

# India and Italy in the global economy. Trends and issues

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and Italy in the Global Economy:  
Enhancing Trade and Cooperation,  
New Delhi, November 1, 2007*

1. Some broad macroeconomic comparisons
2. Main multilateral and bilateral patterns of trade
3. Italy: recent trends in international competitiveness and structural characteristics
4. Perspectives on bilateral cooperation

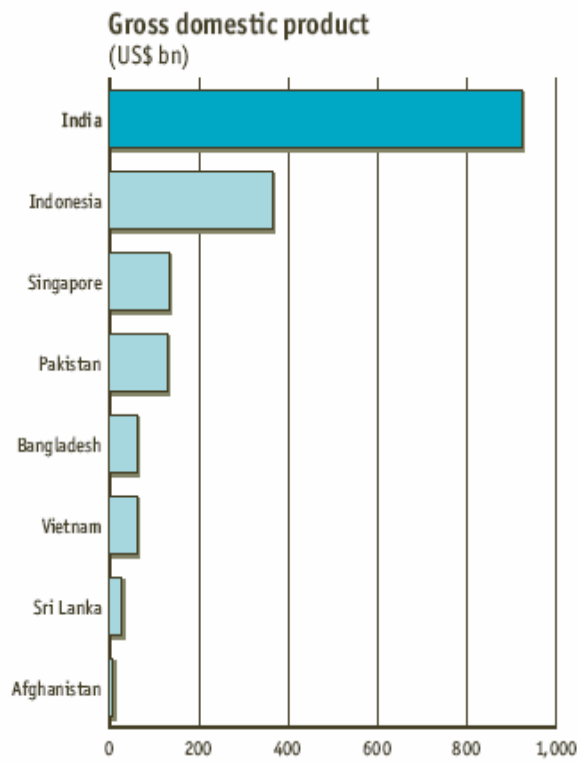
1. Some broad macroeconomic comparisons (a very short and incomplete overview)

# India's growth and openness

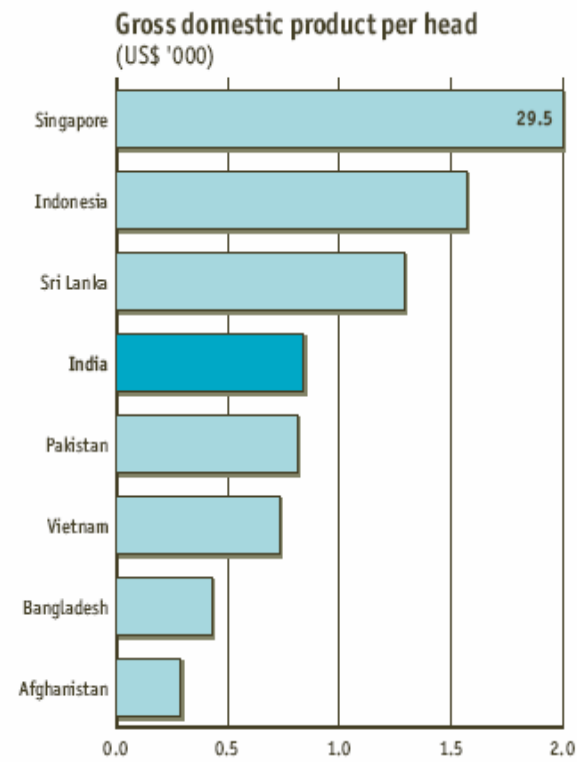
- With 17% of world population, India still generates less than 2% of world GDP and about 1% of world trade.
- Strong acceleration in GDP growth and openness (trade/GDP) since end of 1990s, supported by increasing outsourcing in global supply chains (*Nordas, WTO DP 11, 2005*).
- Huge potential for increase in formal employment and TFP, pulling 300-400 million people out of bottom poverty line, enlarging a middle-class market for modern consumer goods. Recent growth accounting exercises (*H.Oura, IMF WP/07/224 for quick survey*) put medium-term potential GDP growth in range 7.3-8.5 with risks on both sides. Growth favoured by declining dependency ratio and related increase in saving ratios.
- Growing trade deficit (6% GDP), but manufacturing trade balance in equilibrium [Italy: manufacturing trade surplus, trade deficit fob-fob less than 1% GDP]

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# India vs. Asian countries, 2006



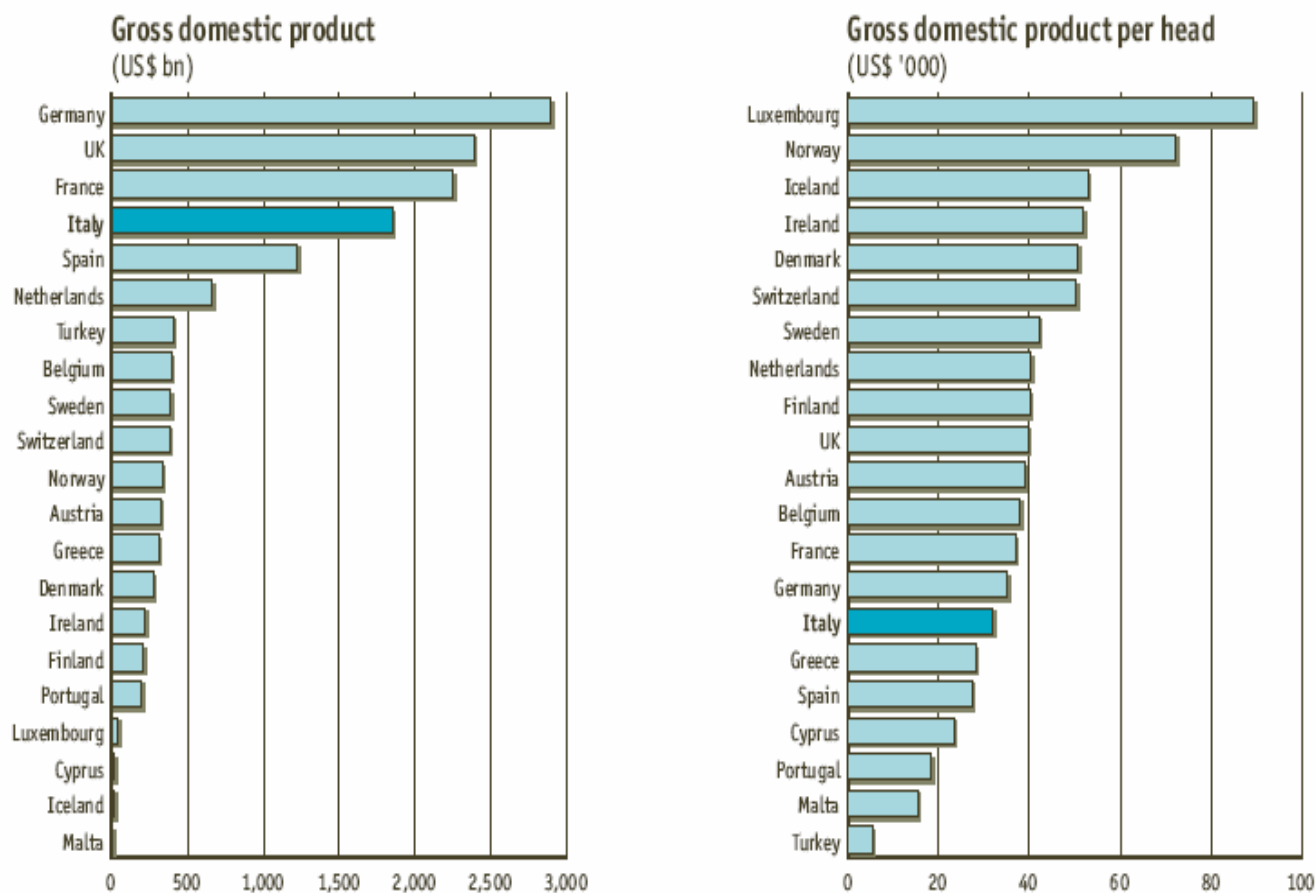
Sources: Economist Intelligence Unit estimates; national sources.



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# Italy vs. advanced countries, 2006

Comparative economic indicators, 2006



## 2. Main multilateral and bilateral patterns of trade



# India's main exports-imports by sector

## Main composition of trade

(US\$ m; fob-cif)

	2001/02	2002/03	2003/04	2004/05	2005/06
<b>Exports</b>					
Engineering goods	6,958	9,033	12,405	17,348	21,547
Textiles & clothing	9,665	11,617	12,791	13,555	16,039
Gems & jewellery	7,306	9,030	10,537	13,762	15,547
Petroleum products	2,119	2,577	3,586	6,989	11,515
Agricultural & allied products	5,901	6,710	7,533	8,475	10,199
<b>Total exports incl others</b>	<b>43,827</b>	<b>52,719</b>	<b>63,843</b>	<b>83,535</b>	<b>102,725</b>
<b>Imports</b>					
Petroleum products	14,000	17,640	50,569	29,844	43,963
Electronic goods (incl software)	3,999	6,093	7,889	10,659	14,087
Gold & silver	4,582	4,288	6,856	11,150	11,189
Precious & semi-precious stones	4,623	6,063	7,129	9,423	9,141
Machinery (non- electrical/electronic)	2,971	3,566	4,744	6,818	9,894
<b>Total imports incl others</b>	<b>51,413</b>	<b>61,412</b>	<b>78,149</b>	<b>111,517</b>	<b>142,416</b>

Source: Reserve Bank of India, *Annual Report*.

- Agriculture (still absorbing 60% of workforce and generating 22% of GDP): only 10% (falling) of exports.
- Textiles-clothing share on total export falling rapidly, from 22% to 16% in four years
- Gems and jewelry share slowly declining to 15% exports. With about 1 million workers, India has 80% of world diamonds and precious stones cutting and processing.  
Fearing competition by China, based on leading technology spurred by rising wages.
- Rapidly growing share of engineering goods, from 16% to 21% in four years

# Increasing role of modern manufacturing

- Manufacturing still today 16% GDP, 11% of India's workforce: but these shares are likely to double in the next two decades, or even before.
- Improvement in range and quality of exports, creating additional China-India competition in world markets (*GTAP exercise in Dimaranan et al, WB Policy Research WP 4304, Aug. 2007*)
- Fast growth of **scale-intensive** and **medium-high tech productions** by large size companies: auto vehicles and components (Tata Motors, Bharat Forge, Maruti-Suzuki, Mahindra), pharmaceuticals (Ranbaxy, Cipla..), energy and nuclear (Larsen&Toubro..), steel (Mittal..), DVDs (Moser Baer...)
- Aside from apparel, India's inherent strength probably lies in **low-medium skill-intensive manufacturing exports**, that could surge to \$300 billion creating 25-30 million jobs by 2015 (*Adil Zainulbhai, director McKinsey Mumbai office, Oct. 2007*) . Wide scope for auto components, electrical-electronic products, chemicals-pharmaceuticals.

# Not only ICT and Software

- ICT services growing fast, but still provide 1% of GDP and less than 1 million jobs over total labor force that will reach 450 million in 2010: hence need for fostering (besides ICT services) **low and medium-tech sectors** capable to absorb abundant low-skill labor supply.
- Continental European countries still today mainly purchase “old economy” products from India (apparel, jewelry, metal products, pharma...)
- Signals of supply shortage (and rapidly rising salaries) of engineers in cities like Hyderabad and Bangalore. Only 4% of total University-educated workforce hold engineering degrees, vs, 20% in Germany and 30% in China. (*McKinsey Quarterly, August 20, 2007*)  
Shortage of computer science PhDs (35 out of 7000 PhDs per year in Science&Engineering. Only few of the 500.000 engineers graduating each year go to post-graduate studies (*Financial Times, October 11, 2007*))

# Top 20 exporters to India: Italy 18th supplier

Top 20 exporters to India  
ALL COMMODITIES  
2005/2006

Rank	Country	2005-2006	%Share	% Cum.
1	CHINA PEOPLE'S REPUBLIC	10,868,050,000	7.29%	7.29%
2	UNITED STATES OF AMERICA	9,454,740,000	6.34%	13.63%
3	SWITZERLAND	8,555,800,000	4.39%	18.02%
4	GERMANY	8,023,630,000	4.04%	22.06%
5	AUSTRALIA	4,947,910,000	3.32%	25.38%
6	BELGIUM	4,725,140,000	3.17%	28.55%
7	SOUTH KOREA	4,563,850,000	3.06%	31.61%
8	UNITED ARAB EMIRATE	4,354,080,000	2.92%	34.52%
9	FRANCE	4,113,300,000	2.76%	37.28%
10	JAPAN	4,061,100,000	2.72%	40.00%
11	UNITED KINGDOM	3,930,300,000	2.63%	42.64%
12	SINGAPORE	3,353,770,000	2.25%	44.89%
13	INDONESIA	3,008,110,000	2.02%	46.90%
14	SOUTH AFRICA	2,471,800,000	1.66%	48.56%
15	MALAYSIA	2,415,610,000	1.62%	50.18%
16	HONG KONG	2,206,980,000	1.48%	51.66%
17	RUSSIA	2,022,190,000	1.36%	53.02%
18	<b>ITALY</b>	<b>1,855,630,000</b>	<b>1.24%</b>	<b>54.26%</b>
19	SAUDI ARABIA	1,632,340,000	1.09%	55.35%
20	TAIWAN	1,382,960,000	0.93%	56.28%
	OTHER COUNTRIES	20,936,930,000	14.04%	70.32%
	UNSPECIFIED COUNTRIES	44,281,180,000	29.69%	100.00%
	<b>TOTAL</b>	<b>149,165,700,000</b>	<b>100.00%</b>	

Fonte: Government of India, Ministry of Commerce and Industry, Department of Commerce  
Valori in US\$ - Tasso di cambio 1 US\$ = 44.7736 INR

# EU-25 as a whole still is the first supplier, despite the growing intra-Asian integration

Importazioni dell'India  
SUDDIVISE PER REGIONE  
2005/2006

Pos.	Regione	Valore US\$ mln.	% Share	% Cum	Principali Paesi		Principali prodotti	
					Paese	Valore	S.A.	Valore
1	Unione Europea a 25 Paesi	25,704.03	17.23%	17.23%	Germania	6,023.63	71	5,632.10
					Belgio	4,725.14	84	4,771.33
					Francia	4,113.30	85	2,028.19
2	Estremo Oriente	23,141.29	15.51%	32.74%	Cina	10,868.05	85	5,734.48
					Corea	4,563.85	84	4,508.67
					Giappone	4,061.10	29	1,842.02
3	Paesi aderenti all'Association of SE Asia Nations	10,893.68	7.30%	40.04%	Singapore	3,353.77	84	1,989.24
					Indonesia	3,008.11	85	1,298.24
					Malaysia	2,415.61	15	1,126.50
4	Paesi del Medio Oriente e del Nord-Africa	10,853.89	7.28%	47.32%	E.A.U.	4,354.08	71	3,632.67
					Arabia S.	1,632.34	27	1,989.68
					Israele	1,031.19	28	926.75
5	America del Nord	10,374.61	6.96%	54.28%	U.S.A.	9,454.74	88	1,959.02
					Canada	919.87	84	1,557.18
					n.d.	n.d.	85	1,238.84
6	Altri Paesi dell'Europa Occidentale	7,045.05	4.72%	59.00%	Svezia	6,555.80	71	5,426.48
					Norvegia	289.34	84	554.88
					Turchia	193.80	89	134.38
7	Oceania	5,280.75	3.54%	62.54%	Australia	4,074.91	15	2,124.81
					N Zelanda	216.83	84	1,915.07
					Papua NG	84.12	08	379.58
8	Africa sub-sahariana	4,041.40	2.71%	65.25%	Sudafrica	2,197.67	71	1,675.63
					Senegal	292.58	28	484.49
					Costa d'A.	193.29	8	410.88
9	Paesi appartenenti all'ex-Unione Sovietica	2,952.61	1.98%	67.23%	Russia	2,022.19	72	1,075.89
					Ucraina	792.39	31	641.41
					Bielorussia	37.88	71	183.88
10	America Latina	2,662.75	1.78%	69.01%	Brasile	893.06	15	854.17
					Argentina	754.04	28	475.88
					Cile	434.50	89	301.81
11	Asia del Sud	1,413.31	0.95%	69.96%	Sri Lanka	577.70	15	225.33
					Nepal	379.85	74	180.79
					Pakistan	179.58	08	77.77
12	Europa dell'Est	330.05	0.22%	70.18%	Romania	270.12	72	181.15
					Croazia	29.49	84	39.69
					Bulgaria	24.06	28	36.46
	Provenienza non specificata	44,481.34	29.82%	100.0%				
	<b>TOTALE IMPORT INDIA</b>	<b>148,165.78</b>	<b>100.0%</b>					

Elaborazioni ICE su dati del Ministry of Commerce and Industry, Department of Commerce  
Valori in milioni di US\$ - Tasso di cambio 1 US\$ = 44,2735 INR

**Within Europe, Italy is fifth exporter to India, far below other major EU member countries. In 2000-05 the Italian share of total Indian imports fell slightly (1.4 →1.2%) while France and Germany shares went up**

*Unione Europea a 25 Paesi*

Rank	Country	2005-2006	%Share	% Cum.
1	GERMANY	6,023,830,000	23.43%	23.43%
2	BELGIUM	4,725,140,000	18.38%	41.81%
3	FRANCE	4,113,300,000	16.00%	57.82%
4	U K	3,930,300,000	15.29%	73.11%
5	ITALY	1,855,630,000	7.22%	80.33%
6	SWEDEN	1,172,200,000	4.56%	84.89%
7	NETHERLAND	1,049,550,000	4.08%	88.97%
8	FINLAND	583,480,000	2.27%	91.24%
9	SPAIN	573,460,000	2.23%	93.47%
10	DENMARK	515,940,000	2.01%	95.48%
11	AUSTRIA	344,020,000	1.34%	96.82%
12	CZECH REPUBLIC	260,380,000	1.01%	97.83%
13	IRELAND	161,910,000	0.63%	98.46%
14	POLAND	107,810,000	0.42%	98.88%
15	GREECE	56,370,000	0.22%	99.10%
16	SLOVAK REP	39,860,000	0.16%	99.25%
17	HUNGARY	31,620,000	0.12%	99.38%
18	PORTUGAL	30,250,000	0.12%	99.49%
19	LITHUANIA	28,960,000	0.11%	99.61%
20	CYPRUS	25,530,000	0.10%	99.70%
21	SLOVENIA	23,610,000	0.09%	99.80%
22	LUXEMBOURG	16,100,000	0.06%	99.86%
23	MALTA	15,830,000	0.06%	99.92%
24	LATVIA	10,130,000	0.04%	99.96%
25	ESTONIA	9,020,000	0.04%	100.00%
	TOTAL - EUROPEAN UNION	25,704,030,000	100.00%	

Presa nel suo insieme, l'Unione Europea a 25, con 25,70 miliardi di US\$, si posiziona al

# Top Ten Indian imports

## Importazioni Indiane 2005/2006 Primi 10 Gruppi Merceologici

Rank	HS Code	Commodity	2005 - 2006	% Share	% Cum
1	27	MINERAL FUELS, MINERAL OILS AND PRODUCTS OF THEIR DISTILLATION; BITUMINOUS SUBSTANCES; MINERAL WAXES.	50,310,080,000	33.7%	33.7%
2	71	NATURAL OR CULTURED PEARLS, PRECIOUS OR SEMIPRECIOUS STONES, PRE-METALS, CLAD WITH PRE-METAL AND ARTCLS THEREOF; IMIT. JEWELRY; COIN.	20,690,510,000	13.9%	47.6%
3	84	NUCLEAR REACTORS, BOILERS, MACHINERY AND MECHANICAL APPLIANCES; PARTS THEREOF.	13,915,050,000	9.3%	56.9%
4	85	ELECTRICAL MACHINERY AND EQUIPMENT AND PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS, AND PARTS.	11,898,860,000	8.0%	64.9%
5	72	IRON AND STEEL	5,448,450,000	3.7%	68.6%
6	29	ORGANIC CHEMICALS	5,144,210,000	3.4%	72.0%
7	88	AIRCRAFT, SPACECRAFT, AND PARTS THEREOF.	4,979,410,000	3.3%	75.3%
8	89	SHIPS, BOATS AND FLOATING STRUCTURES.	2,711,340,000	1.8%	77.2%
9	90	OPTICAL, PHOTOGRAPHIC CINEMATOGRAPHIC MEASURING, CHECKING PRECISION, MEDICAL OR SURGICAL INST. AND APPARATUS PARTS AND ACCESSORIES THEREOF;	2,656,070,000	1.8%	78.9%
10	39	PLASTIC AND ARTICLES THEREOF.	2,556,460,000	1.7%	80.7%
		OTHERS	28,857,320,000	19.3%	100.0%
		<b>TOTAL INDIAN IMPORTS</b>	<b>149,165,730,000</b>	<b>100.0%</b>	

Fonte: Government of India. Ministry of Commerce and Industry. Department of Commerce



# Machinery and Mechanical Appliances

## HS Code 84

NUCLEAR REACTORS, BOILERS, MACHINERY AND MECHANICAL APPLIANCES; PARTS THEREOF.

### Top10 Suppliers

2005/2006

S. No.	Country	Values 2005-2006	% Share	% Cum.
1	GERMANY	2,211.09	15.9%	15.9%
2	CHINA P RP	2,162.24	15.5%	31.4%
3	U S A	1,465.25	10.5%	42.0%
4	JAPAN	1,186.71	8.5%	50.5%
5	SINGAPORE	1,014.73	7.3%	57.8%
<b>6</b>	<b>ITALY</b>	<b>745.34</b>	<b>5.4%</b>	<b>63.1%</b>
7	KOREA RP	639.77	4.6%	67.7%
8	U K	519.35	3.7%	71.5%
9	MALAYSIA	512.23	3.7%	75.1%
10	SWITZERLAND	482.26	3.5%	78.6%
	Other Countries	2,976.11	21.4%	100.0%
	<b>TOTAL</b>	<b>13,915.05</b>	<b>100.0%</b>	

Fonte: Government of India, Ministry of Commerce and Industry, Department of Commerce  
Valori in US\$ - Tasso di cambio 1 US\$ = 44.2735 INR

# Optical-photo, precision-medical instruments, watches, musical instruments

## HS Code 90

OPTICAL, PHOTOGRAPHIC, CINEMATOGRAPHIC, MEASURING, CHECKING, PRECISION, MEDICAL OR SURGICAL INSTRUMENTS AND APPARATUS; CLOCKS AND WATCHES; MUSICAL INSTRUMENTS; PARTS AND ACCESSORIES THEREOF

### Top 10 Suppliers

2005/2006

S. No.	Country	Values 2005-2006	% Share	% Cum.
1	U S A	694.20	26.14%	26.14%
2	GERMANY	415.68	15.85%	41.79%
3	JAPAN	278.38	10.48%	52.27%
4	SINGAPORE	144.17	5.43%	57.70%
5	U K	142.40	5.38%	63.06%
6	CHINA P RP	137.17	5.16%	68.22%
7	SWITZERLAND	103.74	3.91%	72.13%
8	FRANCE	100.77	3.79%	75.92%
9	KOREA RP	79.74	3.00%	78.93%
10	NETHERLAND	65.67	2.47%	81.40%
11	<b>ITALY</b>	<b>62.80</b>	<b>2.36%</b>	<b>83.76%</b>
	Other Countries	431.37	16.24%	100.00%
	<b>TOTAL</b>	<b>2,711.33</b>	<b>100.00%</b>	

Fonte: Government of India, Ministry of Commerce and Industry, Department of Commerce  
Valori in milioni di US\$ - Tasso di cambio 1 US\$ = 44.2735 INR

Come era logico aspettarsi, ai primi posti della classifica troviamo quelle Nazioni che vantano una forte reputazione nel campo della strumentistica di precisione. Al primo posto

# Plastics

**HS Code 39**  
**PLASTICS AND ARTICLES THEREOF;**  
**Top 10 Suppliers**  
**2005/2006**

S. No.	Country	Values 2005-2006	% Share	% Cum.
1	U S A	285.63	11.17%	11.17%
2	KOREA RP	279.47	10.93%	22.10%
3	TAIWAN	222.60	8.71%	30.81%
4	GERMANY	197.64	7.73%	38.54%
5	CHINA P RP	187.47	7.33%	45.87%
6	SAUDI ARAB	136.76	5.35%	51.22%
7	THAILAND	131.73	5.15%	56.38%
8	JAPAN	128.19	5.01%	61.39%
9	SINGAPORE	122.40	4.79%	66.18%
10	NETHERLAND	91.47	3.58%	69.76%
<b>13</b>	<b>ITALY</b>	<b>60.08</b>	<b>2.35%</b>	<b>72.11%</b>
	Other Countries	713.02	27.89%	100.00%
	<b>TOTAL</b>	<b>2,556.46</b>	<b>100.00%</b>	

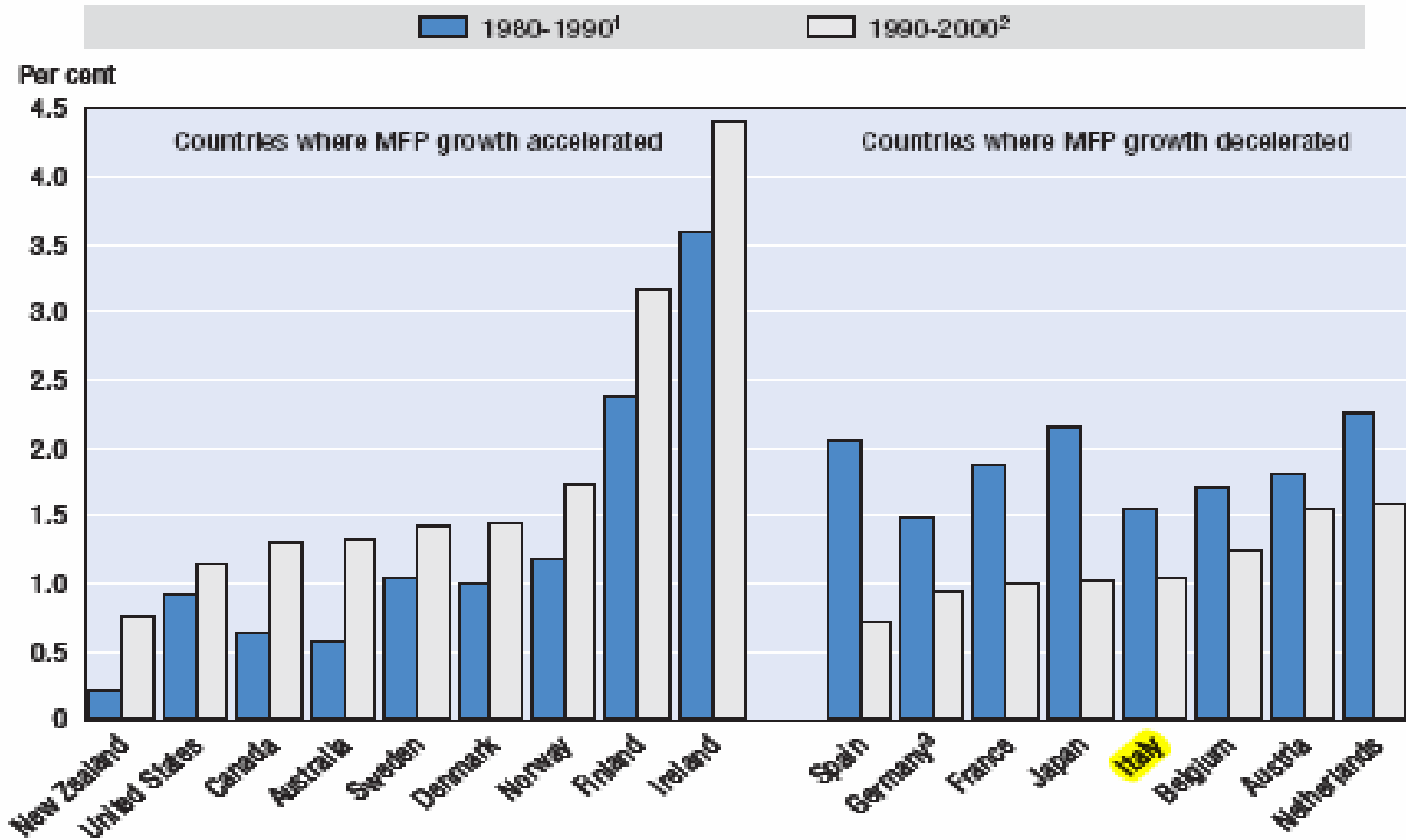
Fonte: Government of India, Ministry of Commerce and Industry, Department of Commerce  
 Valori in milioni di US\$ - Tasso di cambio 1 US\$ = 44.2735 INR

### 3. Italy: recent trends in international competitiveness and structural characteristics

# Lagging productivity

- Since 1980s total factor productivity (TFP) slowdown, more than other Centre-North-European countries. Together with demographic stagnation, it explains lagging growth of actual and potential output (see 2 following slides)
- In 2001-2005 Italy scored an annual rate of increase of 0.27%, against 0.93% in Germany, 1.21% in France, 1.60% in UK (*DPEF 2007-2011, p. 45*). During the decade 1995-2004 the cumulative growth of TFP has been 1.3% on average, against 3.9% in Germany and 8.5% in France (*S.Rossi-Bank of Italy 2006*)

# TFP growth 1980-90, 1990-2000



# Potential GDP growth

	<b>Average 1983-92</b>	<b>Average 1993-2002</b>	<b>2006</b>
<b>USA</b>	3.0	3.3	3.2
<b>Japan</b>	3.6	1.4	1.5
<b>Euroarea</b>	2.7	2.0	1.9
Germany	3.8	1.4	1.5
France	2.0	2.1	2.0
Italy	2.2	1.4	1.2
Spain	2.7	3.0	2.9
Belgium	2.2	2.0	2.1
Ireland	3.8	7.5	4.9
<b>UK</b>	2.2	2.7	2.5
<b>OECD</b>	2.9	2.6	2.5

Source: OECD

- Among main explanations of lagging TFP growth:
  - disproportionate weight of small size (family) business (risk aversion, fear of losing corporate control, bank-dependence) (*Pagano-Schivardi ScJE 2003, Caselli-Gennaioli NBER9442, 2003, De Nardis-Traù 2005, Onida 2004*)
  - Low propensity-ability to R&D by private firms
  - Obstacles to efficient University-industry relations
  - Lagging liberalization-modernization of some basic consumer and business services (retail, local and long distance road-rail-sea-air transport)
  - Legislative and bureaucratic framework not market friendly, failure to achieve effective fiscal federalism and

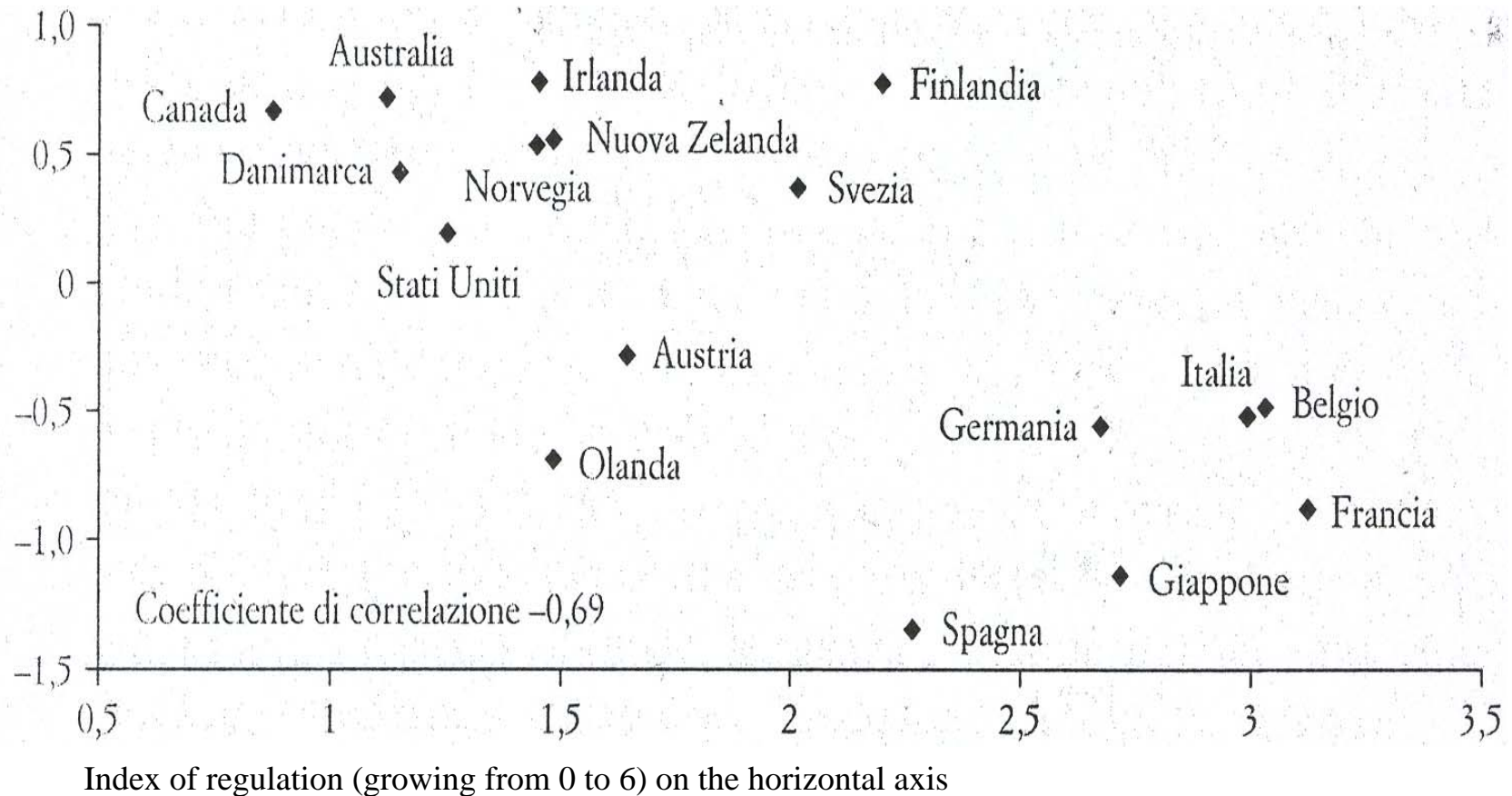
Notice: some of these political challenges are shared with India!



- According to OECD cross-countries analyses, there is a **rough negative correlation between changes in TFP growth** from the 1980s to the 1990s and some indicators of domestic **product market regulation and administrative regulation**.
- Italy belongs to the group of **highly regulated** European countries (together with France, Germany, Belgium and Japan), against countries with **lower level** of regulation (Ireland, Sweden, Denmark, Netherlands, Austria).
- High heterogeneity within Europe in this respect!

# TFP and administrative regulation

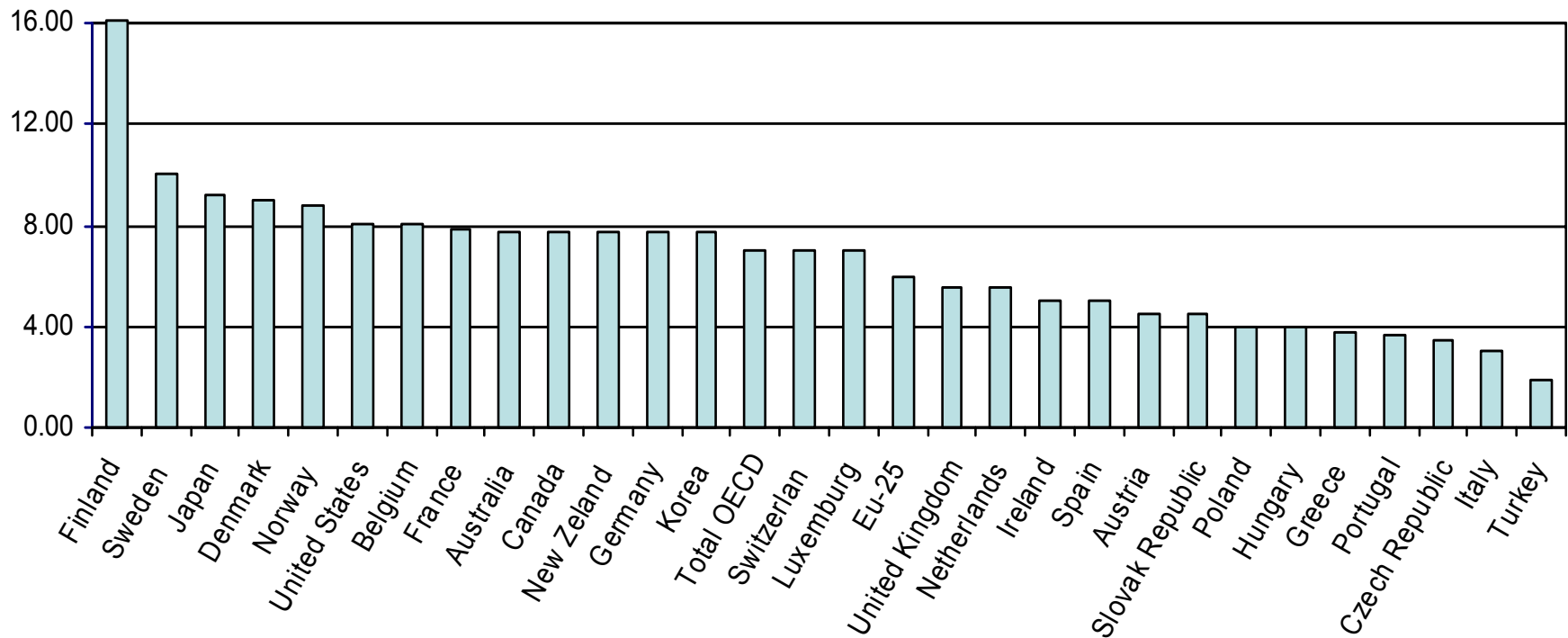
(Change in TFP growth rate between 1980-90 and 1990-2000)



Source: Visco, "La crescita economica in Europa: ritardi e opportunità", 2004

# Number of researchers per 1000 workers: high variance within EU, Italy at bottom ranking

(2003 or most recent year available)



Source: OECD, "Main science and technology indicators, 2005"

# But innovation activity is not only R&D

However remember: European companies, especially Italian SMEs, carry a lot of innovation activities beyond the standard definition of R&D.

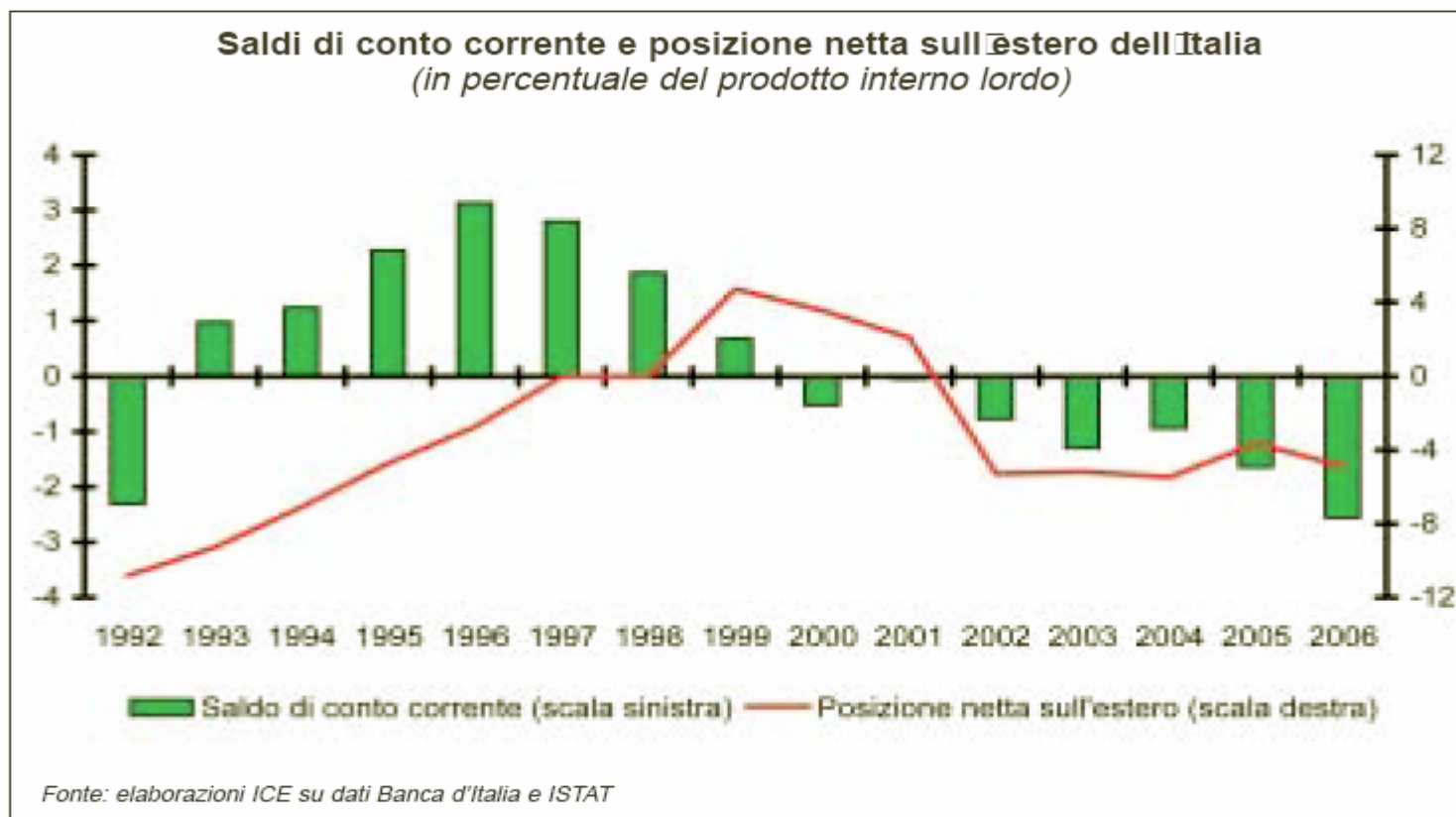
According to a regular Eurostat survey, in 1998-2000 on average 45% of EU-15 companies (61% of German companies) have performed some product or process innovation (technical project and design, prototypes, design and marketing of new products etc.)

*(ISTAT 2005, p. 93-94)*

# Italian trade performance: adjusting to changing competitive conditions

Without the artificial support of a weak exchange rate of the lira, the Italian trade balance and world export shares have deteriorated since the mid-1990s: Euro as a mixed blessing!

# Current account balance and net external position, % GDP

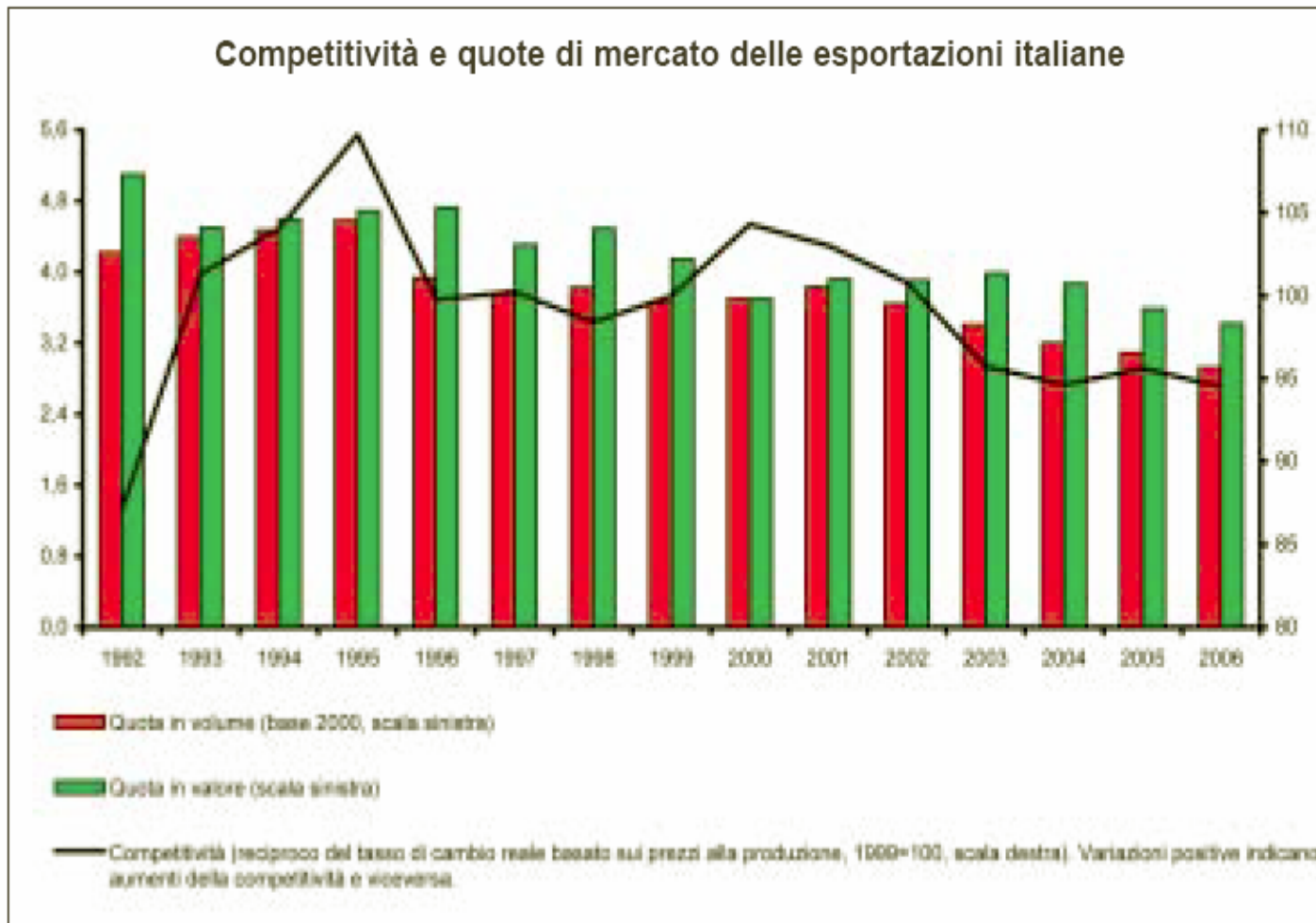


# Values vs. volumes of trade

- However since 2000 export shares at current prices or values (green histograms) have shown greater resilience than shares in quantities or volumes (red histograms): see below

# Real exchange rate, export shares in value and volume

*servizi.*





# Italian sectoral specialization pattern

- At a rather high level of sectoral aggregation, the Italian pattern of international specialization has been quite stable in the last decades:
  - a) stable or even growing revealed comparative **advantages** in **consumer traditional goods for housing and personal care** as well as in a large range of **mechanical engineering equipment and components**, often upstream suppliers of technology for those same traditional goods
  - b) persisting **disadvantages** in most **scale intensive and technology-intensive sectors** (processed food, chemicals, passenger cars, power generation-distribution, computers, electronic components, aerospace)

# Italian sectoral trade

## Main composition of trade

(US\$ bn; fob-cif)

	2002	2003	2004	2005	2006
<b>Exports fob</b>					
Machinery & transport equipment	102.7	117.8	142.1	147.7	164.6
Textiles, clothing & leather goods	38.9	43.0	47.8	47.9	51.1
Chemicals	25.4	29.1	33.8	37.5	40.8
Metal products	20.4	24.0	33.6	37.1	47.0
<b>Total exports incl others</b>	<b>254.1</b>	<b>299.4</b>	<b>353.4</b>	<b>372.9</b>	<b>416.1</b>
<b>Imports cif</b>					
Machinery & transport equipment	89.4	102.7	122.1	124.6	133.8
Chemicals	33.3	39.7	47.3	50.8	55.8
Energy products	24.8	31.1	36.5	51.1	65.9
Minerals & non-ferrous metals	22.9	26.5	36.5	39.3	-
<b>Total imports incl others</b>	<b>246.5</b>	<b>297.3</b>	<b>355.2</b>	<b>384.8</b>	<b>440.8</b>

Source: Istat.

# Not only goods for personal and housing care

- Impressive success of “**made in Italy**” in almost all sectors related to personal care (apparel, shoes and leather goods, eyewear, jewelry, wines) and to housing (furniture, ceramic tiles, cutlery, “white” domestic appliances) mirrors ancient historical, artistic and cultural traditions
- But it must not hide the other even more important area of Italian excellent international performance, i.e. **engineering goods** (machine tools, specialized machinery, mechanical and electrical components), as well as some niches of **medium-high tech** sectors (specialty steels, chemical construction materials, telecom and energy cables, robots, helicopters...)

# Not only final goods, rather...

- At world level, intermediate goods have gained increased weight, due to progressive fragmentation and “unbundling of tasks” (*Blinder 2006, Baldwin 2007*)
- Italy’s competitive advantage as “specialized (customized) supplier” rests on a lot of intermediate components and materials for both consumer and producer durable goods: e.g., processed leather, textiles, rubber and plastics, construction materials, engines, valves, transmissions, automobile and aero parts.

# Specialization pattern is not immobile!

- Data at more disaggregated product groups within sectors show some evidence of rapidly changing and highly diversified horizontal and vertical **intra-industry specialization patterns**,

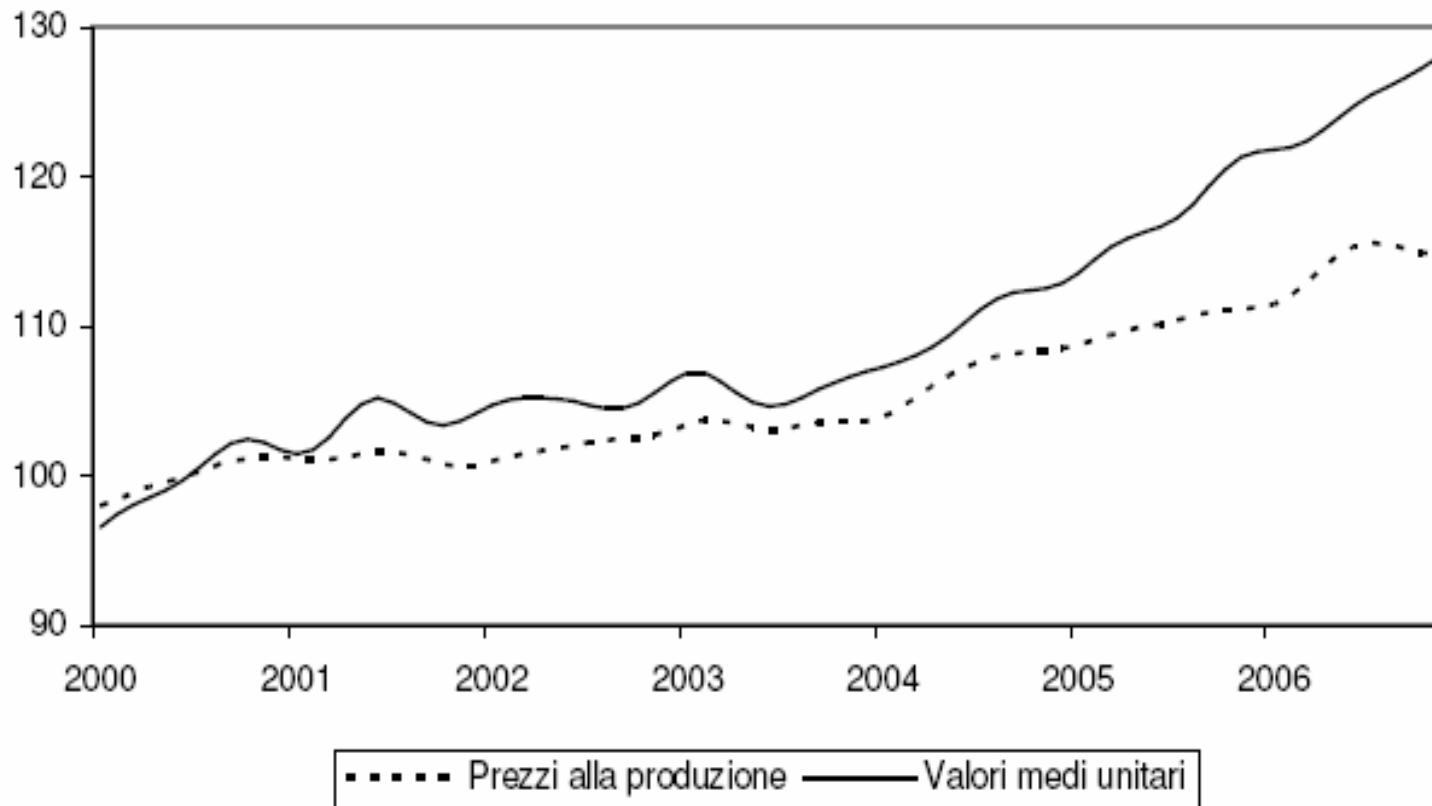
The relatively high similarity between Italy's and China's sectoral composition of export largely disappears when comparison is extended to product mix and export-import unit values within each sector.

Evidence of “**high quality vertical intra-industry**” and considerable market power of exporting firms specialization within Italian traditional “made in Italy”. Increasing service content of merchandise export

*(Amighini-Chiarlone 2005, De Nardis-Traù 2006, Bugamelli 2007, Lanza-Quintieri 2007).*

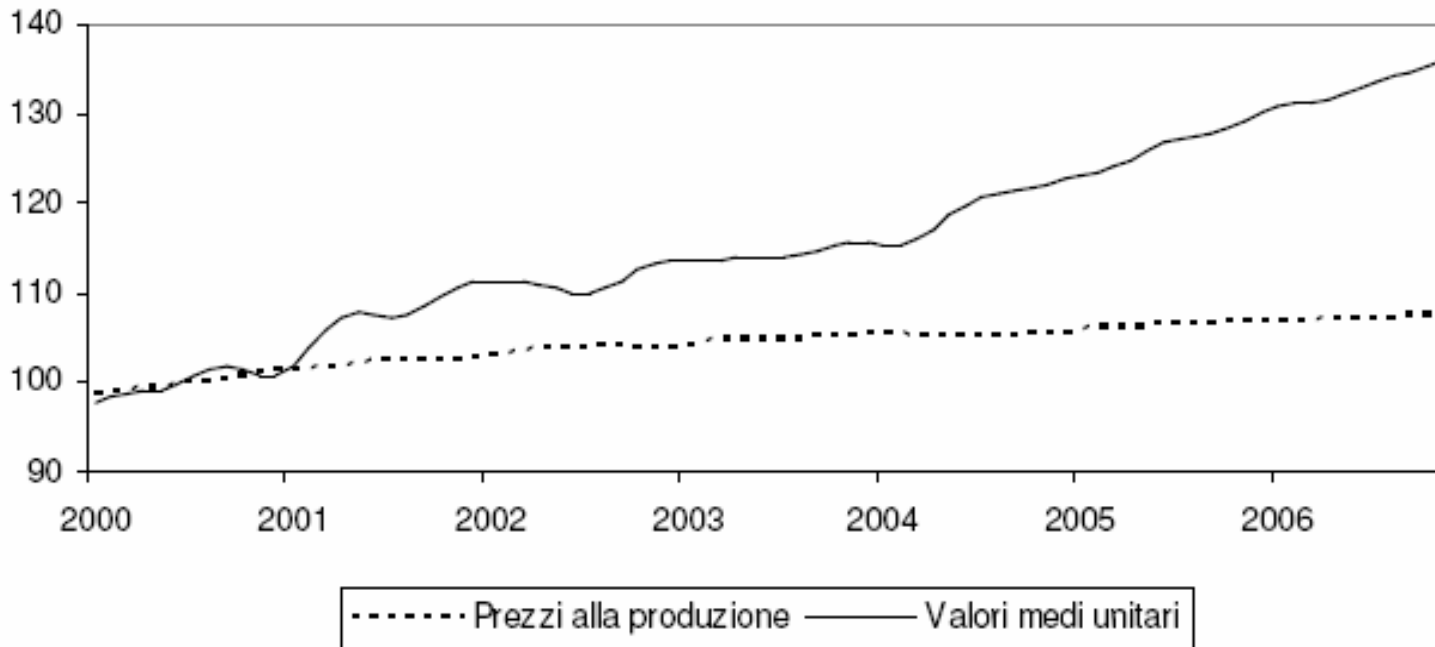
# Export UV and producer prices: aggregate manufacturing

Fig 6 Aggregato manifattura



# Export UV and producer prices: textile and Clothing

Fig. 7 Tessile e abbigliamento



# Further micro evidence

- **Bank of Italy (2007)** survey of more than 4000 manufacturing and service companies in 2000-2006 points to significant **qualitative improvements**: changing product varieties, investment in brand positioning and distributive networks, outward direct investments targeted at market penetration, international cooperative agreements, greater diffusion of modern managerial practices, increasing share of highly educated entrepreneurs.



- **ISTAT (2007)** panel data on 200.000 firms show labor productivity positively correlated to firm size, physical and knowledge capital intensity, service outsourcing, service and product offshoring, lower debt-equity ratios

# Employment by firm size: Italy as European outlier in 1-49 classes

Paese	Classi di addetti					Totale
	1-9	10-49	50-249	<250	250 +	
Belgio	16,6	18,6	17,6	52,8	47,3	100%
Danimarca	11,9	20,2	25,9	58,0	41,9	100%
Germania	9,5	14,9	15,8	40,2	59,8	100%
Grecia	16,0	29,5	28,3	73,8	26,2	100%
Spagna	22,7	28,4	21,2	72,3	27,7	100%
Francia	14,2	18,7	19,8	52,7	47,2	100%
Irlanda	3,7	--	--	3,7	--	100%
<b>Italia</b>	<b>23,9</b>	<b>30,9</b>	<b>19,0</b>	<b>73,8</b>	<b>26,3</b>	<b>100%</b>
Lussemburgo	6,5	12,4	21,5	40,4	59,6	100%
Olanda	11,6	17,4	21,4	50,4	49,6	100%
Austria	10,6	18,2	--	28,8	--	100%
Portogallo	17,5	28,7	29,1	75,3	24,7	100%
Finlandia	10,2	14,5	20,3	45,0	55,0	100%
Svezia	10,9	15,0	21,0	46,9	53,1	100%
Regno Unito	13,4	14,3	20,4	48,1	51,9	100%
EU-15	14,6	19,9	19,4	53,9	46,1	100%

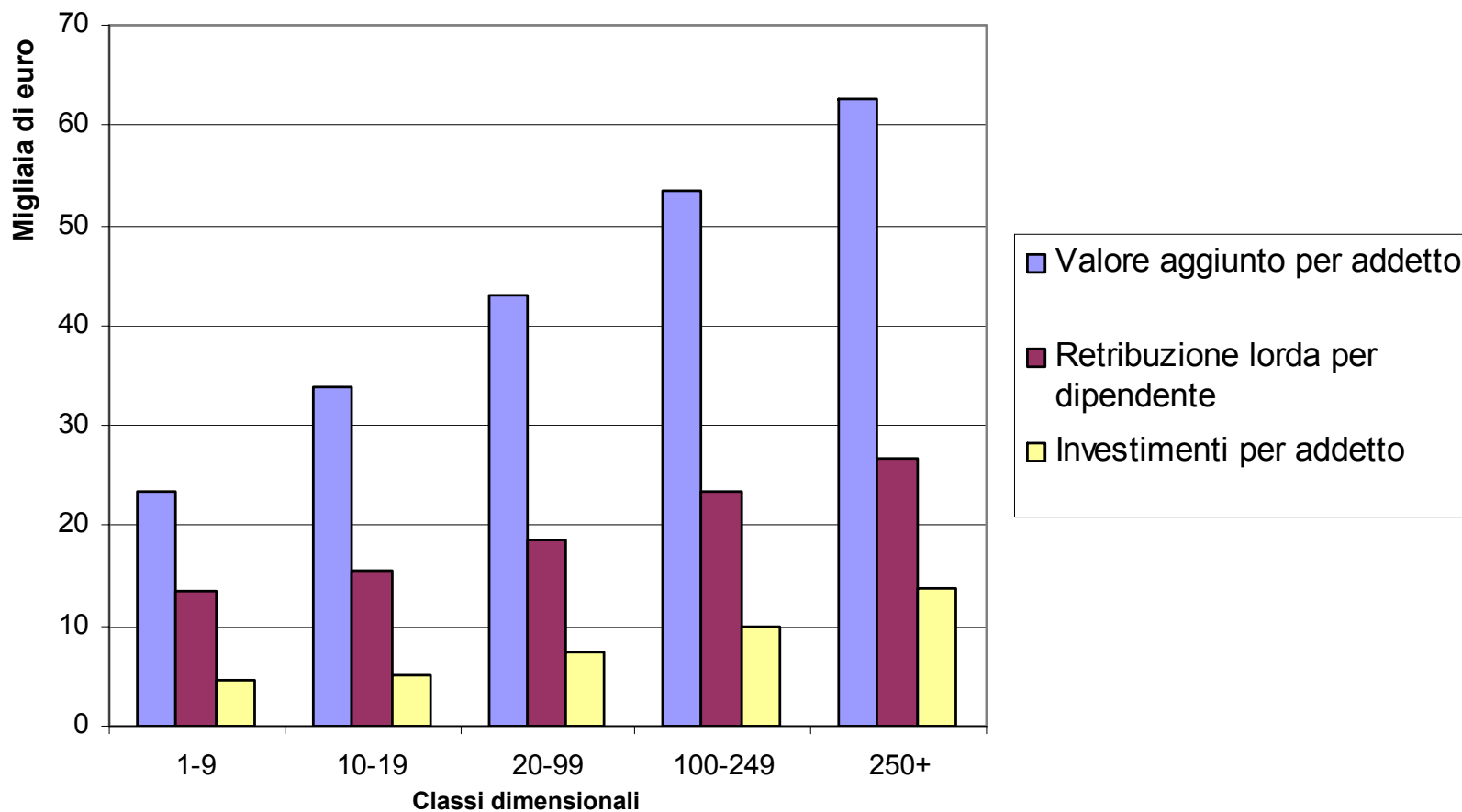
Fonte: “Enterprises in Europe” (1987-1997), Eurostat (2001)

“Small and Medium Enterprises Outlook”, OECD (2002)

# Firm size and labour productivity

- There is abundant agreement between theory and empirical evidence about some “stylized facts” concerning firm size and productivity in manufacturing.
- Moving from smaller to larger manufacturing firm size one finds higher levels of labour productivity (value added per employee), higher wages, higher investment per employee, larger share of profits over value added, lower debt/equity ratios, lower short-term debt/total debt

# Productivity, wages and investment by firm size



Fonte: Istat, *Rapporto Annuale*, Roma, 2002

# Italy as a lagging partner in worldwide integration through FDIs

As an international investor Italy started late (mid-1980s) and is handicapped by its scarcity of big business. Its stock of outward FDI is less than half the stock of France and Germany.

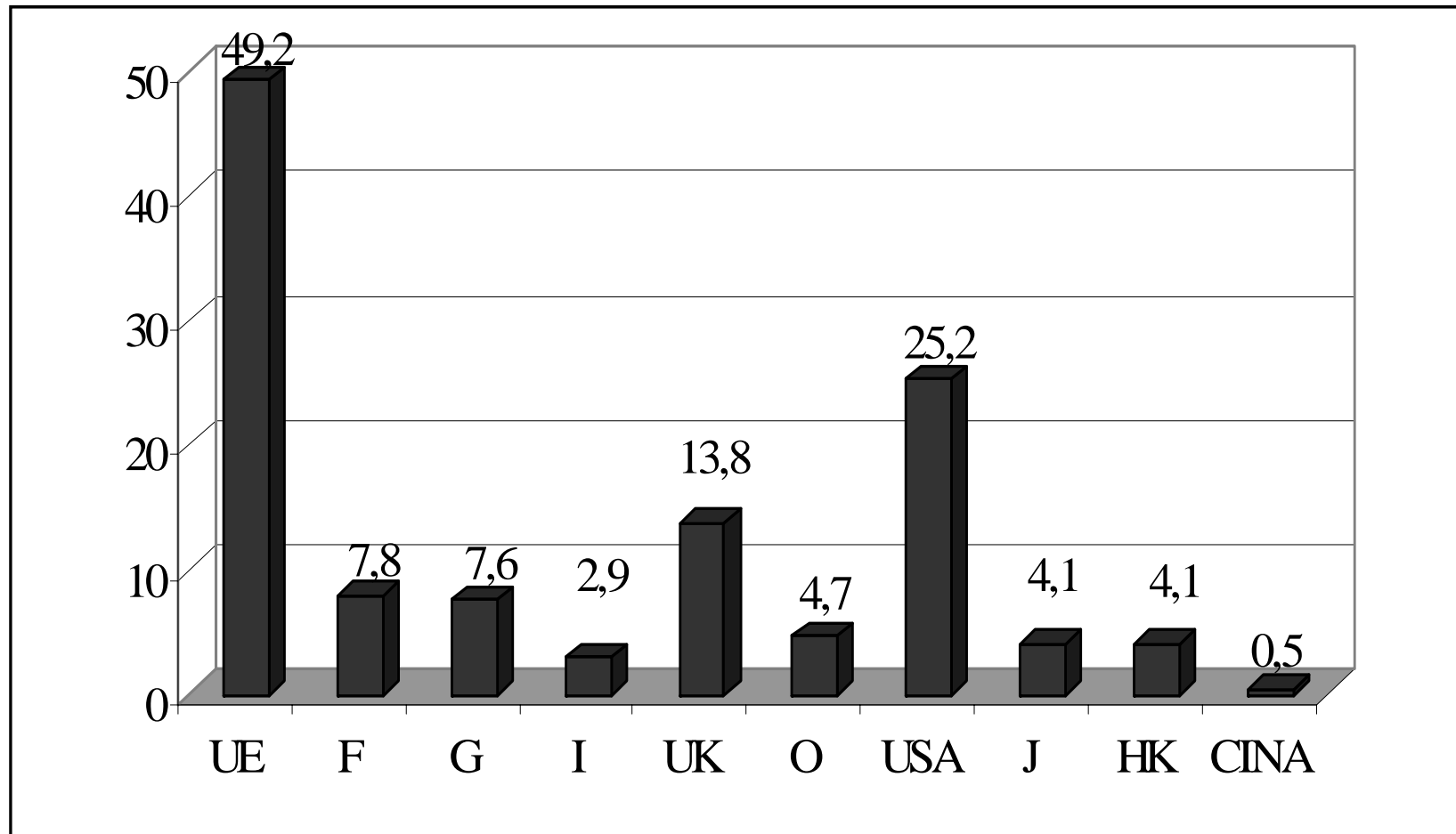
As a country of destination of FDIs Italy has lost position in the world ranking: today is 10th on the stock (2.46% at end 2006), 16th on the recent flows (lagging behind China, Brazil, Mexico, Spain, Denmark, Ireland, Sweden)

Italy shares with India the uncomfortable position near the bottom of respective rankings of developed and developing economies in terms of the UNCTAD “transnationality index for host economies”(\*) (UNCTAD, WIR 2007)

(\*)(average of four shares: FDI inflow/GFCF, FDI inward stock/GDP, VA foreign affiliates/GDP, employment foreign affiliates/total employment)

# FDI outward stock

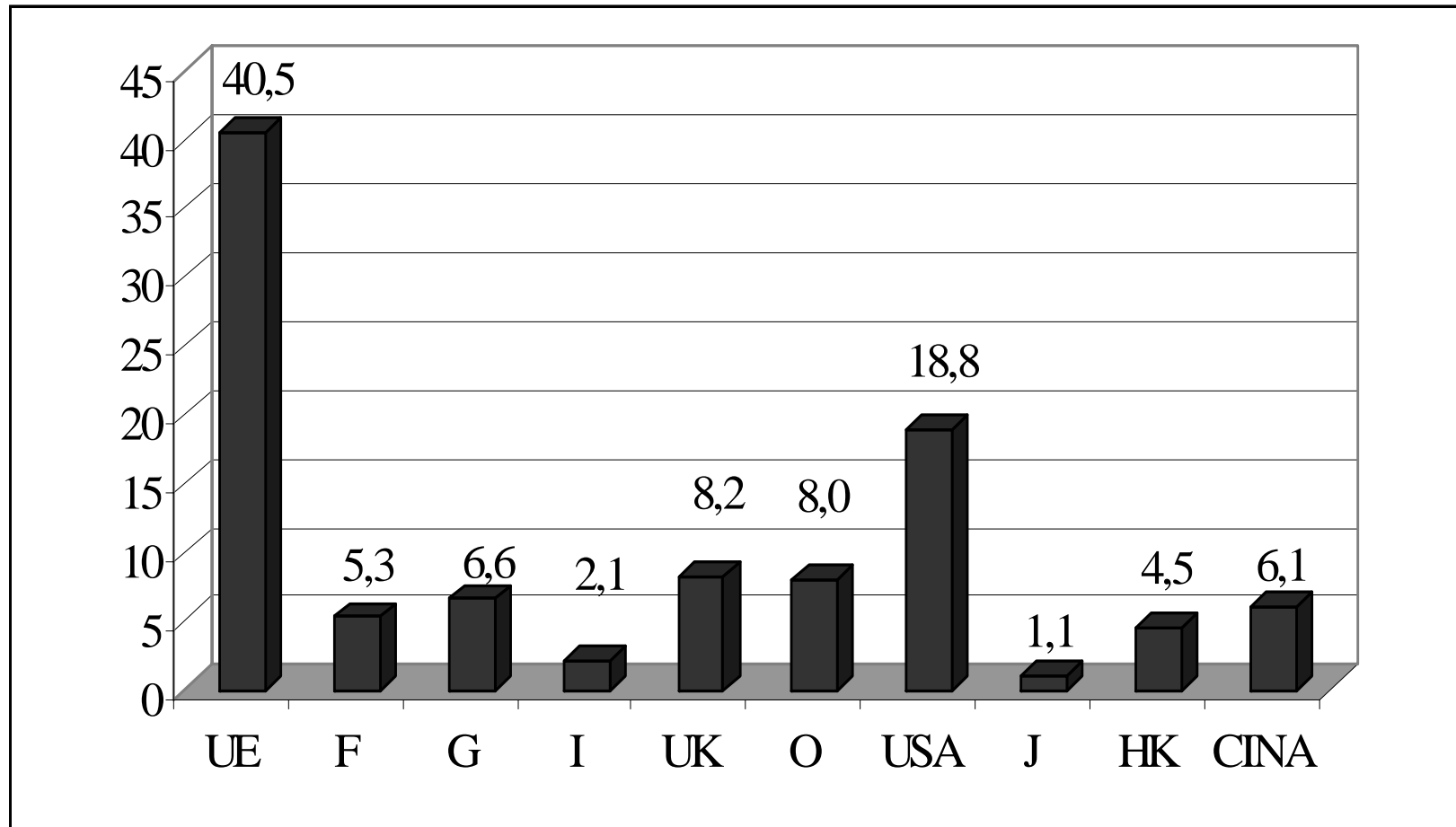
(% world total)



Fonte: "World Investment Report", UNCTAD (2004)

# FDI inward stock

(% world total)



Fonte: "World Investment Report", UNCTAD (2004)

# But still some attractiveness...

Foreign multinationals still perceive attractiveness of some Italian structural and cultural characteristics:

- quality and flexibility of human capital
  - creativity and flexible practices of engineers and technicians,
- old-rooted mechanical engineering skills,
  - reservoir of specialized suppliers,
  - some niche of scientific competence,
  - absence of NIMB syndrome...



- 4. Perspectives on bilateral economic cooperation

# Opportunities for bilateral cooperation (1)

- Although China may be largely unchallenged as “world manufacturing workshop” spread over “global supply chains”, India’s growing manufacturing base calls for technological and organizational modernization → scope for partnerships with Italy’s strongly rooted manufacturing culture
- Complementarity between Italy’s competitive advantages in high-quality traditional consumer goods and specialized machinery and India’s comparative advantages in scale intensive productions and ICT integration with traditional manufacturing and services

# Opportunities for bilateral cooperation (2)

- University-industry partnerships in engineering, biotech, environmental (eg.water), energy and management sciences
- Motor vehicles and components (Tata-Fiat!)
- Specialty steel
- Tourism development

- Thank you and all the best for future interactions and scientific-technological cooperation!