The Italian growth problem

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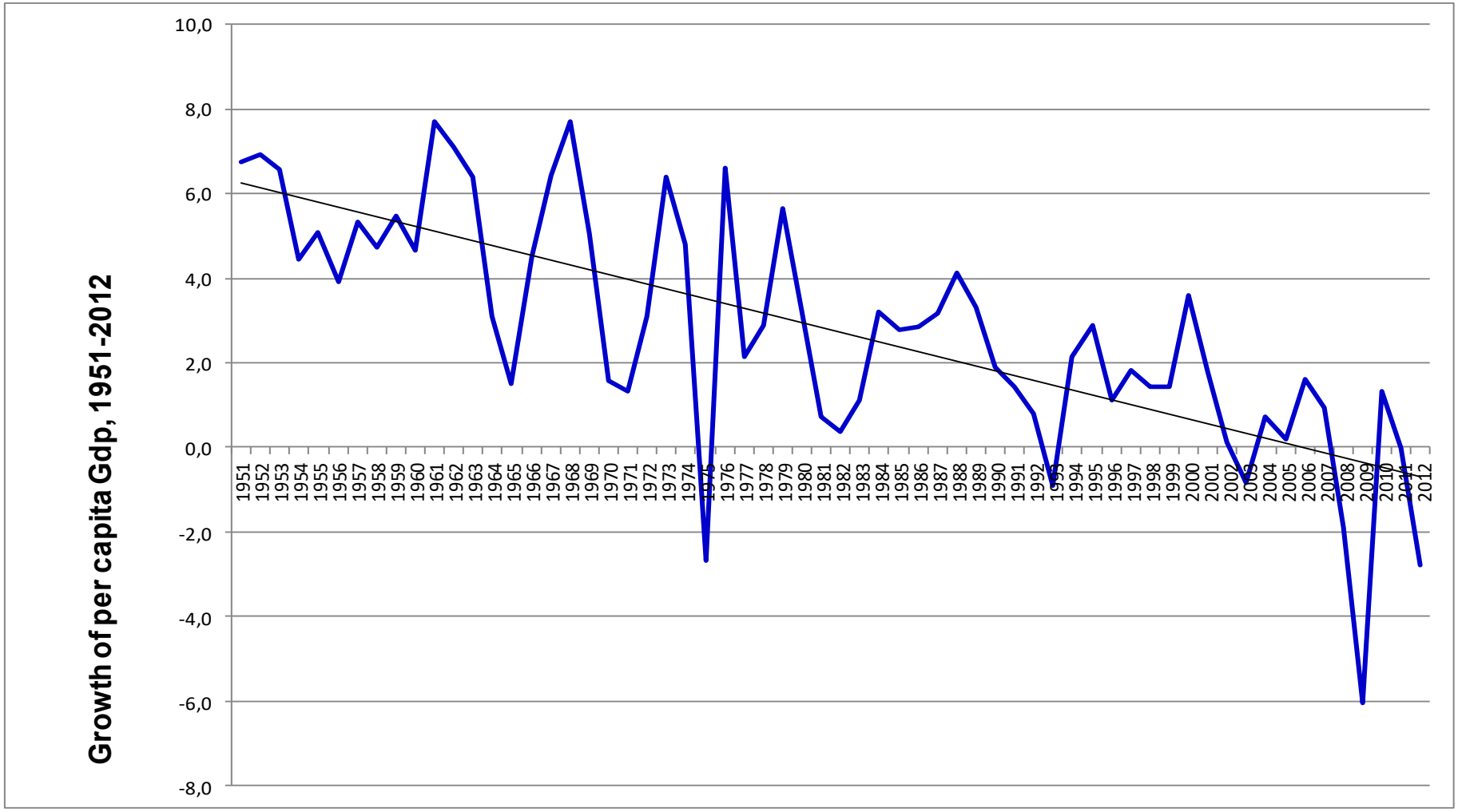
Italy: a gradual growth slowdown

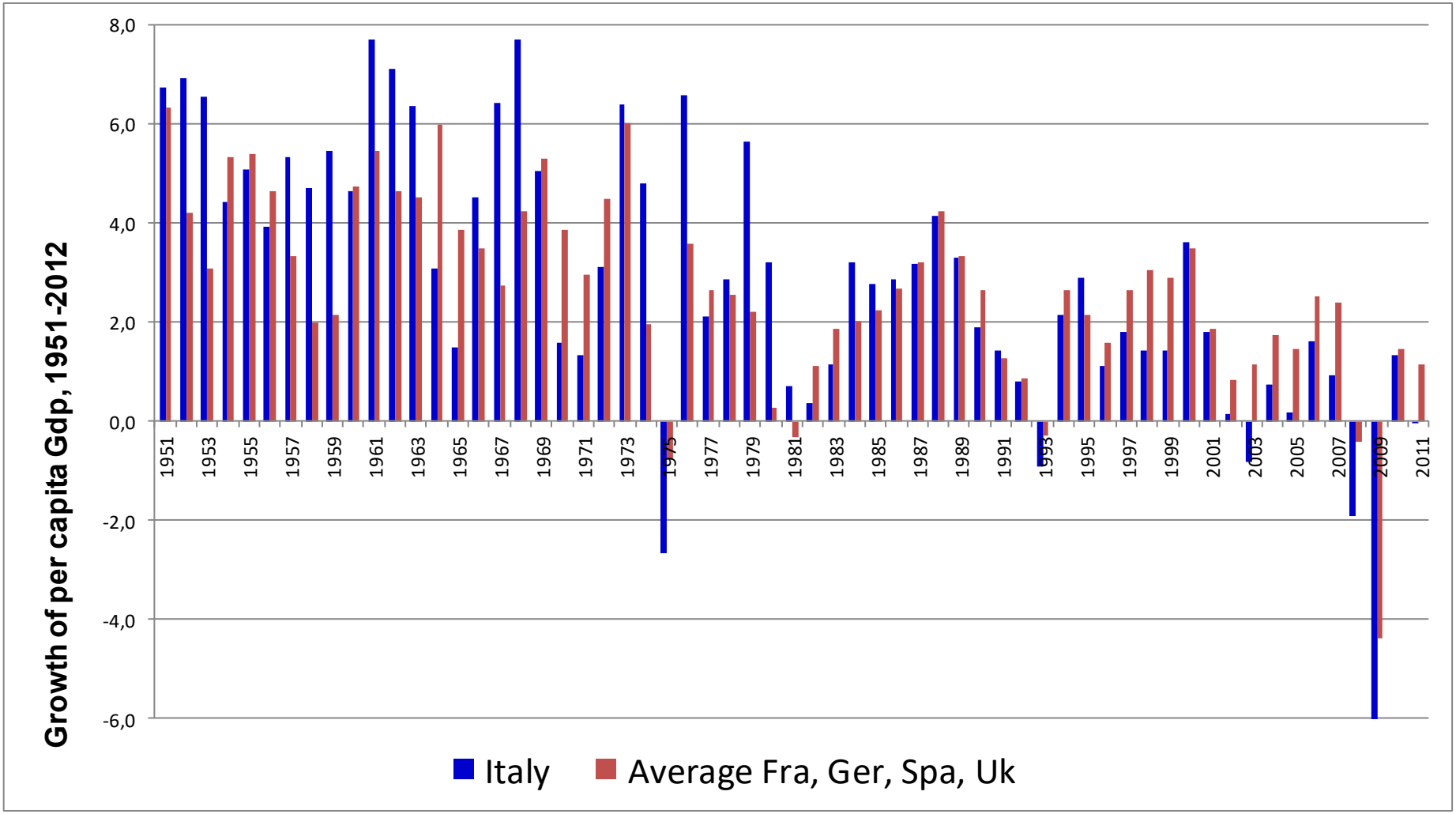


Average yearly growth in the '50s: 5,5%. Down by some 1 ppt per decade, since then. Potential growth zeroed as of today.

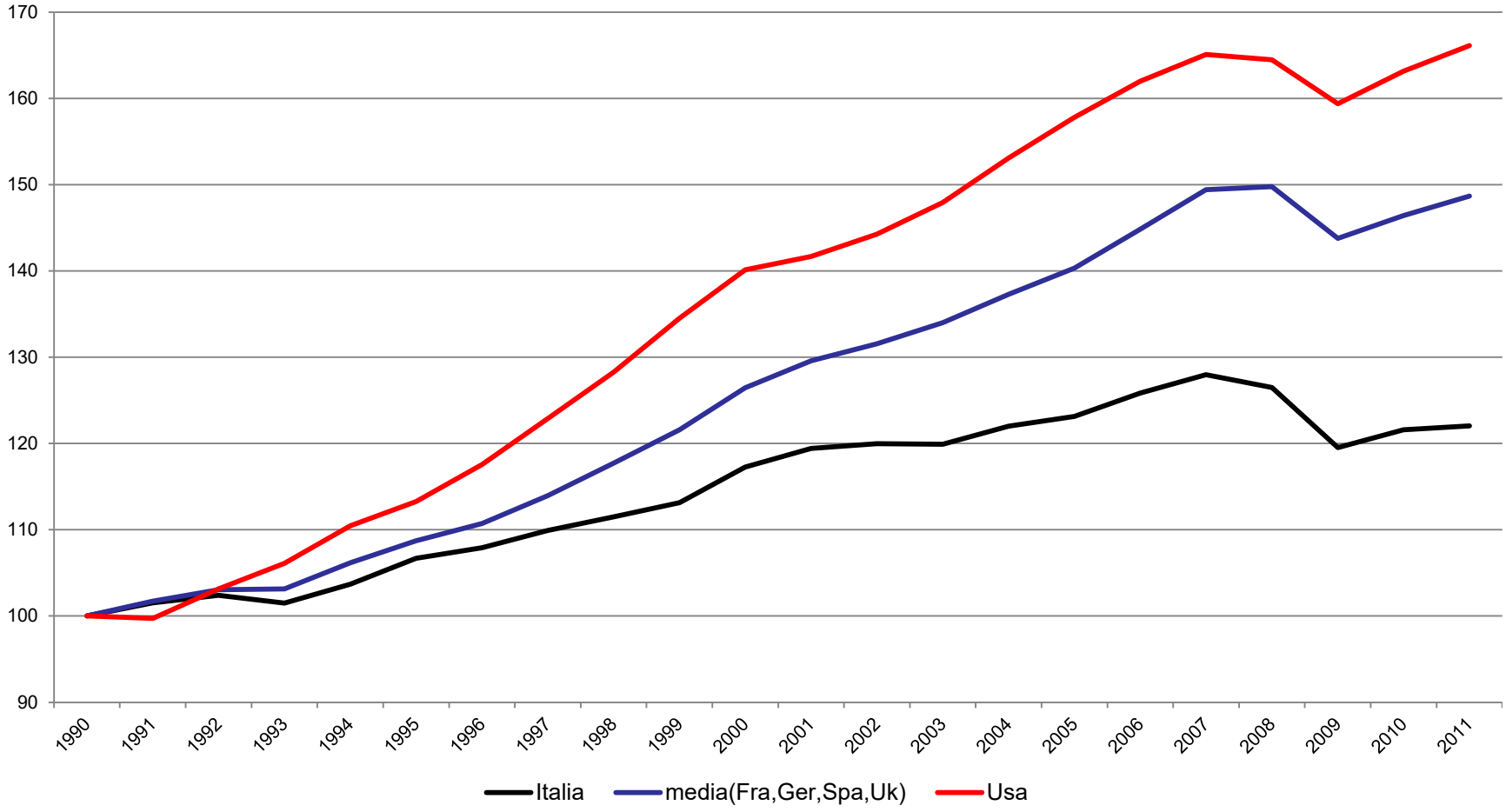
Unexpected stop

- The slowdown was expected
- In the post-war period, Italy benefitted from the «catching-up» effect
- Cheap labor, adopt technologies from leaders
- Italy was the China of the fifties
- Problem: it did not slow down: it almost stopped!

Slowdown More pronounced for Italy than for other large EU countries. End of grace period: ≈ early 1990s



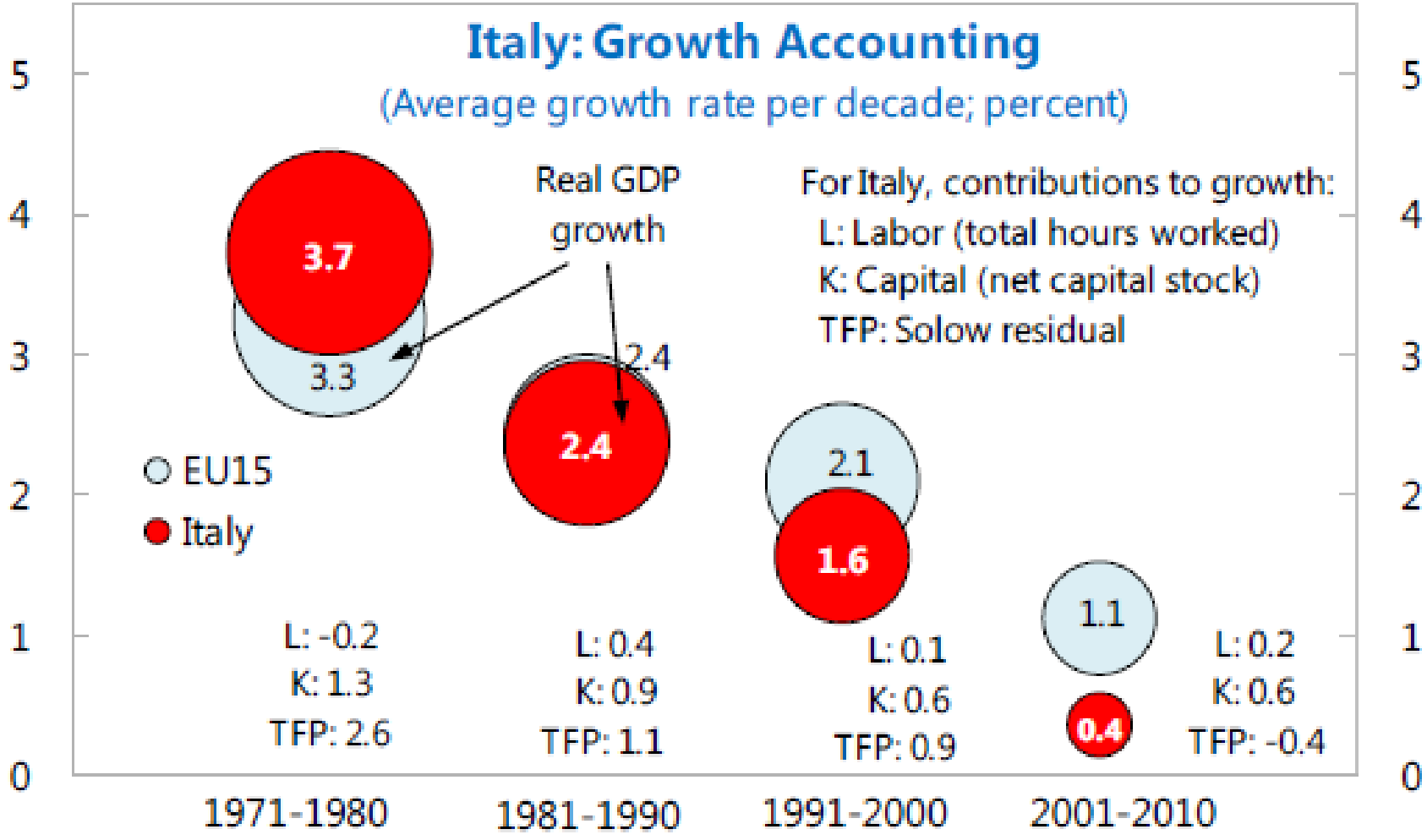
Gdp growth since 1990



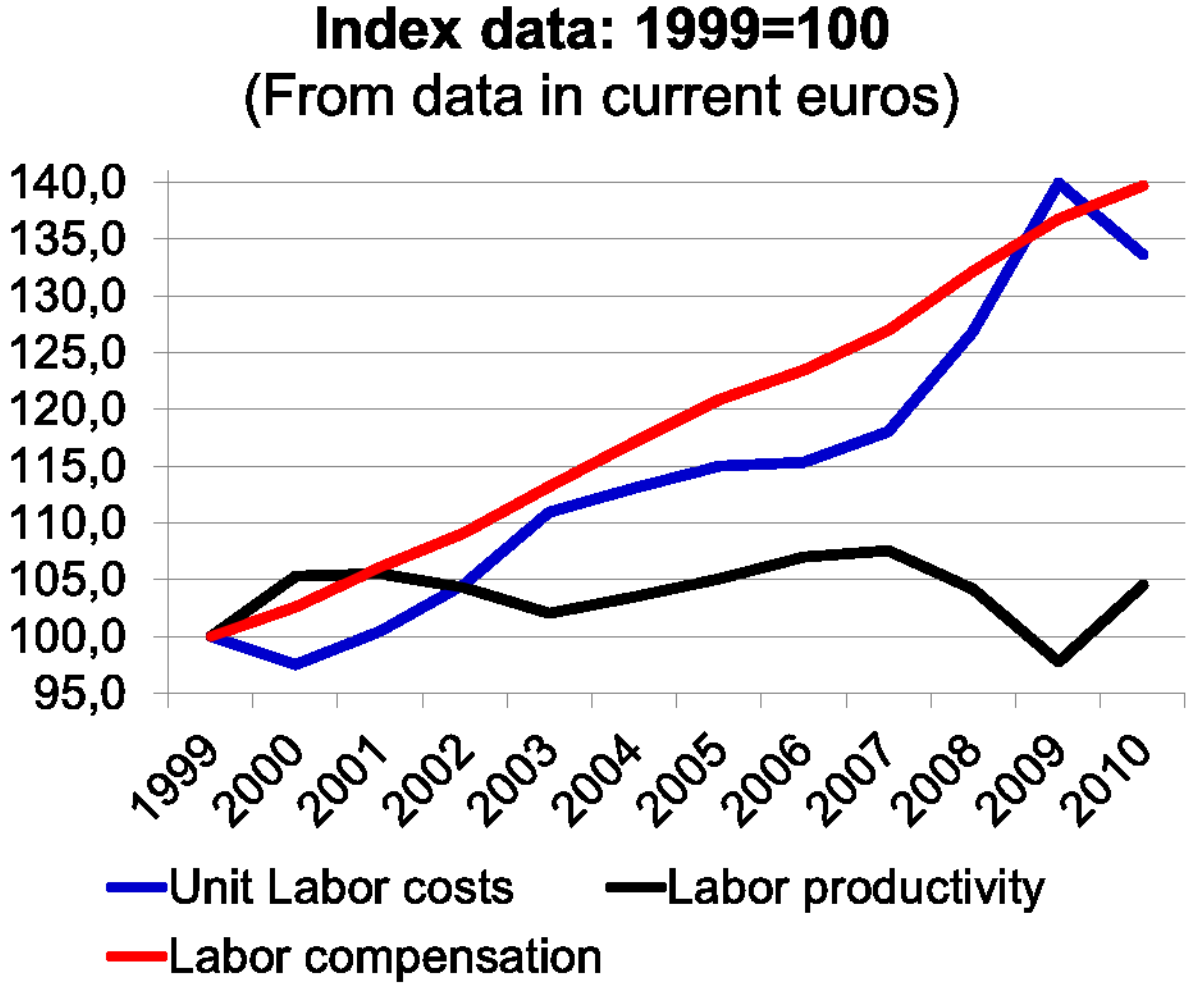
Mostly a question of productivity growth disappearance

Growth rates	Per capita Gdp	Gdp per hour worked	Hours per potential worker	Potential workers per capita
1971-80	+3.2	+2.9	+0.3	+0.0
1981-90	+2.3	+1.7	+0.0	+0.6
1991-00	+1.5	+1.5	+0.2	-0.1
2001-10	-0.2	+0.1	+0.0	-0.3

Role of TFP growth



Stagnating productivity + rising wages = loss of competitiveness



Italy's manufacturing unit labor costs rising very fast with the euro

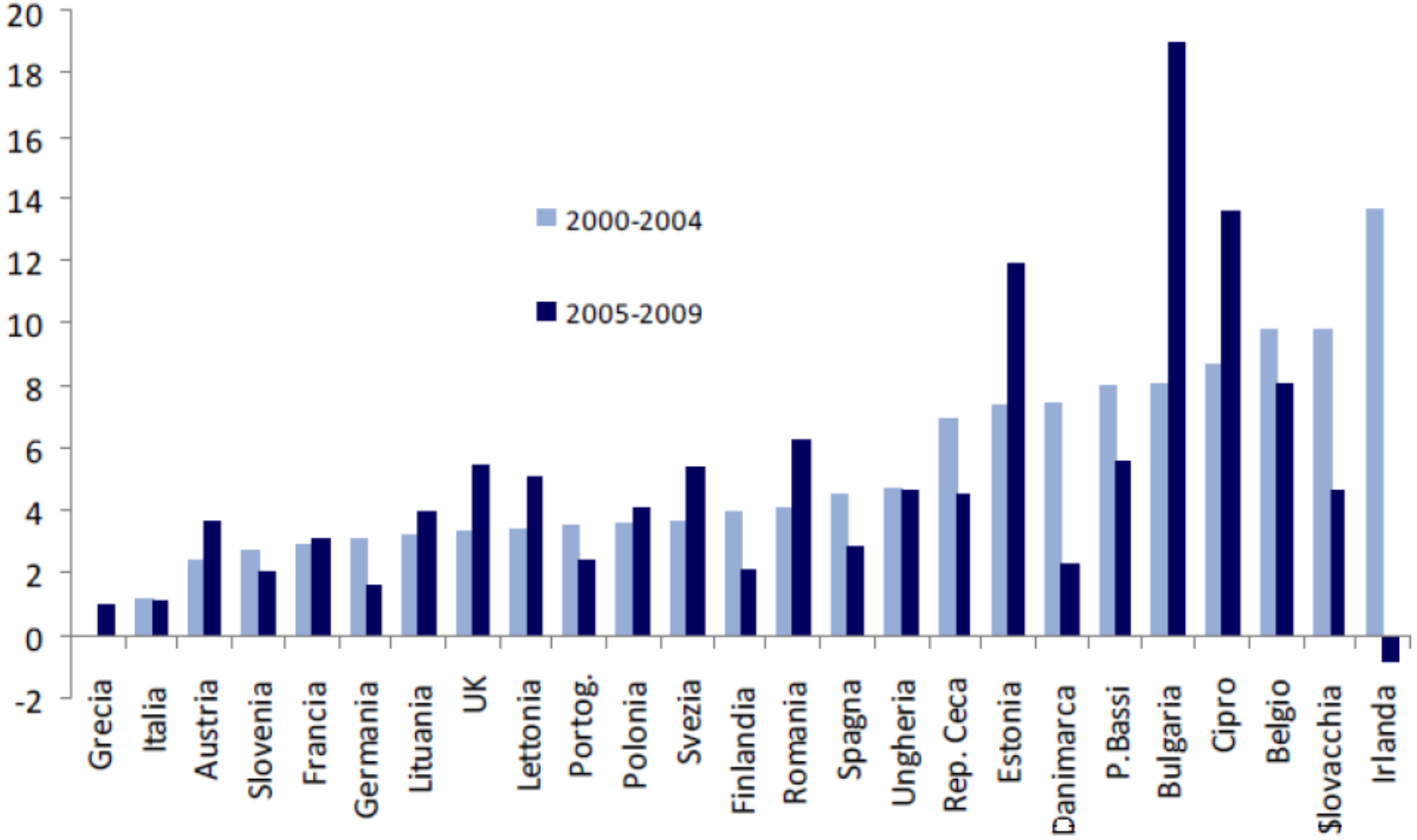
- 1999-2010: +33.6

Why so fast?

- Wages up by 39%
- Labor productivity up by a mere 5% (0% since 2000)

E.g. Germany: unit labor costs stayed constant, productivity and wages up by 28%

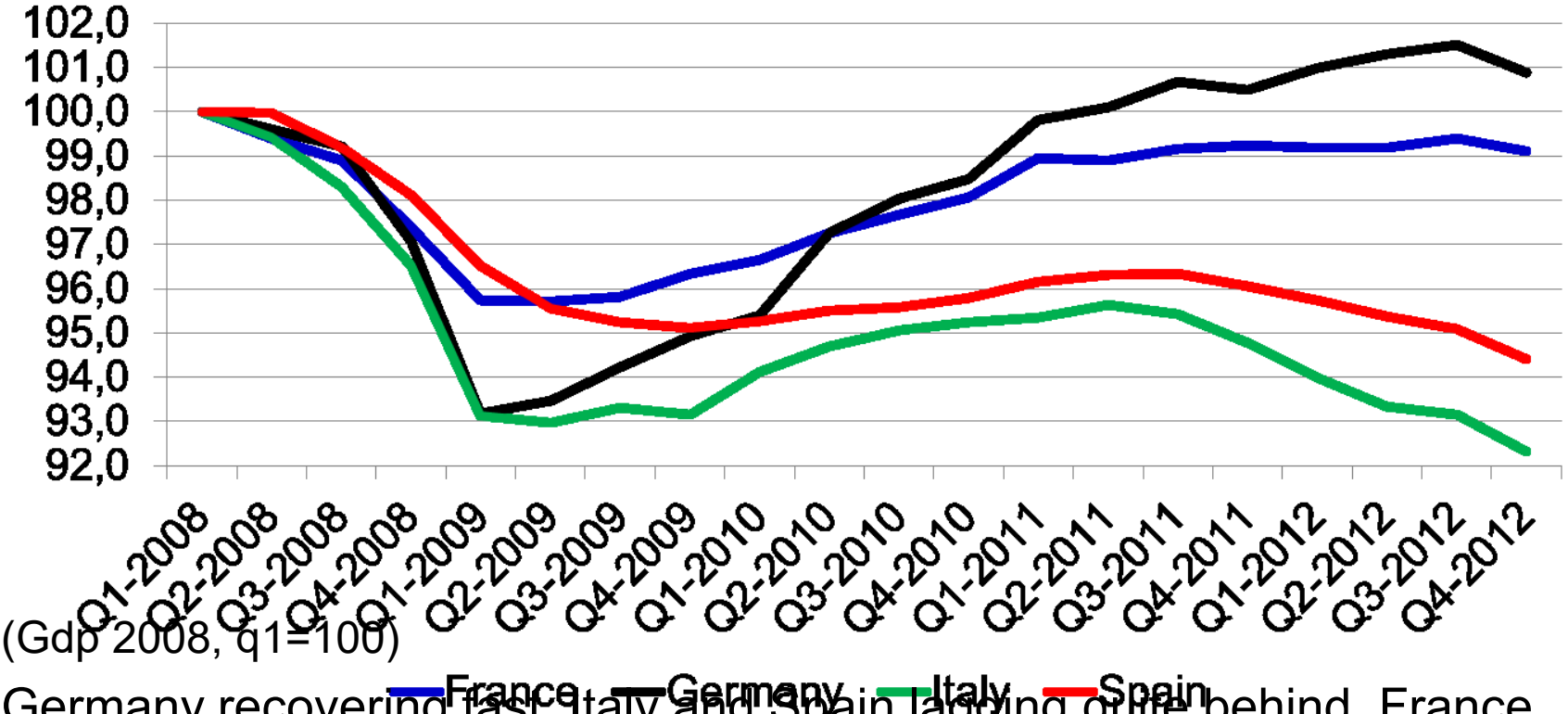
FDI (% of GDP)


20
18
16
14
12
10
8
6
4
2
0
-2
2000-2004
2005-2009
Grecia
Italia
Austria
Slovenia
Francia
Germania
Lituania
UK
Lettonia
Portog.
Polonia
Svezia
Finlandia
Romania
Spagna
Ungheria
Rep. Ceca
Estonia
Danimarca
P.Bassi
Bulgaria
Cipro
Belgio
Slovacchia
Irlanda

So Italy's growth stopped long before the current crisis.

Then the Great Recession came through, in two halves.

First half of the crisis (2008-09): common shock
Second half (2011-12): for Italy and Spain only

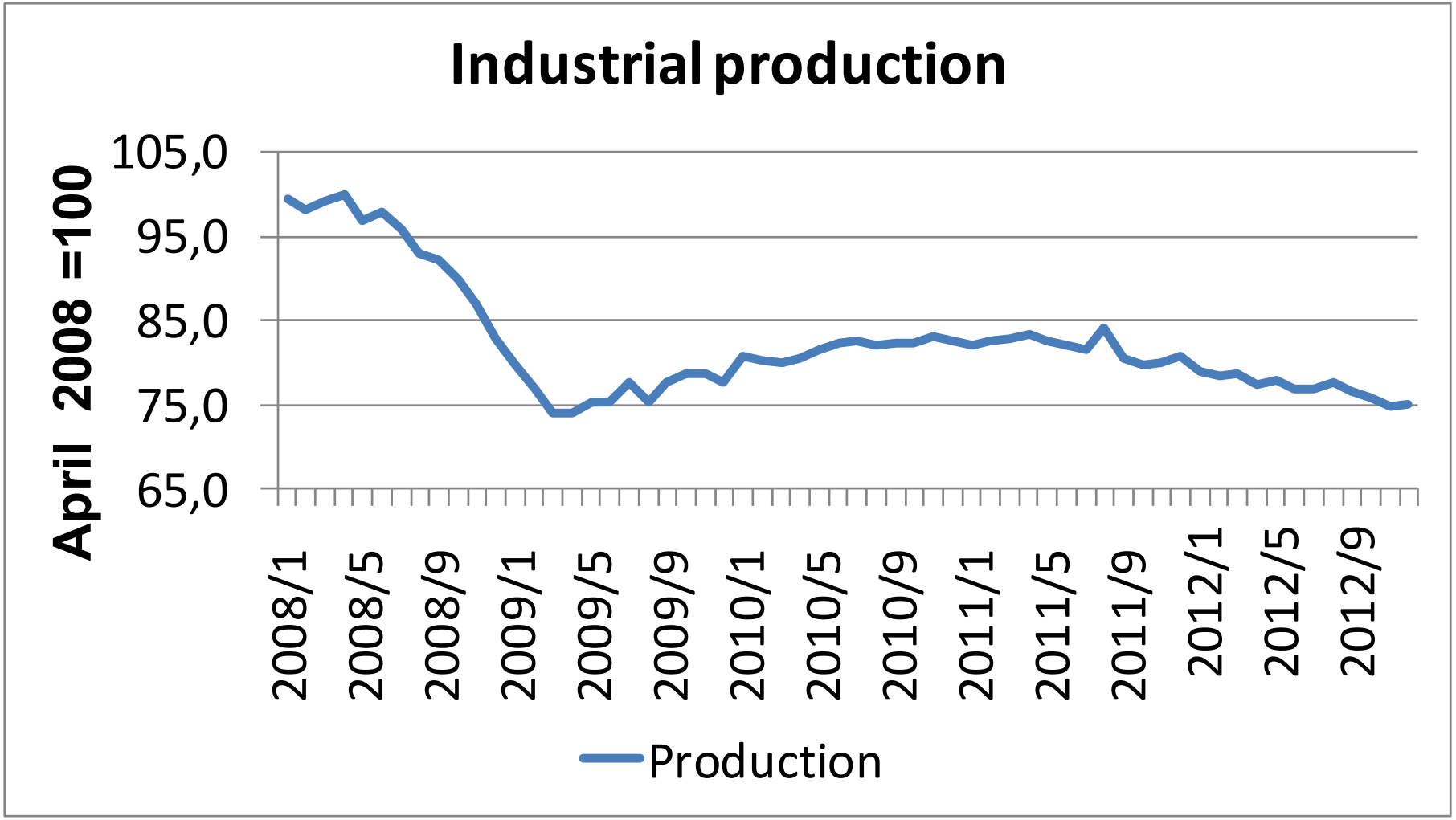


(Gdp 2008, q1=100)

Germany recovering fast, Italy and Spain lagging quite behind, France in between.

Italy's industry hit very strongly during today's crisis

One fourth of Italy's industrial production left on the ground. In two waves.



Yet domestic and external markets, two worlds apart

Italy, Industrial production	Total	National	Abroad
April 2008	100.0	100.0	100.0
April 2009	78.0	80.8	71.6
April 2011	92.5	91.2	95.7
April 2012	89.3	85.4	98.1

- Turnover from abroad is at -2 ppts from before the crisis
- Turnover from domestic markets stuck at -15 ppts from before

This is where the positive data on trade balances come from

Source: Istat

Why Italy doesn't grow, in a nutshell

Diagnosis - Italy is:

- a rich country (Still below Eu average, yet twice as much rich as in 1970)
  - a demographically old country (1/5 of total population above 64; like Germany and Japan)
  - a densely populated country (206 inhabitants per km^2; high-Gdp Oecd countries =30)

  Implication

  • In a rich and densely populated country, opportunities of "extensive growth" already exploited in the past

  • Growth can only come from TFP: innovation, new products, better human capital…
- So the key question is: what is preventing the Italian economy to perform like other industrialized countries, that keep growing even if «rich and old»?

Is it a question of sectoral specialization?

- Surely, being specialized in low tech productions does not help
- But is it just *the issue?*
- No! The Italian performance is lower also within sector
- So it is a more general problem of the whole production system

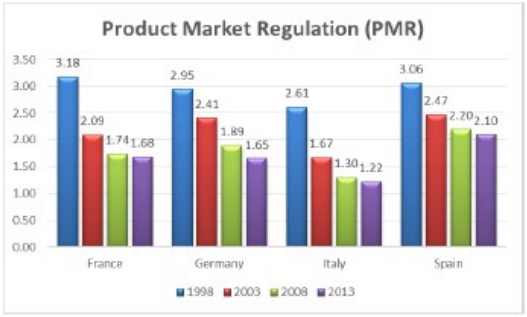
Productivity growth by sector

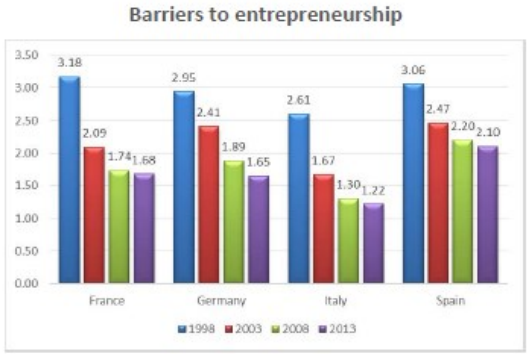
		Francia	Germania	Italia	Usa
		1996-2010	1996-2010	1996-2010	1996-2007
Total		1.30	1.54	0.36	1.97
Total Manufacturing		3.22	2.79	0.73	5.05
o/w	Food. Beverages & Tobacco	0.63	-0.86	0.80	0.84
	Textile & Fabric Mills	3.53	3.11	1.35	3.79
	Chemicals	3.63	5.04	1.67	5.15
	Optical and Electrical Equipment	5.98	6.64	0.61	16.98
	Machinery	3.41	0.56	0.72	3.67
	Transportation Equipment	2.04	2.43	0.40	5.03
Utilities (electrical power, natural gas, water)		0.70	2.47	0.43	2.77
Construction		-0.91	-0.03	-1.20	-3.10
Market services		1.11	1.06	0.19	2.60
o/w	Trade	1.33	2.74	0.10	4.33
	Telecommunication	9.32	9.38	8.44	5.20
	Finance and Insurance services	2.13	0.31	2.76	3.04
	Professional, Scientific, Technical and Administrative Services	-0.19	-1.77	-2.03	2.00

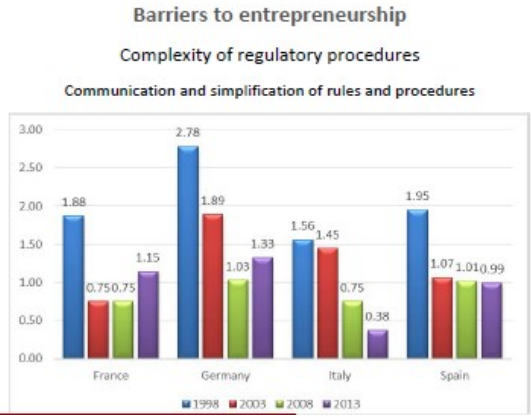
Have the endowmnents got worse?

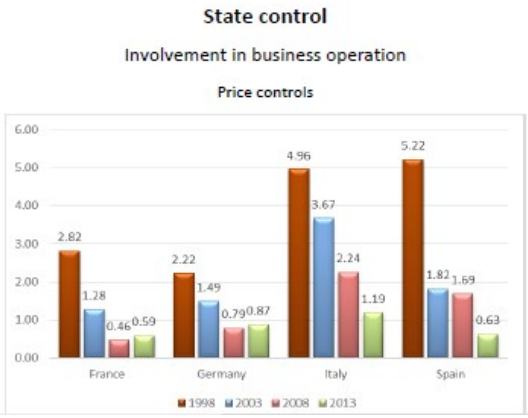
The country undetook many reforms

- Product and labor market regulation, pensions, public expenditure, share of graduates….









Perché l'economia ristagna?

- Il «puzzle» è semmai perché nonostante tutto ciò la crescita è peggiorata
- Due co-indiziati:
  1. Un settore pubblico che «sterilizza» nella pratica gli effetti delle riforme (vedi indicatori Banca Mondiale *Doing business* basati sulle percezioni che dicono una storia diversa da quelli OCSE basati sui regolamenti)
  2. Un sistema produttivo con caratteristiche che poco si adattano al nuovo contesto economico

Traditional Model: Small Business

- Well-known prevalence of small businesses in Italy
- Common to all sectors
- Successful model in traditional sectors with medium-low level of technology
  - Economies of scale not much relevant
  - Strong efficiency in production, thanks to several externalities (industrial districts)
  - Role of exports; competitive devaluations

Table 1. *Firm size as a percentage of the EU15 average*

	EU15	DE	DK	ES	FI	FR	IT	SE	UK
Real Estate	81.66	0.76	0.22	0.37	0.94	0.91		1.32	
Wood	103.96	1.90	1.75	0.34	3.21	0.68	0.21	1.63	0.93
Leather	105.10	0.48			0.77	2.05	0.51	0.47	2.21
Construction	106.72	1.23	1.17	1.06	1.86	1.32	0.38	3.36	0.86
Textile	175.35	1.86	0.61	0.65	1.06	0.95	0.48	0.49	1.96
Hotel & Restaurant	182.68	0.83	0.71	0.33	1.31	0.84	0.43	0.78	3.56
Other Services	204.85	1.40		1.22	2.44	0.72	0.68	1.08	1.38
Business Services	254.28	1.14	1.12	0.63	0.77	1.40	0.30	0.70	1.23
Paper & Publishing	300.65	1.57	1.63	0.51	2.99	0.72	0.60	1.28	0.97
Metal Prod.	305.03	1.55	0.45	0.59	1.71	1.05	0.48	1.22	0.90
Non-met. Prod.	319.66	1.84	1.16	0.50	0.79	1.35	0.44	0.81	1.38
Food	338.66	0.91	1.95	0.58	1.68	0.84	0.75	1.69	2.46
Trade	343.04	1.35	1.11	0.44	0.63	0.76	0.16	0.62	2.91
Transport	347.03	1.57	0.51	0.60	1.02	1.32	0.70	0.89	1.35
Rubber	394.55	1.65	0.50	0.77	0.67	1.29	0.44	0.53	0.72
Machinery	406.08	1.33	1.09	0.56	0.89	1.44	0.94	1.09	0.92
Other Manuf.	532.43	2.00	0.36	0.11	0.32	0.31	0.09	0.22	0.30
Chemical	728.99	1.72	0.94	0.43	1.06	0.87	0.70	0.84	1.07
Elect. Mach.	780.51	1.49	0.30	0.46	0.78	0.79	0.52	1.48	0.62
Finance	1163.84	0.94	0.66	1.15	0.92	1.03		1.53	1.55
Petroleum	1196.54	1.40				1.15	0.87		
Transp. Equip.	1742.63	1.93	0.31	0.67	0.42	1.14	0.88	0.84	0.72
Total	336.33	1.58	0.97	0.58	1.06	0.98	0.42	1.13	1.58

What Has Changed?

1. Technology: ICT
   - New technologies best fitting in firms with a "standardized knowledge"
2. Globalization
   - New competitors with low production costs
3. Euro
   - Competitive devaluation no longer an option

Why Firm Size is Important?

- Pure price competition is not sustainable
- Firms with market power are favoured in the new competitive environment
- In manufacturing market power depends on product differentiation
- Typical case: high tech sectors
  - Competition on product innovation
  - Pagano-Schivardi (2003): business size is key to grow in innovative sectors
  - Italian comparative advantage in other sectors

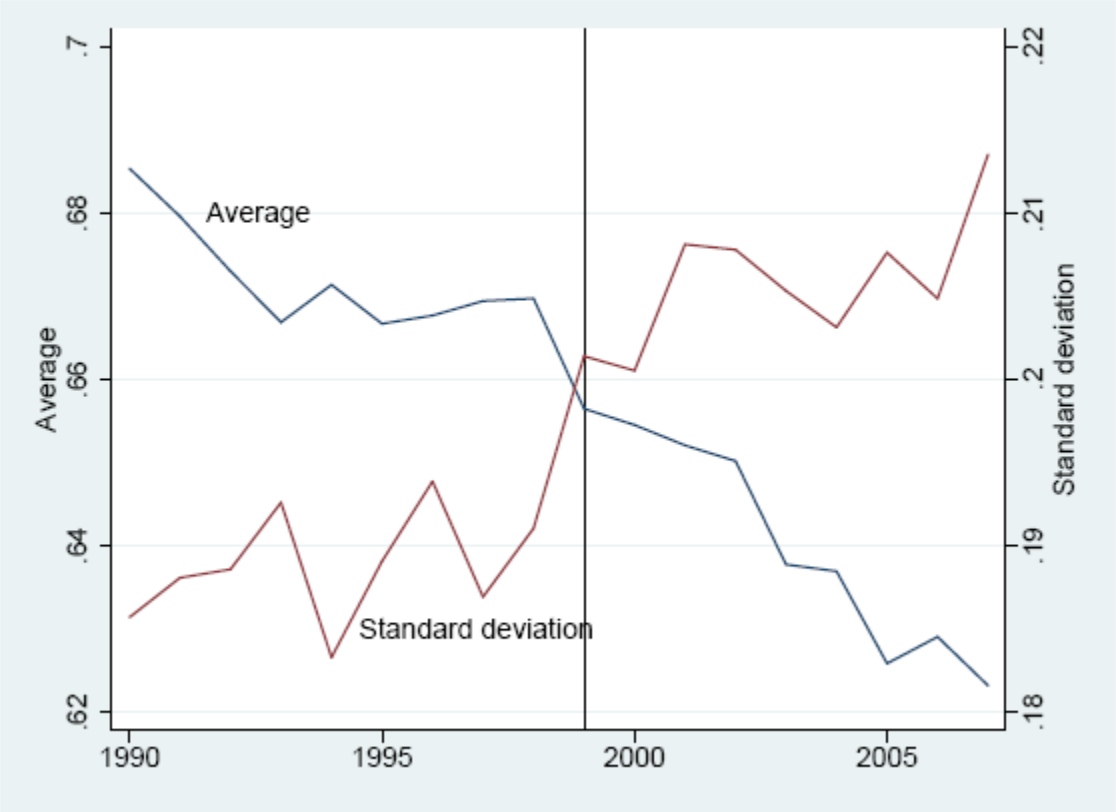
"Tertiarization" within Manufacturing Industries

- Nowadays scale is fundamental in all sectors
- Supporting evidence from a joint research project with Bank of Italy: successful manufacturing firms are moving their boundary closer to the "tertiary sector":
  - strategy focused on activities that support (precede or follow) the production process: engineering, branding, assistance and distribution
  - Resulting product differentiation reduces demand elasticity and allows to face international competition
  - Investment in intangible assets

"Tertiarization…": II

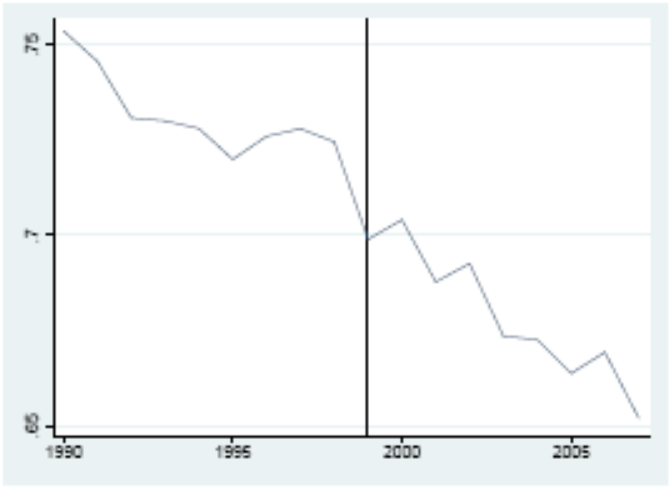
- Same arguments becoming relevant even in traditional activities
- Old model mainly based on production efficiency is failing
- Even in traditional sectors there is evidence that successful firms rely more on "tertiary" activities
- Success often depends on factors unrelated to the strict manufacturing process
- Evidence of an ongoing process?

Fig. 2: Average Share of Blue Collars in Italian Manufacturing

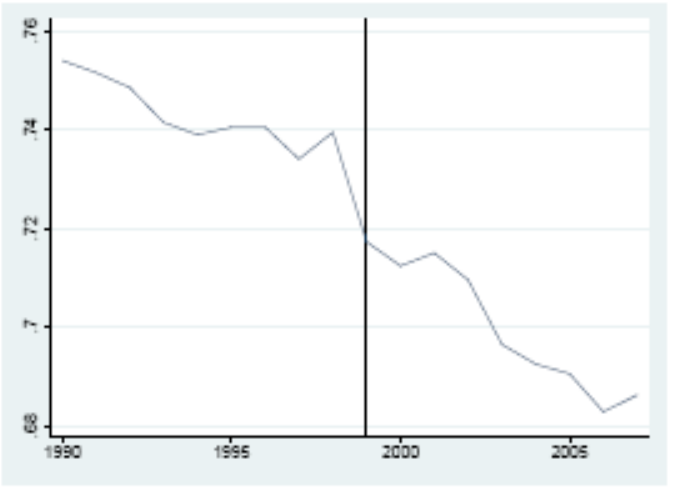


Source: Bugamelli, Schivardi & Zizza, 2008, "The euro and firm restructuring"

Fig. 3: Blue Collar Share by Technological Intensity

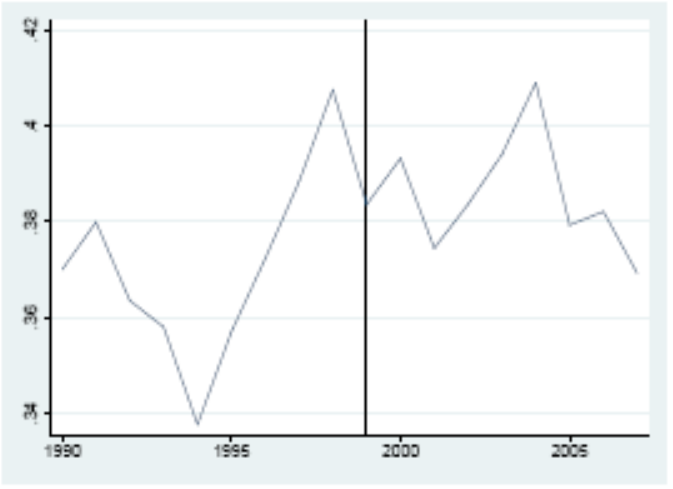


(a) low tech



(b) medium-low tech

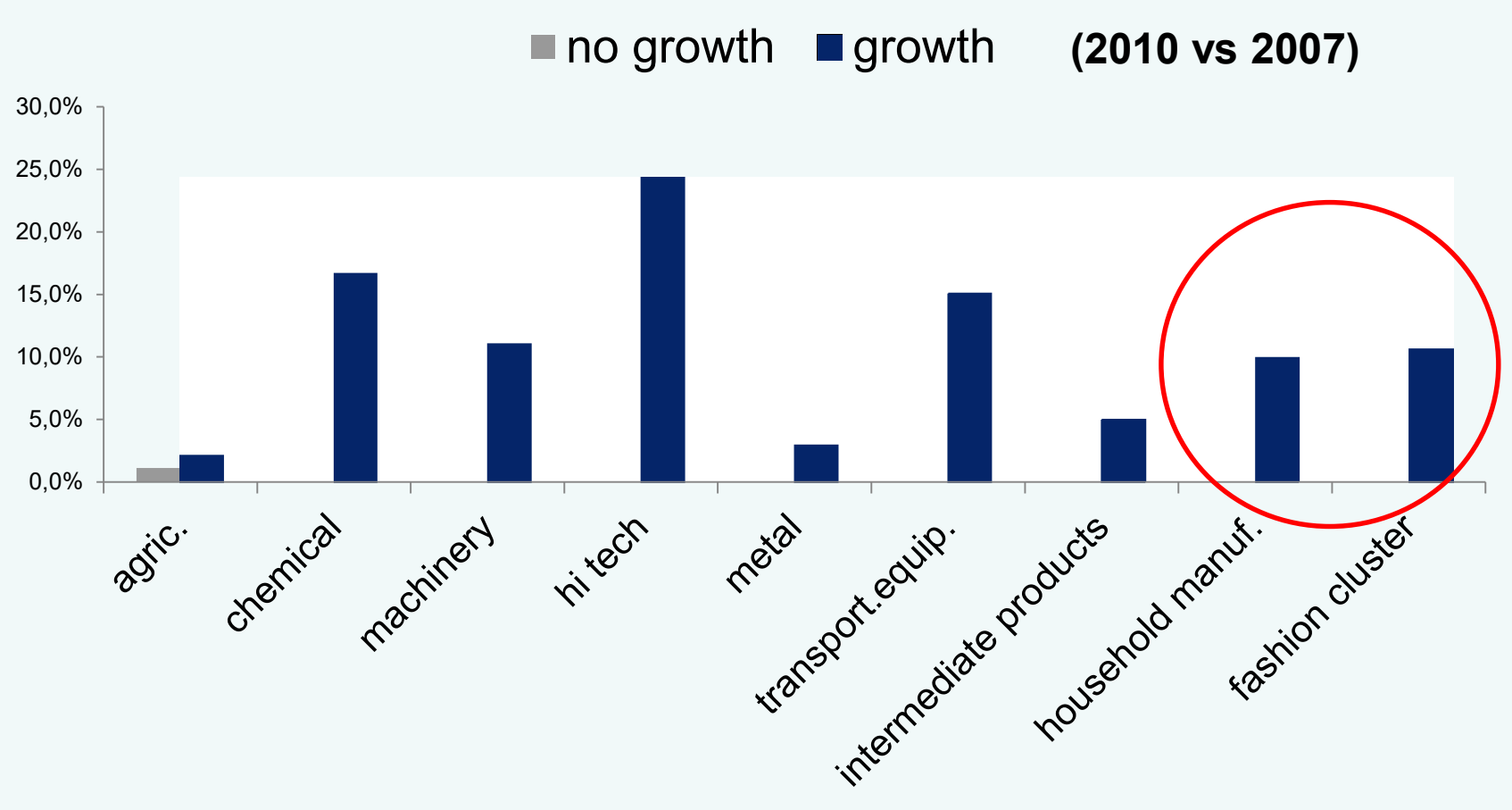
(c) medium-high tech



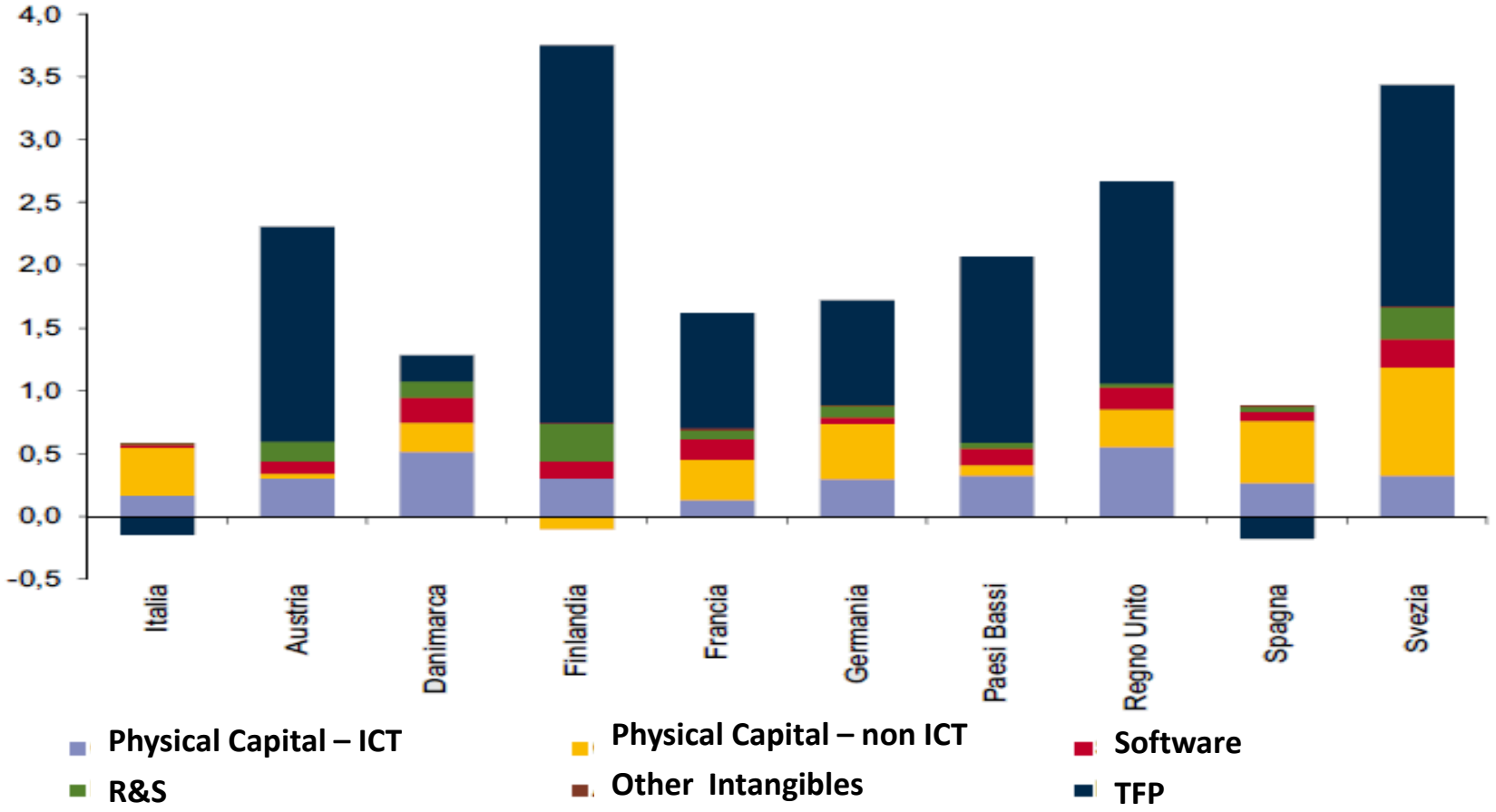
(d) high tech

Intangible Assets in SME

as % of total assets for firms with sales btw 2-50 €mln



At the aggregate level, reasons for low growth performance



Result #1: Key Role of Intangibles vs. Physical Capital

- *Implications for:*
  - *Aid to firms – 488, Legge Sabbatini*
  - *Tangibles vs. Intangibles Infrastructures*
  - *Institutional framework: Intangibles need more legal protection*

Firm Size, revisited

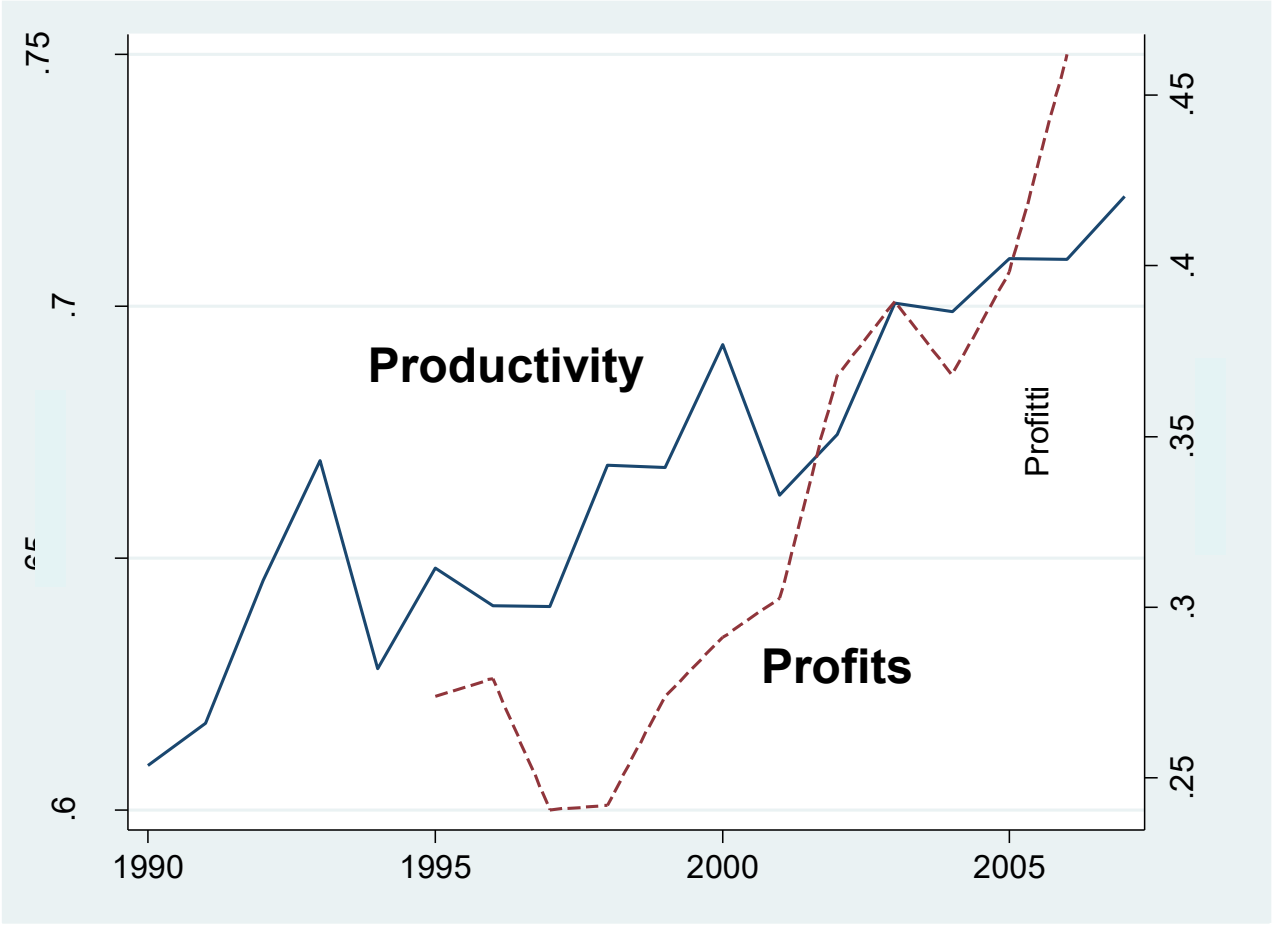
- Fixed costs are increasingly fundamental
- Size also important in terms of “customer base” and brand awareness
- Key is not to have firms with many employees
- … but firms investing in intangible assets to achieve market power
- Example: Nero Giardini

(In)Efficient Resource Allocation

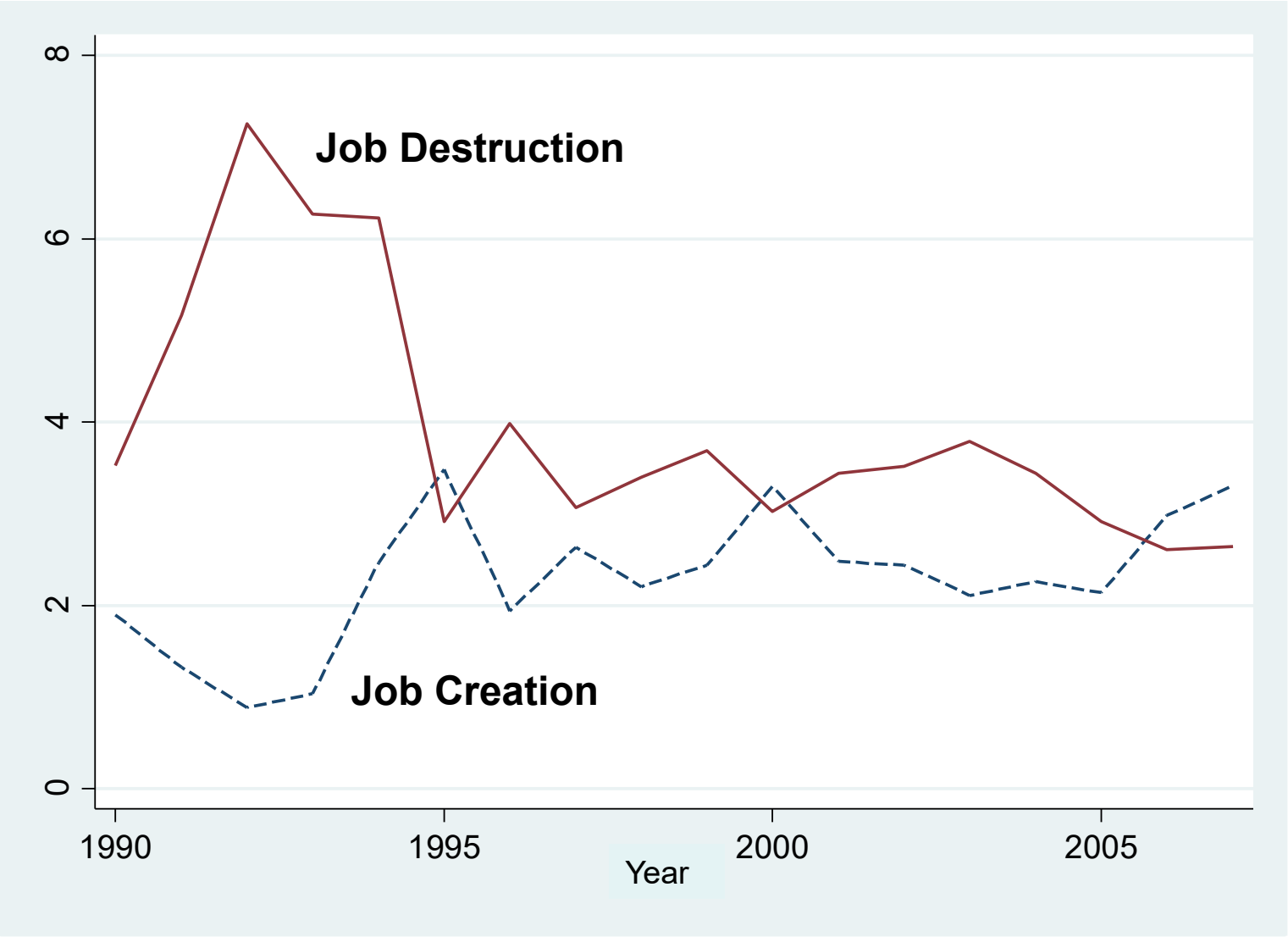
- Pareto efficiency: good firms grow, bad firms exit
- Italy: lack of Pareto efficiency?
- Evidences of restructuring before the crisis:
  - Strong increase in productivity and profitability dispersion
  - No evidence of a job reallocation increase

… see next two figures

Productivity and Profitability Dispersion across Firms



Job creation and destruction rates



Missing Growth Opportunities

- Size is not the problem, rather:
  1. Growth opportunities not exploited
  2. Bad firms survive in the market
- What does hinder allocation efficiency?
- A long list: fiscal burden, labour market, bureaucracy …

Result #2: Importance of Allocation Efficiency/Business Growth

- *Implications:*
  - *Policies to support businesses*
  - *Welfare policies enabling factors mobility*

Corporate governance, finance and management

- Intangible Assets:
  1. High Risk
     - Family owned businesses feature low diversification
     - Require equity investment
  2. Require specific managerial skills
     - Need to hire managers outside the family circle
  3. Require huge financial resources
     - Size and capitalization
- Italian businesses lack these characteristics: SME form the main structure, but cannot be left alone and the framework must be expanded

Focus: Corporate governance and finance

- Two related and important aspects
- Case studies: family entrepreneurs very cautious in adopting growth strategies
- Priority is not to loose firm control
- Tend to be hostile to equity and managerial outside contributions
- Difficulties in management turnover, though with some positive recent evidence (Tab.4, Fig.4)

Firm Size

% of exporting firms, by size

Size Class	AUT	FRA	GER	HUN	ITA	SPA	UK
10-19	69.8	44.7	45.7	58.0	65.4	51.2	54.9
20-49	63.8	59.1	65.4	64.7	73.3	63.5	62.8
50-249	88.6	75.4	78.2	79.3	86.6	76.2	76.8
more than 249	90.8	87.6	84.0	97.4	92.6	88.0	80.7
Total	72.6	57.9	63.4	67.3	72.2	61.1	64.0

Source: The Global Operations of European Firms, Navaretti Bugamelli Schivardi

- Small Italian firms more export oriented but size is a weakness
- Export would increase by 37% with the German size structure

Control and Finance, 2

- Market for corporate control undeveloped
  - Family owned firms are good in some context, bad in other
  - Especially not well behaving when facing the opportunity to grow in scale
  - Bank debt is good to finance physical capital, not for intangibles
  - More equity needed

Ownership and Finance

Ownership and Financial Structure of Firms in 7 European Countries, 2008

	AUT	FRA	GER	HUN	ITA	SPA	UK
% of firms:							
Foreign Ownership	12.8	10.3	6.3	19.8	4.1	4.5	12.2
Venture Capital	2.2	1.9	1.3	0.9	0.5	1.0	5.7
% Bank debt to Total Debt	87.0	78.7	83.9	82.9	87.5	86.4	65.2

Source: The Global Operations of European Firms, Navaretti Bugamelli Schivardi

Ownership and Control

Family Owned & Family Managed Firms			
	Family owned Firms (%)	*Family Owned Only:*	
		CEO from the family (%)	Management within family (%)
France	80.0	62.2	25.8
Germany	89.8	84.5	28.0
Italy	85.6	83.9	66.3
Spain	83.0	79.6	35.5
UK	80.5	70.8	10.4

Source: Bugamelli et al., Bank of Italy, EFIGE data

Result #3:
Business Ownership, Control and Finance model exhibit excess dependence from family and banking system

- *Implications:*
  - *Market for corporate control*
  - *Equity vs. bank debt*
  - *Institutional/ Foreign investors*
  - *Management*

“De profundis” for Small Businesses?

- Can Networks help overcome size weaknesses?
- Network Agreements: develop common investments in intangibles
- Much discussed
- It works for food brands
- Is it true in general? Common Brands? Distributional Networks?

An emerging hierarchy in Districts?

- A Leader is large enough to bear investment in intangibles
- It relies on a *fringe* of small traditional firms
- It would explain the transition toward simpler organizational forms (evidence in SOSE data)
- In line with Focus Groups on a strategic supplier
- Is there a role for Small Firms in an integrated productive system?

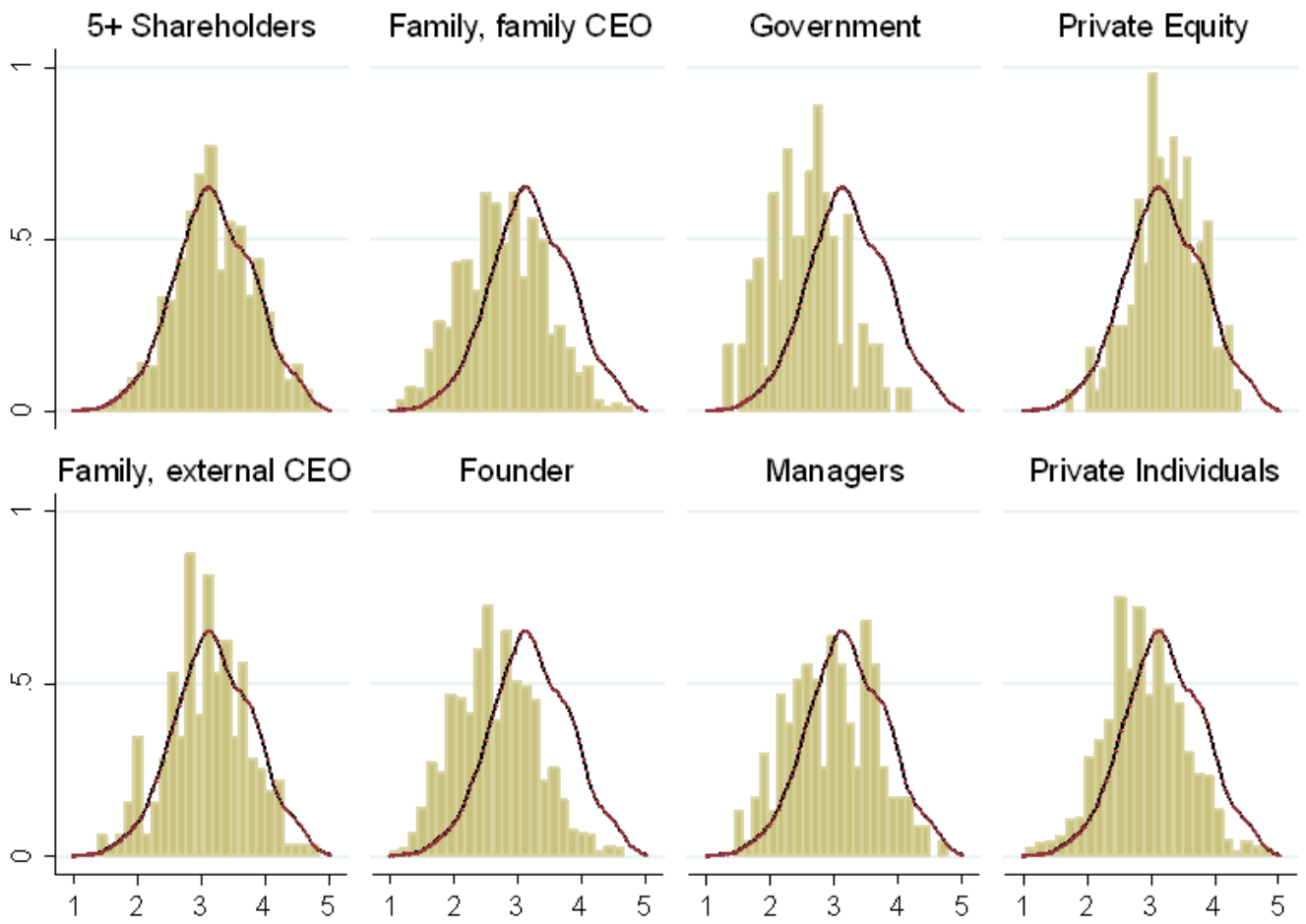
Debate on firm size

- Efficient systems consist of plural size and ownership structures
- No good system in general
- In the Italian system small-family-banks prevail
- Dimension is not a problem *per se*, but for missed growth opportunities

Industrial Relations

- Allocative efficiency is important
- … but firm size is a weakness
  - Fiat example: plants governability issue
- In family owned SME implicit contracts partly replace the lack of legal norms
- Large scale requires explicit contracts and enforcement

International evidence on managerial practices by ownership type



Source: WMS (World Management Survey), 21 countries

Facts #4:
Industrial Relations need a stable institutional framework

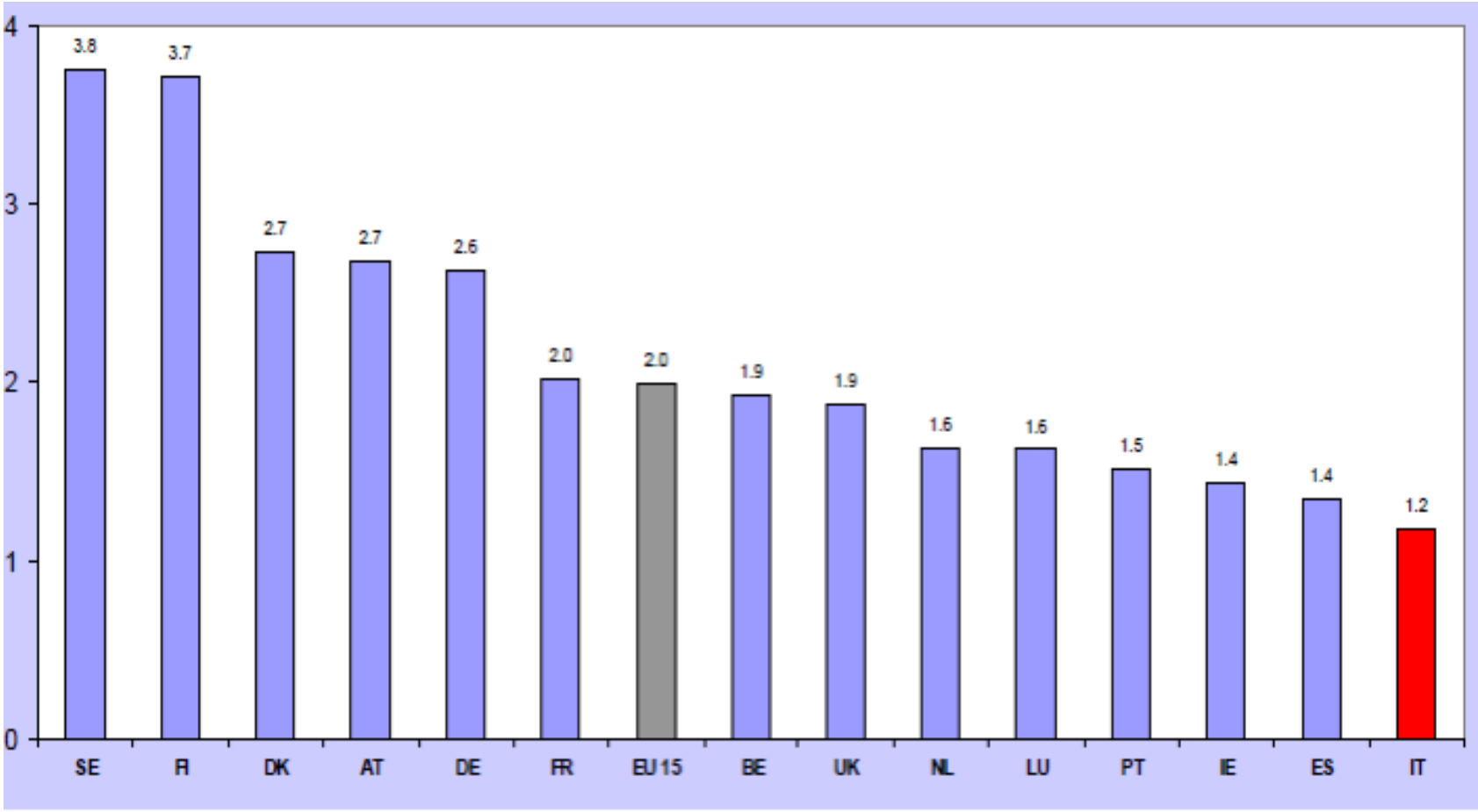
- *Implications:*
  - *Representative System*
  - *Labour market reforms*
  - *Legal system*

Innovation in the light of our theory

- We now move on to fucus on innovation using the «lenses» of the theory that we just formulated

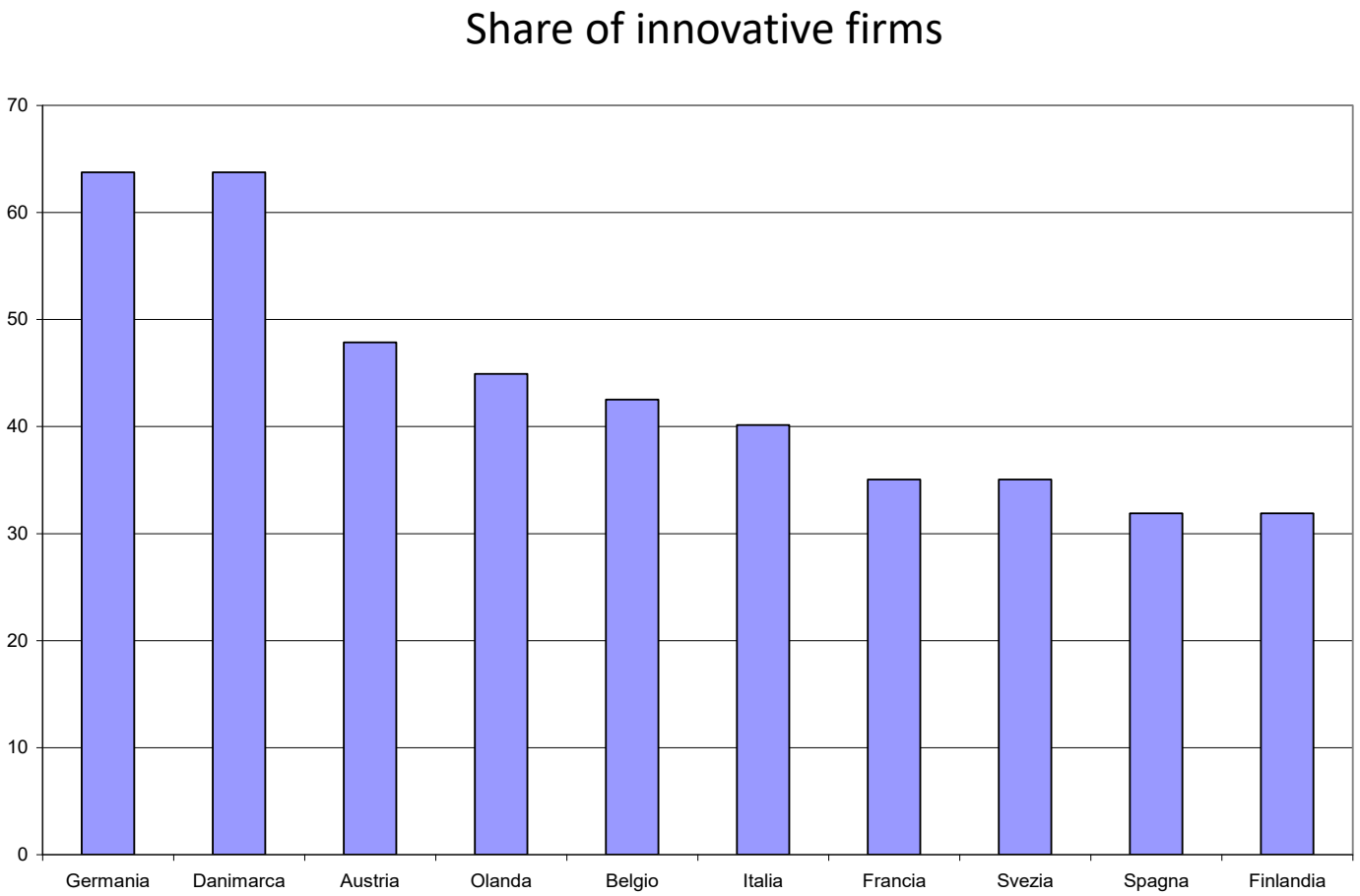
Large differences in R&D epxenditure across Europe

(share of GDP)



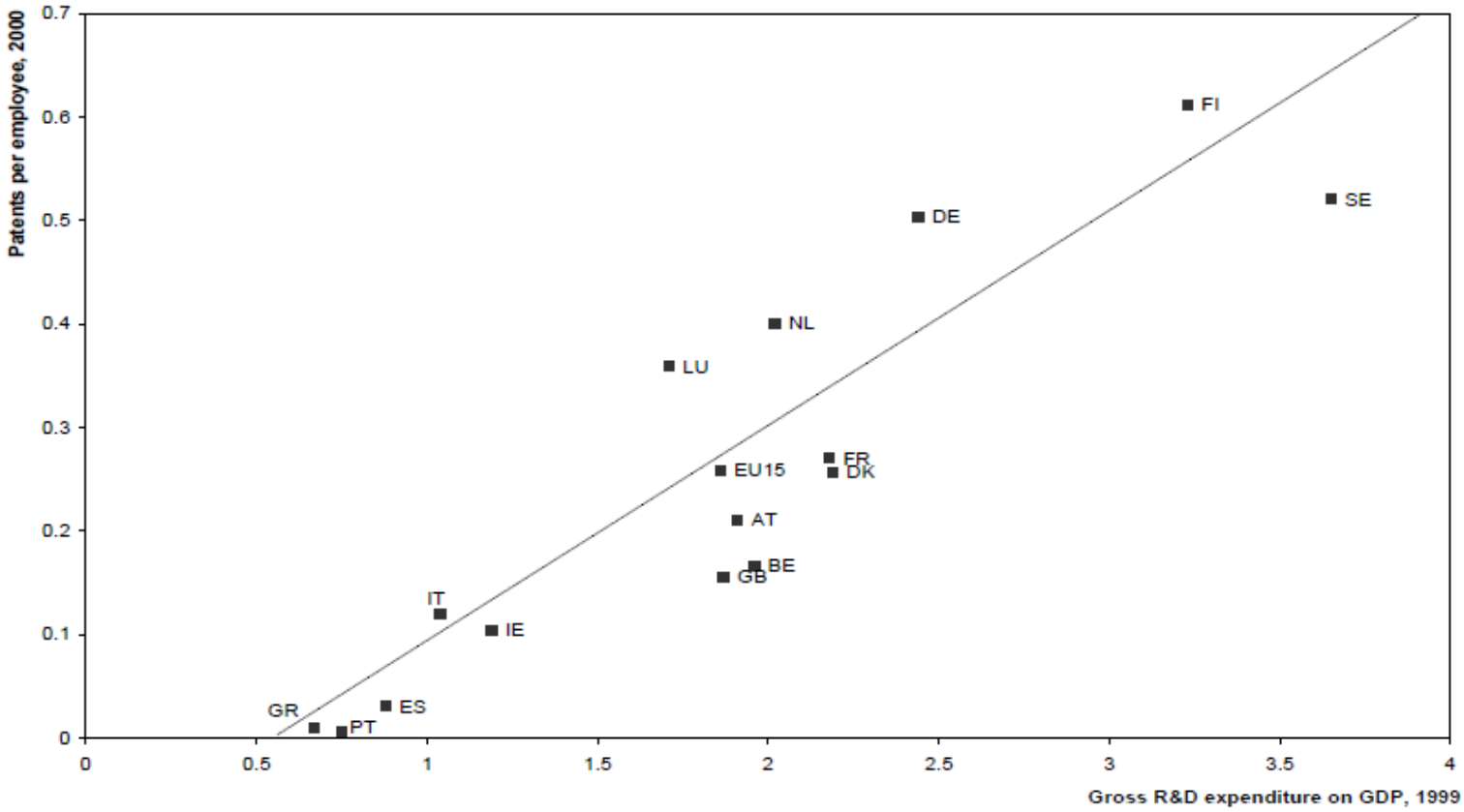
Source: OECD, 2008

More similarity in “innovativeness”



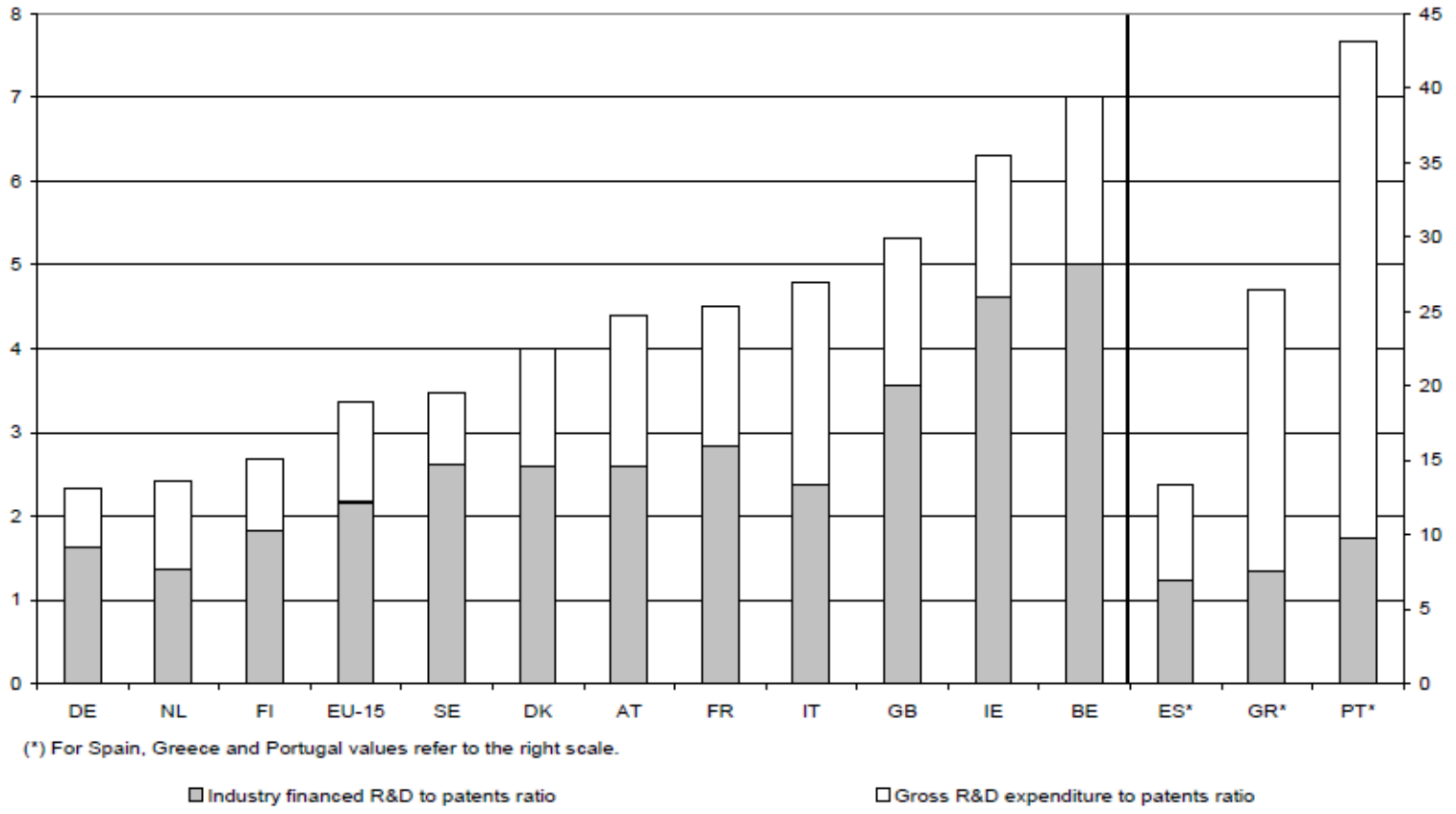
Source: CIS, 2008

Patents and R&D positively related



Source: Lotti-Schivardi (2005). Patents data are from the EPO; employment and R&D personnel data from the OECD Main Science and Technology Indicators database.

Large differences in efficiency of R&D

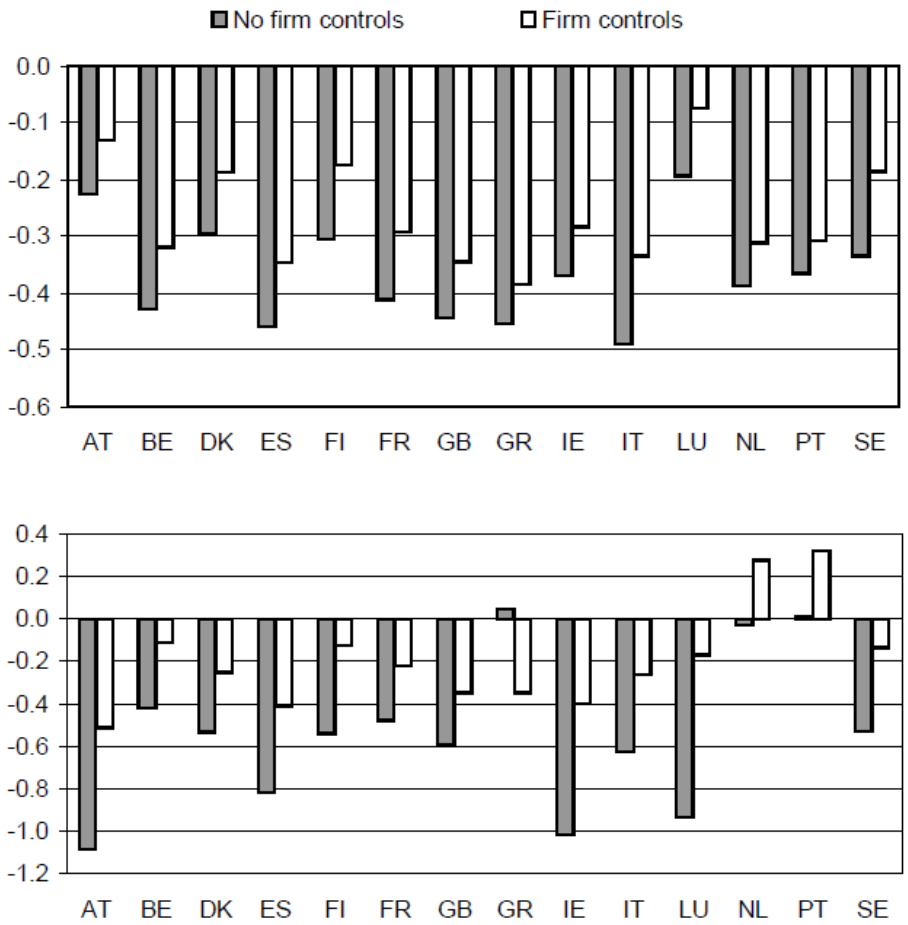


Source: Lotti-Schivardi (2005). Patents data are from the EPO; employment and R&D personnel data from the OECD Main Science and Technology Indicators database.

Useful to think at two drivers of innovation:

- Country characteristics: financial system, education system, sectoral specialization….
- Firm characteristics: firm size distribution, ownership structure, financial structure

Differences from Germany in patent propensity, firm data



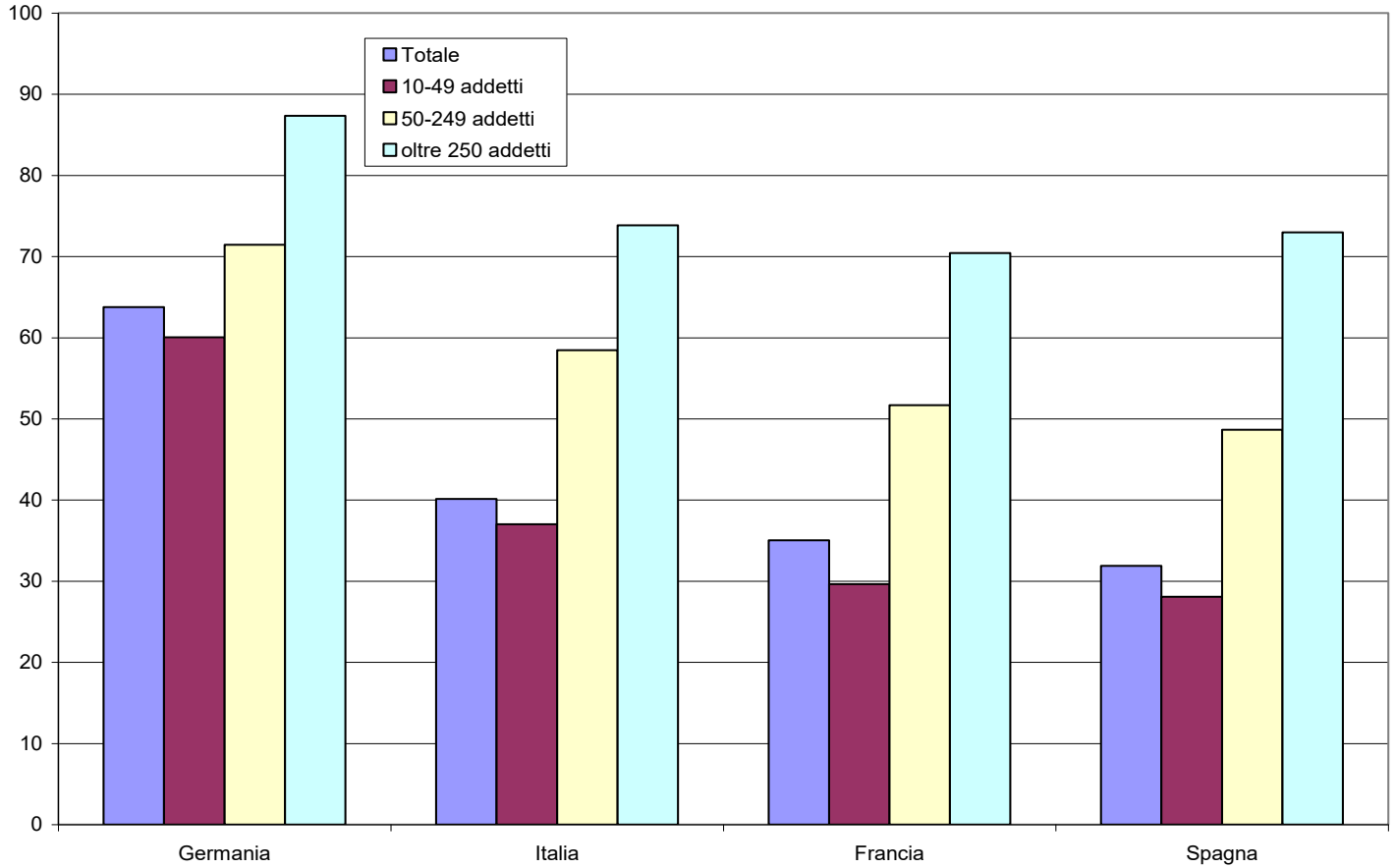
Panel A: Probability of having at least one patent. Panel B: number of patents.

Source: Lotti-Schivardi (2005), EPO and Amadeus

Role of firm size

- Old debate (Schumpeter): both needed

Share of innovative firms, by size



Source: CIS, 2008

Obstacles to innovation activity

		Too risky	Fiancial constrains
France	10-49	11.8	24.8
	50-249	11.5	23.6
	>250	6.2	18.7
	totale	*11.5*	*24.3*
Germany	10-49	28.6	43.9
	50-249	23.4	46.2
	>250	31.8	34.3
	totale	*27.8*	*43.7*
Italy	10-49	47.1	56.5
	50-249	40.0	57.6
	>250	44.0	46.4
	totale	*46.2*	*56.5*
Spain	10-49	51.0	54.9
	50-249	43.2	49.6
	>250	43.8	39.9
	totale	*49.8*	*53.8*
UK	10-49	5.7	51.4
	50-249	7.9	40.3
	>250	3.1	31.5
	totale	*6.1*	*48.0*

Source: Bugamelli et al., 2011, Efige Data

- The importance of financial constraints decreases with firm size
- Riskiness much more relevant in Italy and Spain, more based on bank finance, less in the UK, with a more market based financial system

Barriers to growth in Europe

Low propensity of young EU firms to grow: Why?

Finance and ownership structure?

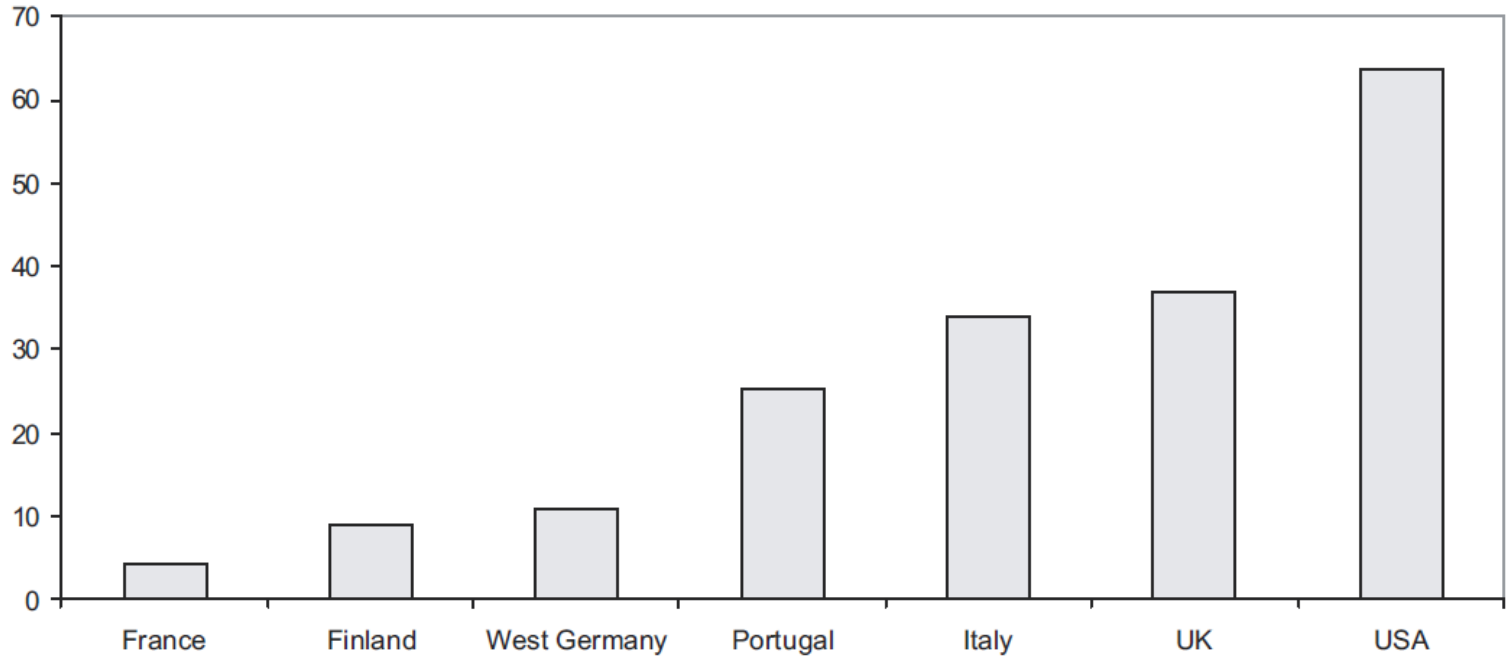


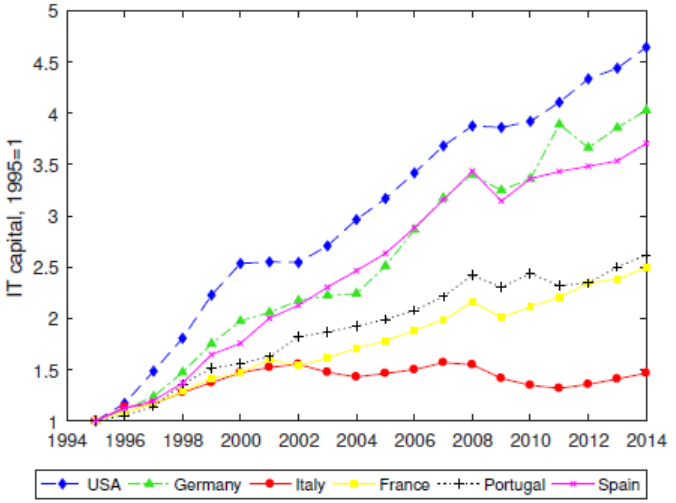
Figure 5 Percentage increase in average firm size (at 7 years of age) relative to size at entry, manufacturing.

Source: Bartelsmann, Scarpetta and Schivardi, 2005

Focus: La rivoluzione IT

- Basato su un lavoro in corso con Tom Schmitz (Bocconi)
- Dalla metà degli anni novanta le IT sono comparse anche nelle statistiche
- Meno nei paesi del sud Europa: perché?
- Non è un problema di offerta

Growth in the real IT capital stock

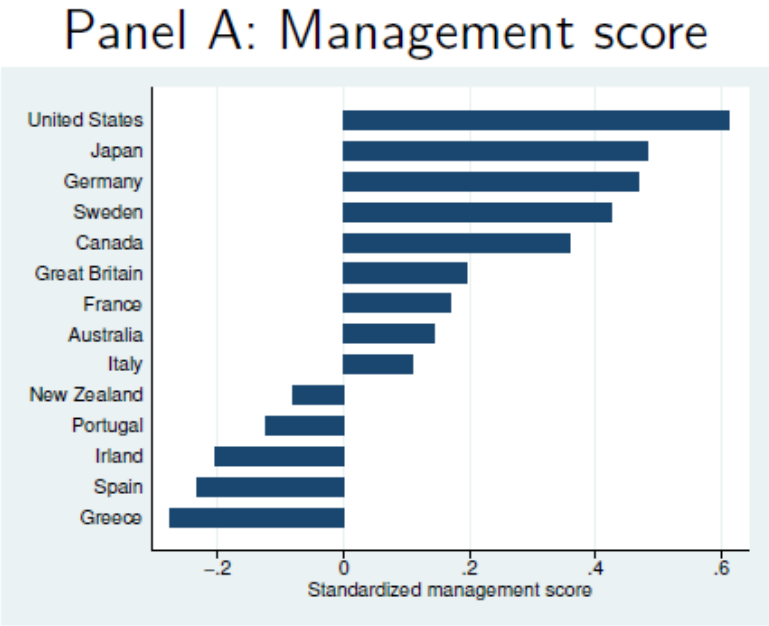


Source: OECD and EU KLEMS.

Adozione di IT in Italia e Germania

	IT specialists		Diffic. in hiring		Fixed connect.		Max speed	
	[1] ITA	[2] GER	[3] ITA	[4] GER	[5] ITA	[6] GER	[7] ITA	[8] GER
Size class								
10-49	11	15	33	54	95	94	2,40	2,57
50-99	35	39	22	56	97	96	2,55	2,77
100-249	58	57	24	40	97	97	2,63	2,90
250+	74	81	28	53	98	98	3,02	3,50
Total	15	23	30	52	95	95	2,43	2,64

Evidenza sulle pratiche manageriali dalla WMS



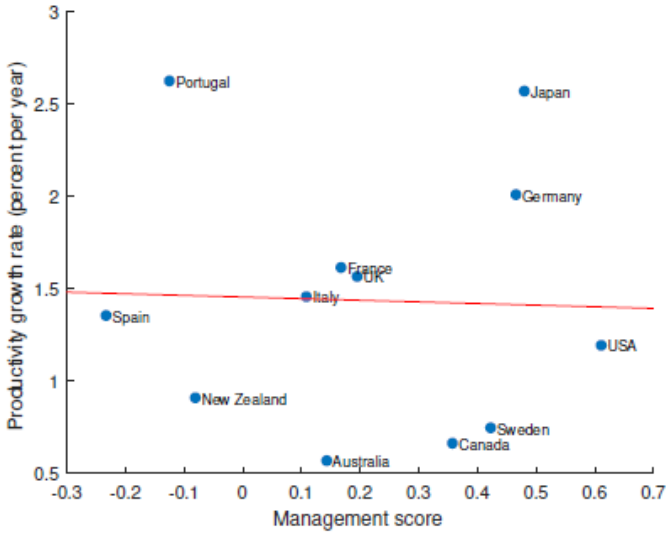
Evidenza: IT è complementare alla qualità delle pratiche manageriali

Ipotesi: questa complementarietà penalizza le imprese del sud Europa, che hanno pratiche mediamente peggiori

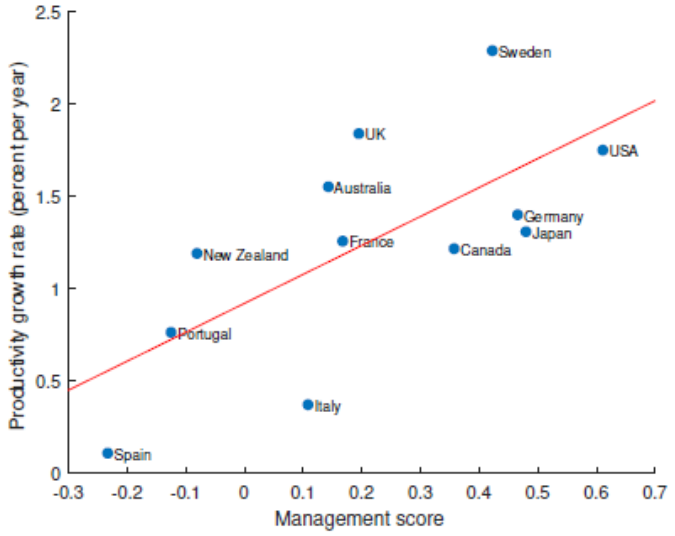
(Perché? Non affrontato in questo lavoro. Ruolo importante della corporate governane and control)

Crescita della produttività e pratiche manageriali prima e dopo la rivoluzione IT

Panel A: 1985-1995



Panel B: 1995-2008



Quanto può spiegare della divergenza Nord-Sud Europa?

- Costruiamo un modello in cui la sola differenza fra paesi è nelle pratiche manageriali
- ICT e pratiche manageriali sono complementari
- Pratiche manageriali formali richiedono lavoratori istruiti
- Il progresso tecnologico aumenta la produttività delle IT
- Calibriamo il modello con vari dati micro e macro
- Risultati principale: Lo svantaggio in termini di pratiche manageriali diventa più saliente con la rivoluzione IT

Risultati da un modello calibrato: 1995- 2008

Table 8: Quantitative results for the baseline calibration

	[1] Without IT				[2] With IT			
	DEU	ITA	PRT	ESP	DEU	ITA	PRT	ESP
Productivity rel. to Germany	1	0.980	0.969	0.964	1	0.934	0.902	0.890
Productivity growth					11.1%	5.9%	3.4%	2.5%
Share of actual divergence						35%	81%	47%

- l'Italia crescerà i 2/3 della Germania e la metà degli USA (relativamente al contributo alla crescita di IT)

Quali politiche possono aiutare?

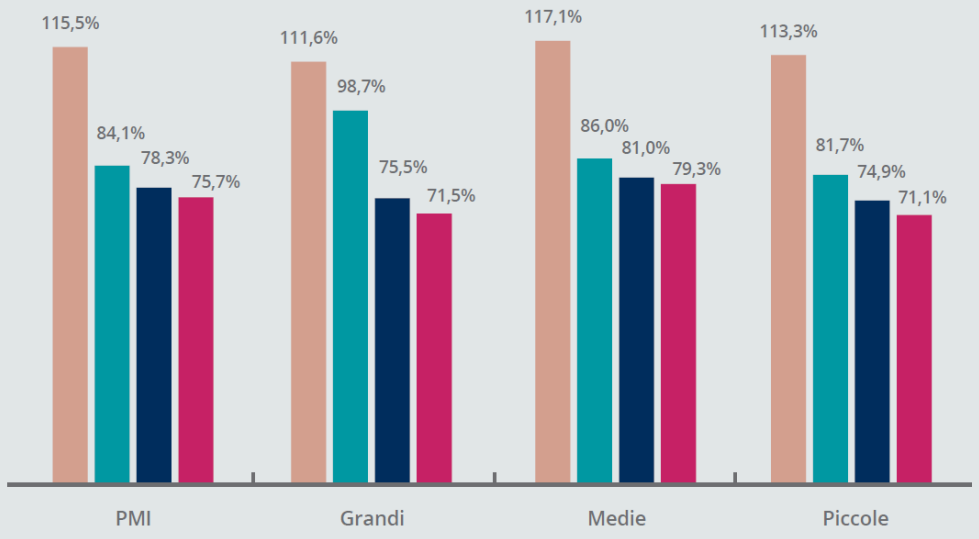
- Abbiamo simulato una serie di politiche: sussidio all'adozione di IC (Industria 4.0) e sussidio all'istruzione per accrescere i laureati che possono fare i managers (borse di studio)
- Non migliorano la situazione – sussidi all'istruzione contribuiscono alla «fuga dei cervelli»
  - Motivo: il basso tasso di adozione/laureati è un sintomo della minor efficienza delle imprese nell'utilizzo delle IT, non una causa
- Curare il sintomo non aiuta: bisogna lavorare sulla causa del malessere

Qualcosa si muove sul fronte capitalizzazione e accesso a finanza

- Rapporto di previsione (Box su Investimenti e fonti di finanziamento):
  - le condizioni finanziarie sono migliorate, anche grazie a una serie di riforme (minibonds, PIR,…)
  - Ma potrebbero ancora essere vincolate molto PMI, più dipendenti dalle banche
- Siamo giunti a stesse conclusioni nel Rapporto Cerved PMI 2017:
  - Il *leverage* delle imprese è diminuito sensibilmente, in buona parte per conferimenti di capitale di rischio, e con esso la rischiosità delle imprese
  - Abbiamo stimato che 52.000 PMI potrebbero aumentare l'indebitamento per circa 100 miliardi complessivi mantenendo un profilo di rischio estremamente contenuto

Forte rafforzamento struttura pratrimoniale

Rapporto tra debiti finanziari e capitale netto per dimensione d'impresa



Fonte: Rapporto Cerved PMI 2017

Ma rimane una tendenza a chiudersi a capitale e competenze esterne

- Aumento *equity* prevalentemente da fonti interne (?)
- Sviluppo di finanza alternativa langue:
  - Raccolta private equity e venture capital pari a 1.313 milioni di euro (-47%) rispetto ai 2.487 milioni del 2015 (Fonte AIFI)
  - Raccogliamo per VC una frazione della Spagna
- Sono importanti non solo per capitale ma anche perché immettono competenze
- Management esterno nelle imprese familiari: abbiamo evidenza aneddotica di entrambe le strade (Zambon e Lavazza vs. Ferrero e Pesenti), ma poca evidenza sistematica

CONCLUSIONE

- Non è il paese che è peggiorato
- Il mondo è cambiato in una direzione sfavorevole rispetto alle nostre «dotazioni»
- Abbiamo bisogno di un sistema imprenditoriale che si affranchi dal modello famiglia-banca e si apra ad apporti di capitale e di competenze esterne all'ambito familiare