



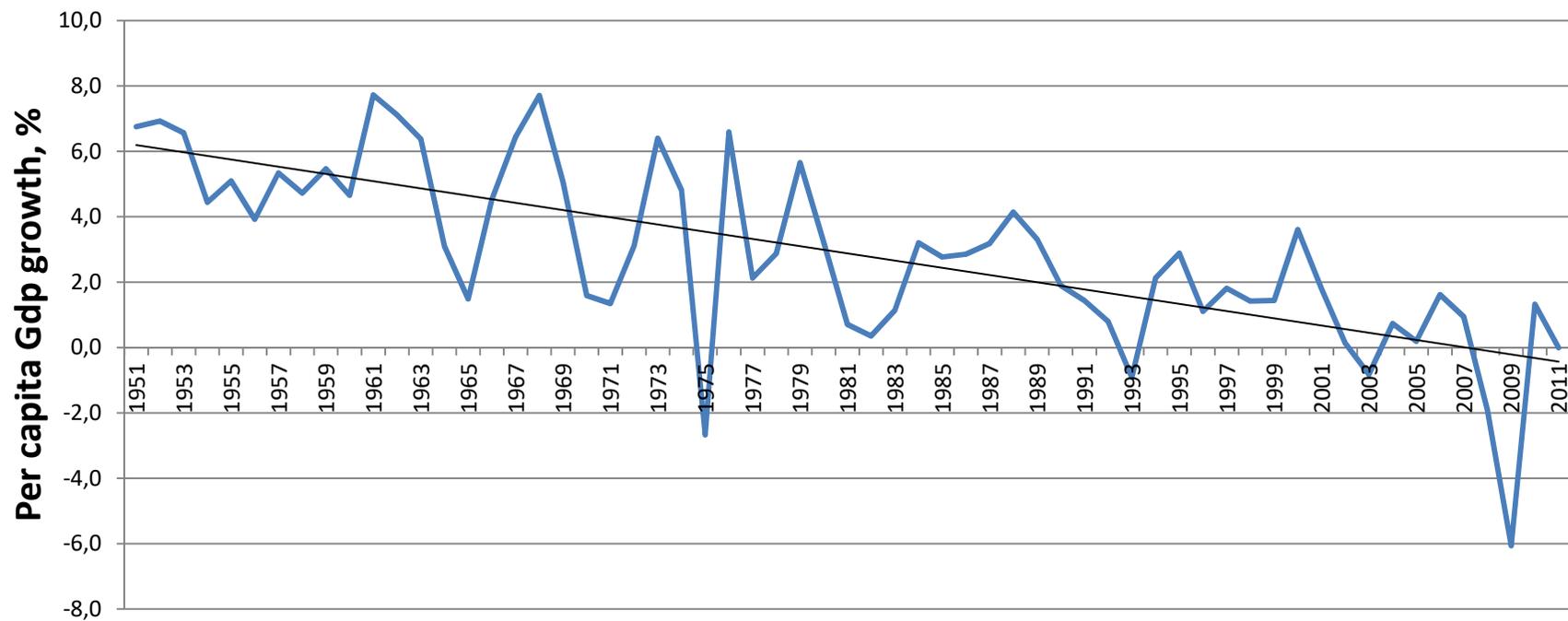
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Declining productivity in Italy and Europe: facts and explanations

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Italy's gradual growth slowdown in the last 60 years



... has been mostly driven by the slowdown of productivity growth

Growth = productivity + hours + demographics

Primary source: Istat National Accounts, 1970-2010

Compounded avg growth (%) of:	1970-1980	1980-1990	1990-2000	2000-2010
Value added per capita (« growth »)	+3,2	+2,3	+1,5	-0,2
Value added per hour worked (« productivity »)	+2,9	+1,7	+1,5	+0,1
Hours worked per 15-64 population (« hours »)	+0,3	+0,0	+0,2	+0,0
Population at 15-64 over total population (“demographics”)	+0,0	+0,6	-0,1	-0,3

**Italy's declining productivity performance
often seen
as if it were specific of Italy.**

**Long-run productivity data on Europe
indicate that
Italy's problems are not that specific.**



Preliminary measurement issue

Productivity known to be pro-cyclical



To lessen pro-cyclicality

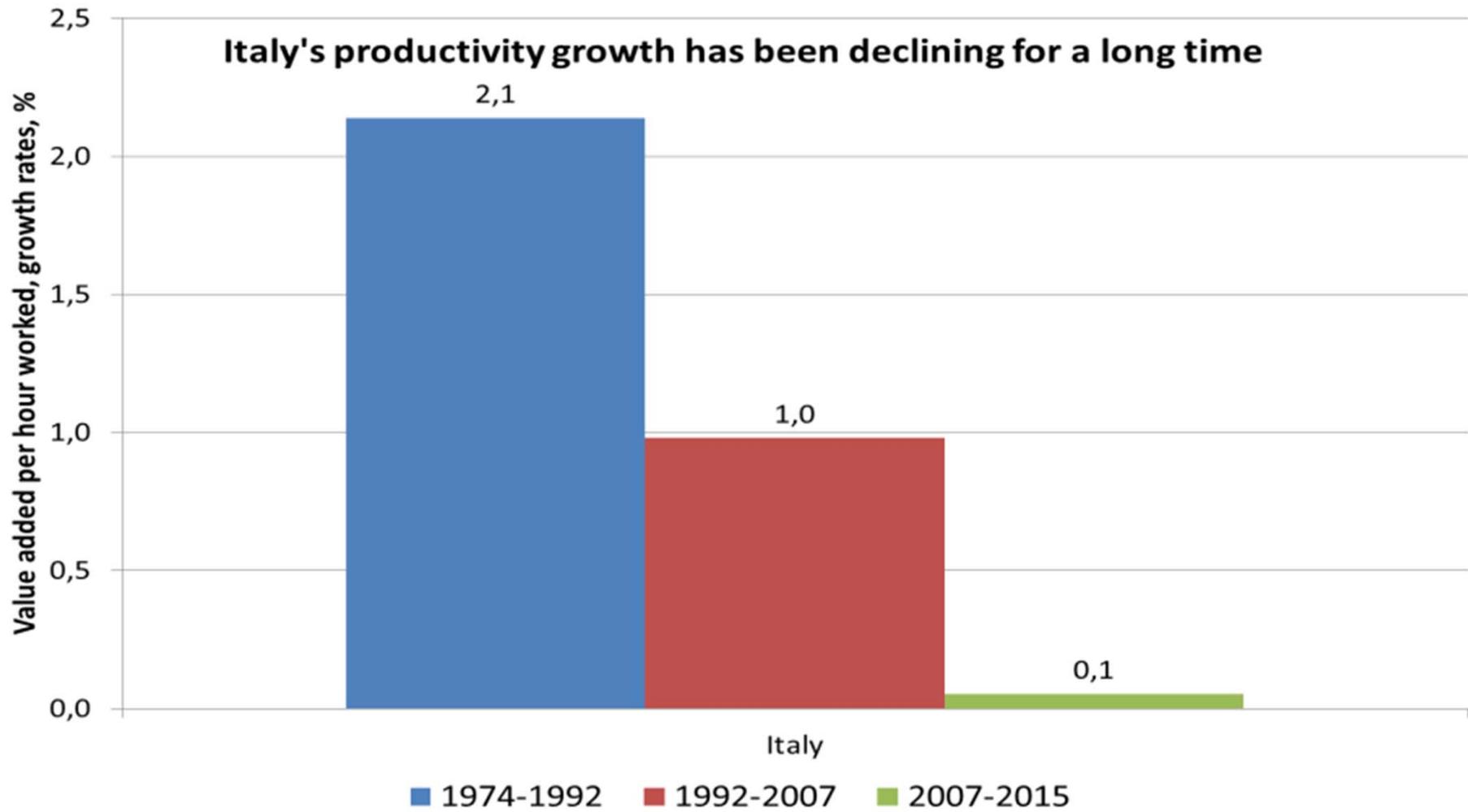
**Growth rates computed across peak years
1974, 1992, 2007, 2015 (so far)**

**Sub-periods: 1974-1992, 1992-2007, 2007-2015
(a bit unfair for 2007-15. Perhaps.)**

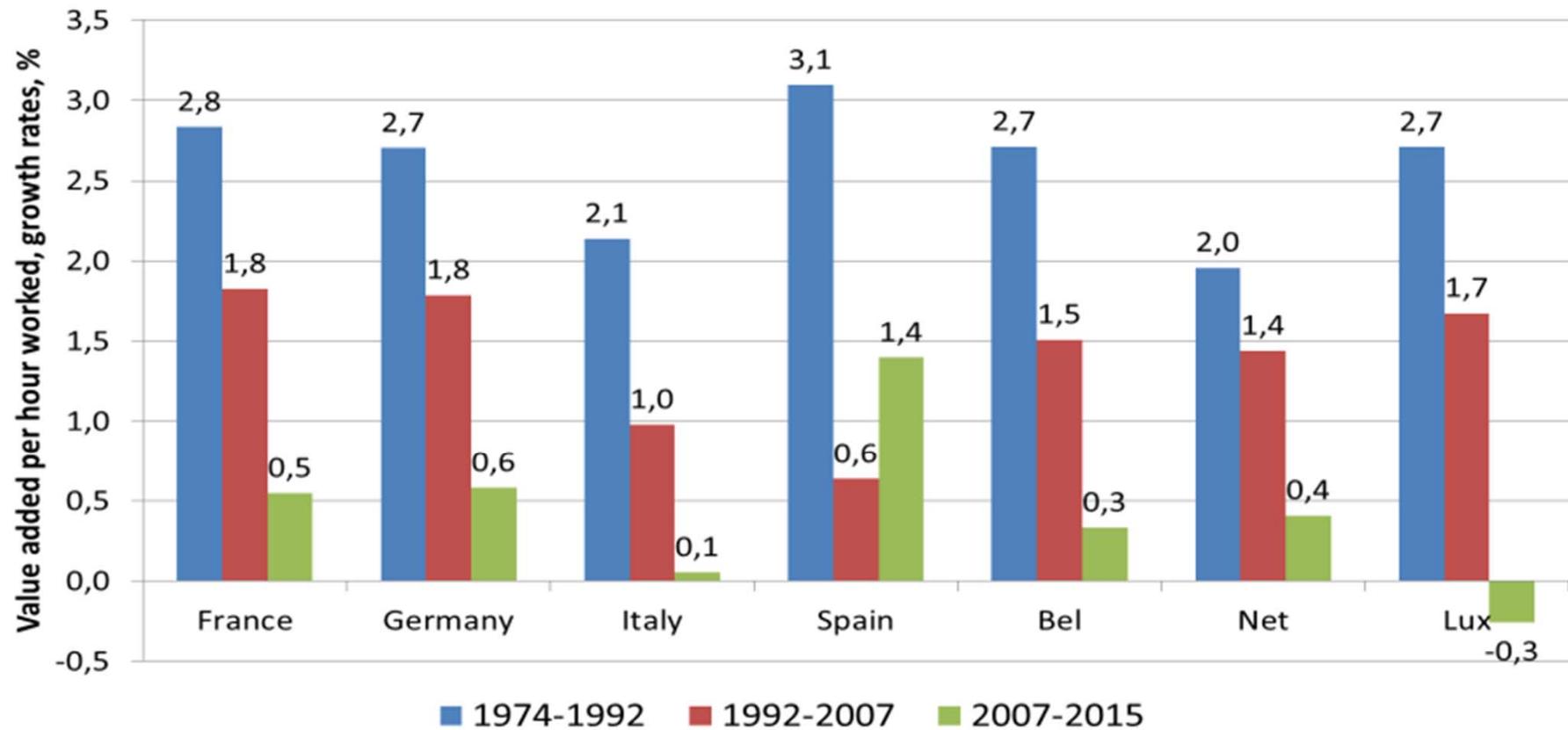
Source: Oecd productivity database



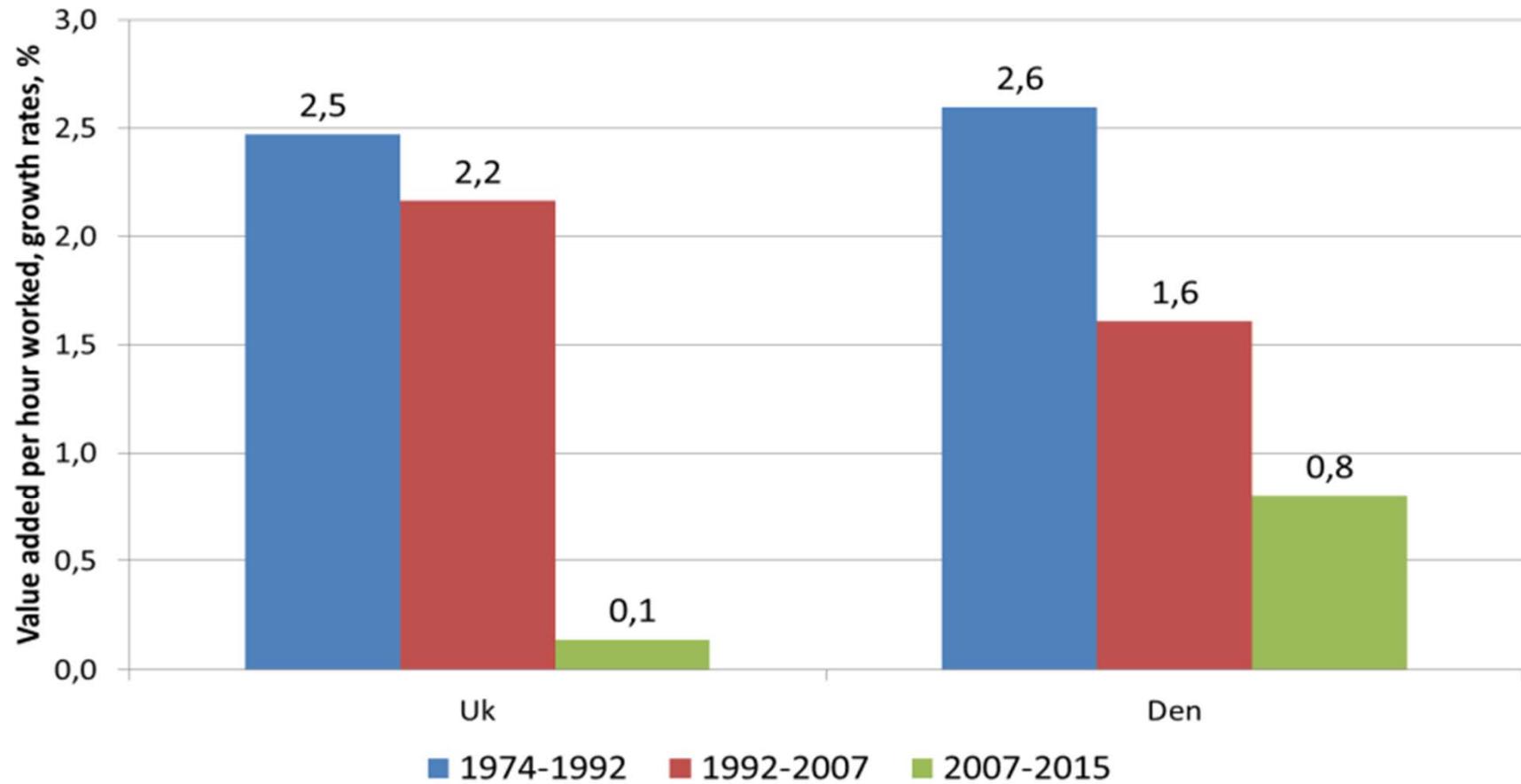
Italy's productivity growth has been declining for a long time



Long-term productivity growth has gone down in other Emu countries as well (Spain is somewhat different: bigger shortfall in 1992-2007, recovery in 2007-15)



Productivity growth has similarly gone down in some non-Emu countries such as the Uk and Denmark



“It’s because of the euro!”

Well



A hand-made comparison of productivity growth rates shows no systematic difference between “twin” Emu and non-Emu countries

Sixteen Emu and non-Emu “twin” countries. Criteria for twinship: size + per capita Gdp

€	Fra	Ger	Ita	Spa	Fin	Net	Lux	Aut	Bel	Ire	Slk	Slv	Lat	Lit	Por	Gre
Non €	Uk	Uk	Uk	Uk	Swe	Dk	Swi	Swi	Dk	Chi	Ch	Ch	Ch	Ch	Chi	Chi

Missing Oecd data for three € countries: Estonia, Malta, Cyprus

“Chi” = average(Czech Republic, Hungary, Israel) (Per capita Gdp of Gre, Por & Ire ≈ 21k in 1992; per capita Gdp in Cze, Hun and Isr = 17.5k)

“Ch” = average(Czech Republic, Hungary)

Results for:	Productivity growth over:	Mean difference (n=16 “twins”)	Std. deviation
(€-non€)	(1992-2007)	+0.3	1.3
(€-non€)	(2007-2015)	+0.1	1.3
(€-non€)	(2007-2015)-(1992-2007)	-0.2	1.7

Raw data behind the twin “€ vs non-€” comparison

1992-2007 data

€	Fra	Ger	Ita	Spa	Fin	Net	Lux	Aut	Bel	Ire	Slk	Slv	Lat	Lit	Por	Gre
	1,8	1,8	1,0	0,6	2,9	1,4	1,7	1,8	1,5	3,6	5,2	4,3	6,6	6,0	1,3	2,1
	2,2	2,2	2,2	2,2	2,6	1,6	1,5	1,5	1,6	2,6	3,4	3,4	3,4	3,4	2,6	2,6
Non €	Uk	Uk	Uk	Uk	Swe	Dk	Swi	Swi	Dk	Chi	Ch	Ch	Ch	Ch	Chi	Chi

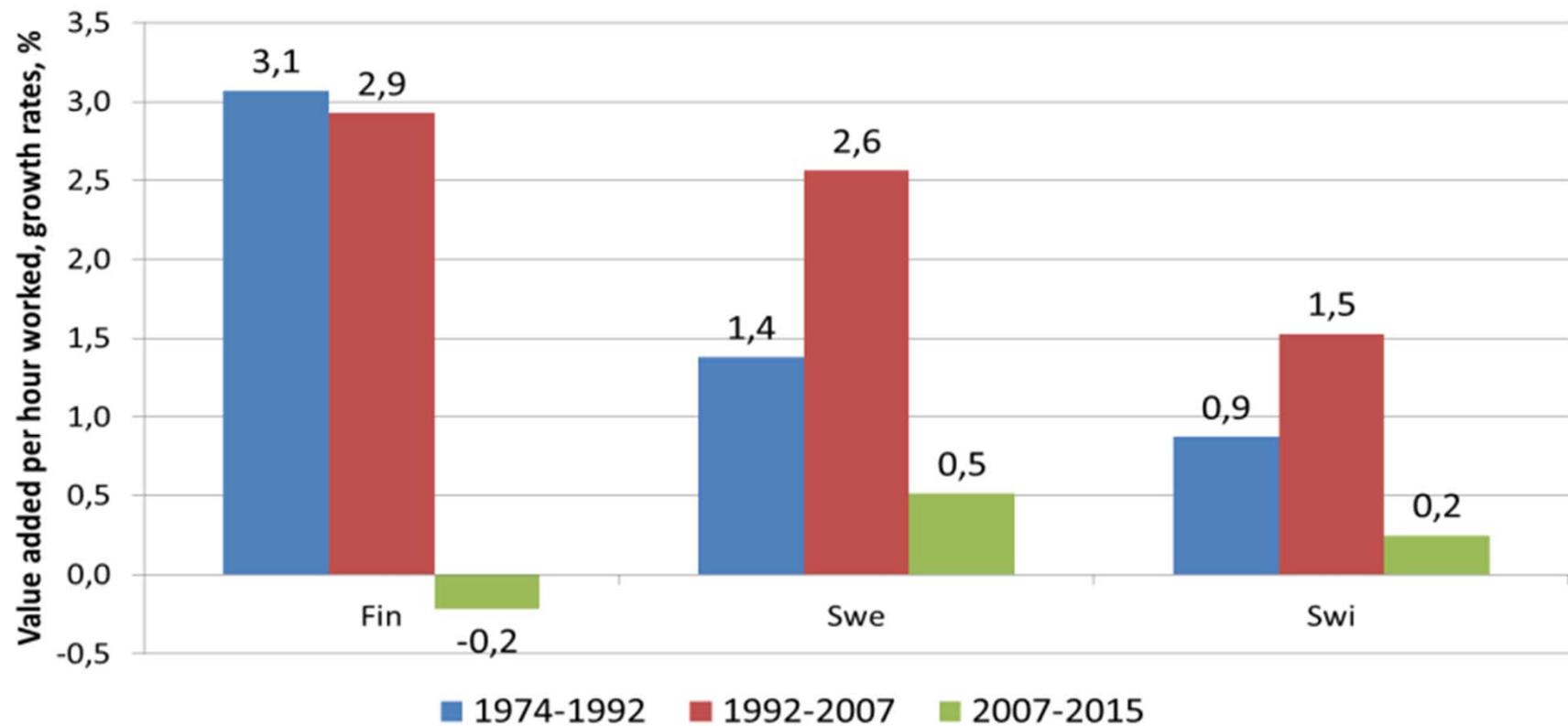
2007-2015 data

€	Fra	Ger	Ita	Spa	Fin	Net	Lux	Aut	Bel	Ire	Slk	Slv	Lat	Lit	Por	Gre
	0,5	0,6	0,1	1,4	-0,2	0,4	-0,3	0,7	0,3	4,9	1,9	0,0	1,4	2,1	0,8	-1,2
	0,1	0,1	0,1	0,1	0,5	0,8	0,2	0,2	0,8	1,2	1,3	1,3	1,3	1,3	1,2	1,2
Non €	Uk	Uk	Uk	Uk	Swe	Dk	Swi	Swi	Dk	Chi	Ch	Ch	Ch	Ch	Chi	Chi

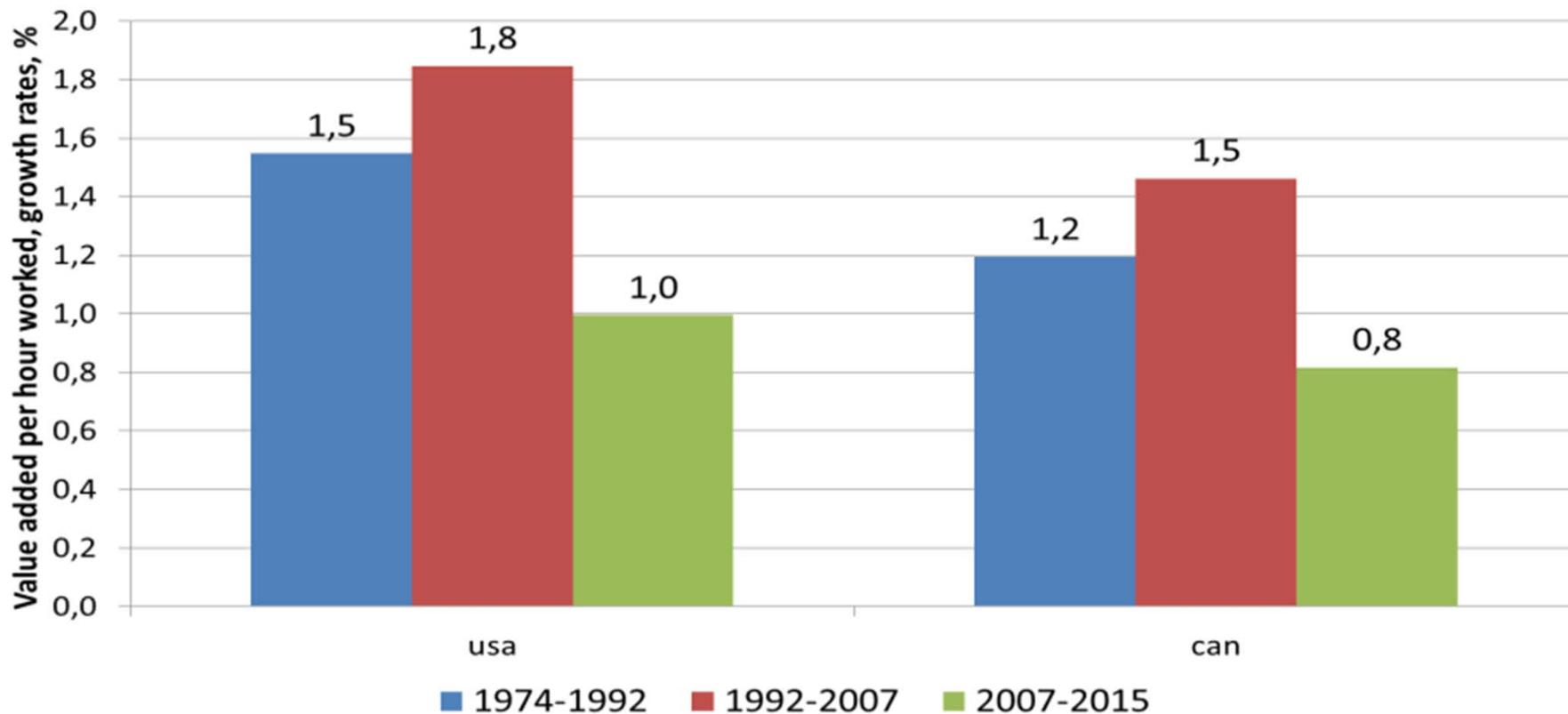
**Have
the ICT revolution and globalization
played a role?**



Productivity growth has been resilient or even accelerating in 1992-2007 in two nordic twins (the Emu member Finland and the non-Emu member Sweden), as well as in Switzerland. But in 2007-15 it eventually fell in these countries as well



The same time trend as in the Nordics is also visible in other non-Eu Oecd countries. In Usa and Canada, temporary acceleration in 1992-2007 and marked deceleration in 2007-15



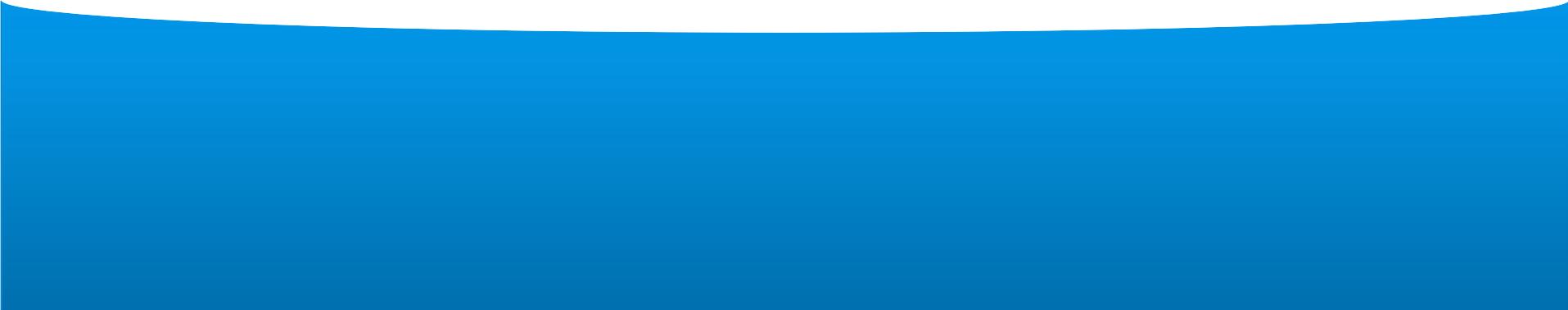
Summing up on Italy's and Europe's long-run productivity trends

- Declining productivity is strongly associated to Italy's growth slowdown. This is a long run feature of Italy's productivity data
- But such trends are not specific of Italy
- Such trends are:
 - neither a €-area phenomenon only
 - nor a EU phenomenon only
- The 1992-2007 sub-period has seen resilience or even acceleration of productivity growth in Finland, Sweden, Switzerland, Usa, Canada
- This may have been because these countries have adapted more swiftly to the ICT revolution and, more generally, to globalization
- However: in 2007-15, productivity growth fell everywhere, but in Spain. Productivity largely failed to restart after the post Lehman crisis

**Understanding productivity dynamics
requires joint consideration of trends in
productivity and hours worked**



Back to 1973 first



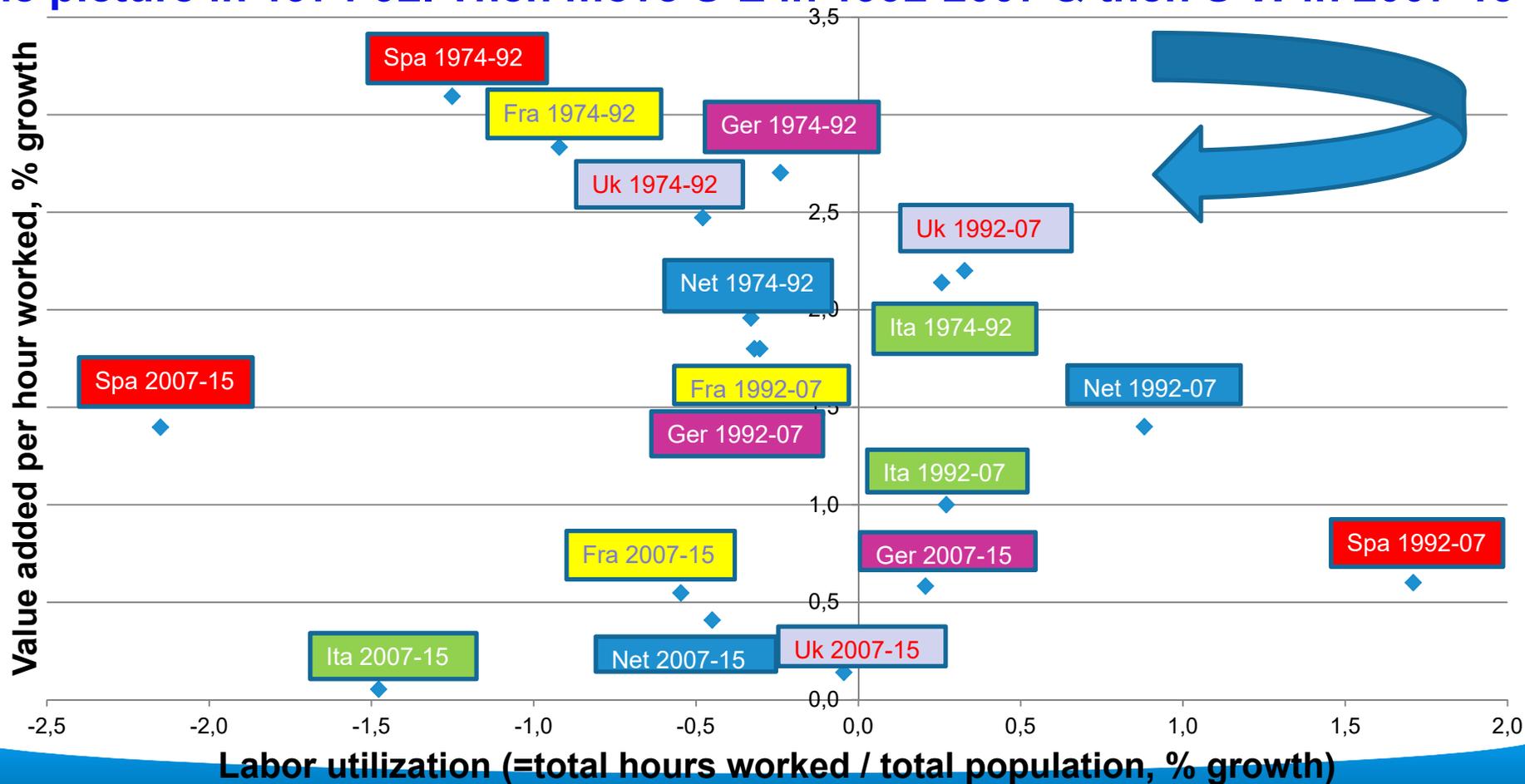
**1973: the good old days of fast productivity growth and low unemployment rates.
The results of the prolonged post-WWII boom.**

1973, data in %	Labor productivity growth rates	Unemployment rates
Italy	6.5	4.5
France	5.7	2.3
Germany (West)	5.1	1.0
Spain	6.3	2.7
Netherlands	6.6	2.6
United Kingdom	1.8	3.6

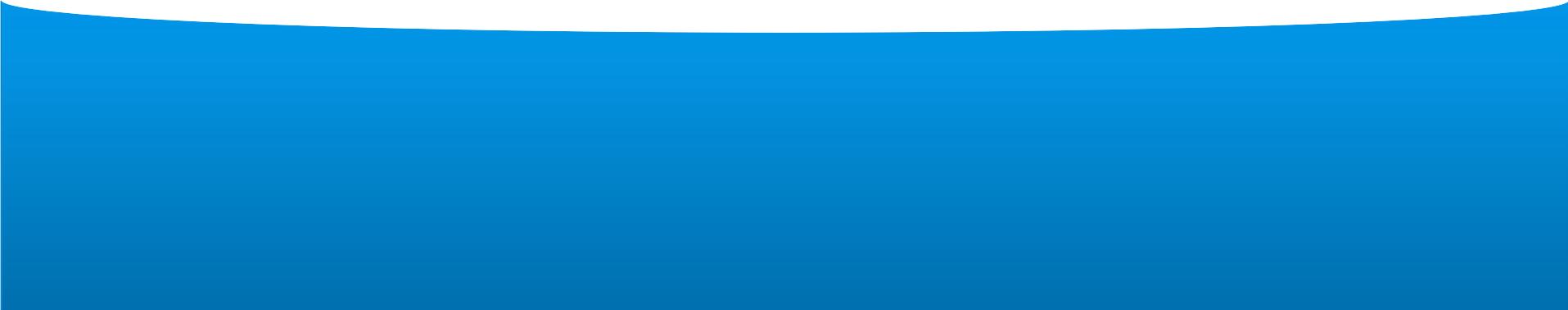
**What happened to trends of
productivity and labor utilization
since 1973?**



Productivity and labor utilization: most large EU countries start N-W in the picture in 1974-92. Then move S-E in 1992-2007 & then S-W in 2007-15



Why such shifts?



1974-92



1974-92: the rise of welfare spending and labor taxes (Alesina & Perotti, AER 1997; Daveri & Tabellini, EP 2000)

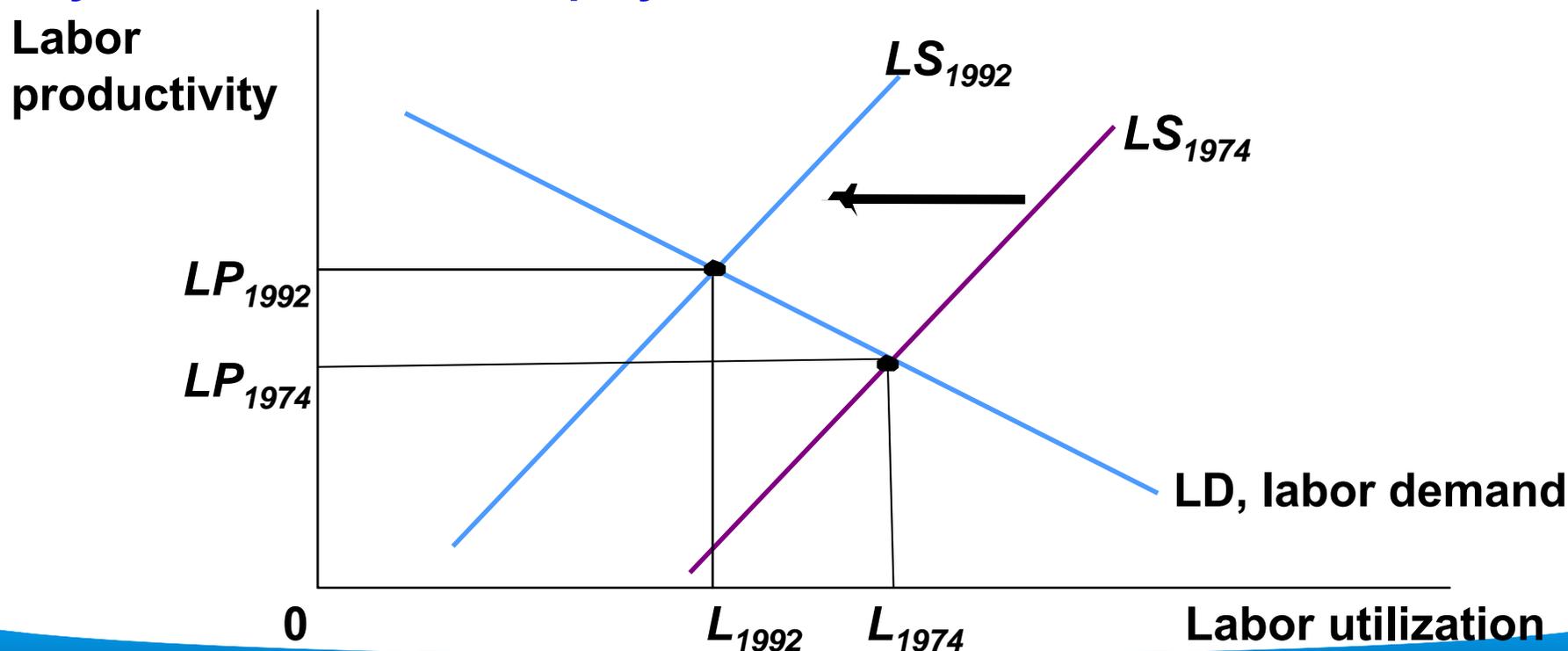
TABLE 1—GOVERNMENT EXPENDITURE AND TAXATION IN OECD COUNTRIES, 1960–1990

	Social expenditure		Government consumption		Labor taxation	
	1960	1990	1960	1990	1965	1990
average ^a	8.3	15.3	15.1	17.3	13.2	21.2
growth rate (percent)	85		14.9		60	

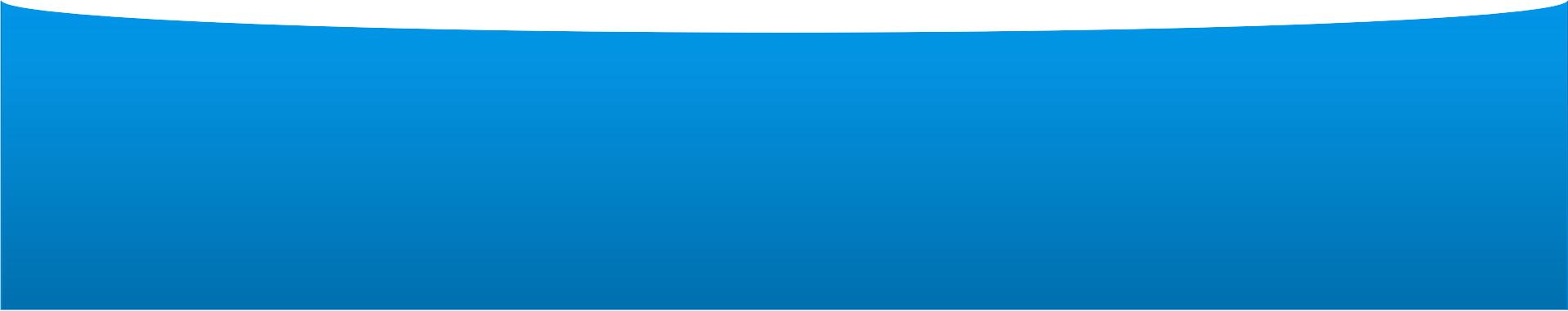
Notes: Social expenditure: social security benefits plus social assistance grants plus other current transfers, general government. Government consumption: expenditure on goods and services, general government. Labor taxation: direct taxes on households, social security taxes paid by employees and by employers, and payroll taxes, general government. The sample includes all current OECD countries, except the Czech Republic, Hungary, Iceland, the Republic of Korea, Luxembourg, Mexico, New Zealand, Poland, and Turkey. For some countries, the starting year is 1965, 1970, or 1975, depending on data availability. Source: *Economic Outlook Database* OECD (1995).

^a Weighted average, with weights represented by 1980 GDP in dollars.

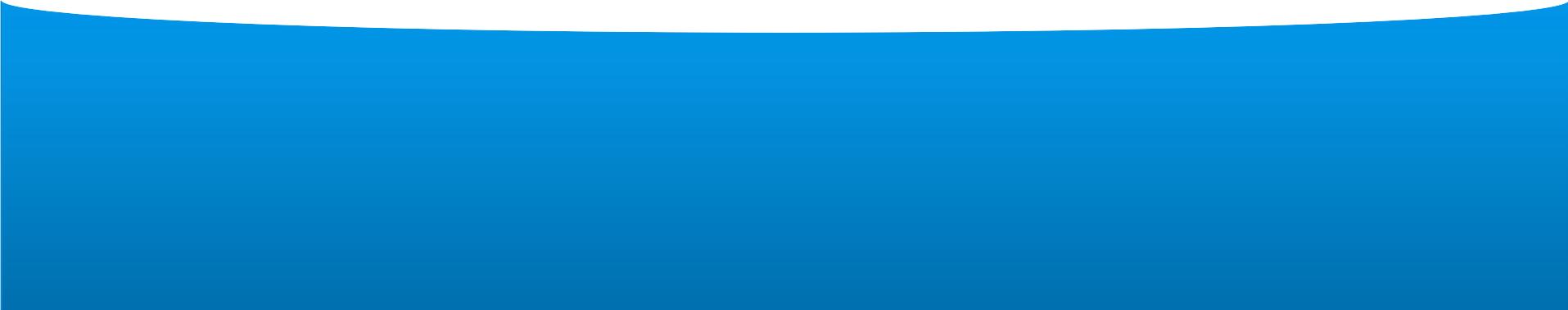
1974-92, L^S and L^D shifted to the left (L^S by more). The rise of welfare spending & labor taxes raised non-wage labor costs, stifling labor market performance and prompting K-L substitution that pushed up labor productivity. Result: EU labor markets couldn't accommodate all baby boomers into the employed.



1992-2007



1992-2007
Four shocks and one policy response



Shock 1: Europe's IT revolution could have pushed L^D to the right, but it didn't.

Table 2. IT investment over GDP in the EU and the US, 1990s

% points				
	1990	1995	2001	(1995-01)-(1990-95)
US	3.3	3.7	4.2	+0.5
European Union 15	2.2	2.1	2.6	+0.3
US minus EU-15	1.1	1.6	1.6	-

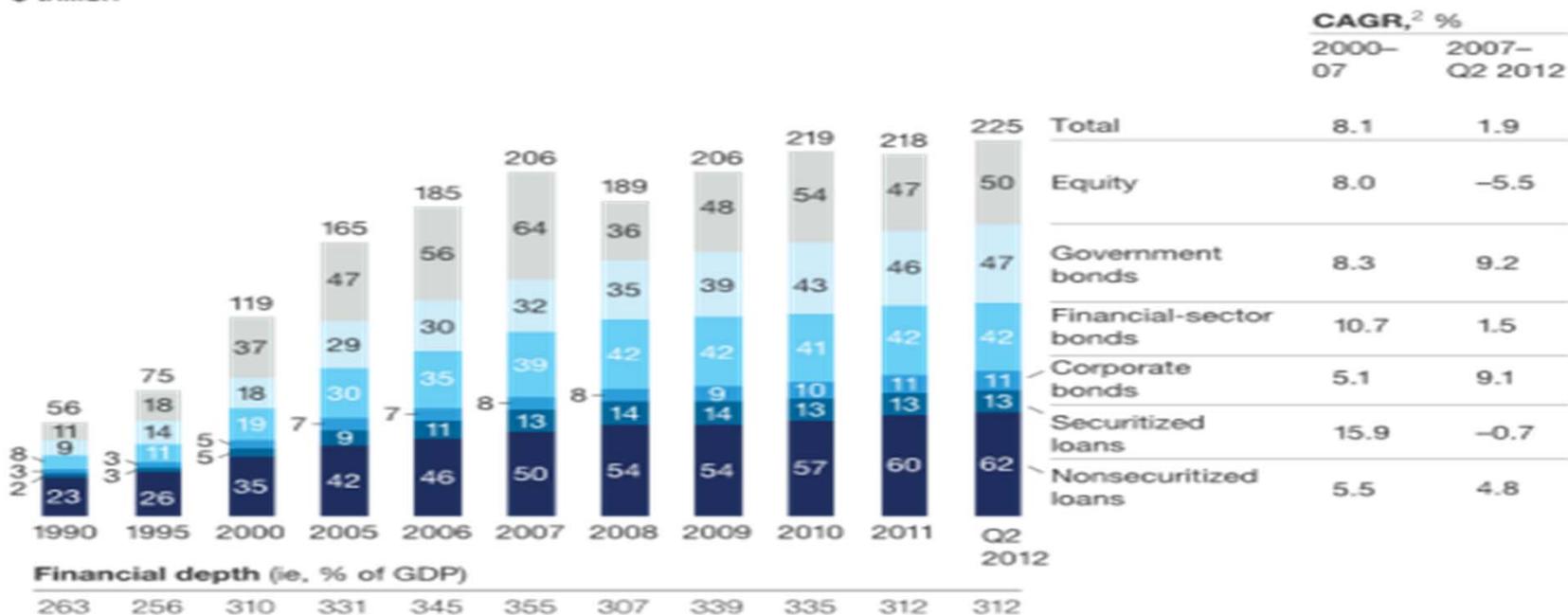
Source: Own calculations from Timmer et al. (2003).

Table 1. Growth of GDP per hour worked in the EU and the US, 1979-2001

Total economy					
OECD	1970-80	1980-90	1990-95	1995-02	(1995-02) minus (1990-95)
European Union 11	3.6	2.3	2.6	1.4	-1.2
US	1.6	1.4	1.2	2.0	+0.8

Shock 2: Financial globalization taking off in 1995-2005. Good time for investment to take off and shift L^D to the right.

Global stock of debt and equity outstanding, \$ trillion¹

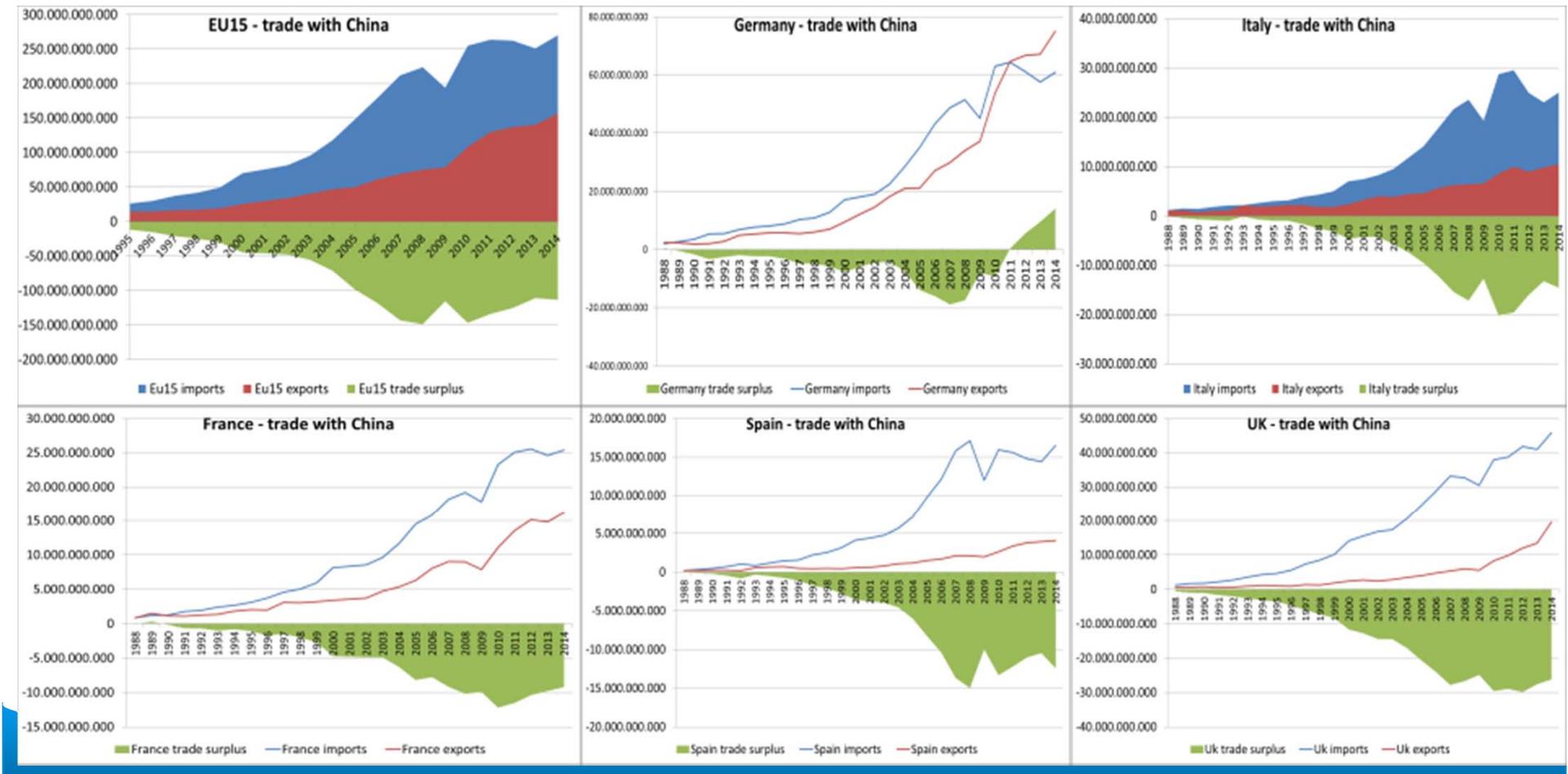


¹End-of-year figures for a sample of 183 countries, based on constant 2011 exchange rates. Figures may not sum to totals, because of rounding.

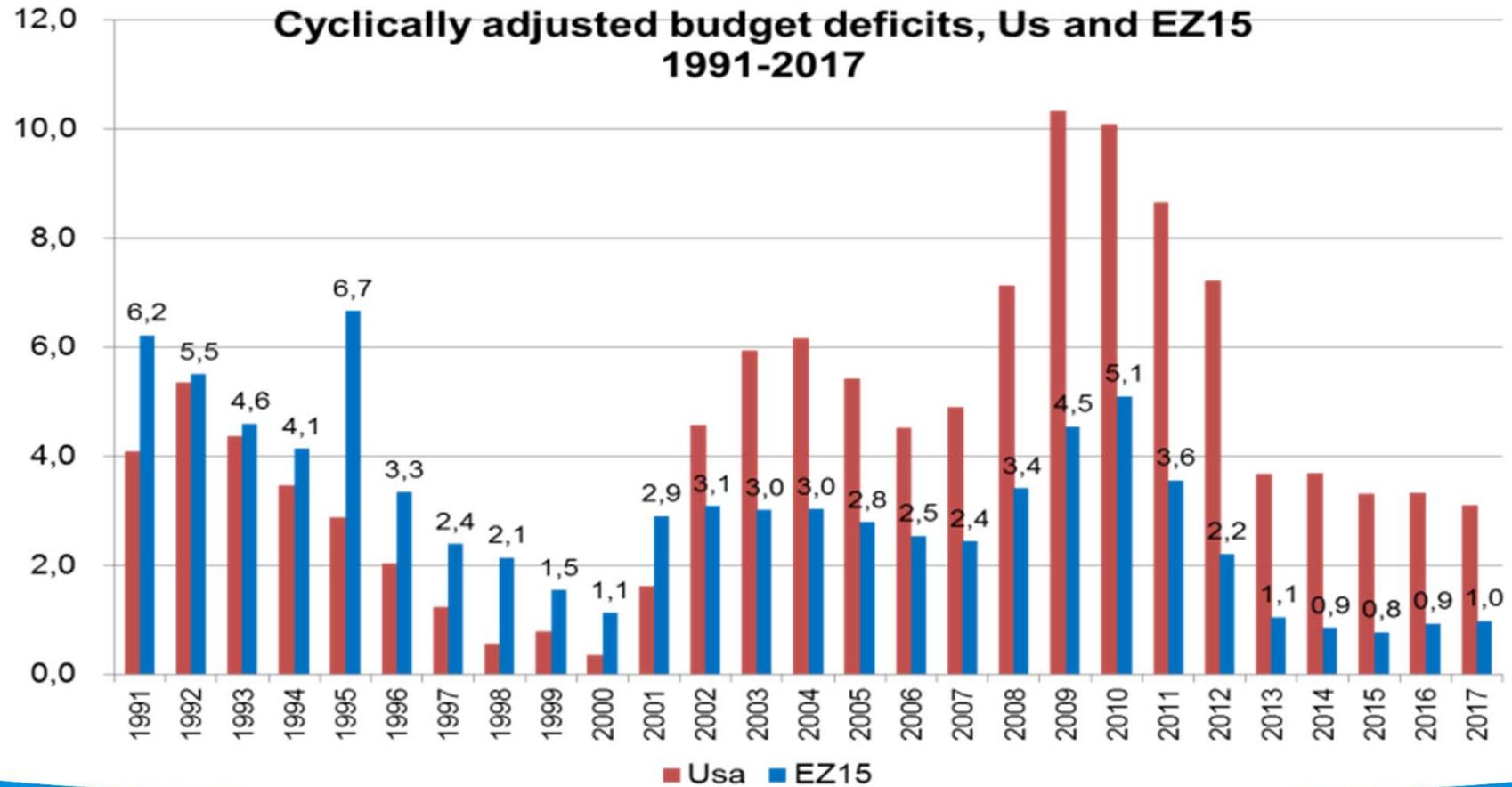
²Compound annual growth rate.

Source: McKinsey Global Institute analysis

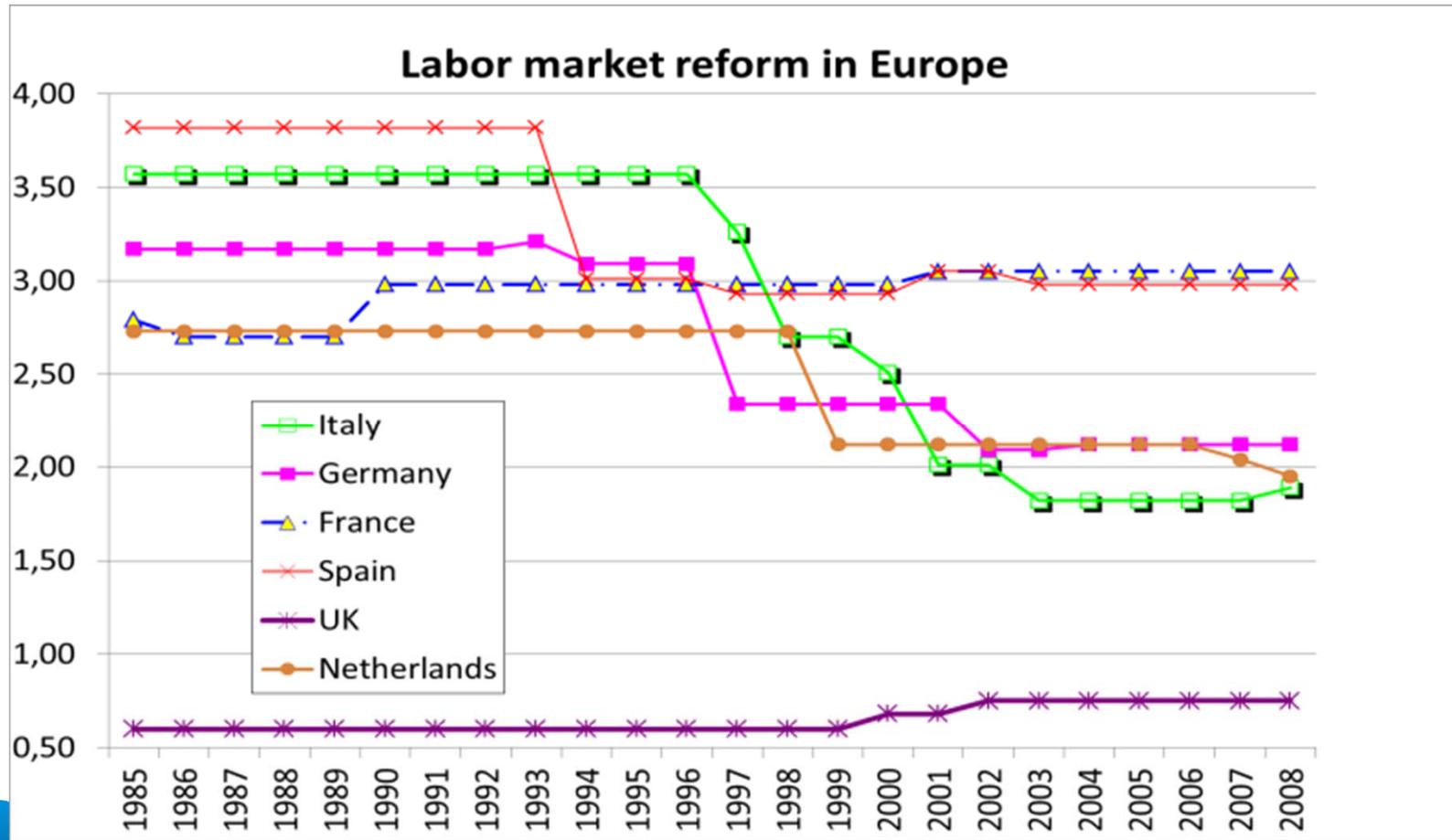
Shock 3: Booming imports from China. L^D to the left (German exception)



Shock 4: The EZ budget cuts of the 1990s and the €



Policy response: labor market reform towards more flexibility

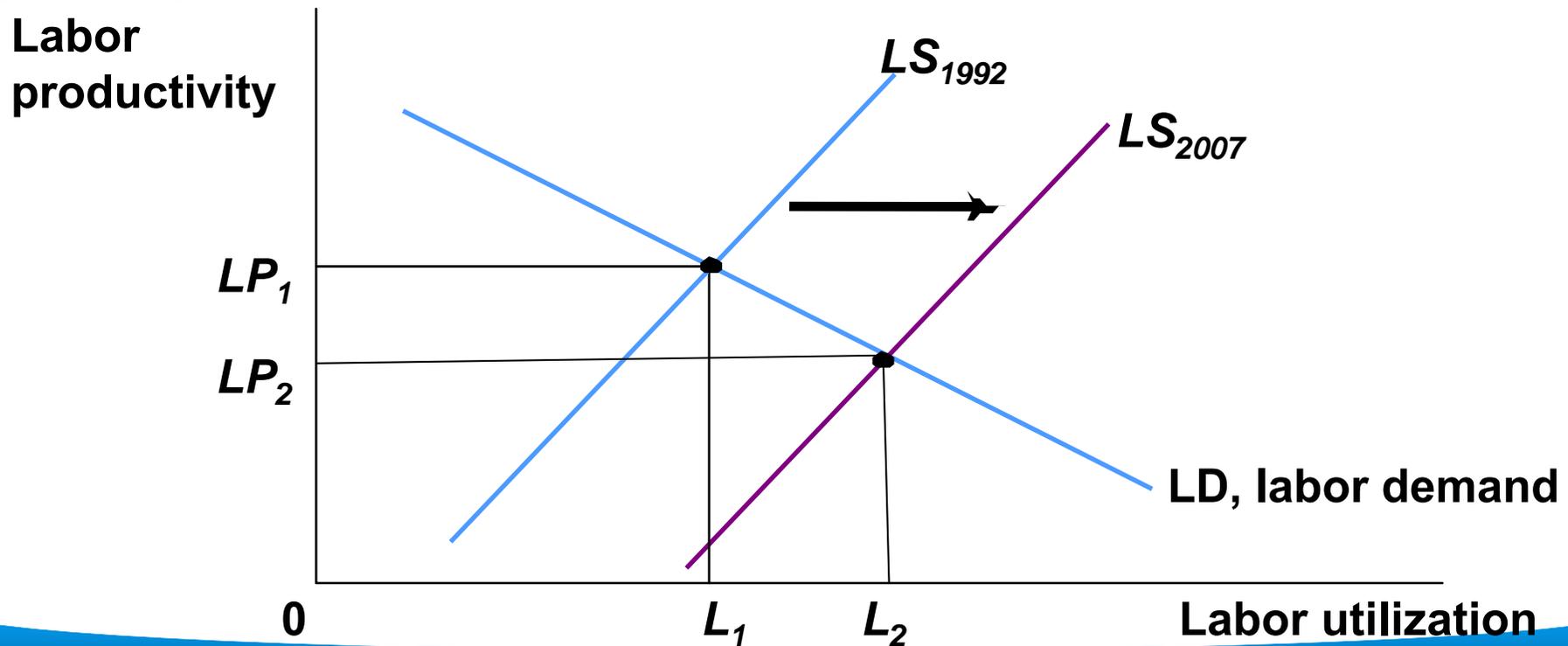


1992-2007: productivity growth down, while labor utilization went up

Seemingly, the four shocks hitting labor demand in 1992-2007 offset each other, so labor demand did not shift much.

Instead, labor market reform made labor more flexible. L^s shifted to the right.

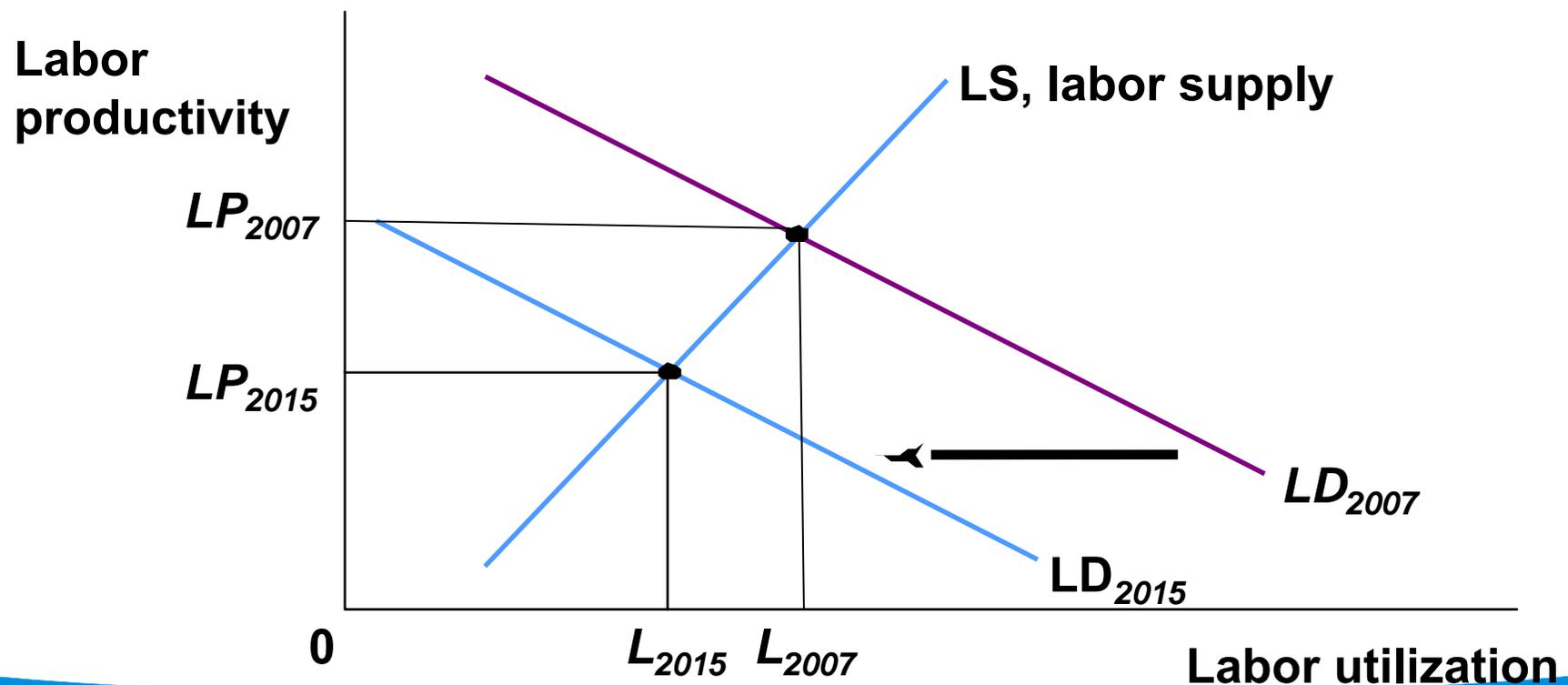
(Germany's exception: East-West reunification \Rightarrow Govt transfers shifted L^s up)



2007-15



2007-15: the (Lehman + euro) crises unambiguously shifted L^D to the left in most Eu countries (not in Germany).
Accumulated debt also weighs on the pace of recovery.



Conclusions on the causes of productivity trends in Italy and Europe

1974-1992

Rise in non-wage labor costs aligned Italy to other EU countries, lowering labor utilization and keeping productivity growth relatively high (though lower than in the 1960s for the dying out of post-war reconstruction impulses)

1992-2007

Low productivity growth & high employment originated from rightward shift of labor supply due to piecemeal labor market reform (end of 1990s) coupled with anemic labor demand (delayed adoption of ICT, China entry, €-related fiscal contractions)

2007-2015

Low/negative productivity and hours growth due to labor demand leftward shifts, like in all Eu countries with the exception of Germany which did well and Spain where productivity rose in parallel with above-average reduction in hours.