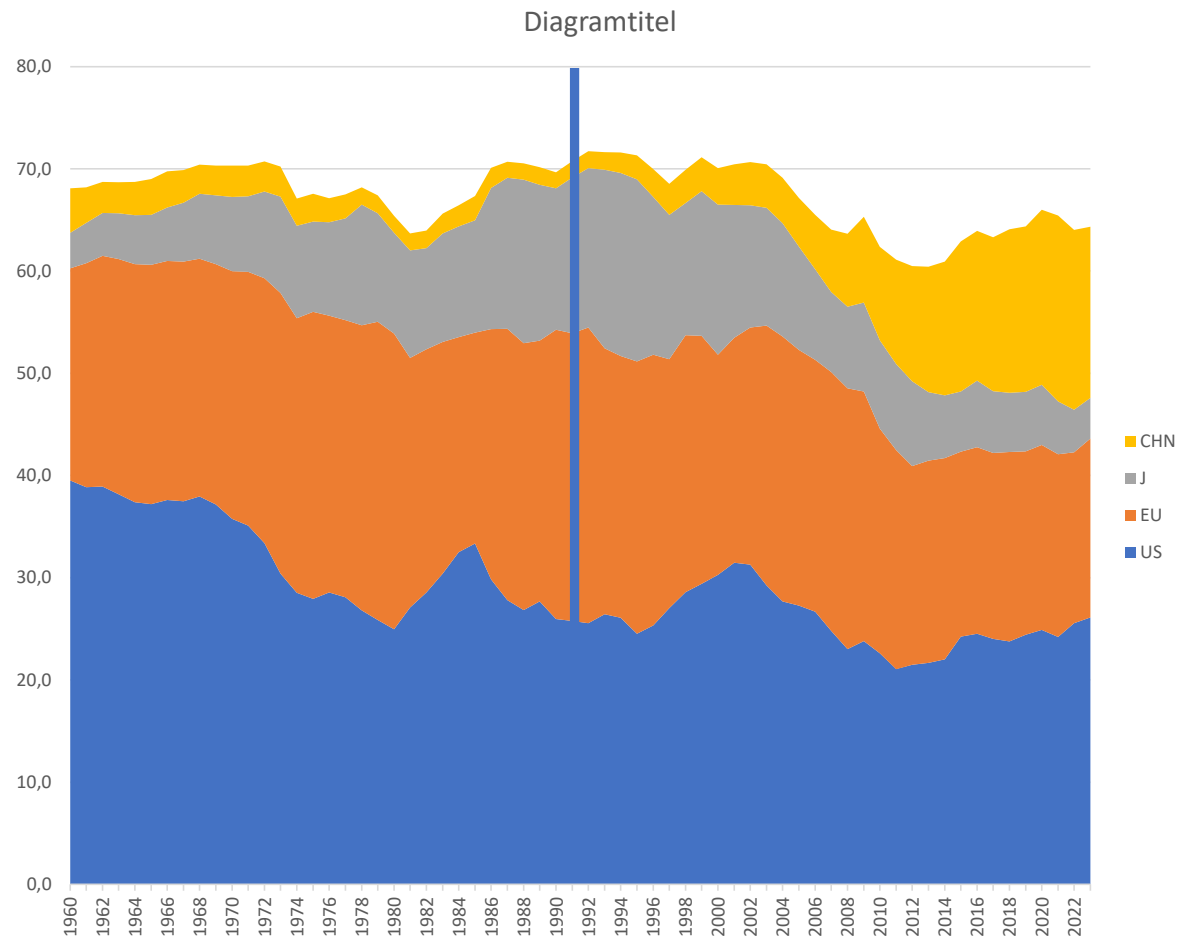


# The economy: Can Europe hold its own?



## Shares in global economy

- China irrelevant until 2000
- Japan balloons in 1980s disappearing later in the rear view.
- EU share down recently, but still globally relevant
- US share stable after end of EU post WWI boom.



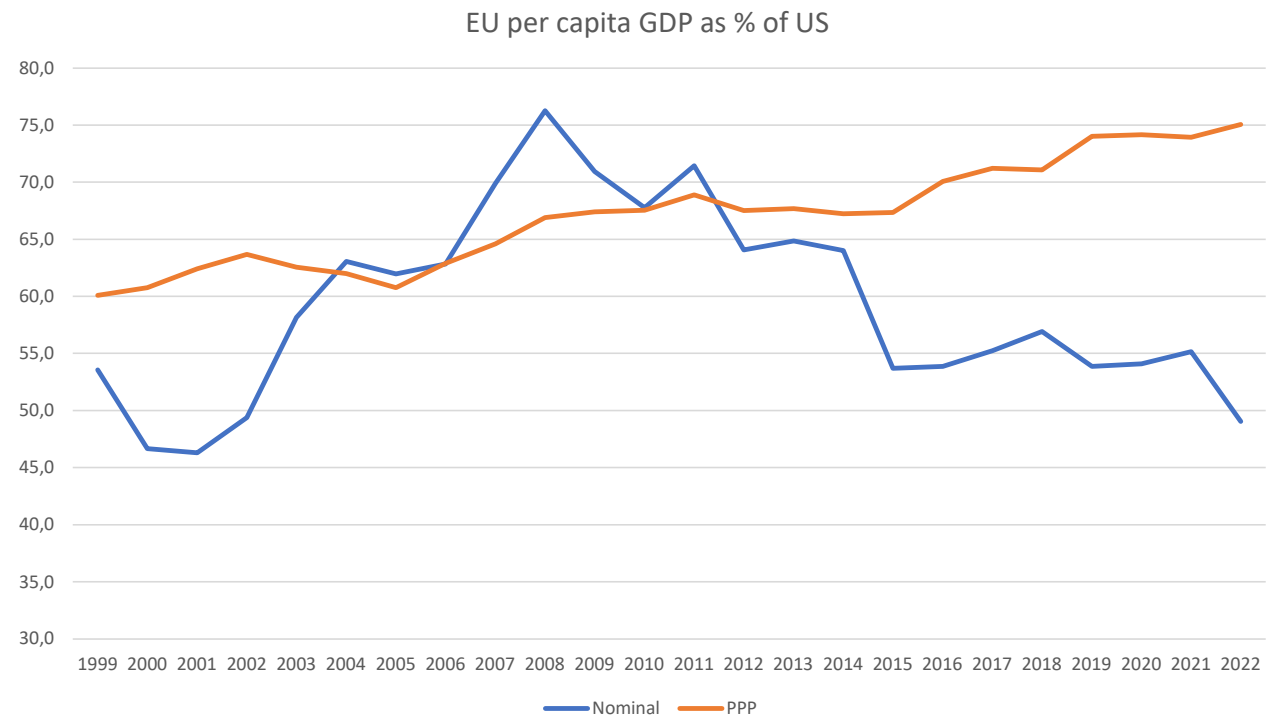
## *The economy*

1. Track record of EU mixed bag: Good on defending European way of life (= GDP at PPP), good on manufacturing, bad on productivity and 'intangibles'.
2. EU mid-tech trap
3. Global trends in specialisation and the US China trade war

—Background: Narrative that EU is losing ground big time (Draghi report)

# EU vs US: Two measures to compare economic performance PPP and current exchange rates

On PPP the EU catches up (slightly) on current exchange rates (=weight in global economy) loses ground (slightly)



# Manufacturing current USD compared US EU CHN

[https://data.worldbank.org/indicator/NV.IND.MANF.CD?end=2022&locations=CN-US-EU&name\\_desc=false&start=1997](https://data.worldbank.org/indicator/NV.IND.MANF.CD?end=2022&locations=CN-US-EU&name_desc=false&start=1997)

China like a rocket,  
but EU and US like  
twins, Japan  
disappearing in the  
rear view.

Global total is 16  
trillion =>

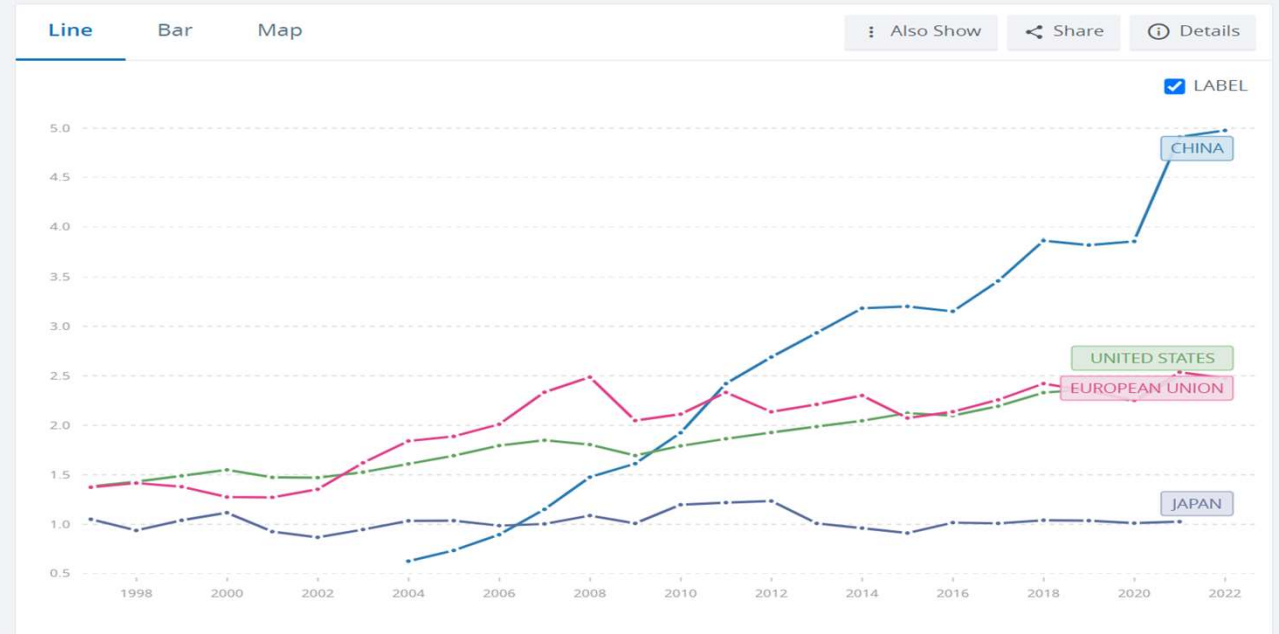
China = 30%, US and  
EU 15 % each.

In 2000, EU+US = 50  
% of world

## Manufacturing, value added (current US\$) - China, United States, Japan, European Union

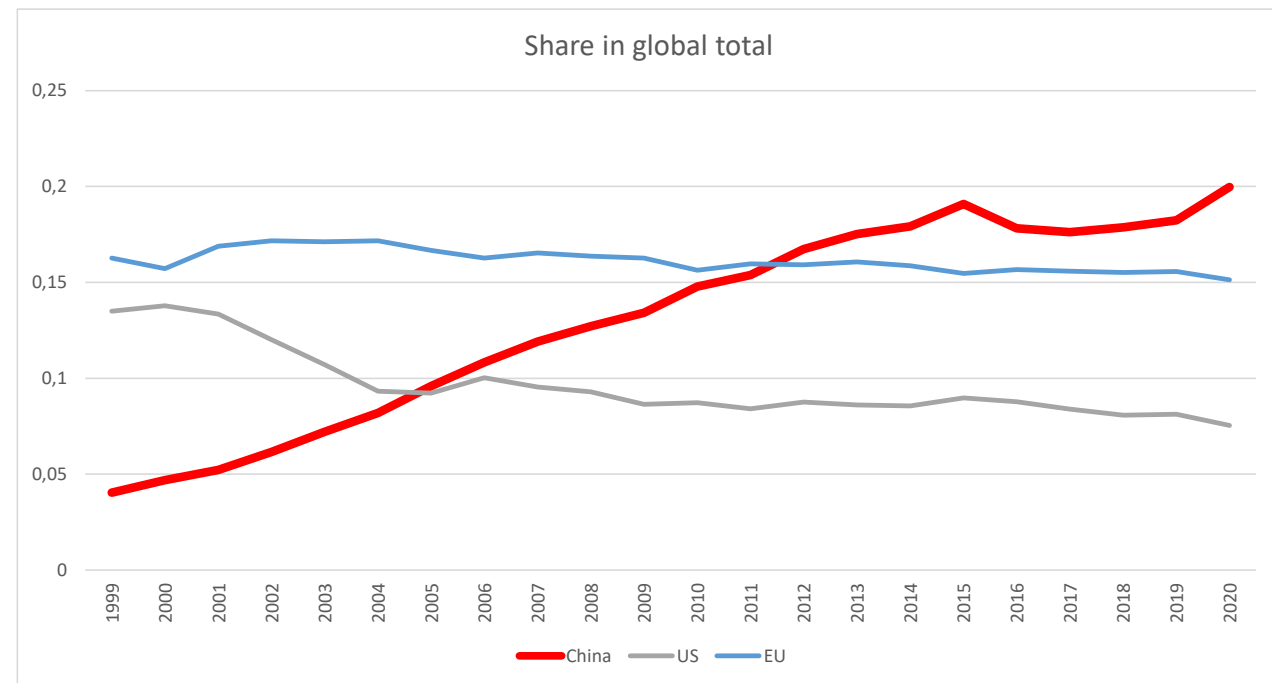
World Bank national accounts data, and OECD National Accounts data files.

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# China's rise in global manufacturing exports, decline of US, EU (almost) stable

EU industry loses only little market share compared to US = EU competitive (one reason EU needs to pay for imports of raw materials).



# Summary trilateral comparisons US/EU/China over last two decades

- EU defends way of life (GDP per capita at PPP).
- But EU per capita GDP at current exchange rate much lower and growth anaemic.
- Manufacturing:
- China's growth unprecedented: ten times (+1000 %) in less than 15 years. China's manufacturing output now equal to combined EU+US.
- EU strong in manufacturing exports.
- => EU performance slightly better than US (manufacturing) mostly mid-tech sectors (automotive, machinery).

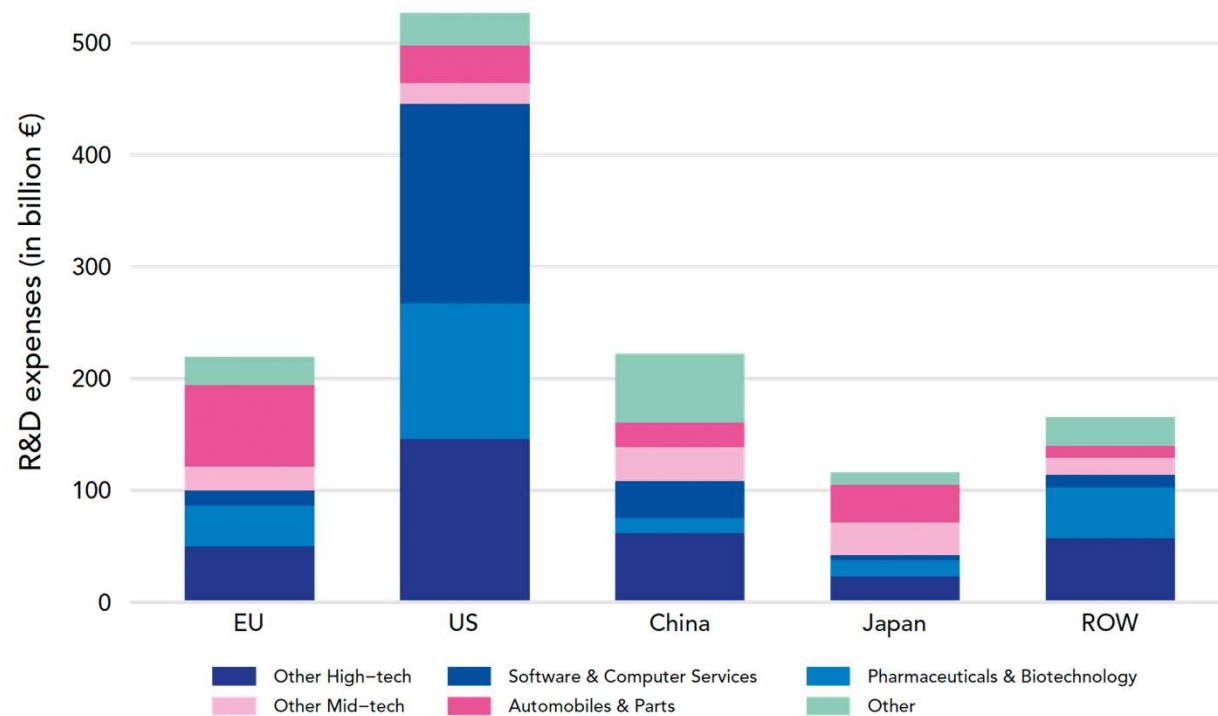
## Innovation becomes key, but EU stuck in mid-tech trap

- Public support to innovation is comparable in EU to US (similar 0.7 % GDP). But most public R&D is national (90%).
- The big difference is in private, business R&D spending (1.2% GDP in EU; in US it is 2.3%).
- Moreover, composition is different.
- EU business R&D concentrates in mid-tech (e.g. automotive), rather than high-tech (e.g. software)
- Mid-tech grow less than high-tech
- Evidence of path dependency



# The sectoral composition of R&D is key

BERD by Tech-level 2022 (Top 2,500 companies)



Total US 3 times larger than EU.

EU > US in mid tech.

US >> in high tech

EU absent in software

EU specialization similar pattern as Japan.

China similar in absolute values to EU, but would be much higher in PPP terms (Chinese researchers much cheaper)

Source: Industrial R&D Investment Scoreboard (2023).

## Path dependency or stickiness?

### Top-3 R&D spenders and their industries compared over time

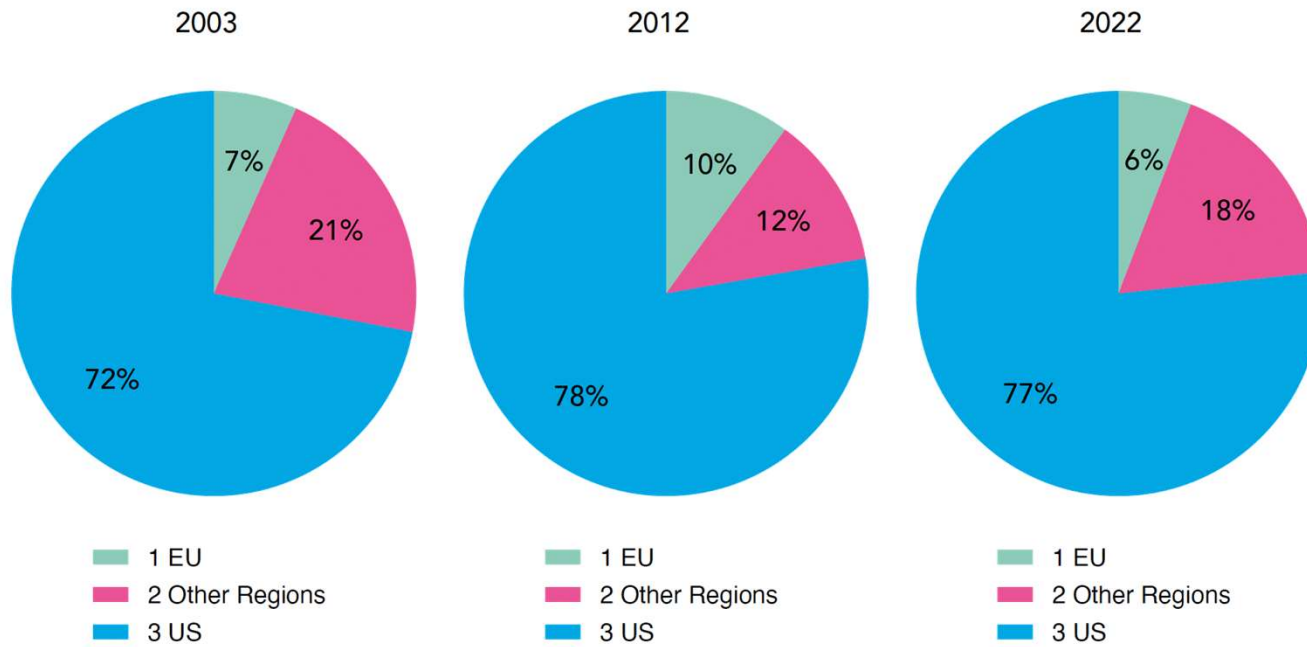
	2003	2012	2022
<b>US</b>	Ford (auto) Pfizer (pharma) GM (auto)	Microsoft (software) Intel (hardware) Merck (pharma)	Alphabet (software) Meta (software) Microsoft (software)
<b>EU</b>	Mercedes-Benz (auto) Siemens (electronics) VW (auto)	VW (auto) Mercedes-Benz (auto) Bosch (auto)	VW (auto) Mercedes-Benz (auto) Bosch (auto)
<b>JPN</b>	Toyota (auto) Panasonic (electronics) Sony (electronics)	Toyota (auto) Honda (auto) Panasonic (electronics)	Toyota (auto) Honda (auto) NTT (telecom)

Source: Industrial R&D Investment Scoreboard (2004, 2013 and 2023).

# Path dependency?

Country share of total international BERD

## Software & Computer Services



# Reason(s) for mid-tech trap

1. Path dependency:
2. European firms invest in incremental innovation in the sectors they know best (low risk).
3. Bank-based financial system geared to finance low risk investment backed up by physical capital (which is important in mid-tech).
4. Going into new sectors = high risk of failure. But cost of failure higher in Europe.
5. (Reason why European leaders in the semiconductor sector are mostly spin-off from large industrial conglomerates (Phillips ASML and NXP, Siemens Infineon).
6. An aside: US-China trade war provides respite for EU manufacturing sector.

# Conclusions for EU economy

1. Europe specialises in manufacturing, mid-tech absent from software.
2. Implies low but steady growth.
3. China threat shifts to capital intensive manufacturing, competes now in several mid-tech sectors.
4. European industry needs to shift to sectors with low economies of scale (and should invest more in innovation outside mid-tech). Needs more integrated capital markets with more equity.
5. Trade measures increase cost of green transition and protect incumbents.
6. US-China trade war provides respite for EU manufacturing sector.

## Annex:

### Two considerations on EU in global trading system

- Patterns of comparative advantage
- Opportunities from the EU-China trade war



**Università  
Bocconi**

IEP@BU  
Institute for European  
Policymaking

## Emerging patterns of global comparative advantage:

- US specializes at two extremes of technology ladder: commodities (wheat, shale oil and gas) and high R&D sectors like software (AI, Silicon valley) and high profit margins.
- China capital intensive and economies of scale in selected (by party) industries (e.g. green goods, but also steel, ships, etc.).
- EU mostly middle-tech like automotive, but also some bespoke machinery, high-tech niches, with middling capital intensity and profit margins.

Europe has so far remained competitive in mid tech but needs to find new niches to hold its own



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