

# ELECTRA

*Annex 1*

*Statistics, Facts & Figures*

# COPYRIGHT NOTICE

## *Important notice*

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# Scope of ELECTRA



NACE		Industrial Branches
29.71	Electric domestic appliances .....	Household Appliances
<b>30</b>	.....	
31	Electrical machinery and apparatus	
31.10	Electric motors, generators and transformers.....	Automation (31.10 pt, 31.20 pt, 3320 pt, 3330)
31.20	Electrical distribution and control apparatus ... }	Energy (31.10 pt, 3120 pt, 3130 pt)
31.30	Insulated wire and cable .....	Insulated Wire and Cable
31.40	Accumulators, primary cells and primary batteries .....	Accumulators, Primary Cells and Primary Batteries
31.50	Lighting equipment and electric lamps .....	Lighting
31.61	Electrical equipment for engines and vehicles	
31.62	Other electrical equipment n.e.c.	
32	Radio, television and communication equipment and apparatus	
32.10	Electronic valves and tubes and other electronic components .....	Electronic Components
<b>32.20</b>	.....	
32.30	Television and radio receiver, sound or video recording or reproducing apparatus and associated goods	Consumer Electronics
33	Medical, precision and optical instruments, watches and clocks	
33.10 pt	Medical and surgical equipment and orthopaedic apparatus .....	Electromedical Equipment
33.20 pt	Instruments and appliances for measuring, checking, testing, navigating and other purposes .....	Automation
33.30	Industrial process control equipment .....	Automation
<b>TOTAL Hardware</b>		

**Not included**

30.....	Office machinery and computers .....	ICT
32.20.....	Television and radio Transmitters and apparatus for line telephony and line telegraphy .....	ICT

# ELECTRA – Statistical Analysis



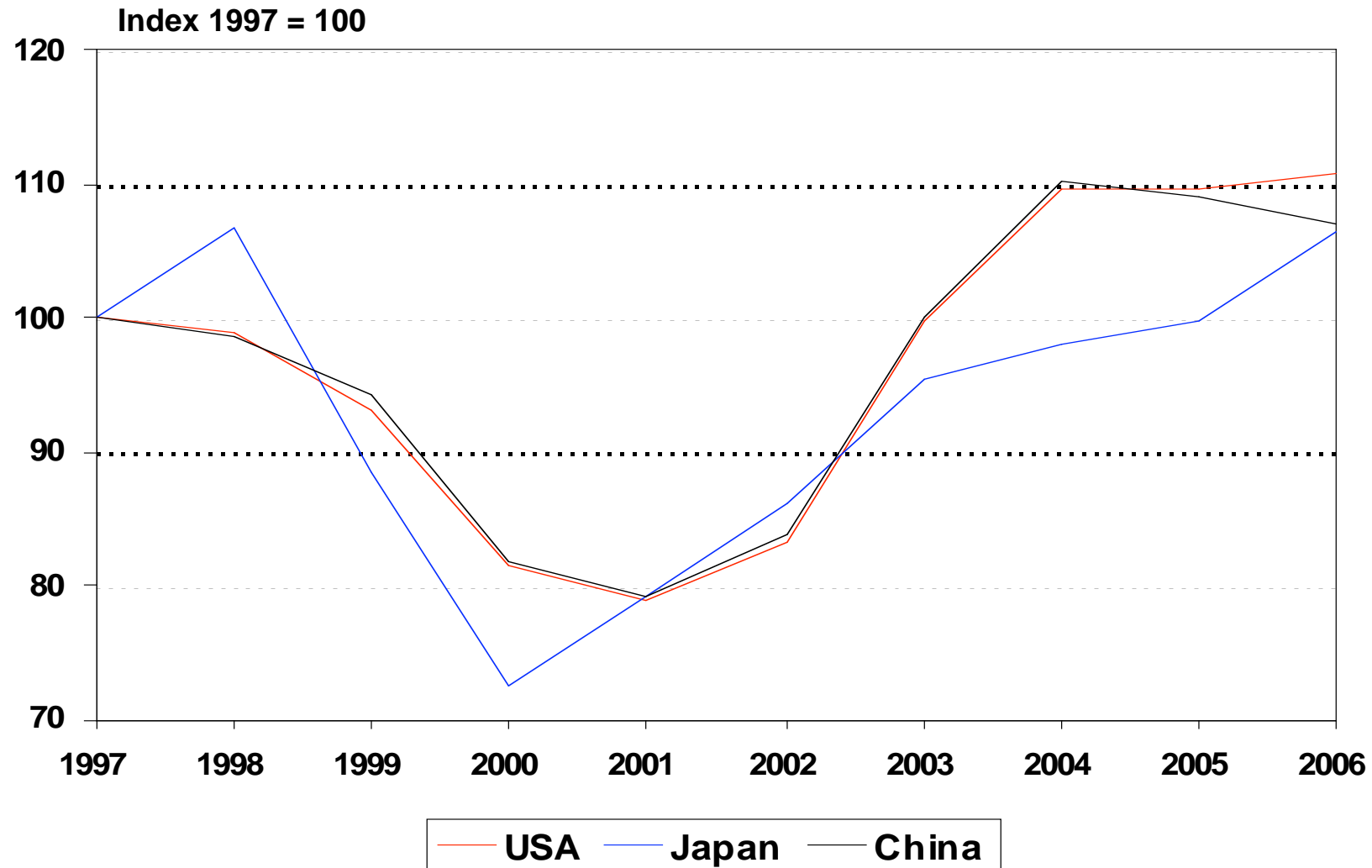
- Tables and Graphs available since 10th of September
- List of Variables (Production, Exports, Imports, Apparent Consumption, Number of Enterprises, Employees, Investments, Labour Costs, Research & Development, Calculated Values like Productivity, Per Capita Values, Import Penetration Rate, Export Rate a. s. o.)
- EC (27; data for each Member Country), USA, Japan, China
- Subsectors (limited variables: Production, Exports, Imports, Apparent Consumption)
  - Automation
    - Electronic Components
    - Household Appliances
    - Energy
    - Consumer Electronics
    - Lighting
    - Electromedical Equipment
    - Insulated Wire and Cable
    - Accumulators, Primary Cells and Primary Batteries
- NACE 31: Electrical machinery and apparatus: Parts of Automation (31.10, 31.20), Energy (31.10, 31.20, 31.30), Insulated Wire and Cable (31.30), Accumulators, Primary Cells and Primary Batteries (31.40), Lighting (31.50)

# ELECTRA – Statistical Glossar



- Only figures for hardware, no figures for software and services
- Values in Euros, nominal
- Estimations for missing values by ZVEI
- Apparent consumption (Hardware):
  - Production
    - Exports (Intra-EU and/or Extra-EU)
    - + Imports (Intra-EU and/or Extra-EU)
    - = Apparent Consumption
- **N.B.: Calculation of apparent consumption for separate EU-Member-Countries includes Extra-Trade plus Intra-EC-Trade**
- **Import Penetration Rate: Imports in % of apparent consumption**
- **Export Rate: Exports in % of production**
- **Productivity: Production per employee  
Value added per employee**
- **Investment Ratio: Investment in % of production  
Investment in % of value added**
- **R&D Ratio: R&D expenditures in % of production  
R&D expenditures in % of value added**

# ELECTRA Exchange Rates National Currency Units per Euro (1997 = 100) 1997 - 2006



Source: Deutsche Bundesbank, ZVEI

# EC (27): Employees, Production, Apparent Consumption

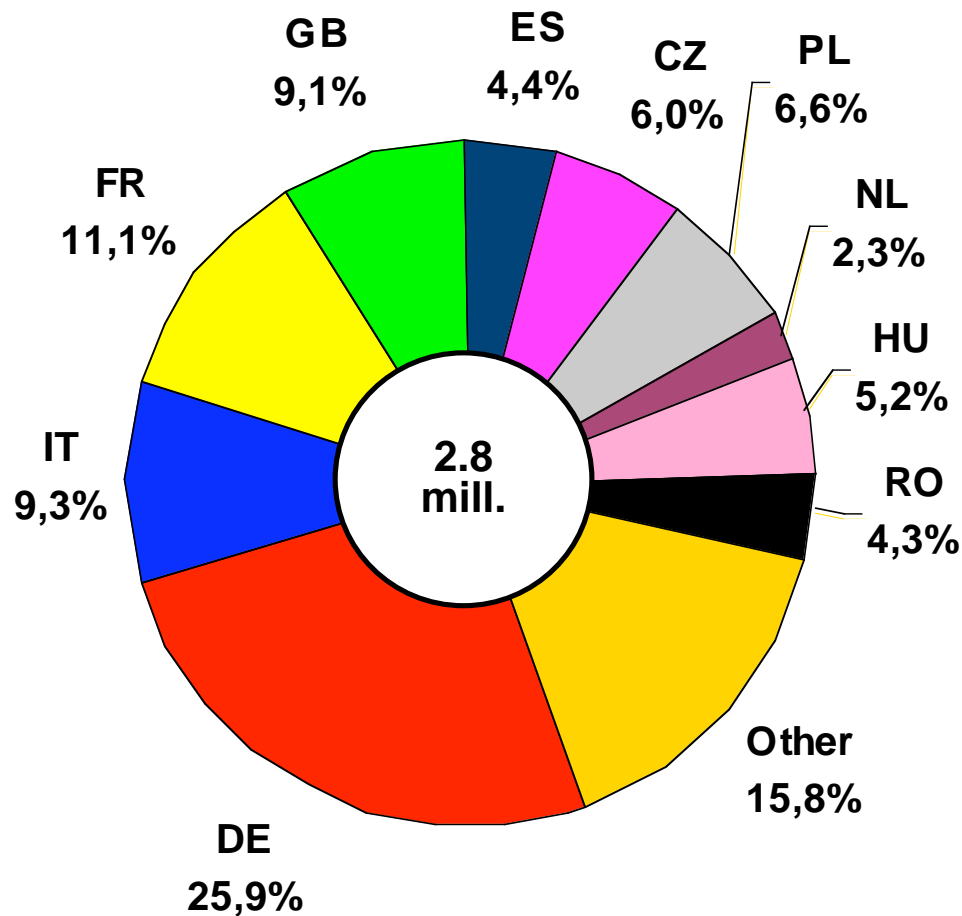


- **Big 4: Germany, France, Great Britain, Italy:**  
Two thirds of production and apparent consumption  
but only 55 % of employees
- **New Member Countries with high share of employees**
- **Intra-EC-Trade is higher than Extra-Trade**

**Charts 7 - 10**

# ELECTRA – Employees in 2006

## EC (27) by country



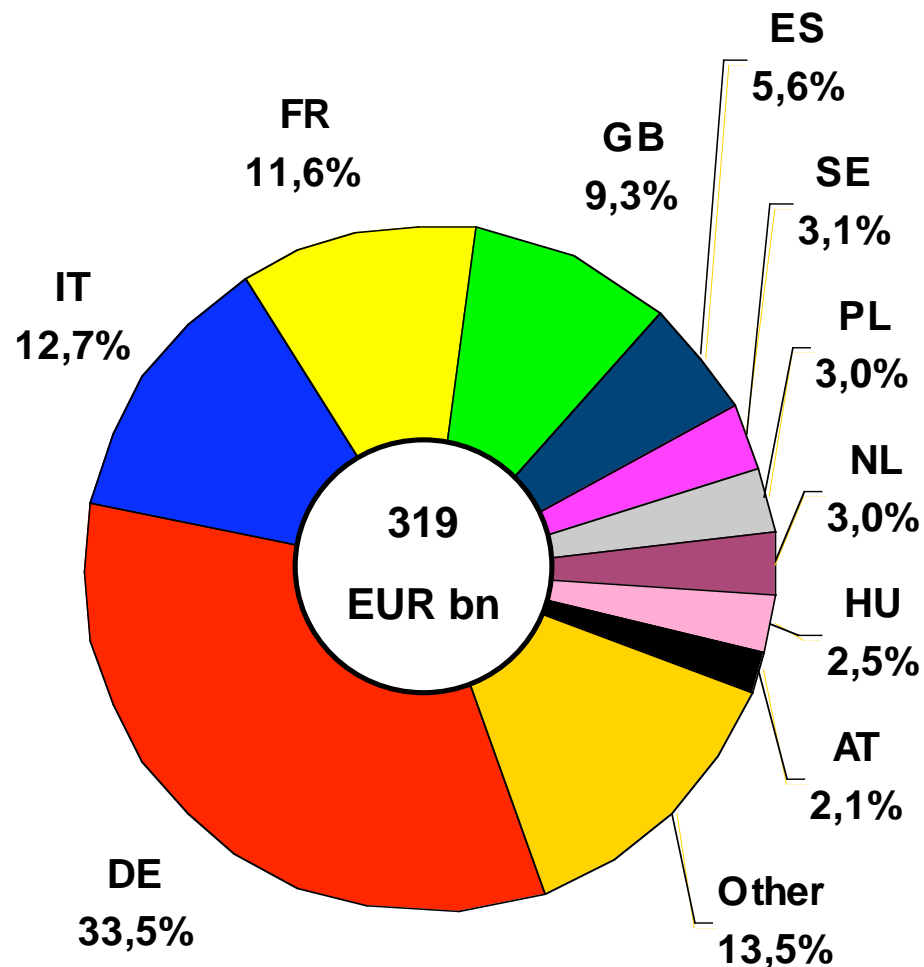
Other	15,8	%
AT	2,0	%
SK	2,0	%
SE	1,8	%
DK	1,4	%
BELU	1,4	%
PT	1,3	%
SI	1,3	%
BG	1,2	%
FI	1,1	%
LT	0,8	%
IE	0,6	%
GR	0,3	%
EE	0,3	%
LV	0,3	%
CY	0,0	%
MT	0,0	%

Source: Eurostat, National Statistical Offices, ZVEI



# ELECTRA – Production in 2006

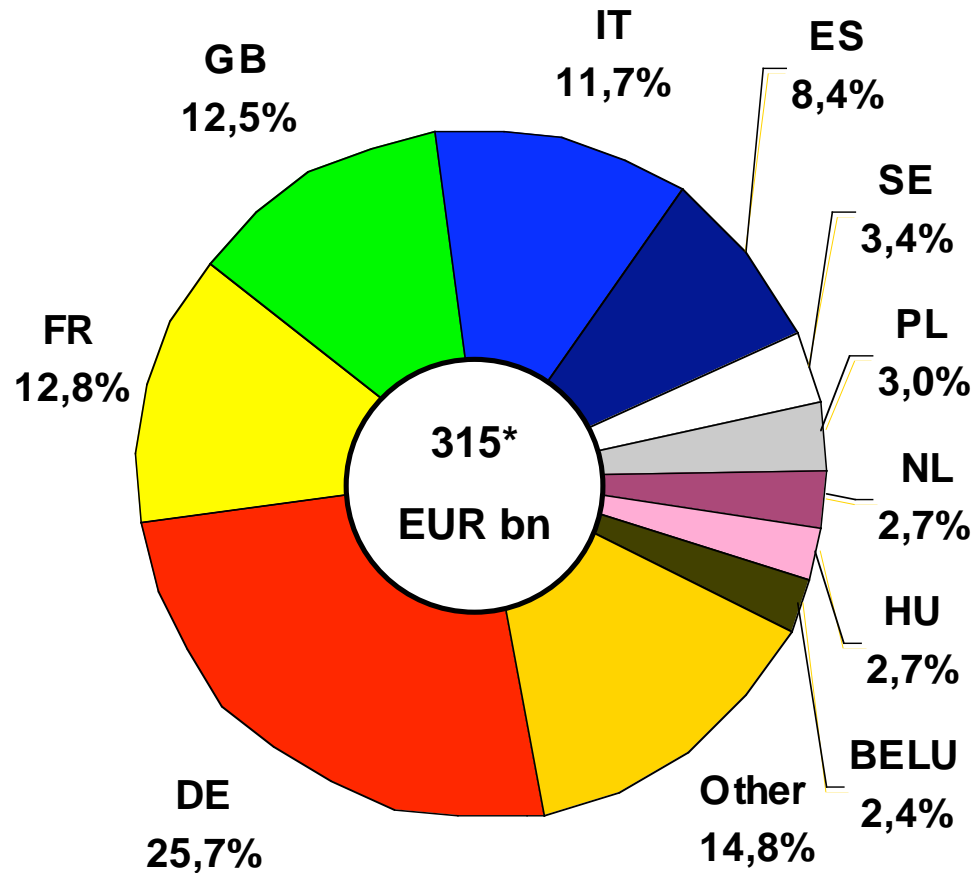
## EC (27) by country



Country	Value	Percentage
Other	13,5	%
CZ	2,1	%
DK	2,0	%
BELU	1,8	%
FI	1,6	%
IE	1,5	%
PT	0,9	%
SK	0,9	%
SI	0,8	%
RO	0,7	%
GR	0,4	%
LT	0,3	%
BG	0,2	%
EE	0,1	%
MT	0,1	%
LV	0,1	%
CY	0,0	%

Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Apparent Consumption in 2006 EC (27) by country

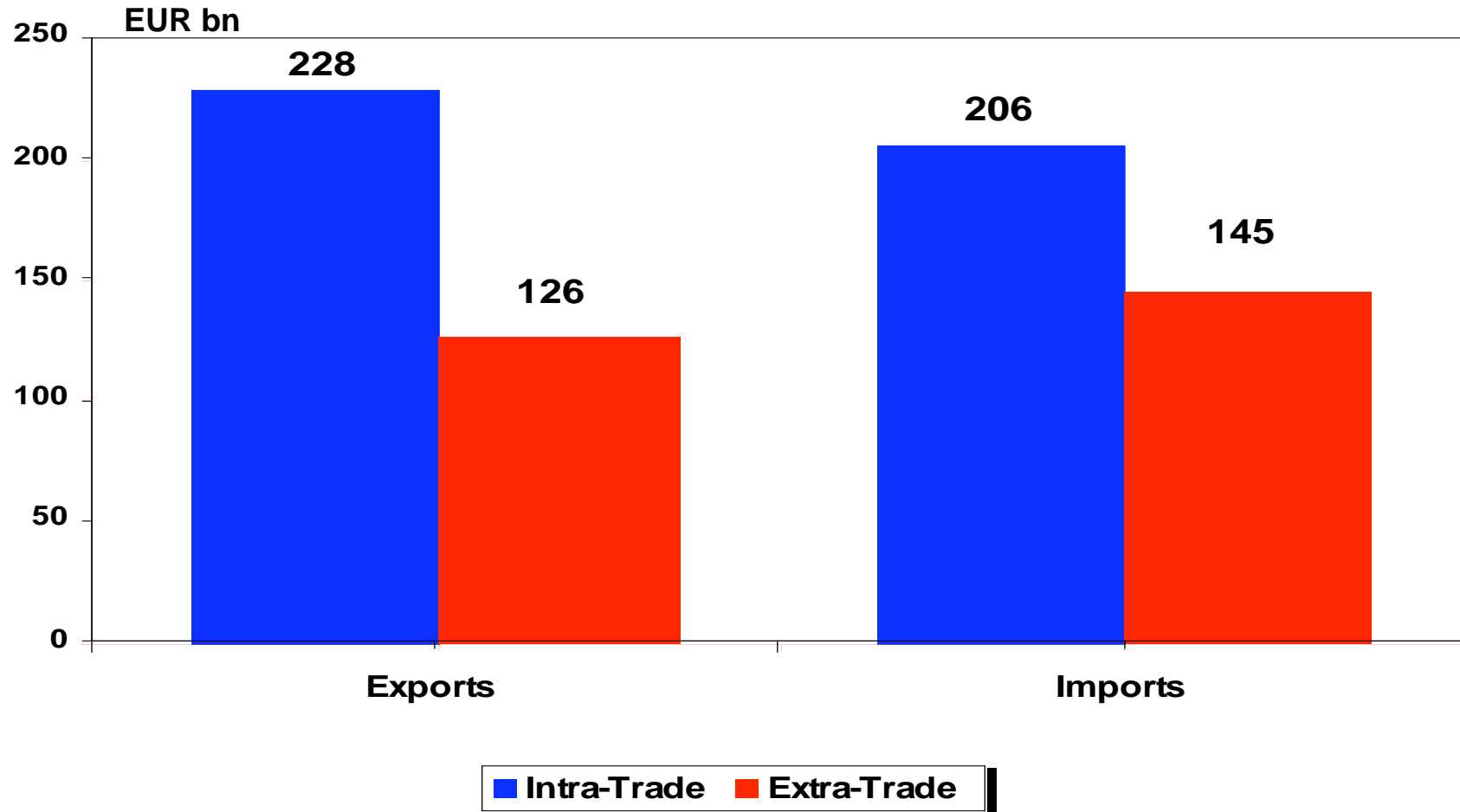


Other	14,8	%
CZ	2,0	%
DK	2,0	%
AT	1,8	%
FI	1,8	%
IE	1,3	%
PT	1,1	%
SK	1,0	%
SI	1,0	%
RO	0,7	%
GR	0,5	%
LT	0,4	%
BG	0,4	%
EE	0,4	%
MT	0,2	%
LV	0,1	%
CY	0,0	%

Source: Eurostat, National Statistical Offices, ZVEI

\*)including Intra-EC trade

# ELECTRA – Intra-/Extra-EC-Trade 2006



Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Key Figures EC (27), USA, Japan, China 2006



Country	Apparent Consumption EUR bn	Production EUR bn	Employees		Value Added	
			Numbers '000	Share of total Industry in %	Value EUR bn	Share of total Industry in %
EC (27)	338	319	2,771	8.0	142	8.4
USA	338	290	1,080	8.2	184	12.6
Japan	240	285	1,000	12.3	102	13.5
China	401	459	7,000	11.7	100	14.2
ROW	208	172				
<b>World</b>	<b>1,525</b>	<b>1,525</b>				

Source: Eurostat, National Statistical Offices, ZVEI

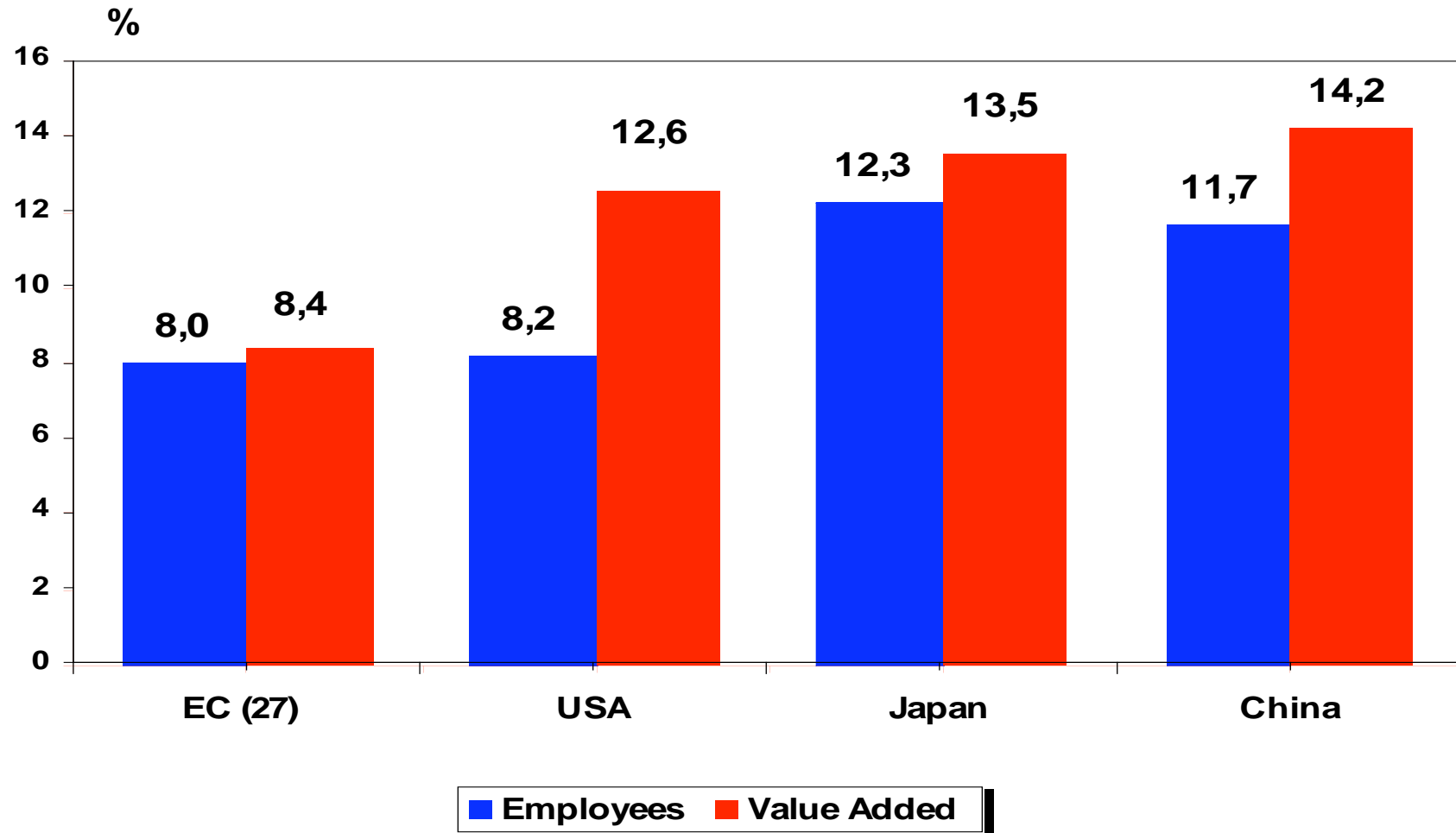
# ELECTRA – Key Figures EC (27), USA, Japan, China 2006



Country	Production	Exports	Imports	Apparent Consumption
	EUR bn	EUR bn	EUR bn	EUR bn
EC (27) (Intra-EC-Trade)	319	126 (228)	145 (206)	338
USA	290	127	175	338
Japan	285	106	61	240
China	459	252	194	401
ROW	172	433	387	208
World	1,525	1,168	1,168	1,525

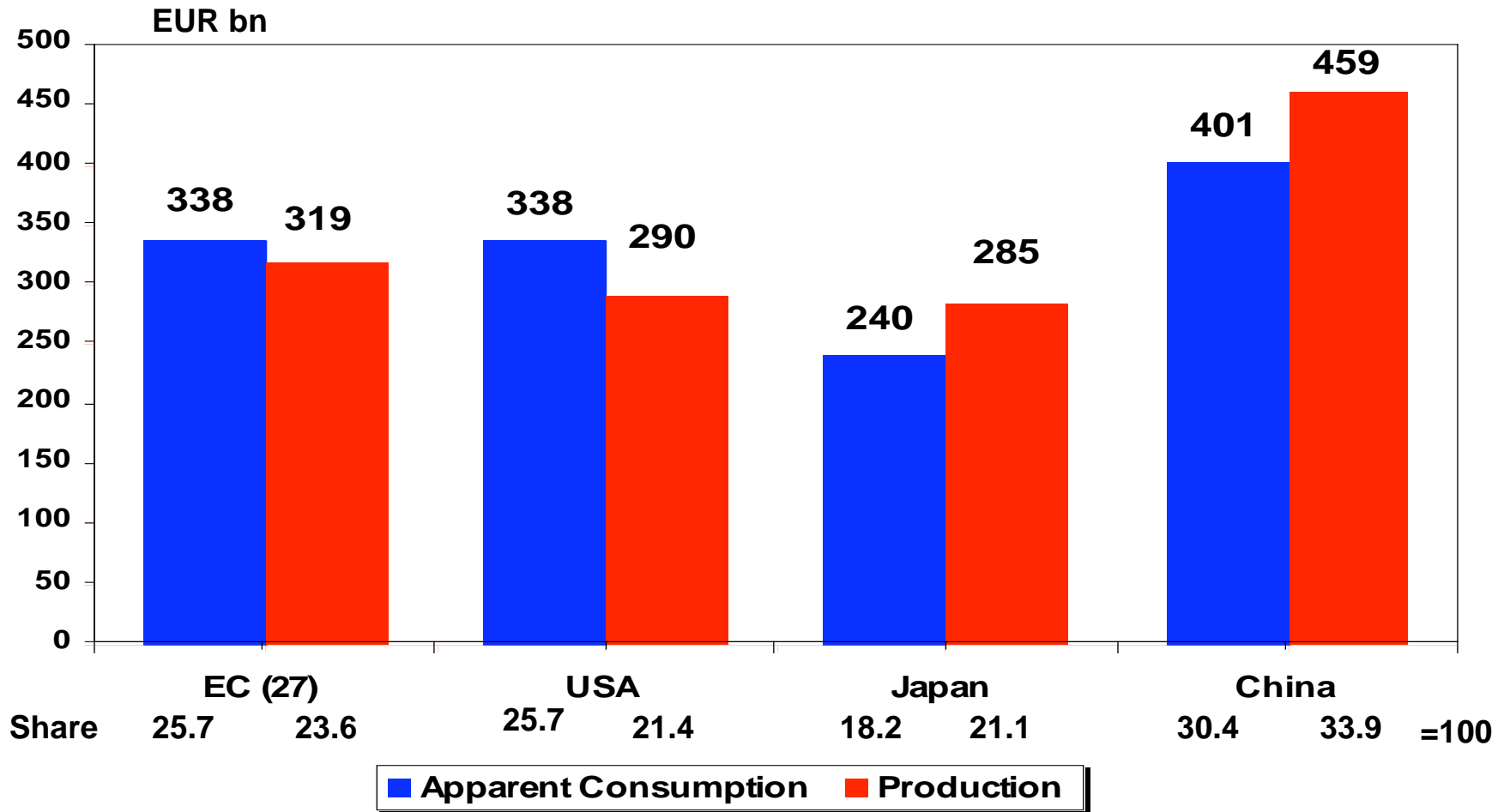
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Share of total Industry 2006



Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Apparent Consumption and Production EC (27), USA, Japan, China 2006



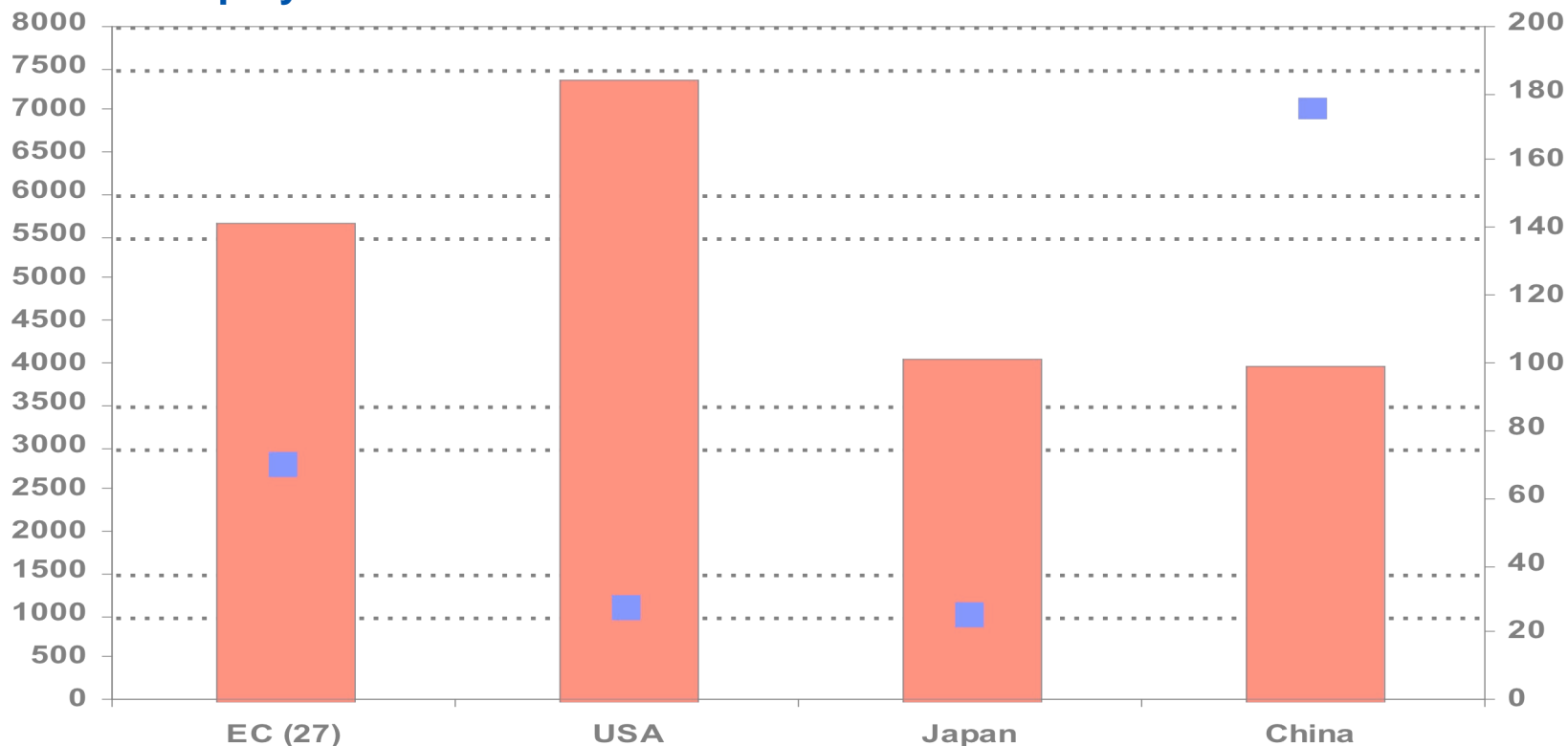
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Value Added and Employees EC (27), USA, Japan, China 2006



Employees mill.

Value Added in EUR bn.

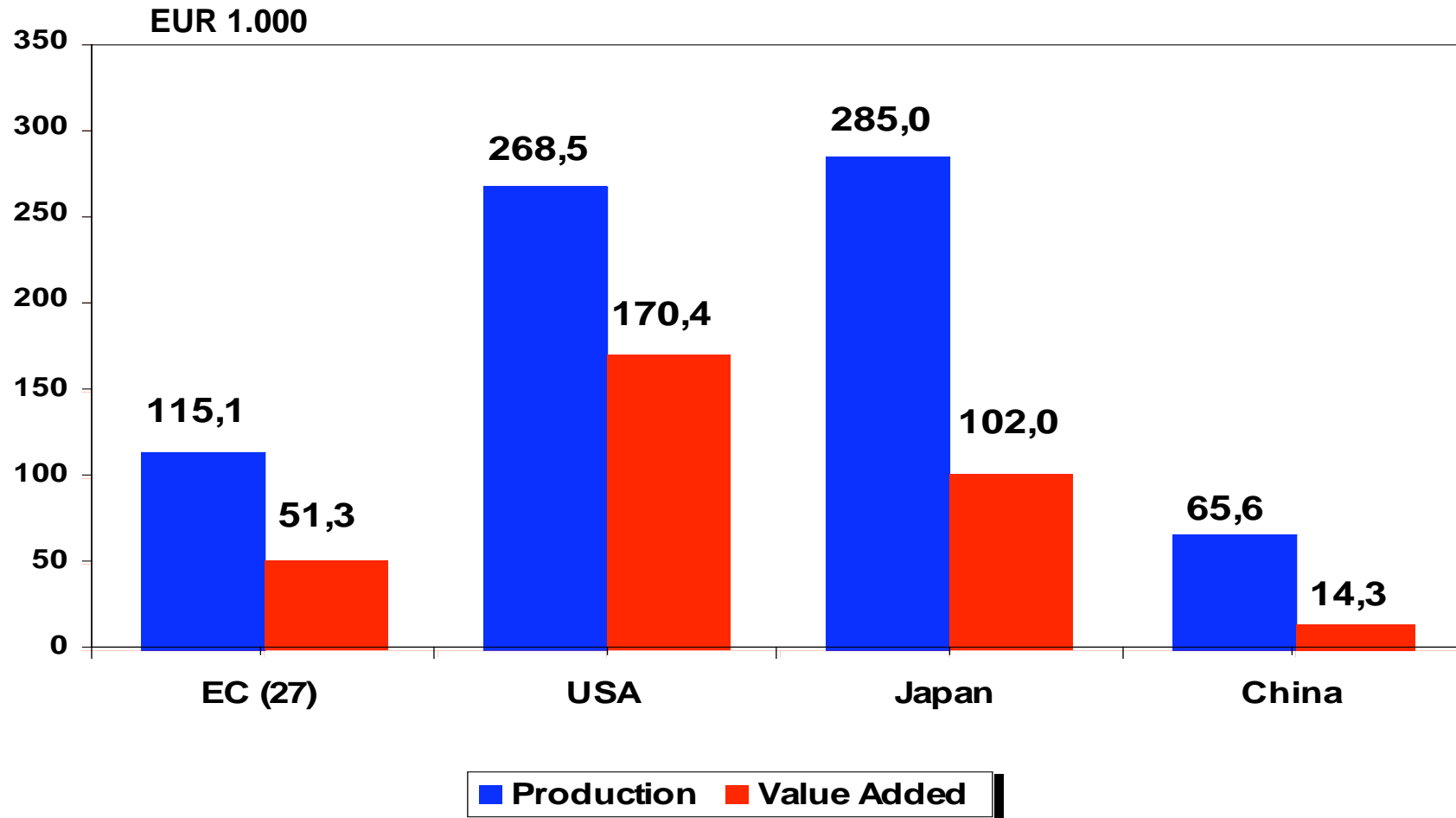


Share of Value Added	26.9	34.9	19.3	18.9	=100
Share of Employees	23.4	9.1	8.4	59.1	=100

Source: Eurostat, National Statistical Offices, ZVEI

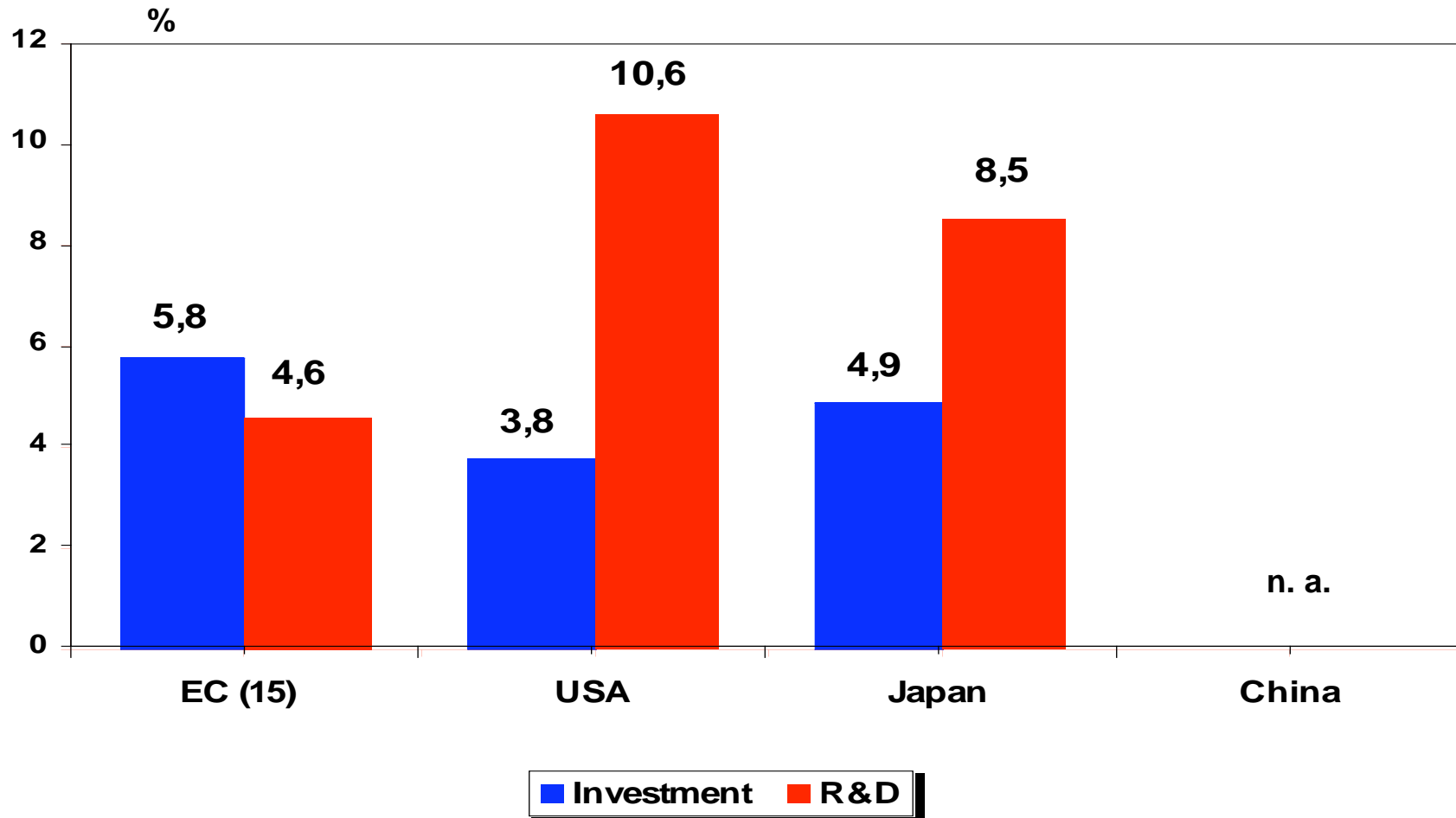


# ELECTRA – Production and Value Added per Employee EC (27), USA, Japan, China 2006



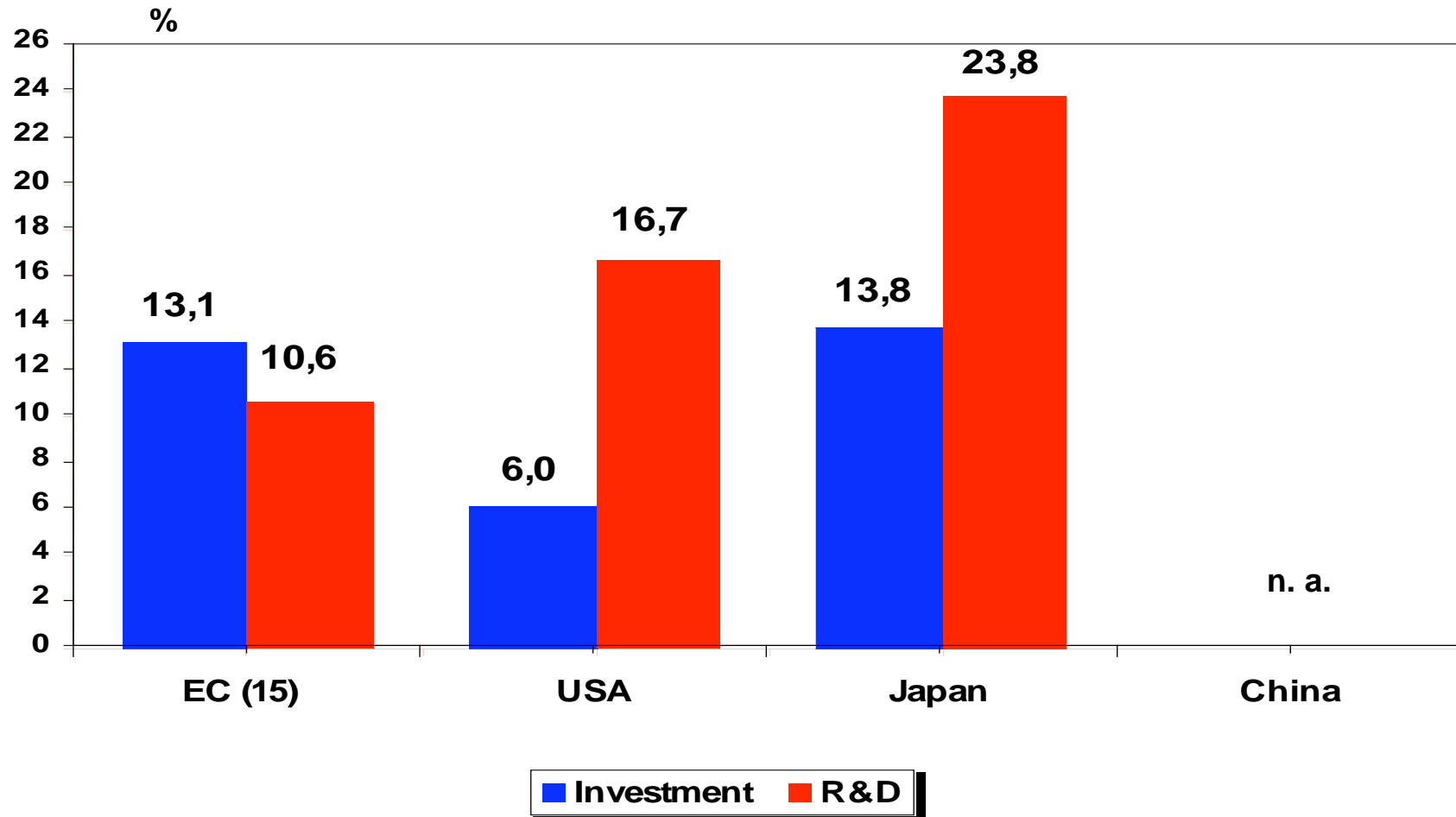
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Investment and R&D in % of Production EC (15), USA, Japan, China 2006



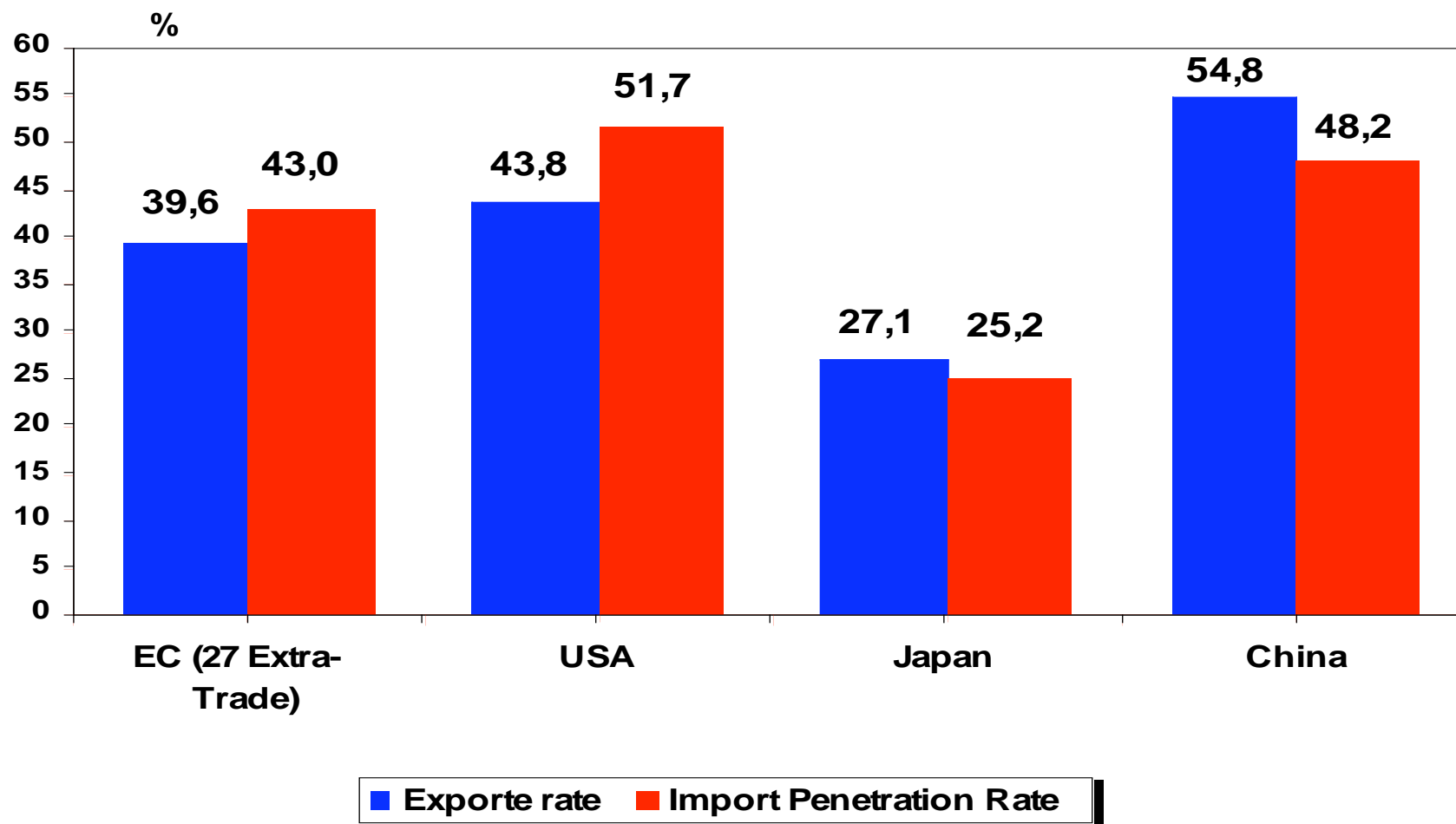
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Investment and R&D in % of Value Added EC (15), USA, Japan, China 2006



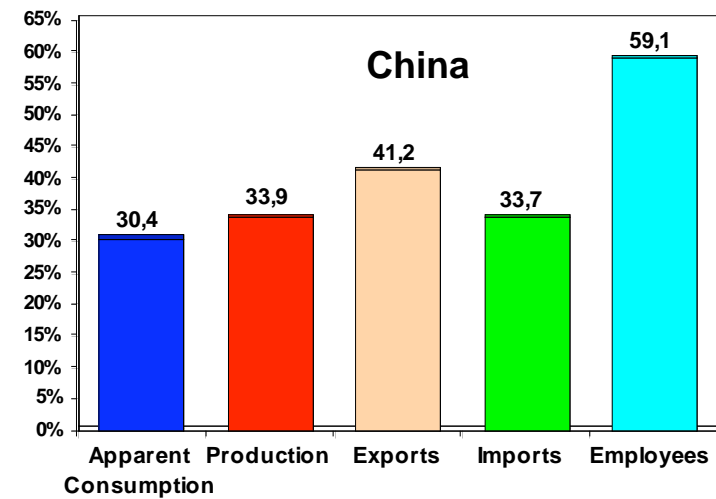
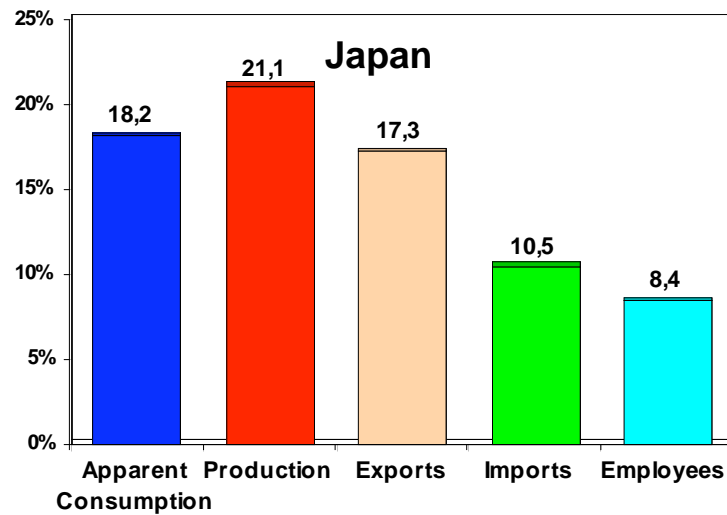
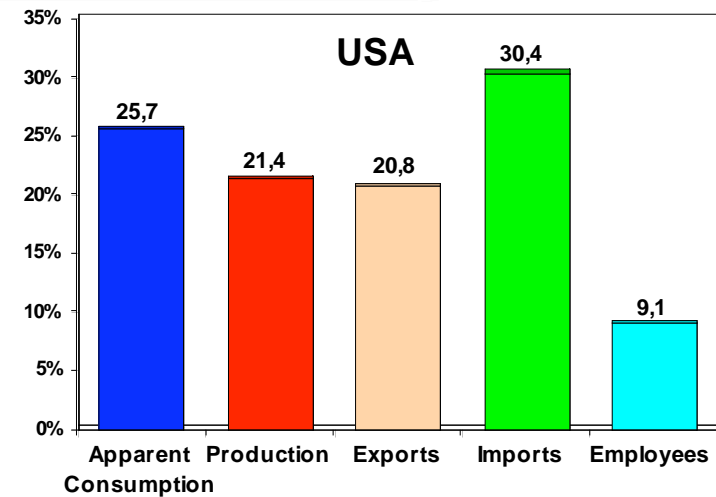
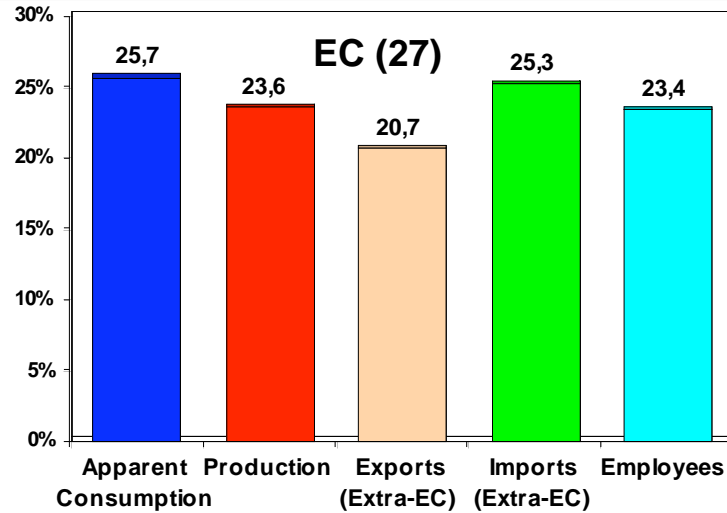
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Export Rate and Import Penetration Rate EC (27), USA, Japan, China 2006



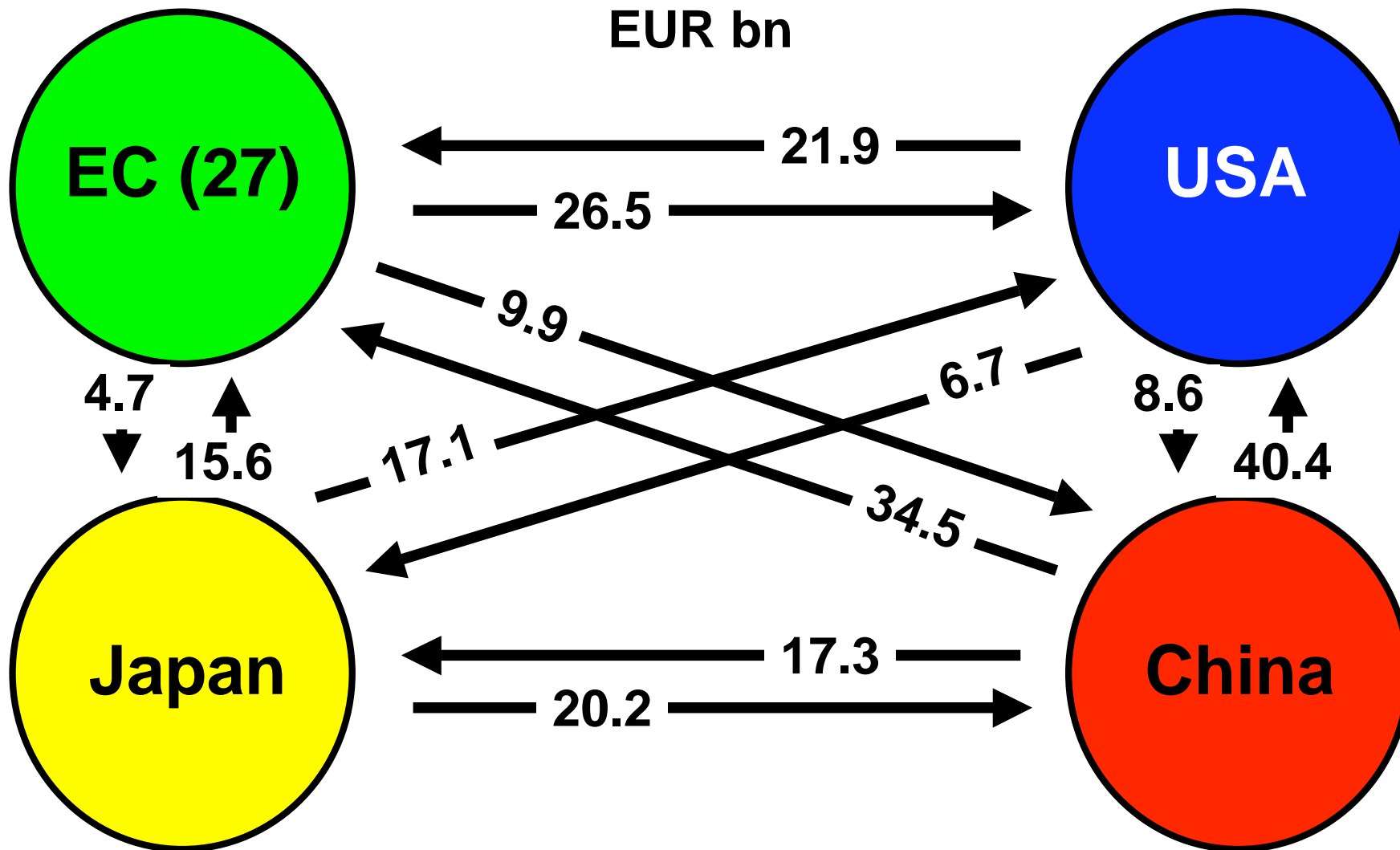
Source: Eurostat, National Statistical Offices, ZVEI

# Regional Shares of Total (EC + USA + Japan + China = 100)



Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Foreign Trade 2006



Source: Eurostat, National Statistical Offices, ZVEI

## Development 1997 - 2006 in EC (27), USA, Japan, China

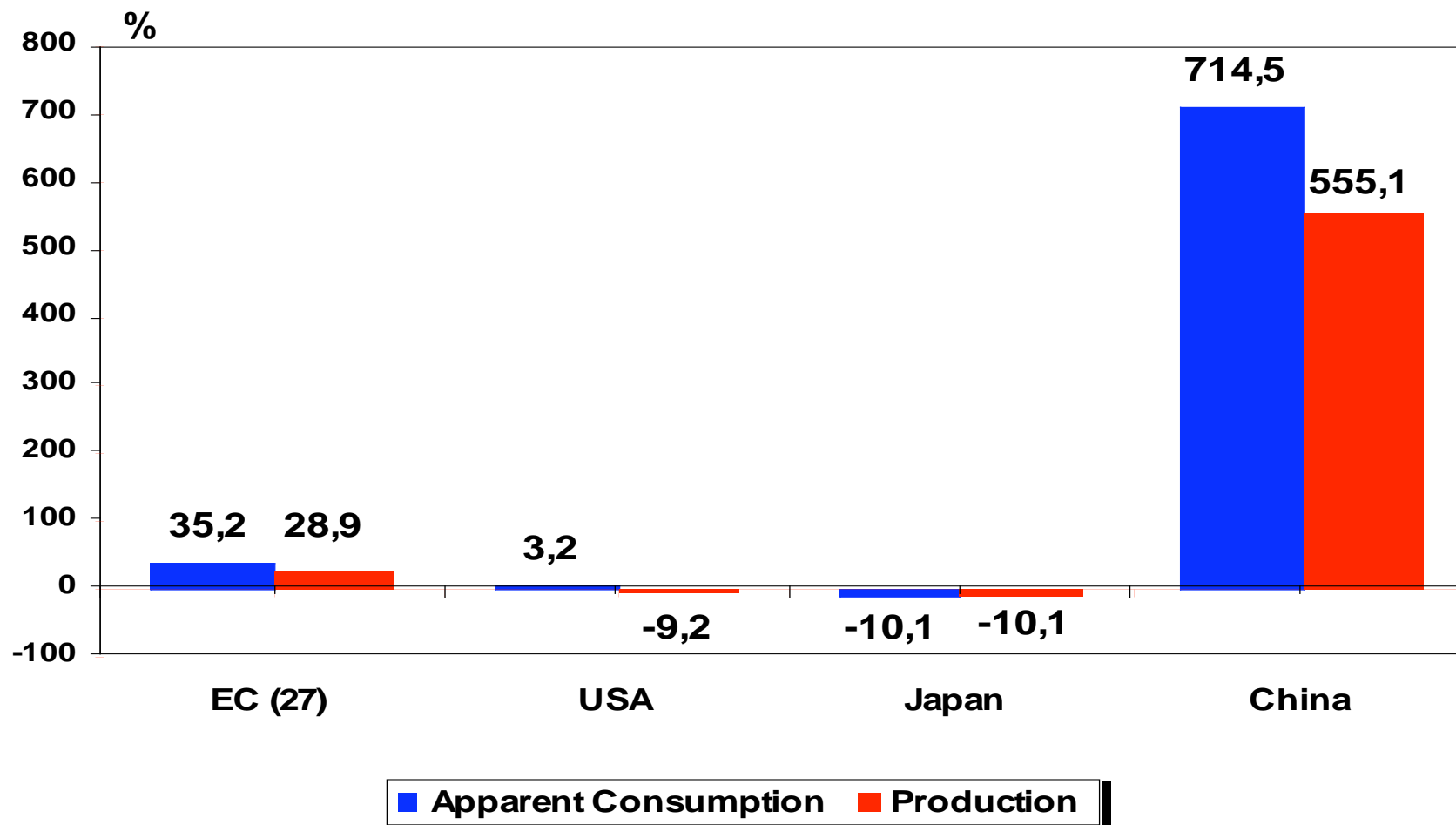


- **Low growth rates in EC (27); decrease of apparent consumption in USA and Japan  
High growth in China**
- **Worldwide increase of trade, especially China**
- **Decrease of Employees in EC (27), USA, Japan; increase in China**
- **Investment with some recovery after 2002/2003**

**Charts with bars: 23 - 25**

**Charts with lines: 26 - 36**

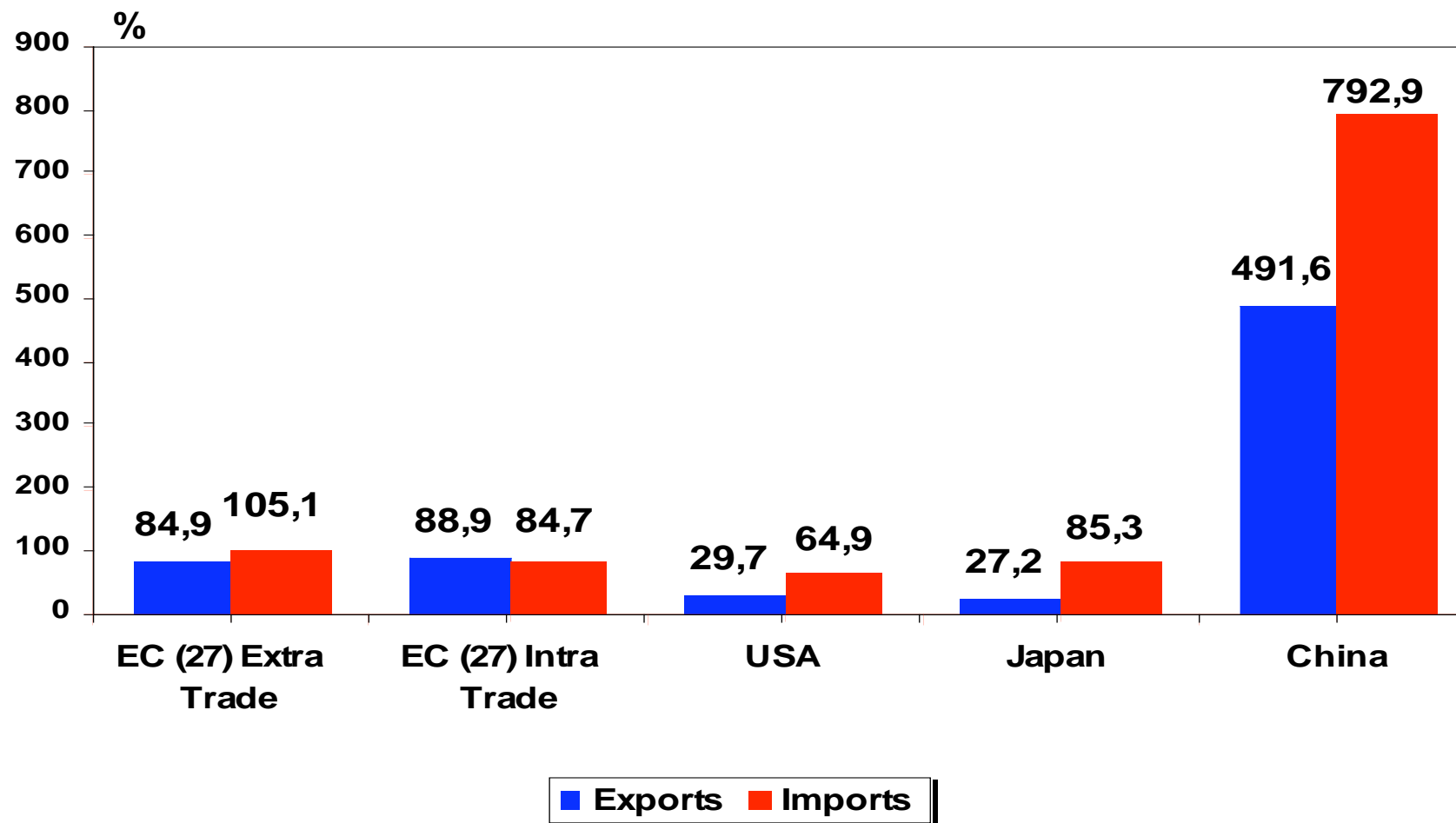
# ELECTRA – Development of Apparent Consumption and Production EC (27), USA, Japan, China 1997 - 2006



Source: Eurostat, National Statistical Offices, ZVEI

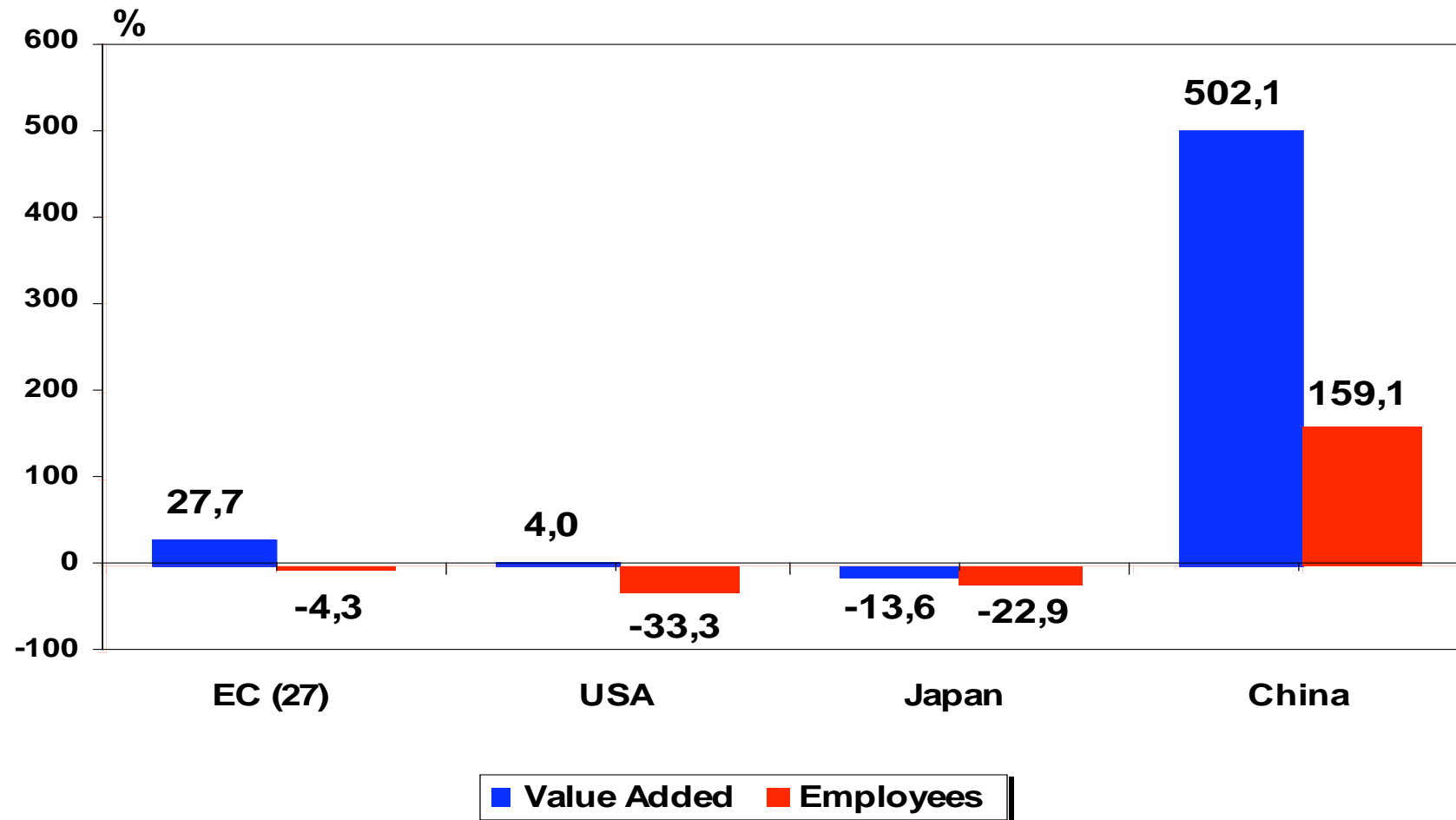


# ELECTRA – Development of Exports and Imports EC (27), USA, Japan, China 1997 - 2006



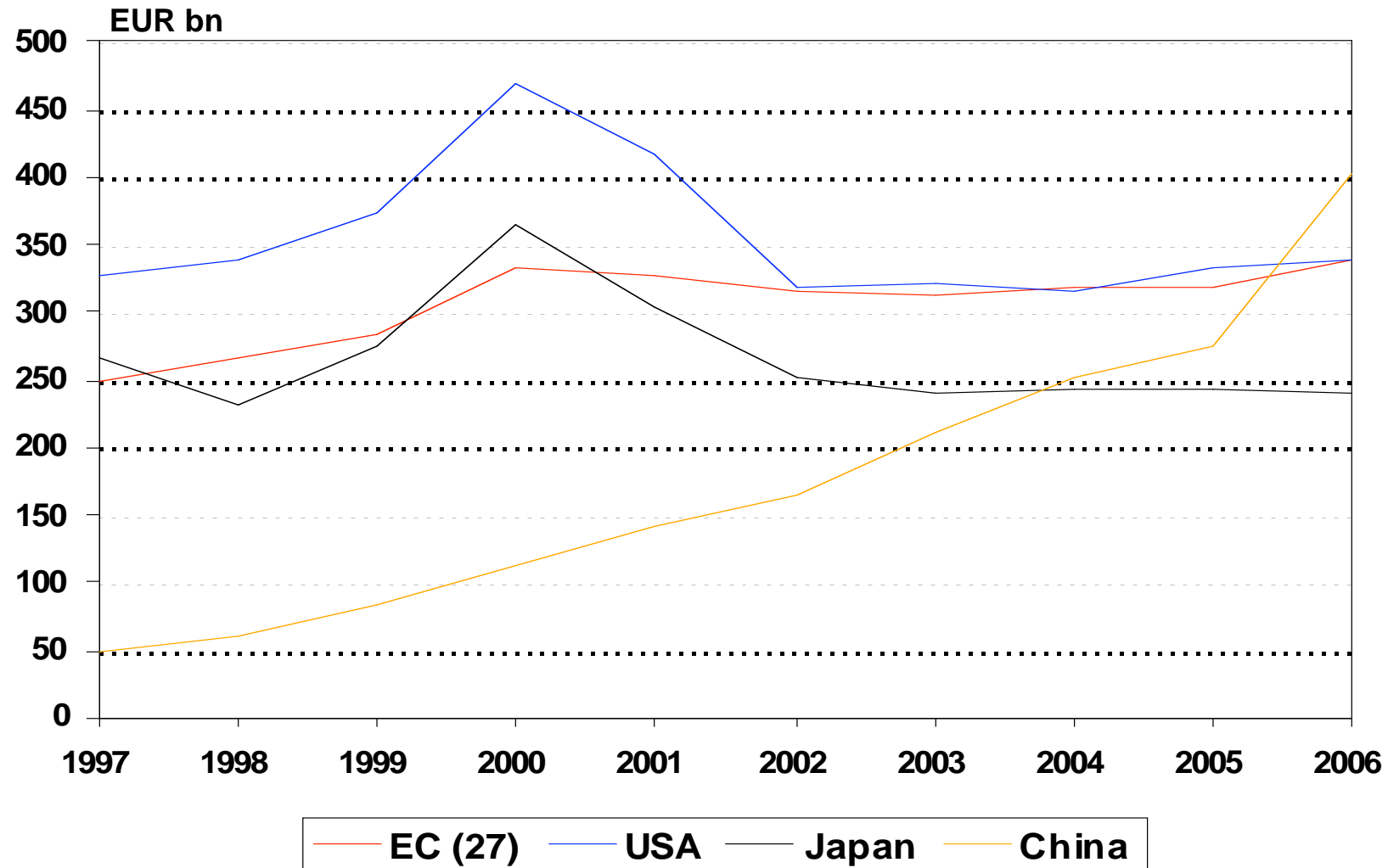
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Development of Value Added and Employees EC (27), USA, Japan, China 1997 - 2006



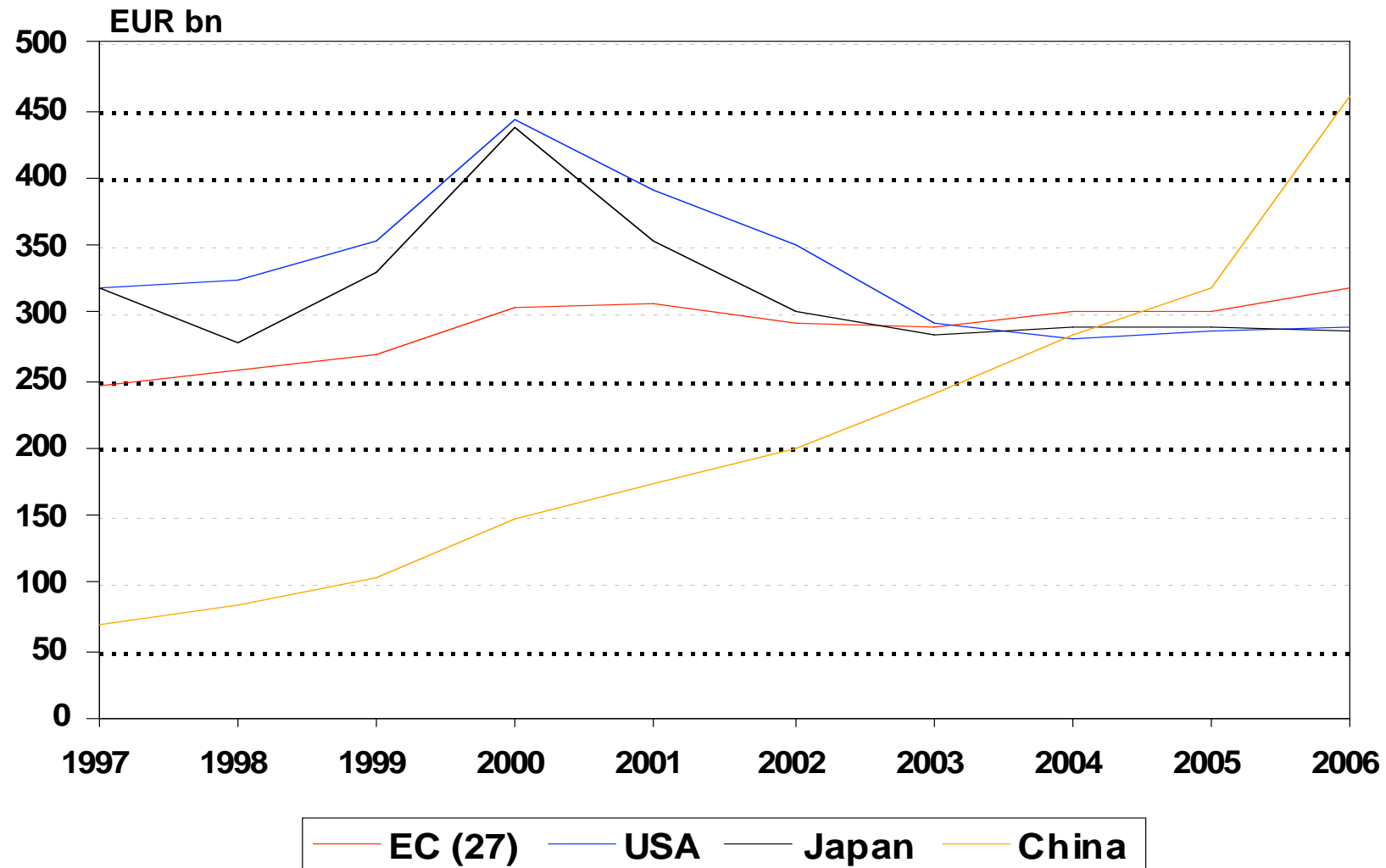
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Apparent Consumption 1997 - 2006



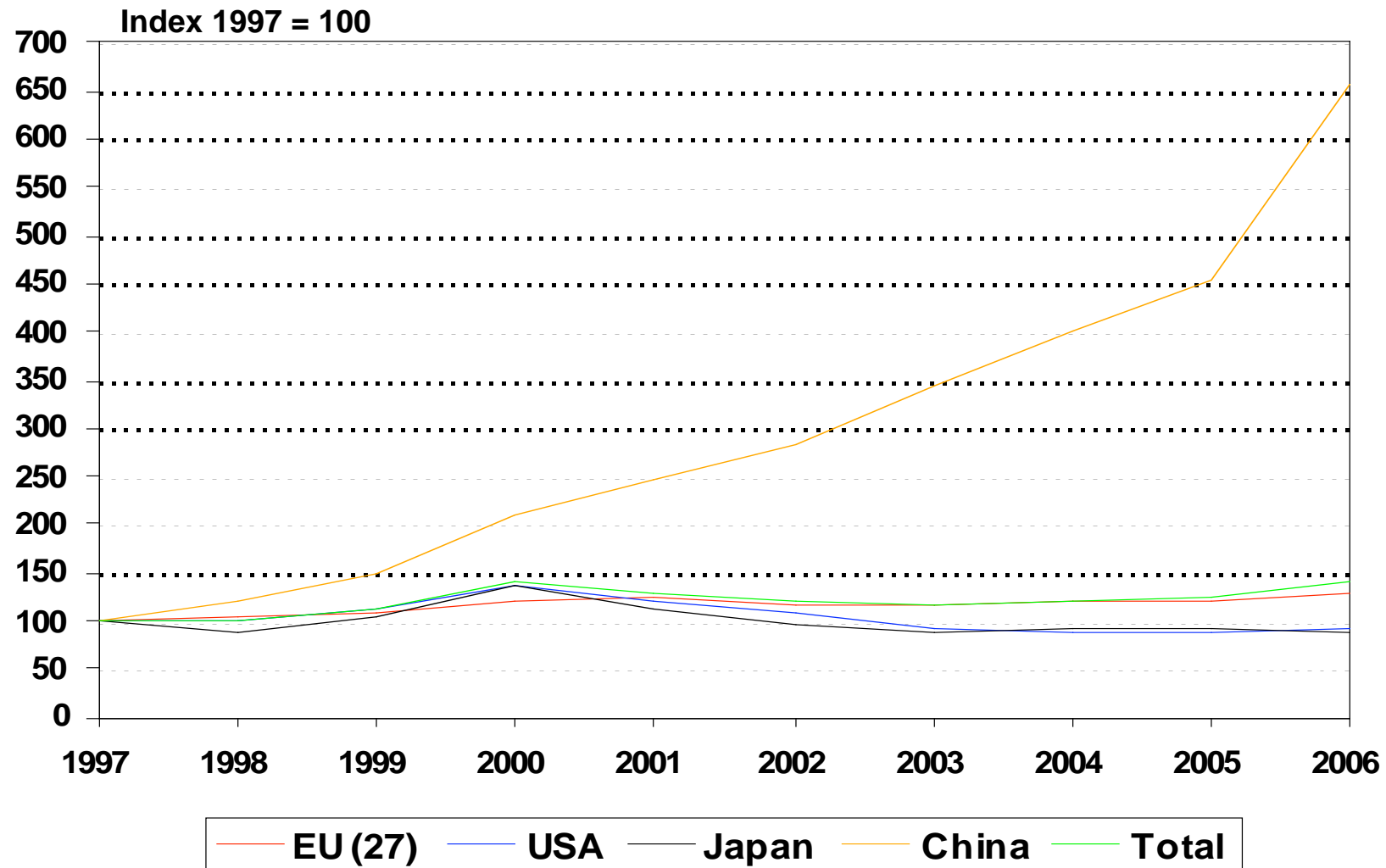
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Production 1997 - 2006



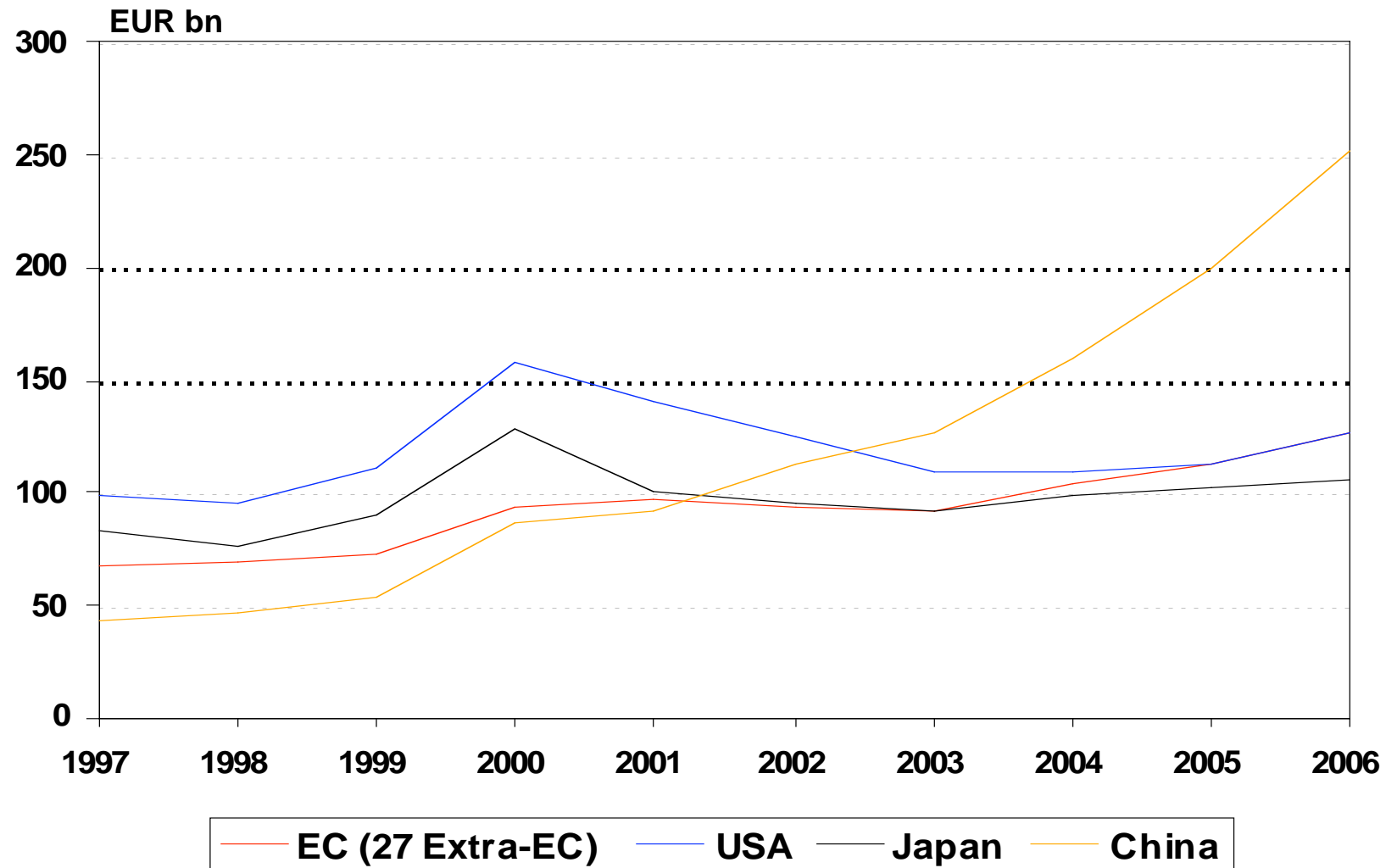
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Production 1997 - 2006



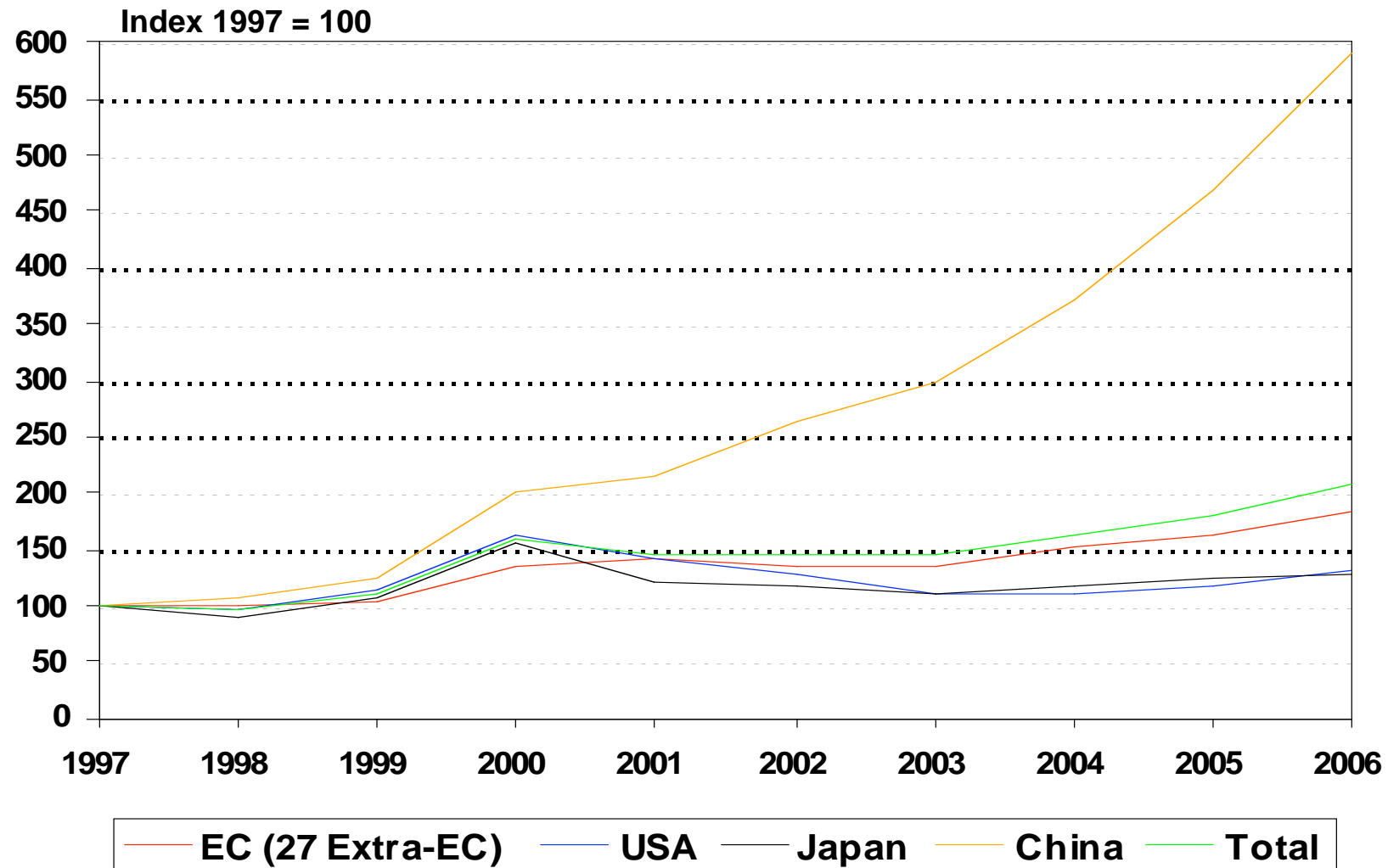
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Exports 1997 - 2006



Source: Eurostat, National Statistical Offices, ZVEI

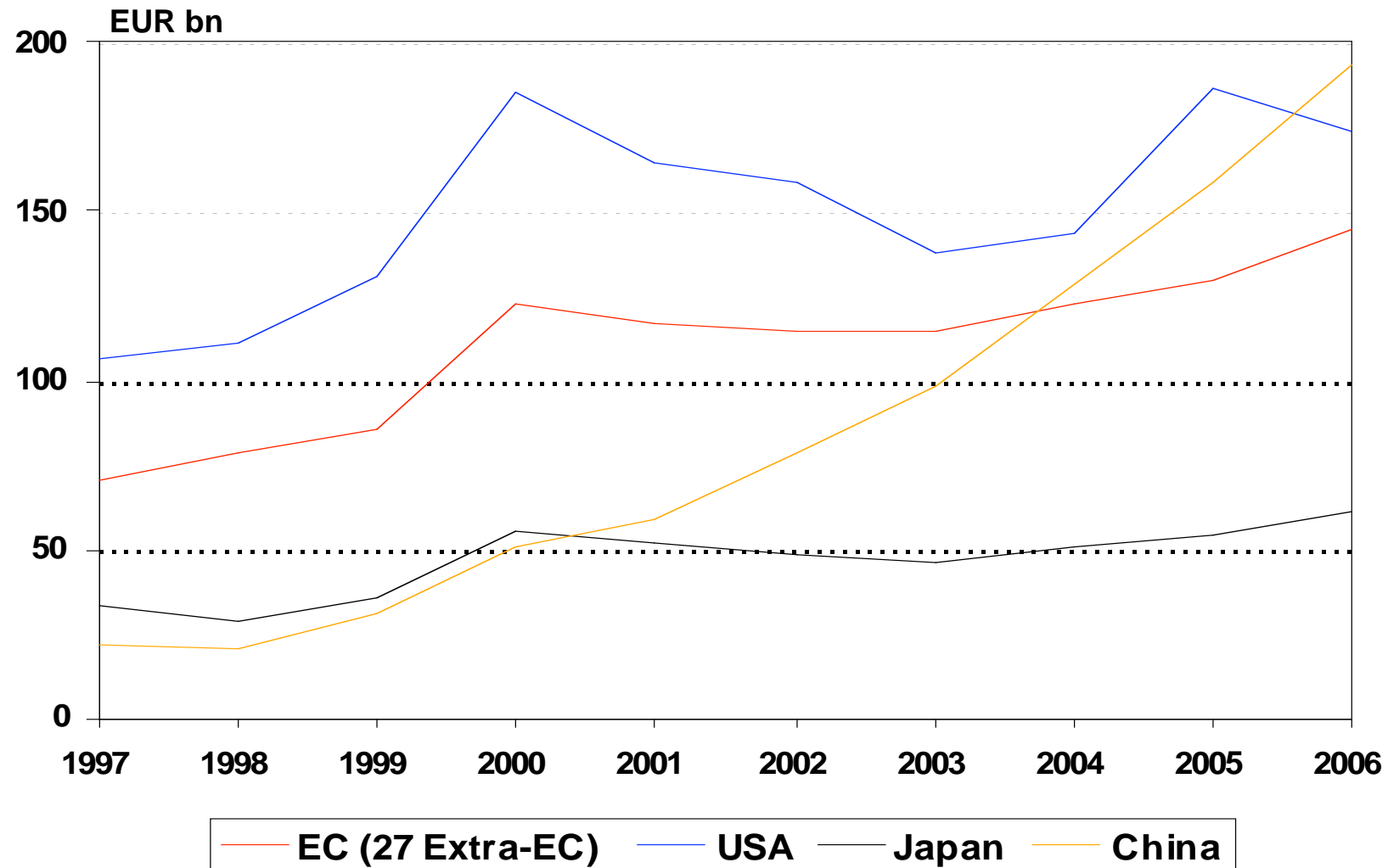
# ELECTRA – Exports 1997 - 2006



Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Imports

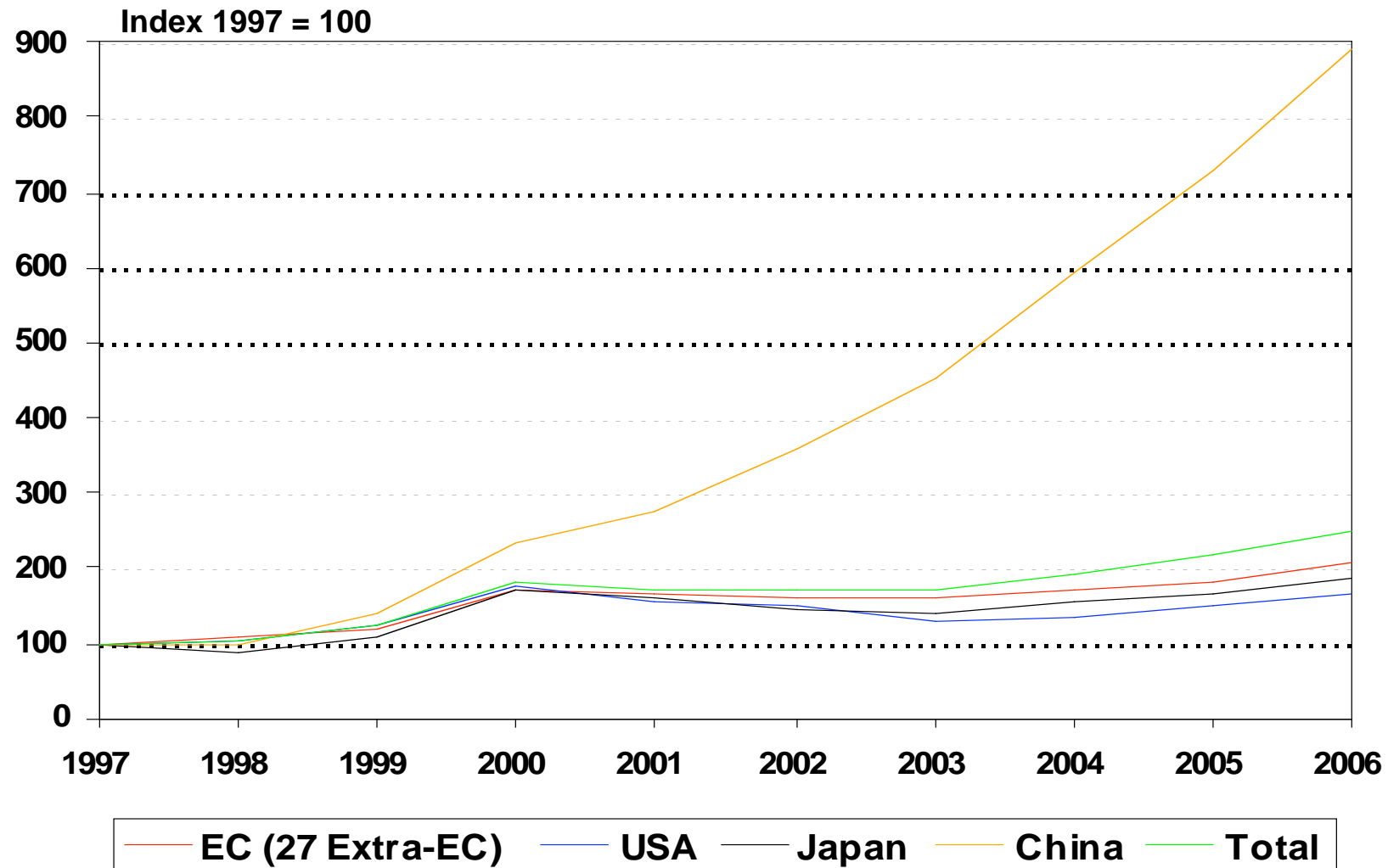
## 1997 - 2006



Source: Eurostat, National Statistical Offices, ZVEI

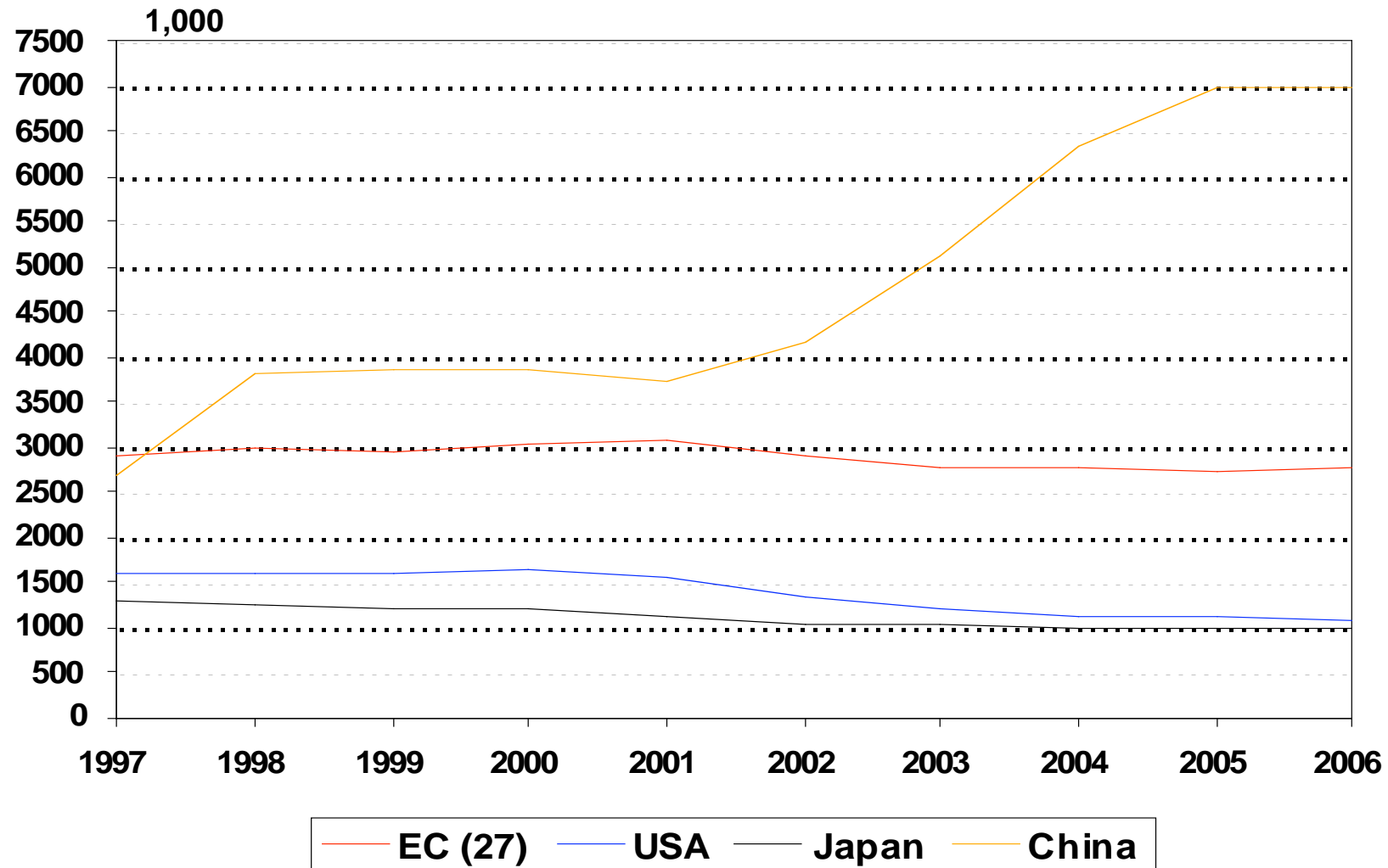


# ELECTRA – Imports 1997 - 2006



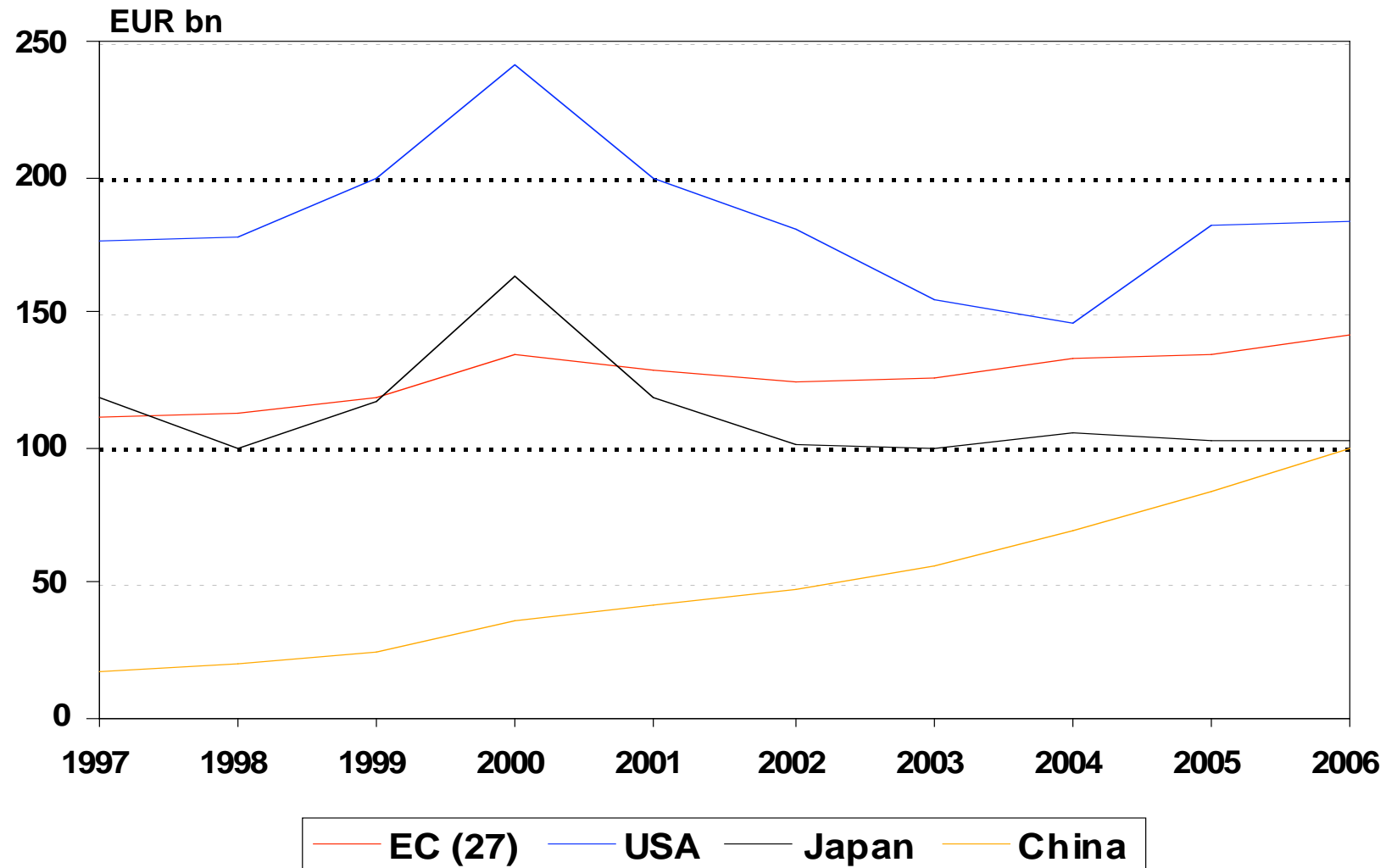
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Employees 1997 - 2006



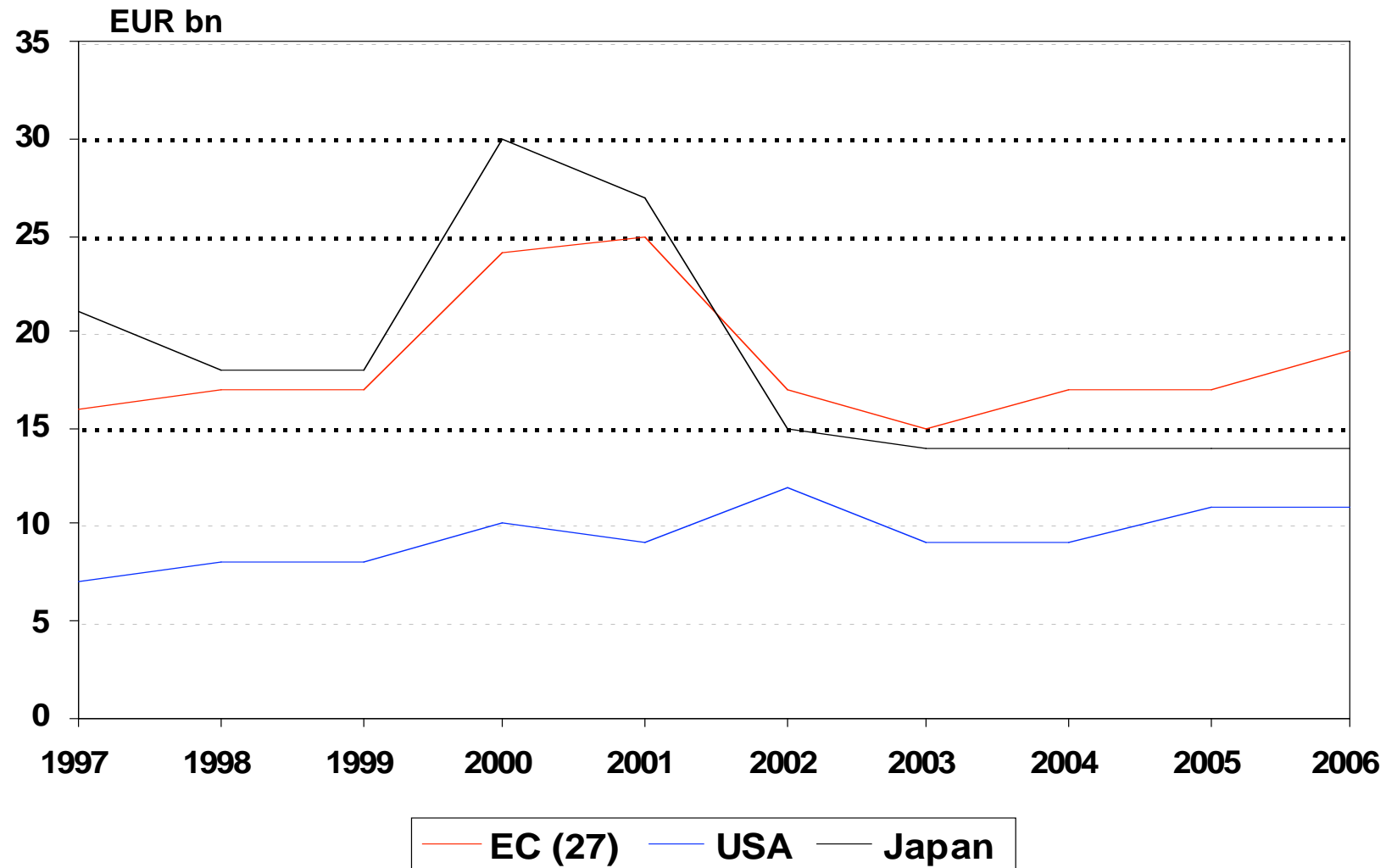
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Value Added 1997 - 2006



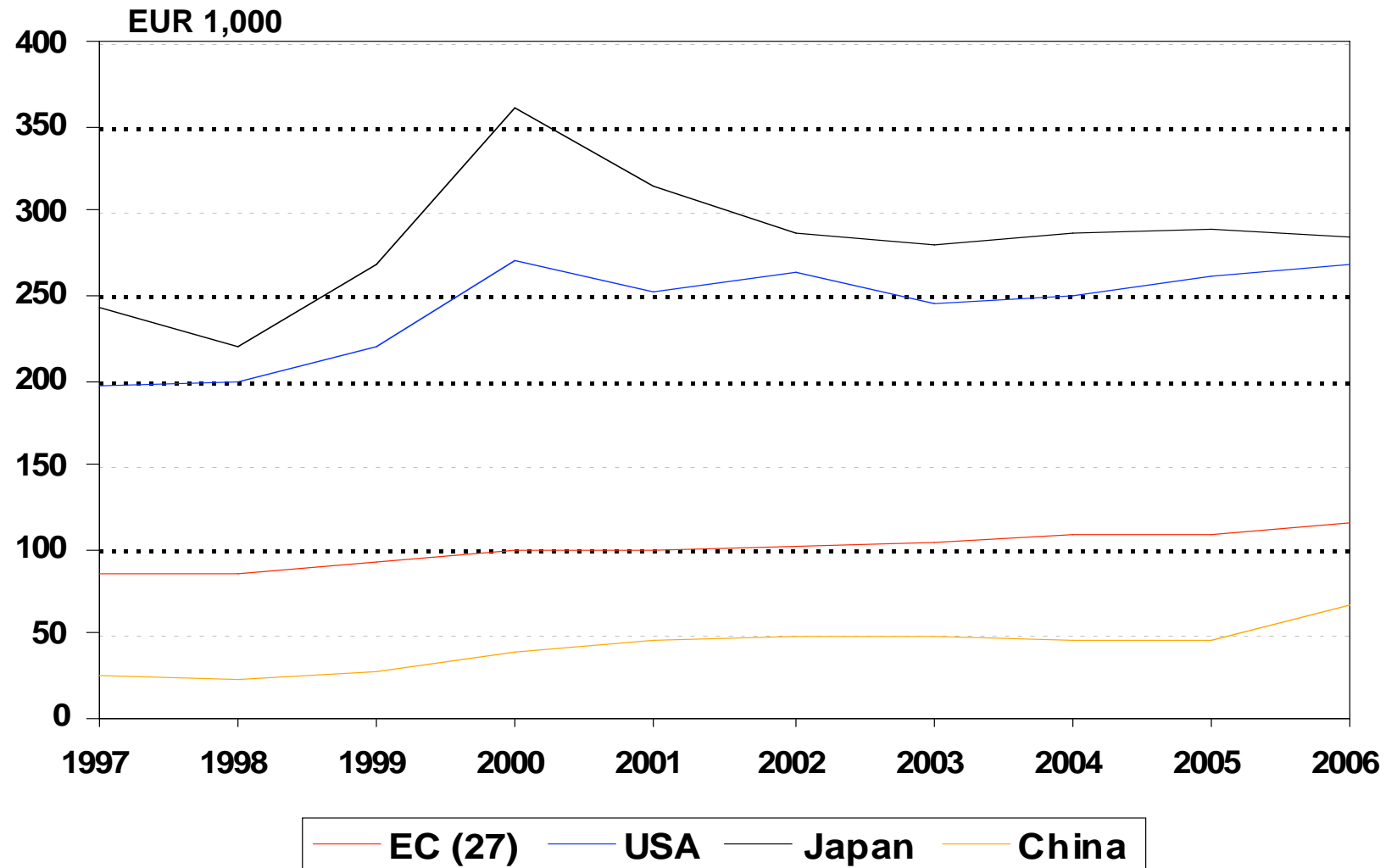
Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Investments 1997 - 2006



Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Production per Employee 1997 - 2006



Source: Eurostat, National Statistical Offices, ZVEI

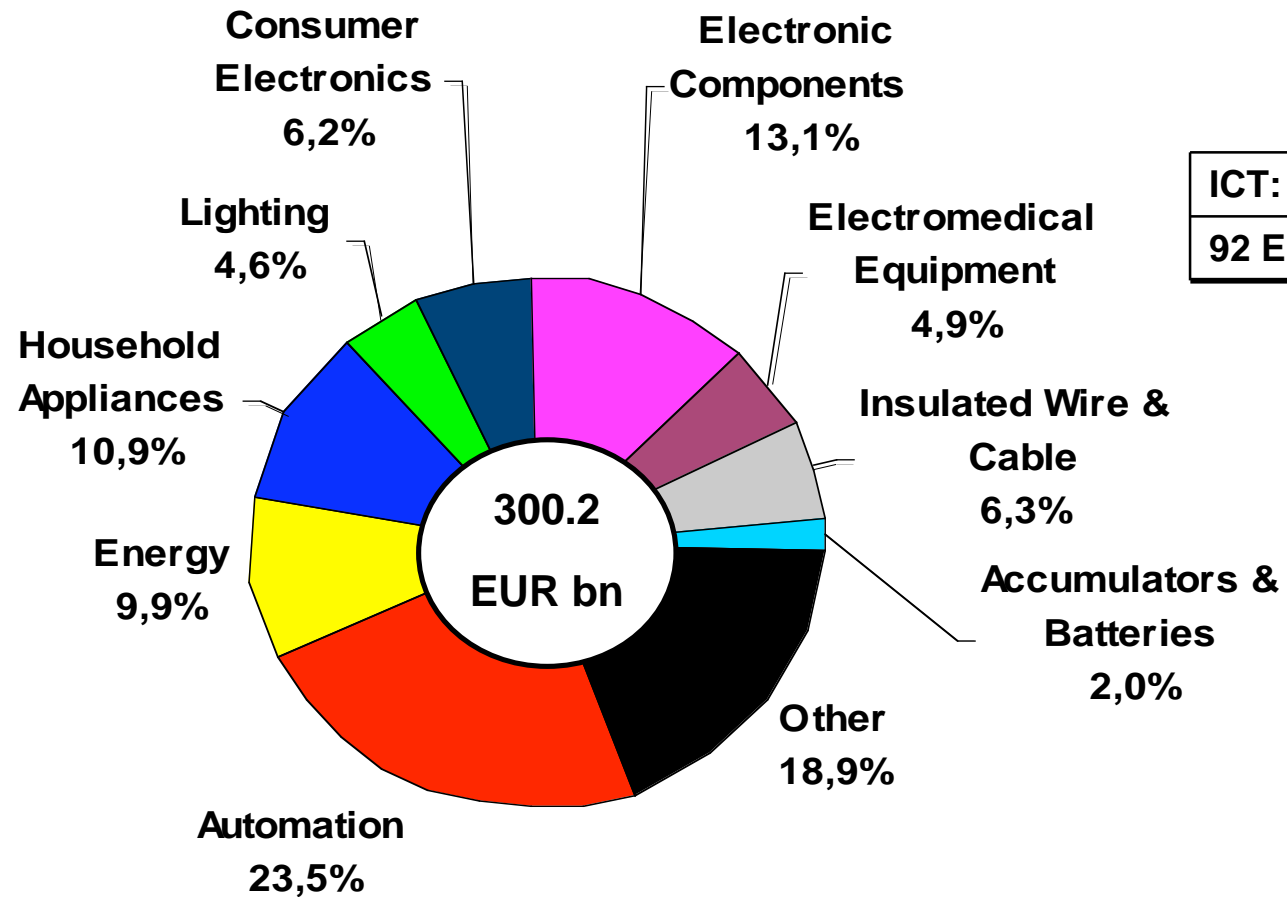
# Sectoral Structure within EC (27), USA, Japan, China



- **Limited availability of variables (Production, Trade, Apparent Consumption)**
- **Most important in EC: Automation**  
**in USA: Electronic Components**  
**in China: Consumer Electronics**  
**In Japan: Electronic Components**
- **Big differences within each Member Country**

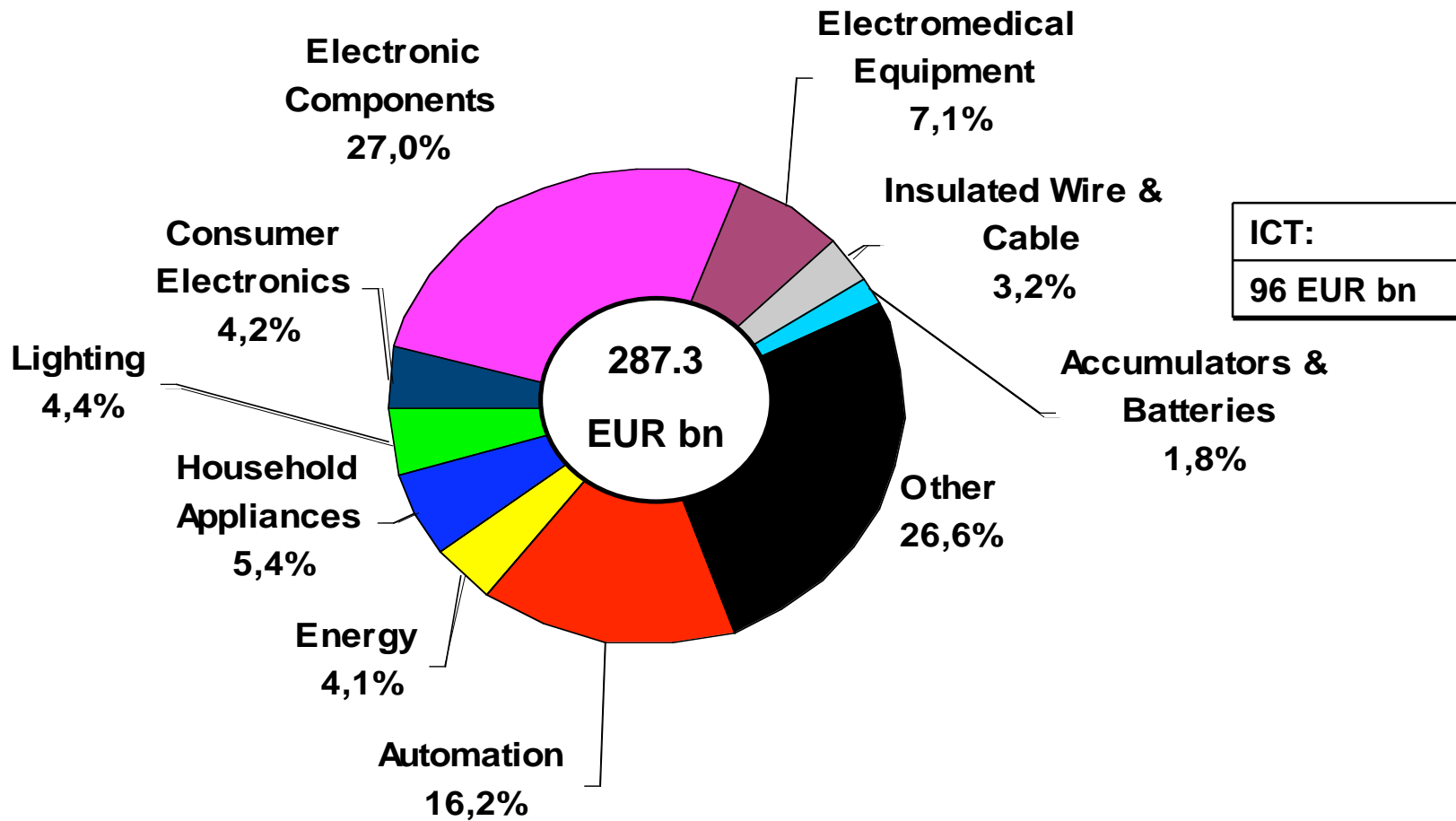
**Charts 38 - 41**

# ELECTRA – Production in 2005 EC (27)



Source: Eurostat, National Statistical Offices, ZVEI

# ELECTRA – Production in 2005 USA

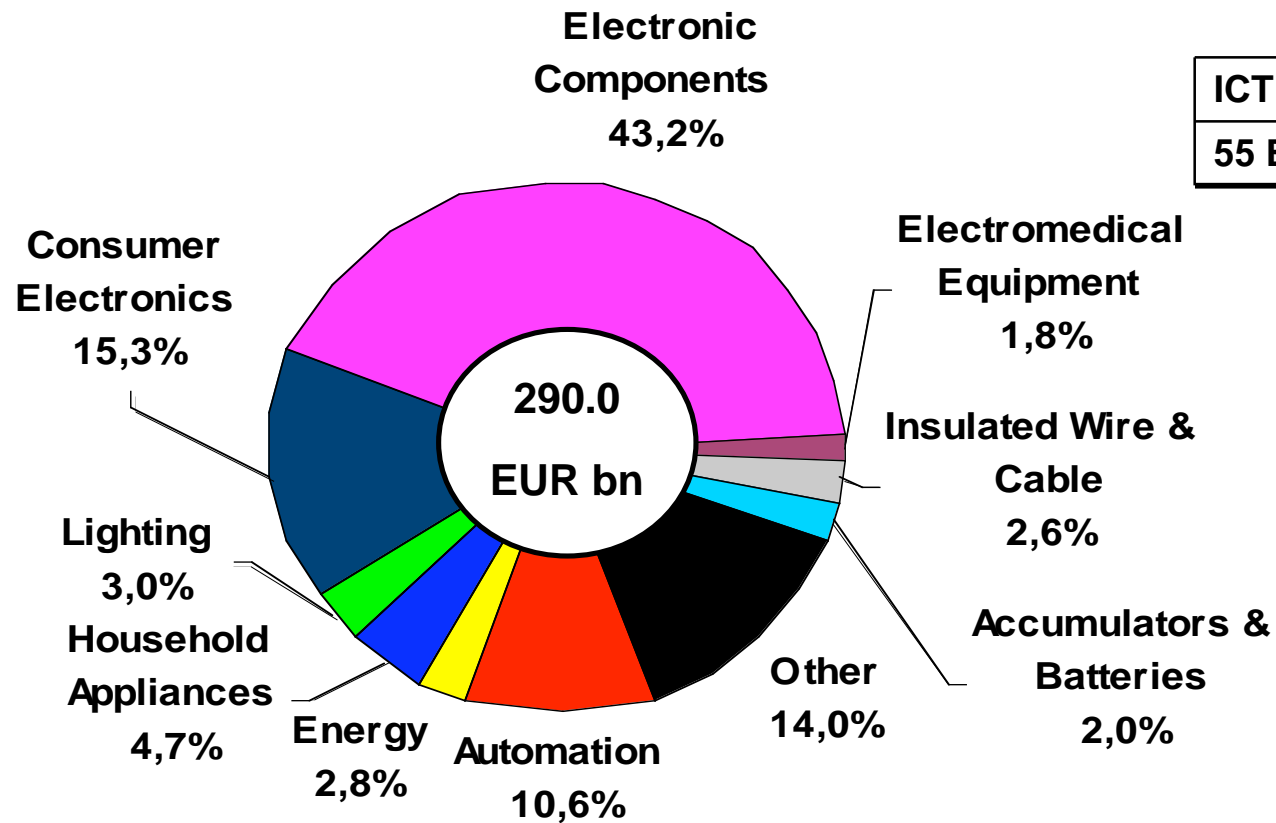


Source: Eurostat, National Statistical Office, ZVEI



# ELECTRA – Production in 2005

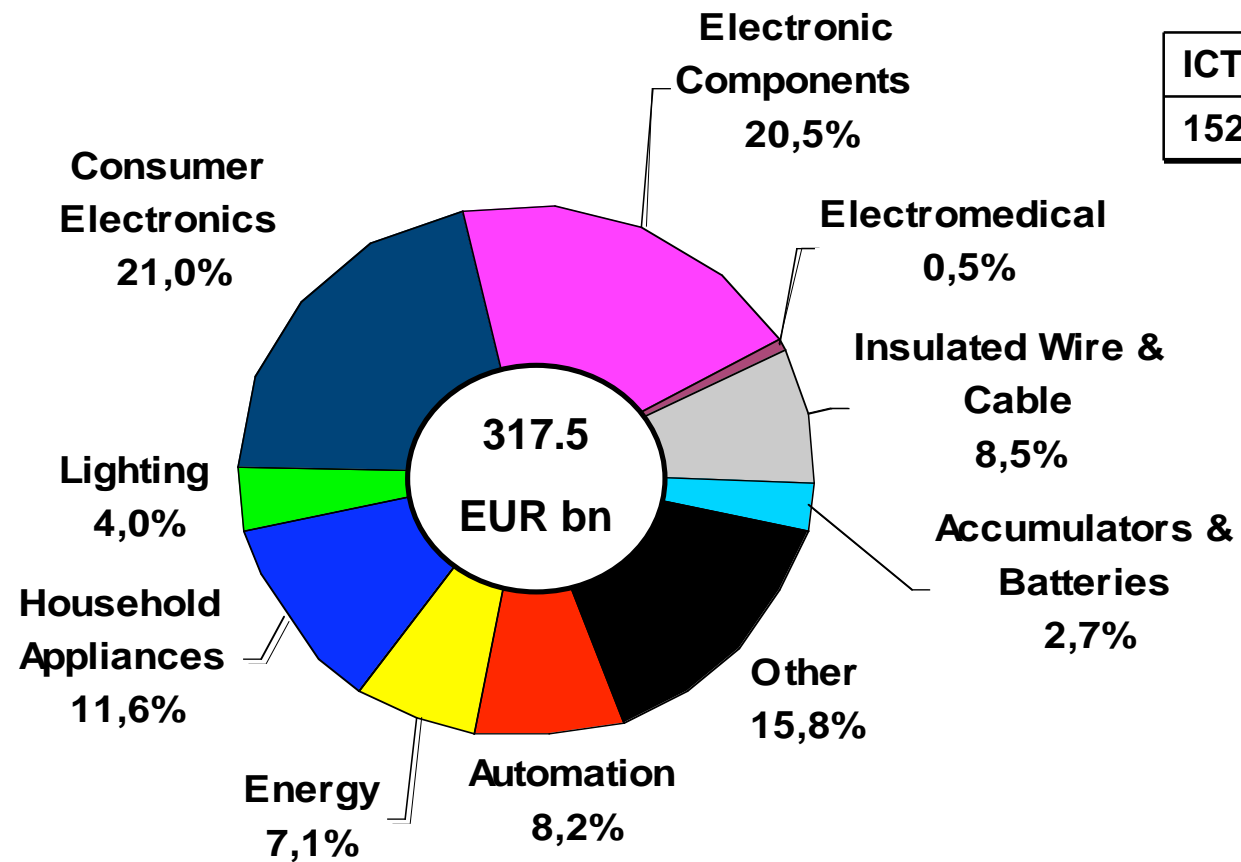
## Japan



Source: National Statistical Office, ZVEI

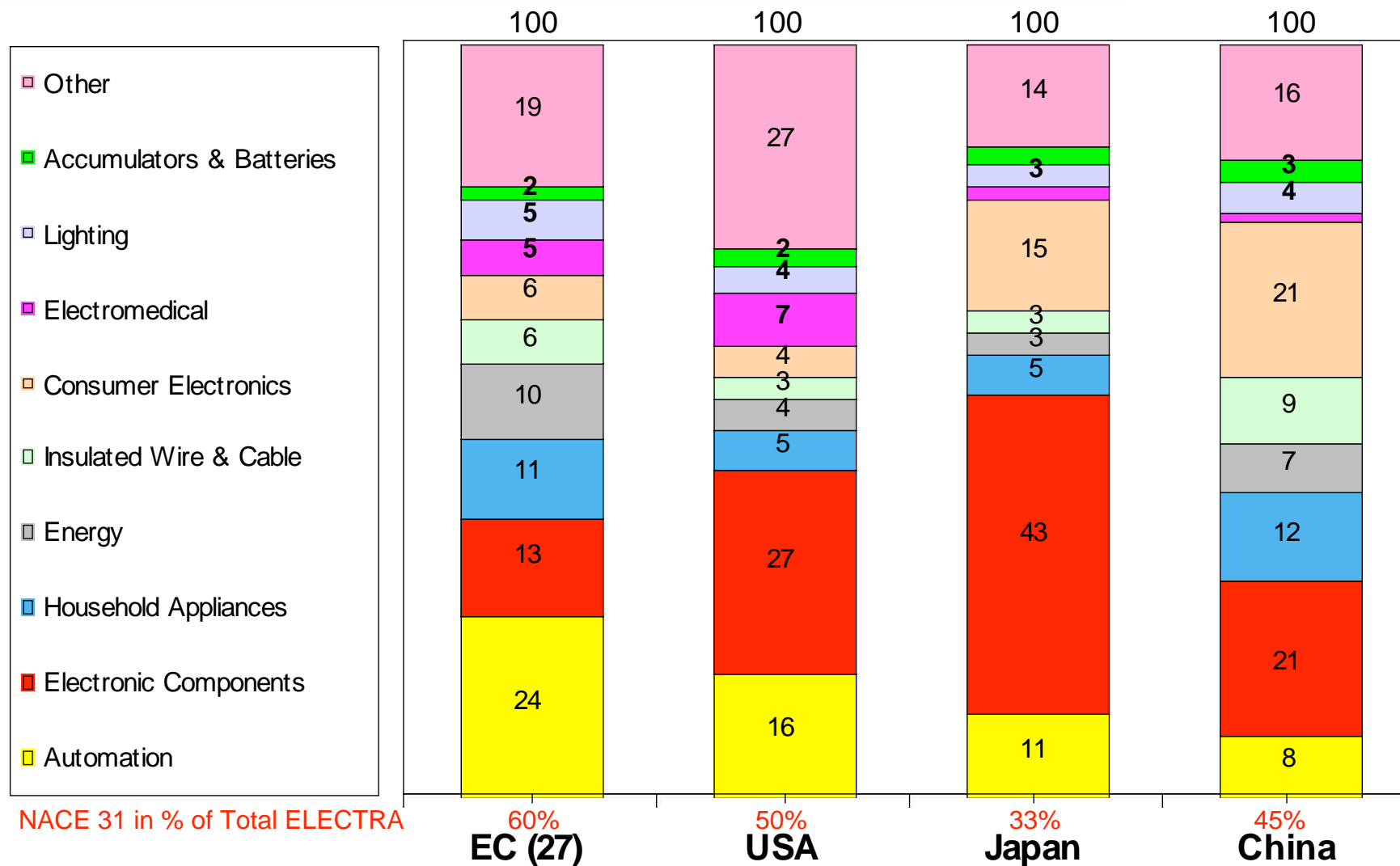
# ELECTRA – Production in 2005

## China



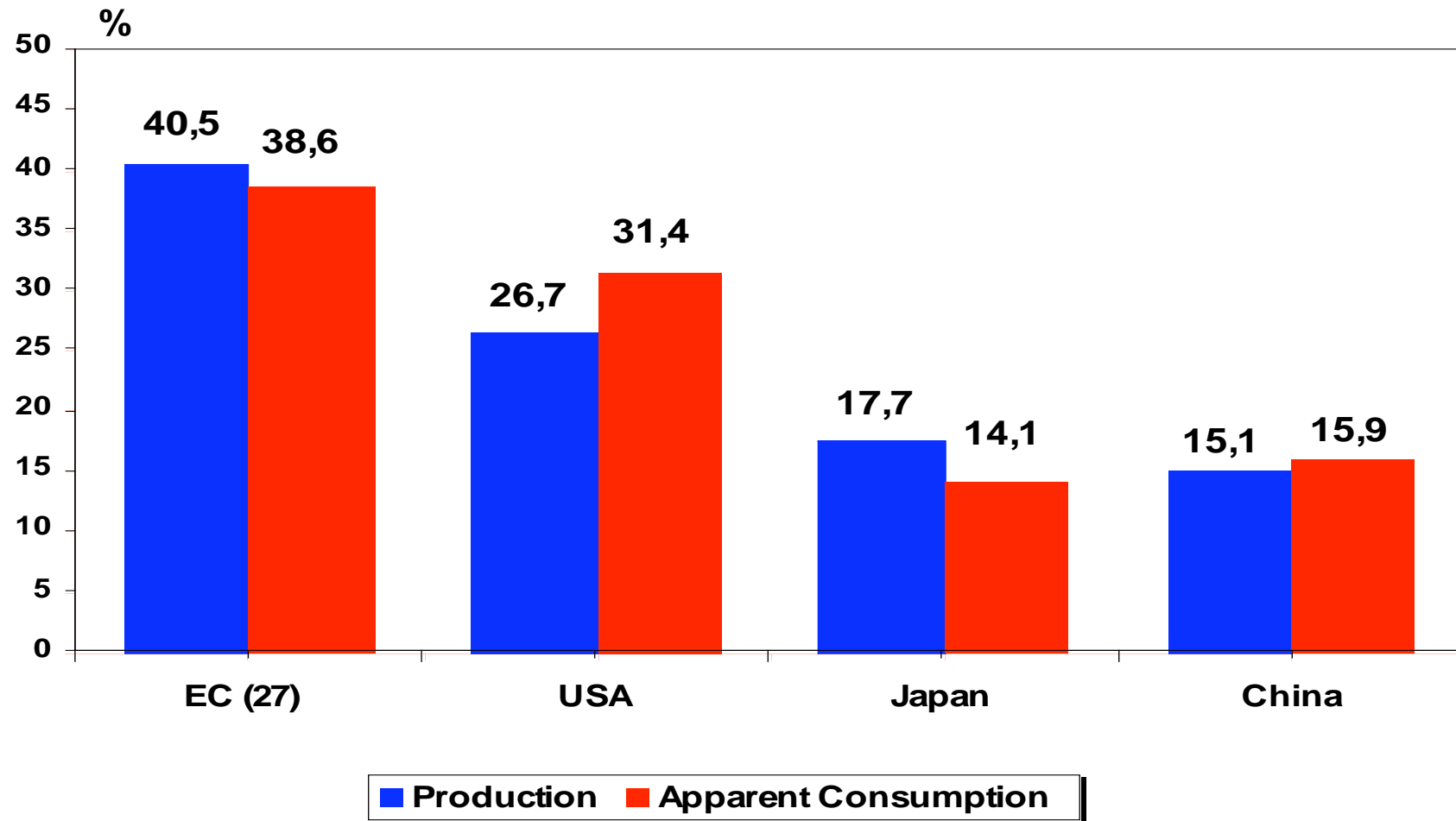
Source: Eurostat, National Statistical Office, ZVEI

# ELECTRA – Production: Shares of Subsectors EC (27), USA, Japan, China



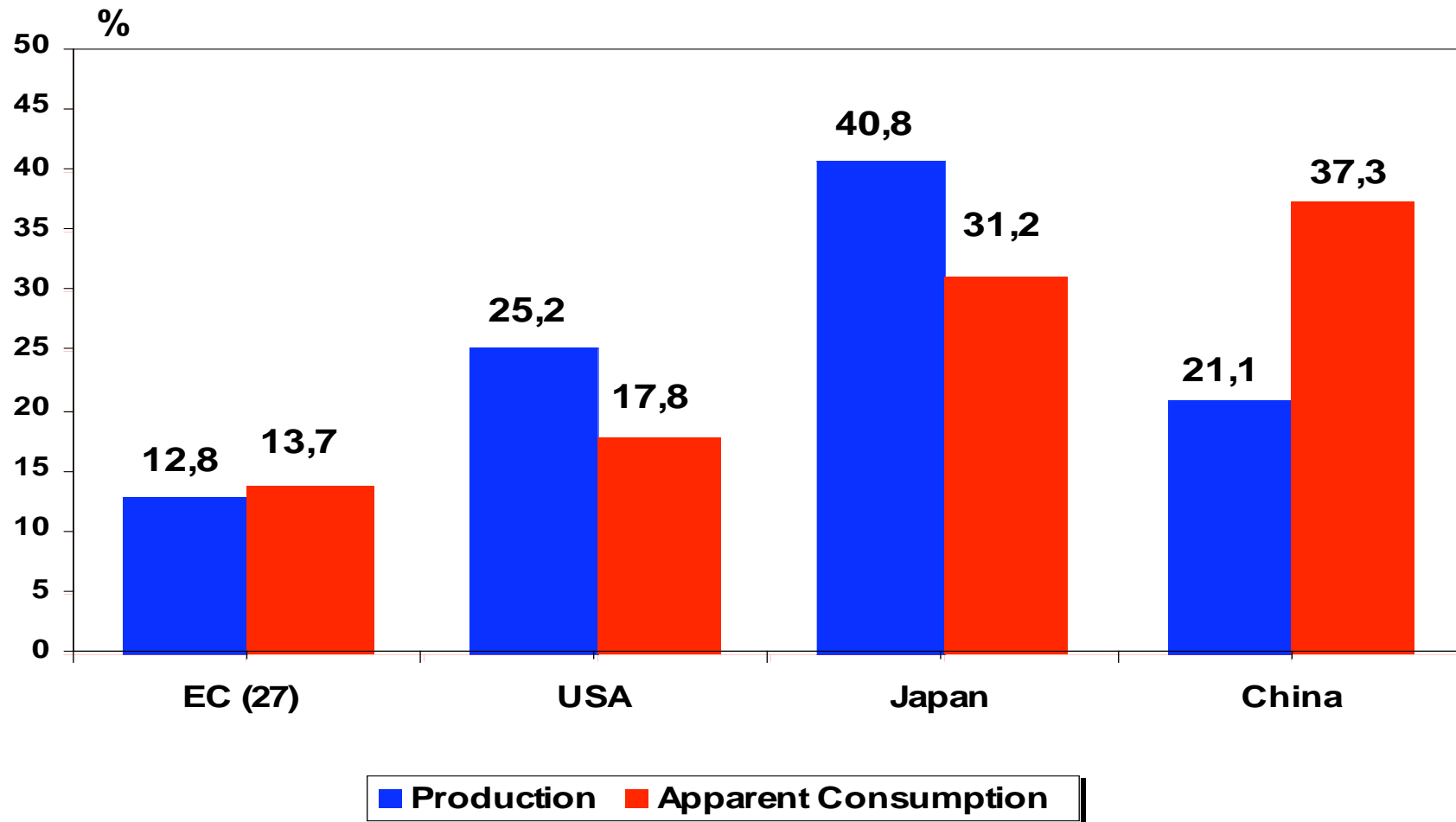
Source: Eurostat, National Statistical Offices, ZVEI

# Automation 2005 – Shares (EC (27) + USA + Japan + China = 100)



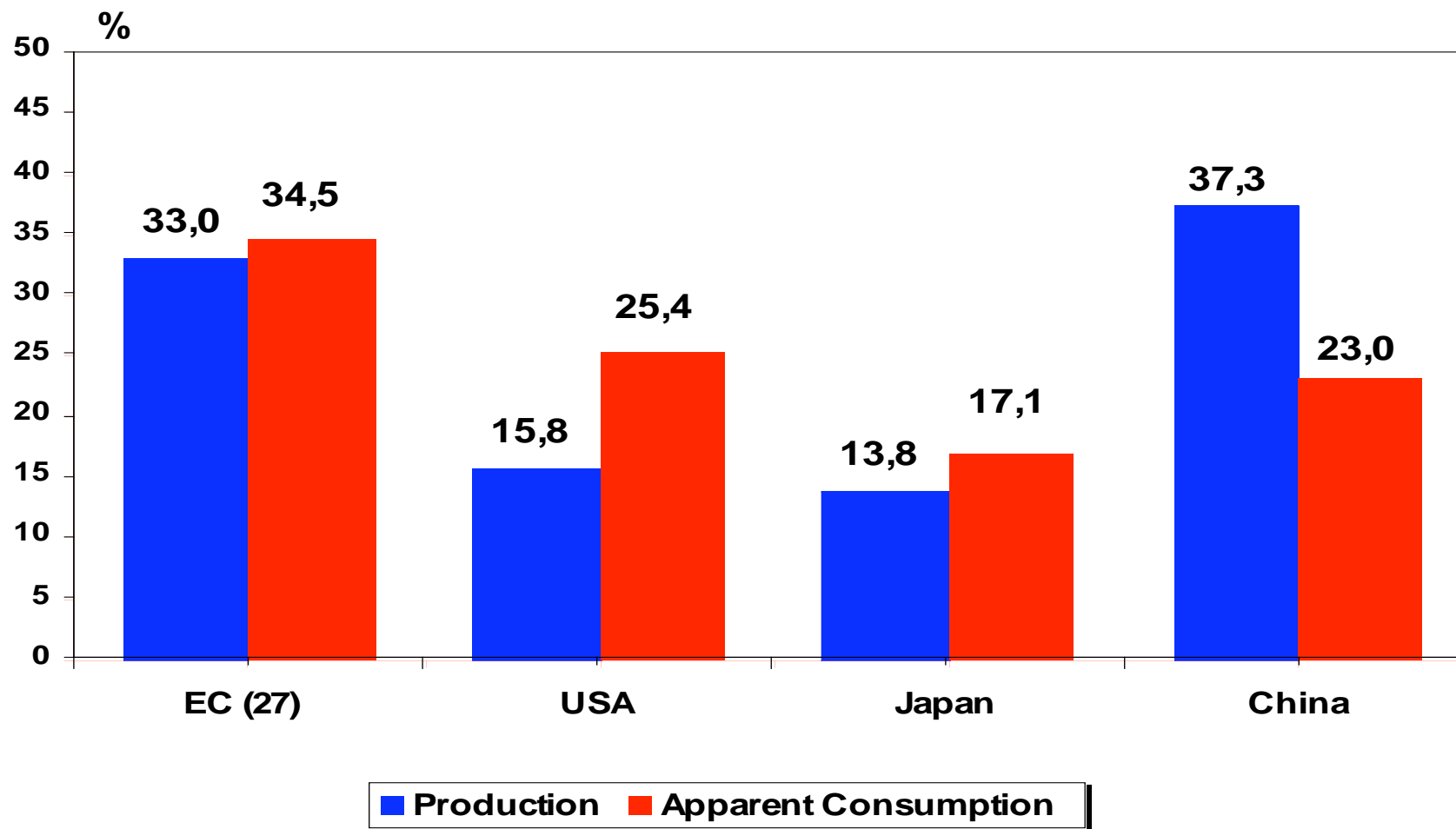
Source: Eurostat, National Statistical Offices, ZVEI

# Electronic Components 2005 – Shares (EC (27) + USA + Japan + China = 100)



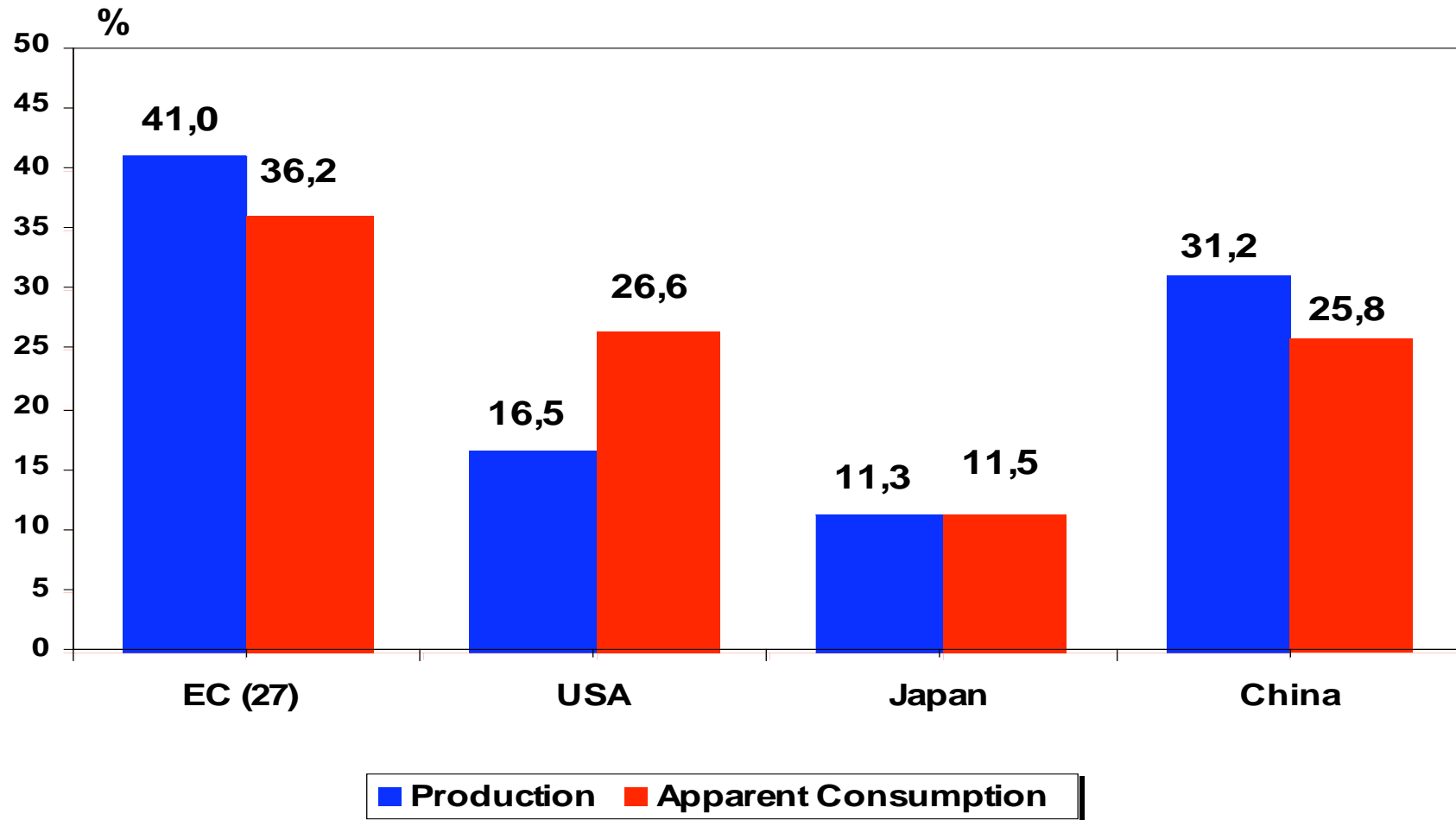
Source: Eurostat, National Statistical Offices, ZVEI

# Household Appliances 2005 – Shares (EC (27) + USA + Japan + China = 100)



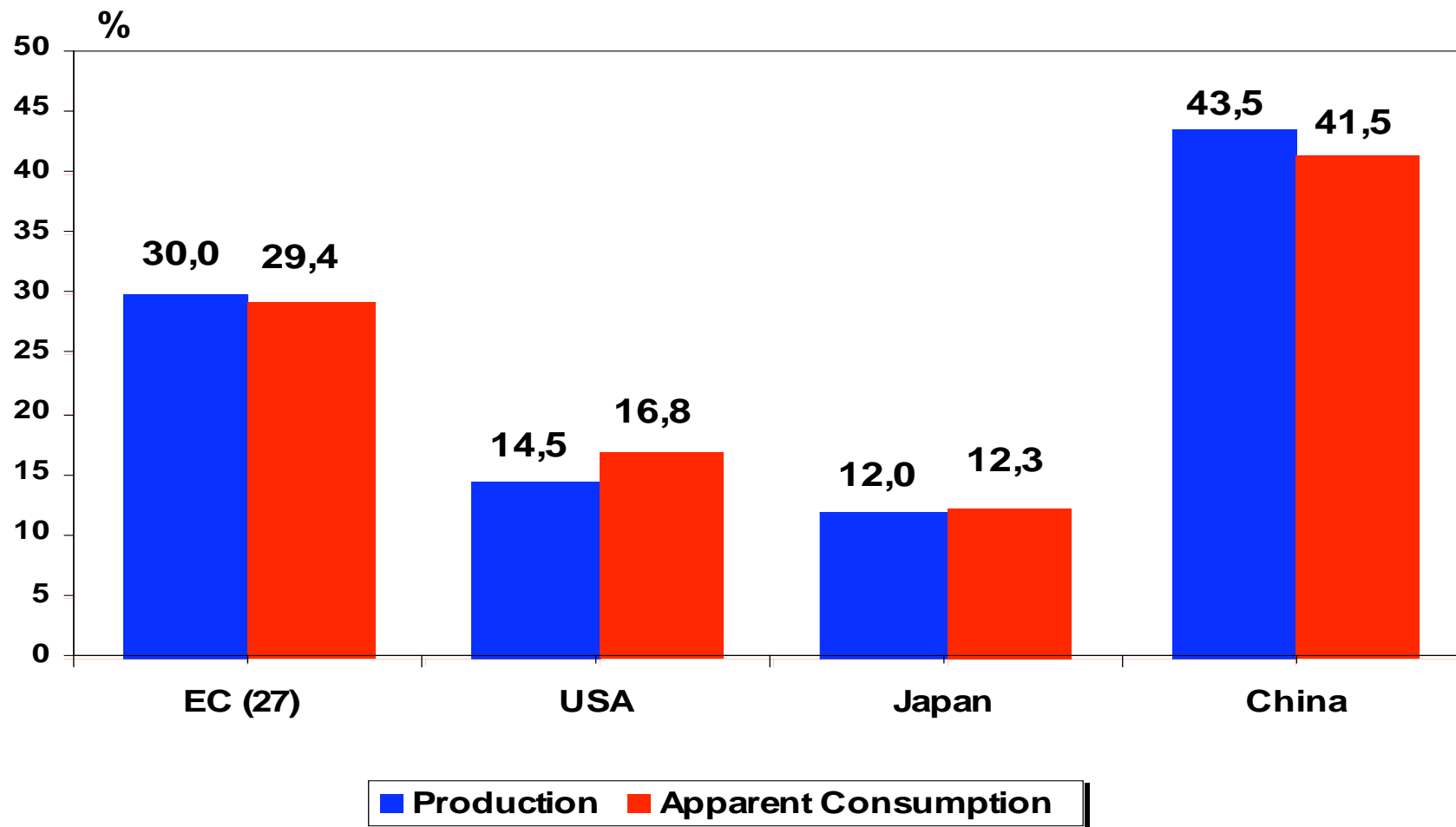
Source: Eurostat, National Statistical Offices, ZVEI

# Energy 2005 – Shares (EC (27) + USA + Japan + China = 100)



Source: Eurostat, National Statistical Offices, ZVEI

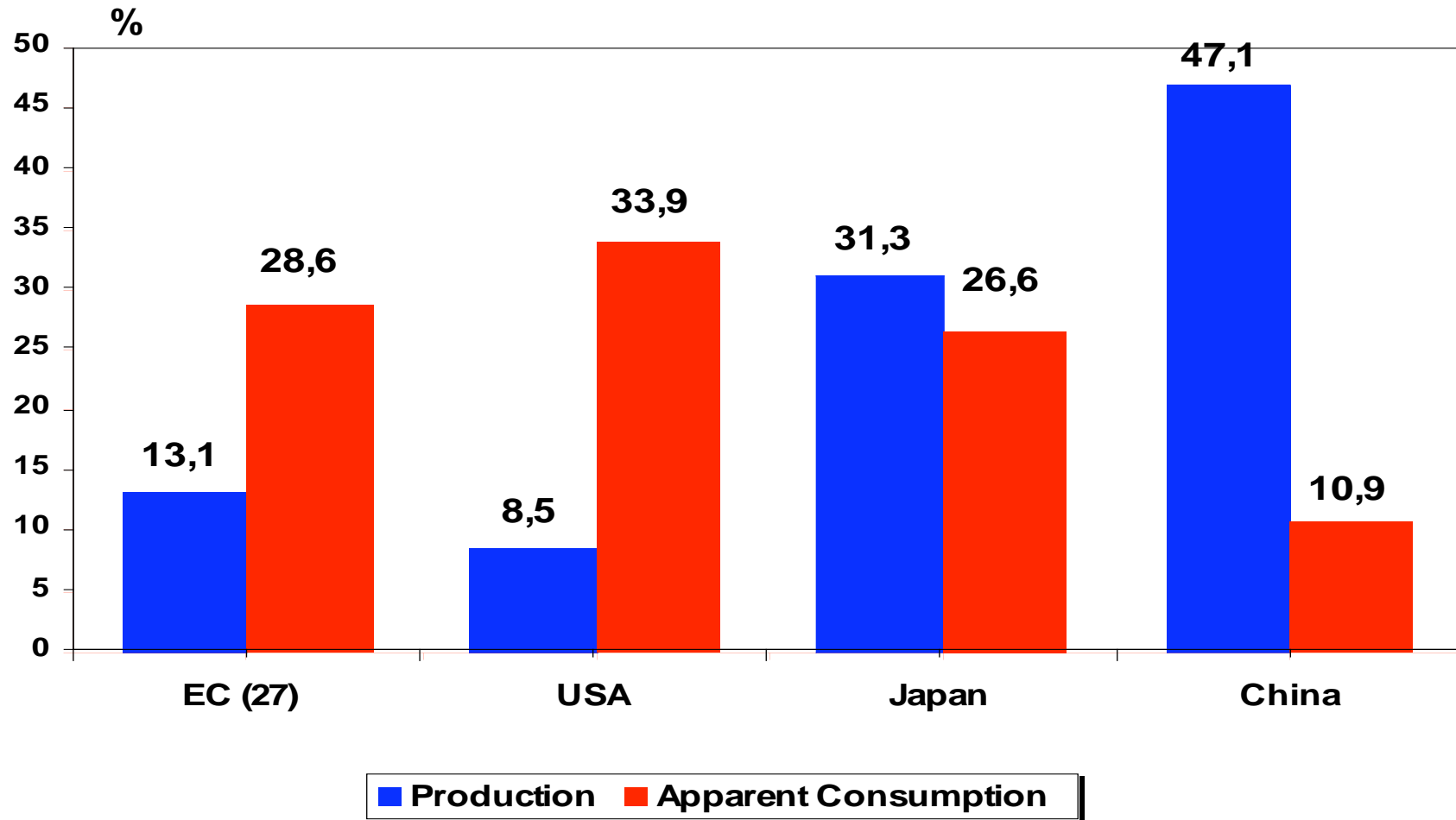
# Insulated Wire and Cable 2005 – Shares (EC (27) + USA + Japan + China = 100)



Source: Eurostat, National Statistical Offices, ZVEI

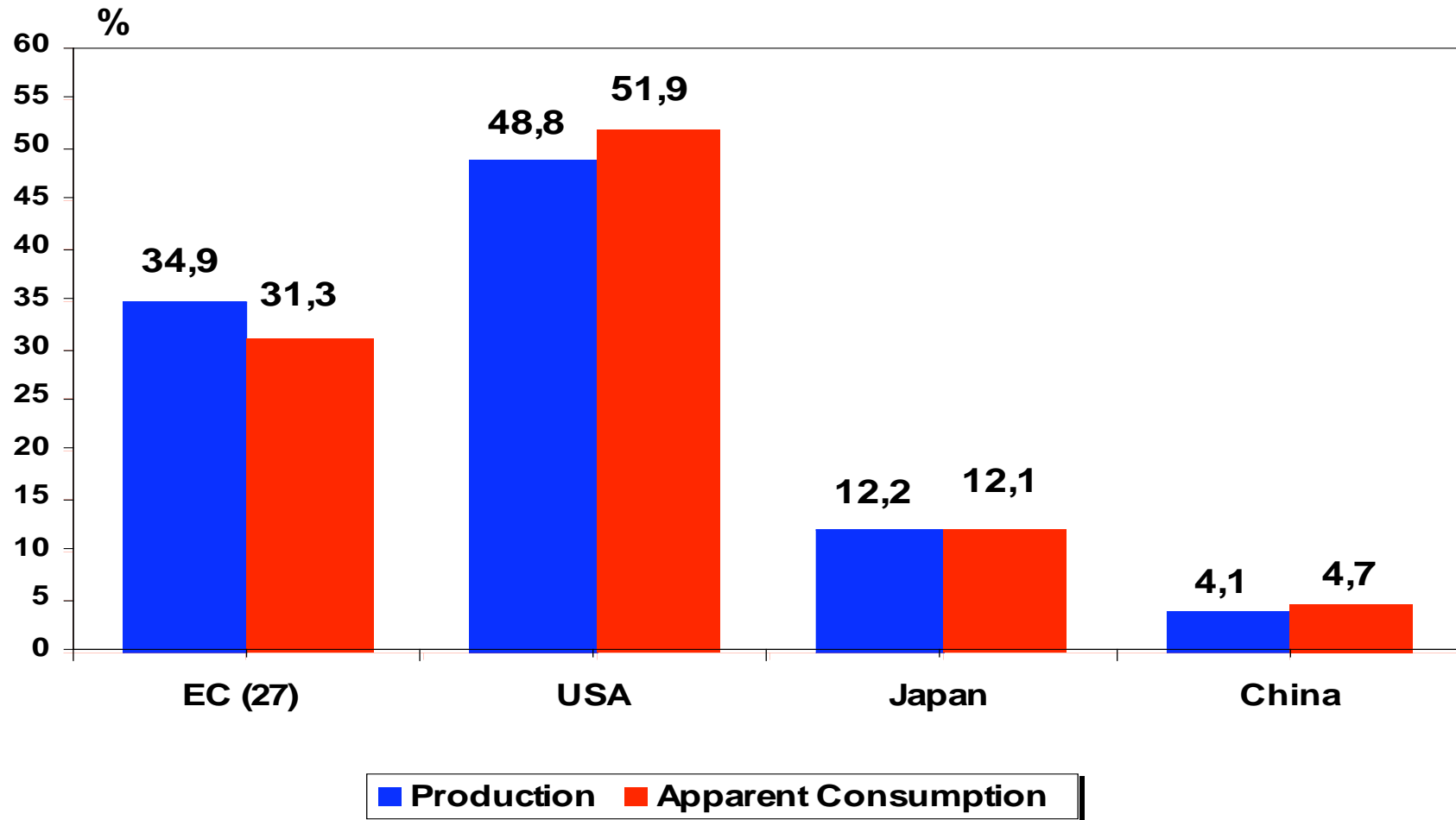


# Consumer Electronics 2005 – Shares (EC (27) + USA + Japan + China = 100)



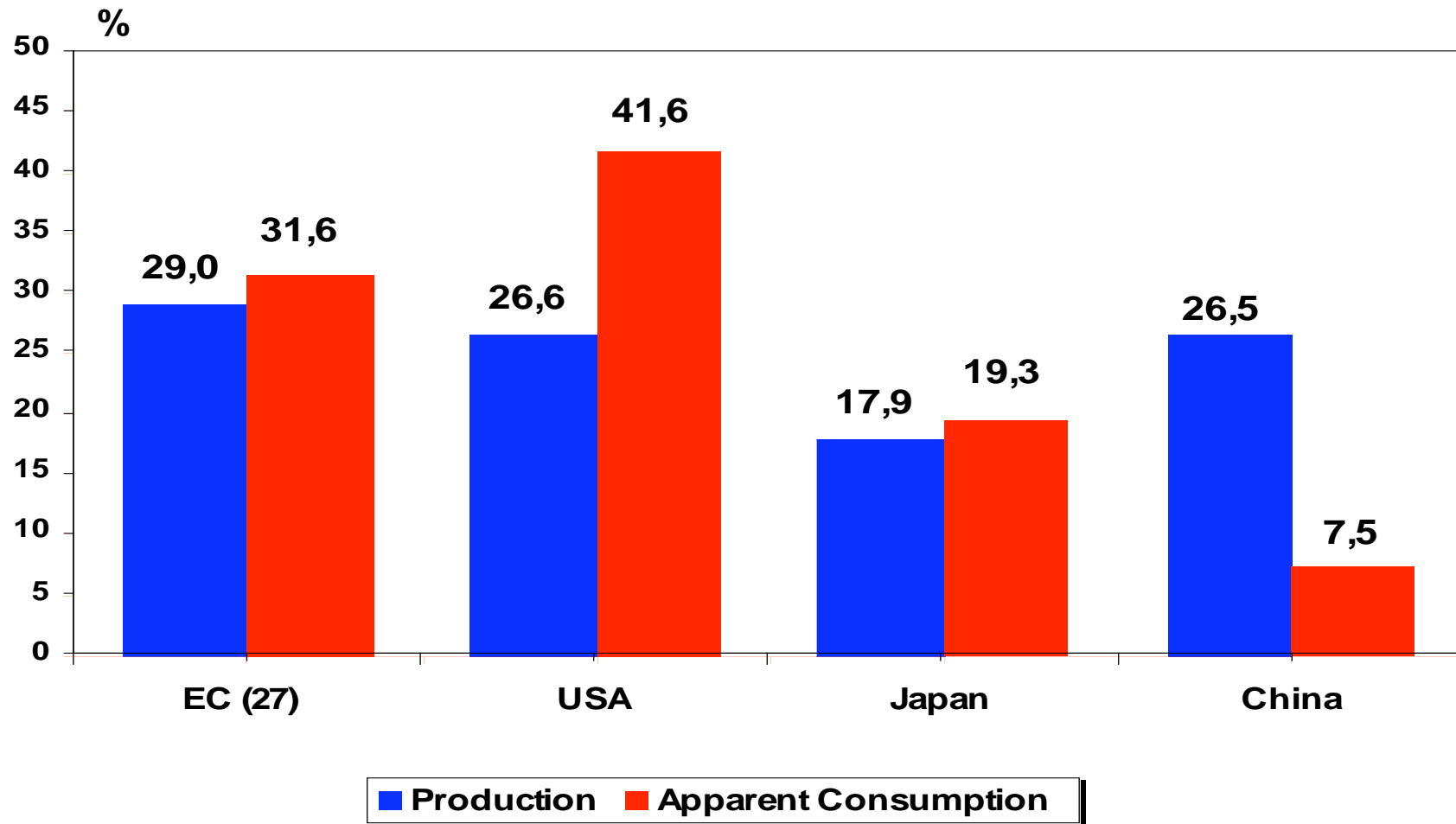
Source: Eurostat, National Statistical Offices, ZVEI

# Electromedical Equipment 2005 – Shares (EC (27) + USA + Japan + China = 100)



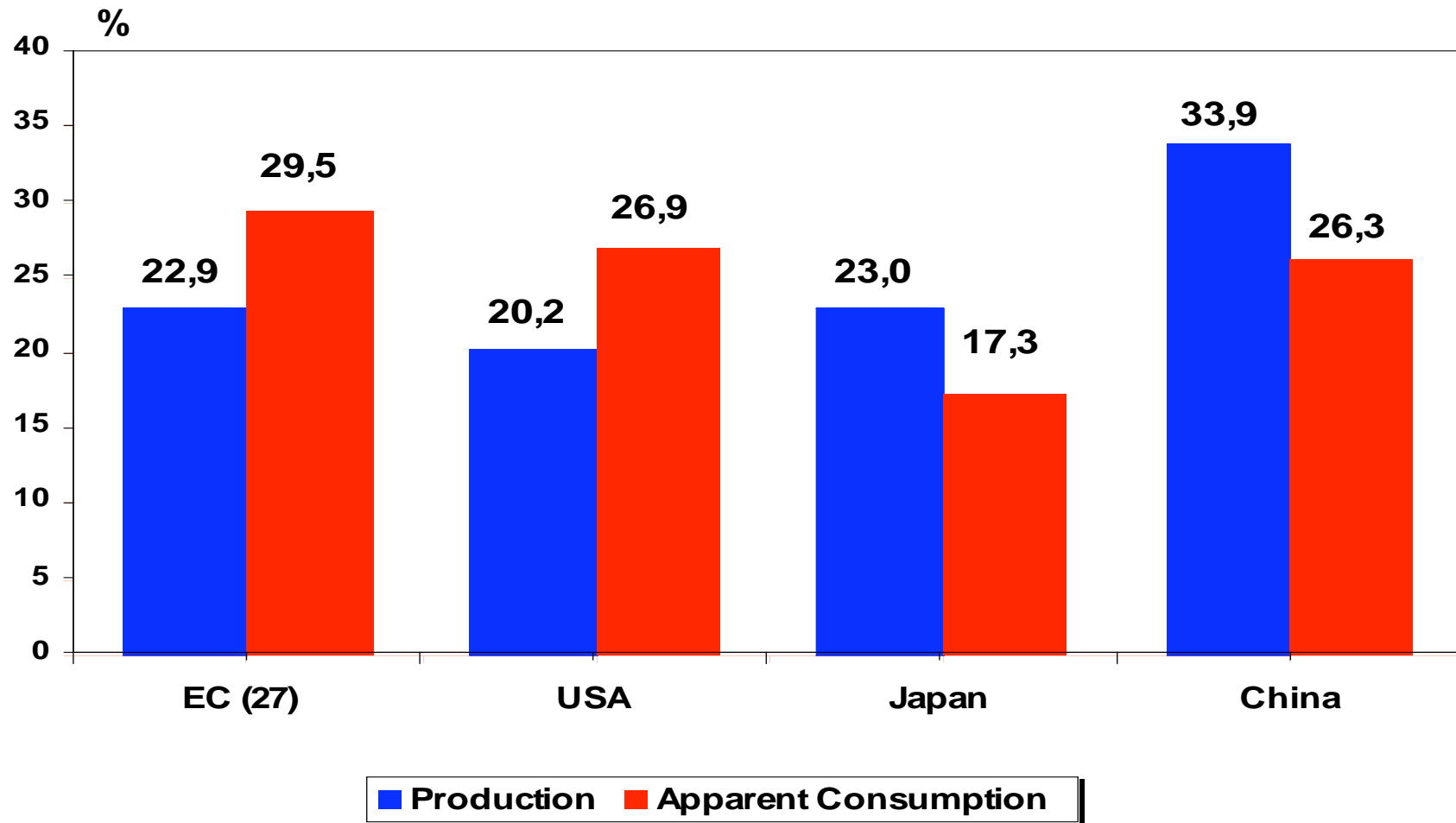
Source: Eurostat, National Statistical Offices, ZVEI

# Lighting 2005 – Shares (EC (27) + USA + Japan + China = 100)



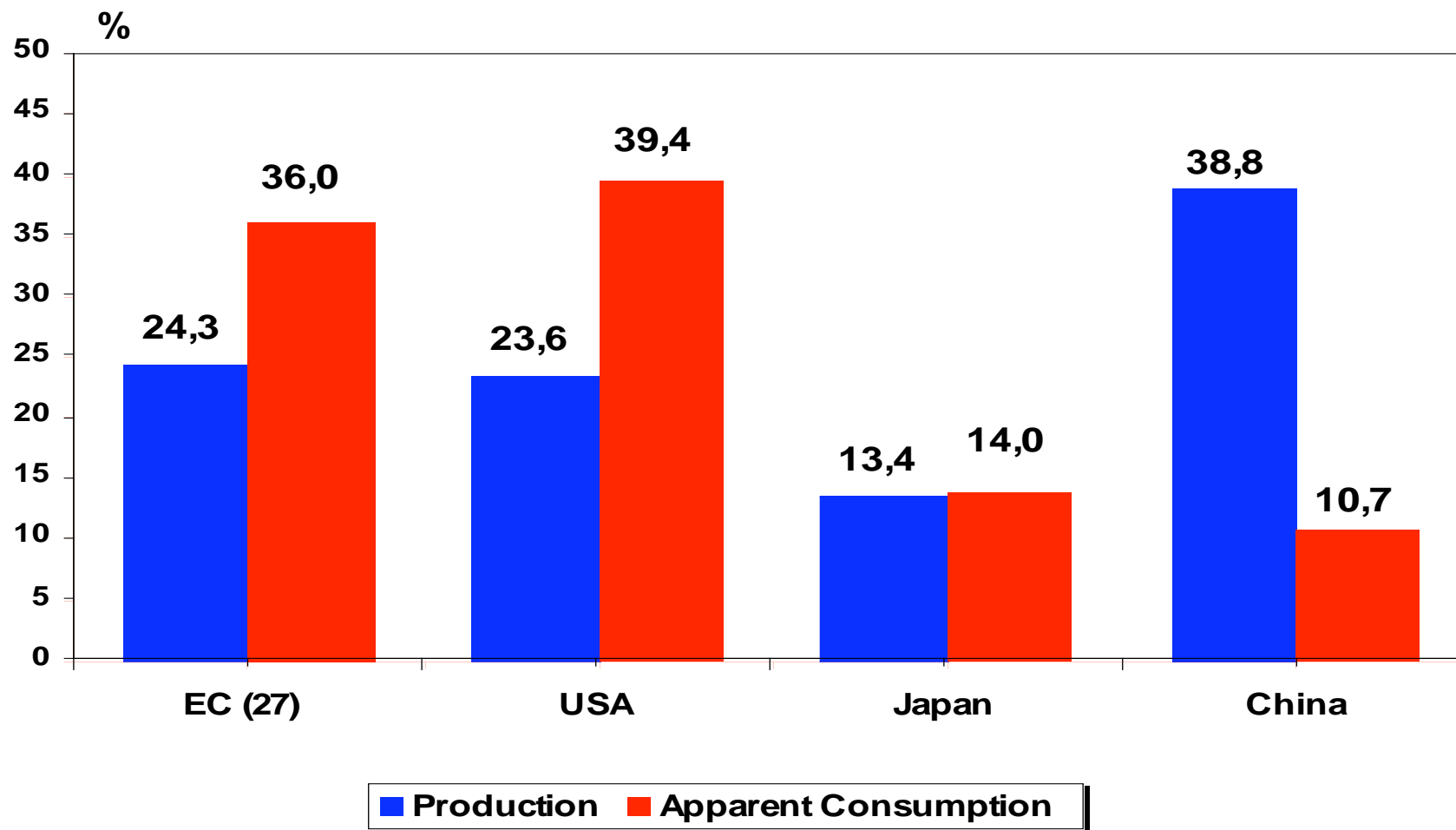
Source: Eurostat, National Statistical Offices, ZVEI

# Accumulators and Batteries 2005 – Shares (EC (27) + USA + Japan + China = 100)



Source: Eurostat, National Statistical Offices, ZVEI

# ICT 2005 – Shares (EC (27) + USA + Japan + China = 100)



Source: Eurostat, National Statistical Offices, ZVEI

- **The Role of China**
  - **Most dynamic development in Production and Exports since 5 years**
  - **Half of Imports are electronic Components**
  - **Exports of electronic products to all regions of the world, esp. to USA**
  - **ICT is very important**
  - **Japanese, US- and EC-based companies**