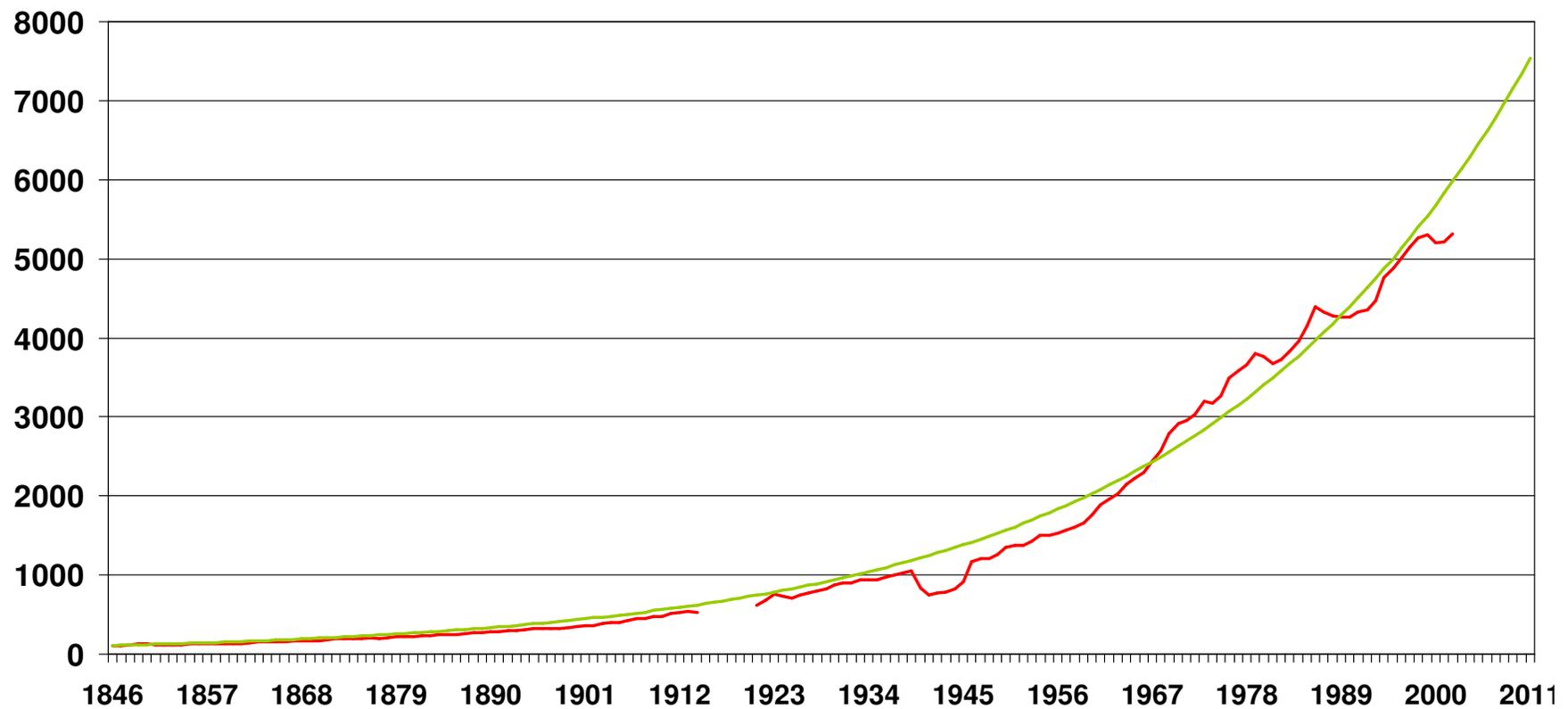


<h1>Future construction of and demand for housing, office spaces and industrial buildings</h1>	

Jesper Bo Jensen, Ph.D.
political scientist, futurist

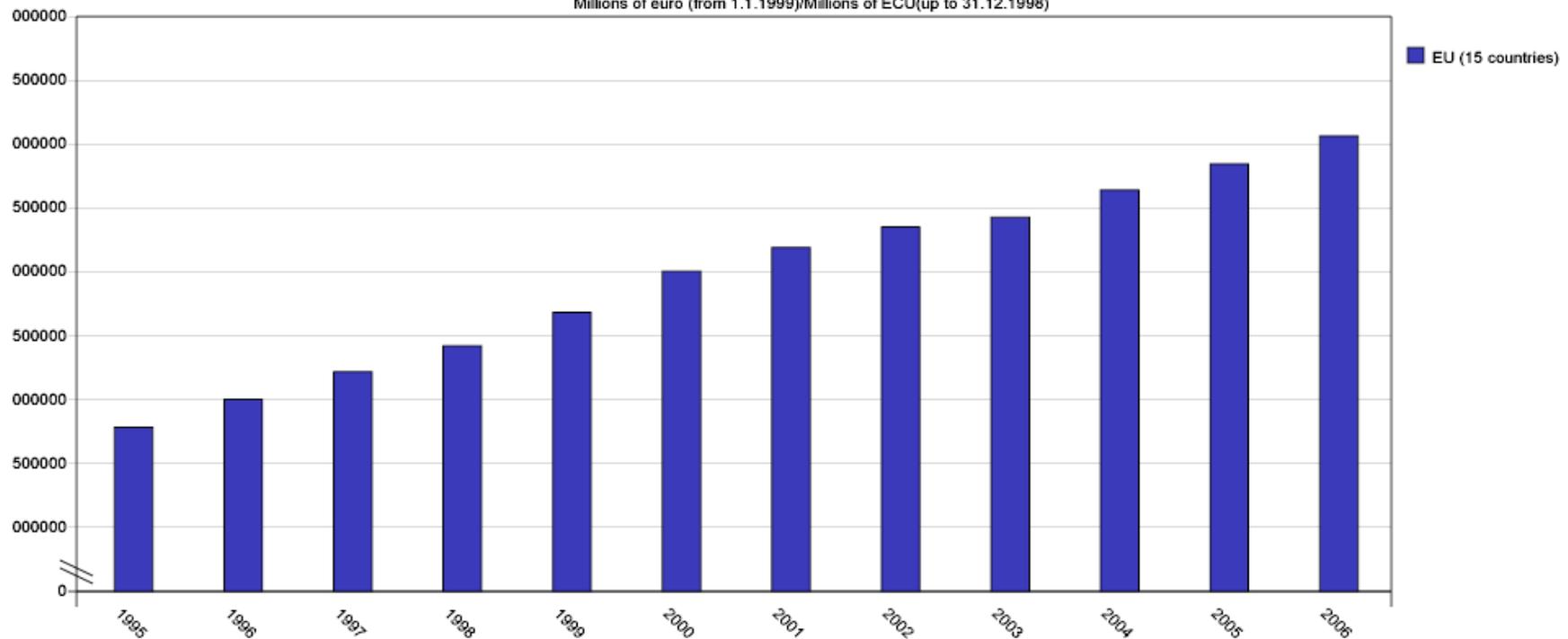
Private consumption



Consumption in 15 EU member countries

Final consumption expenditure of households and non-profit institutions serving households
At current prices

Millions of euro (from 1.1.1999)/Millions of ECU (up to 31.12.1998)

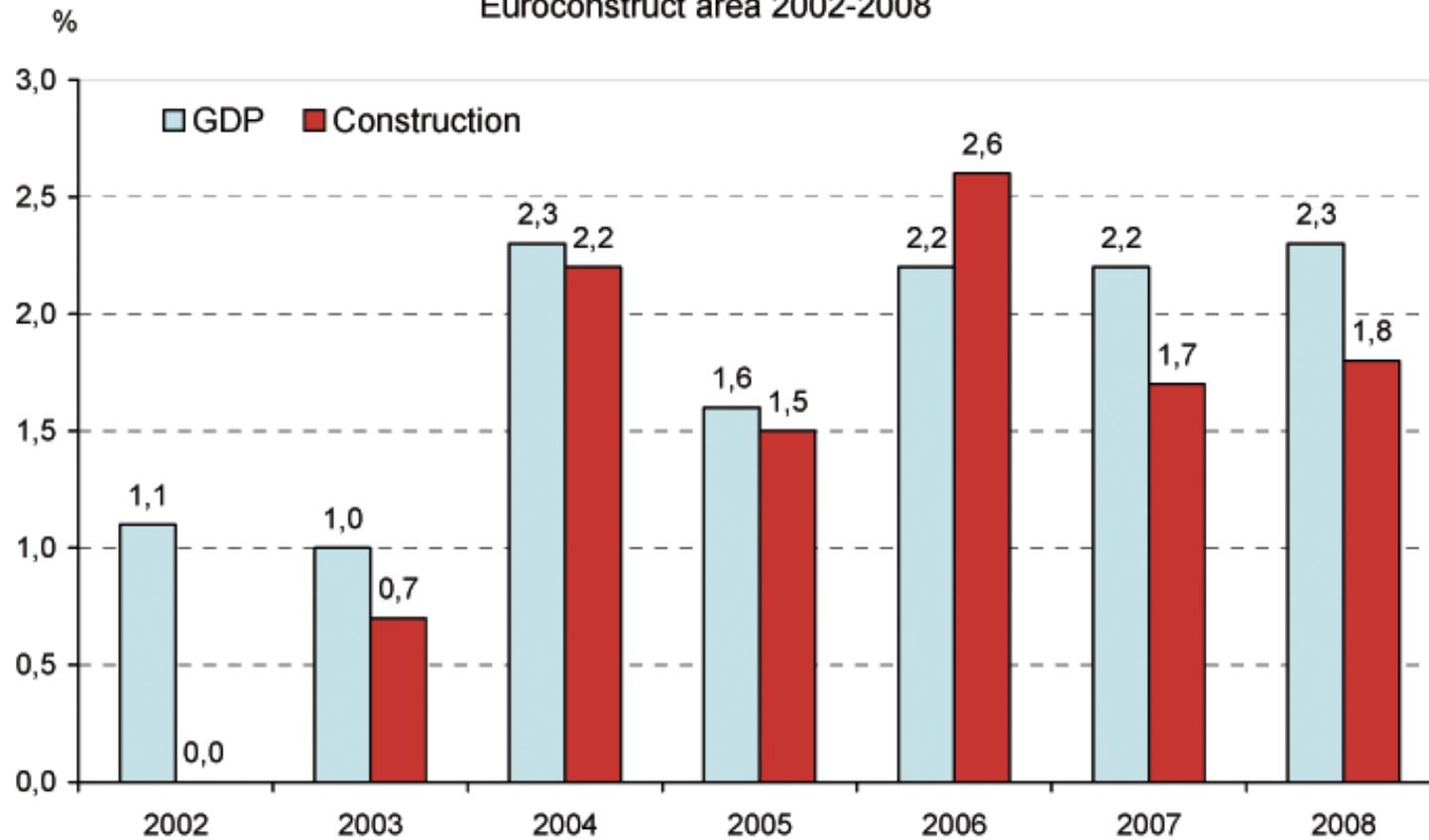


Source: Eurostat/CH: Secrétariat de l'Etat à l'Economie/US: Bureau of Economic Analysis/JP: Economic and Social Research Institute

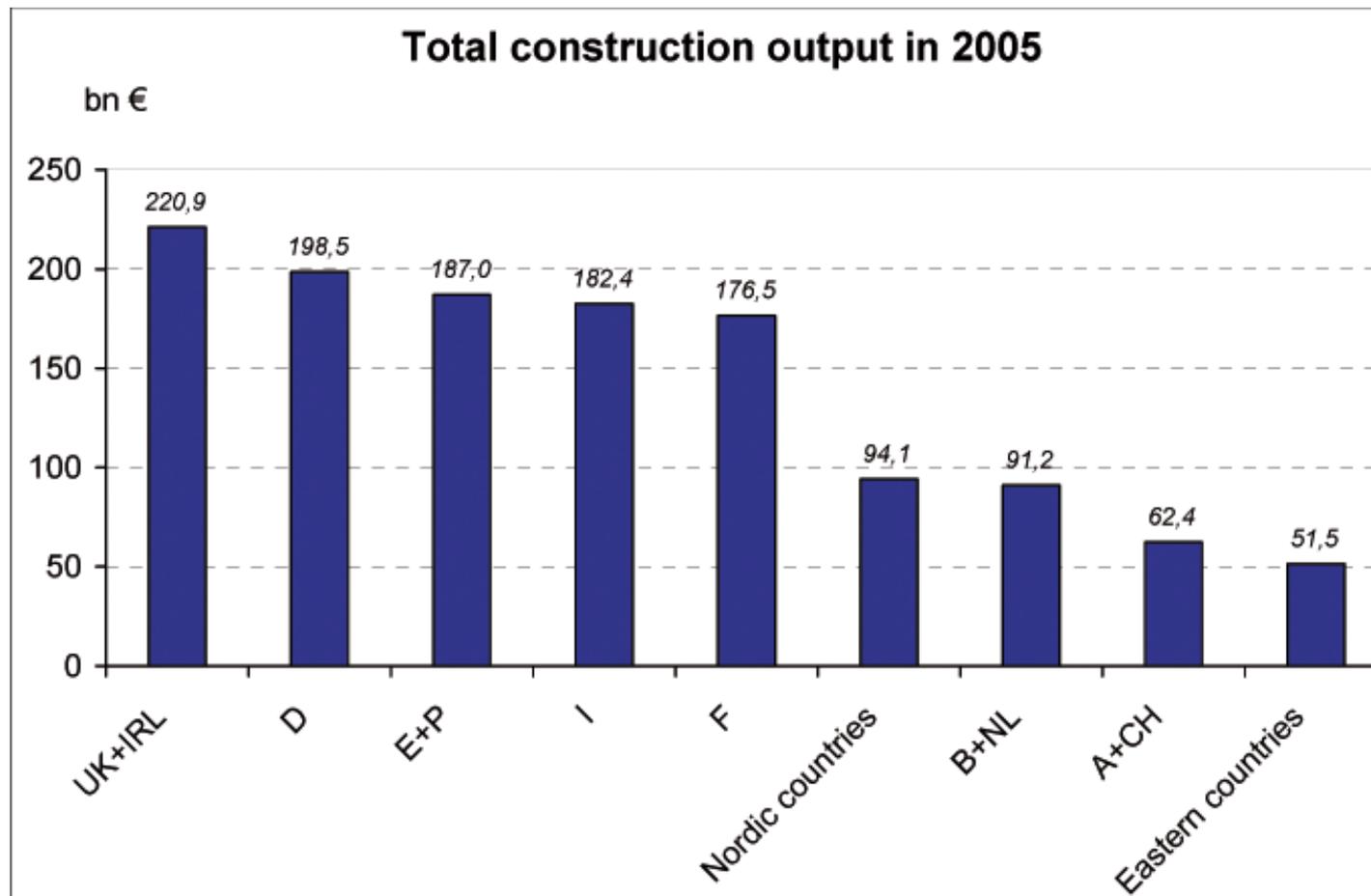
European construction and growth



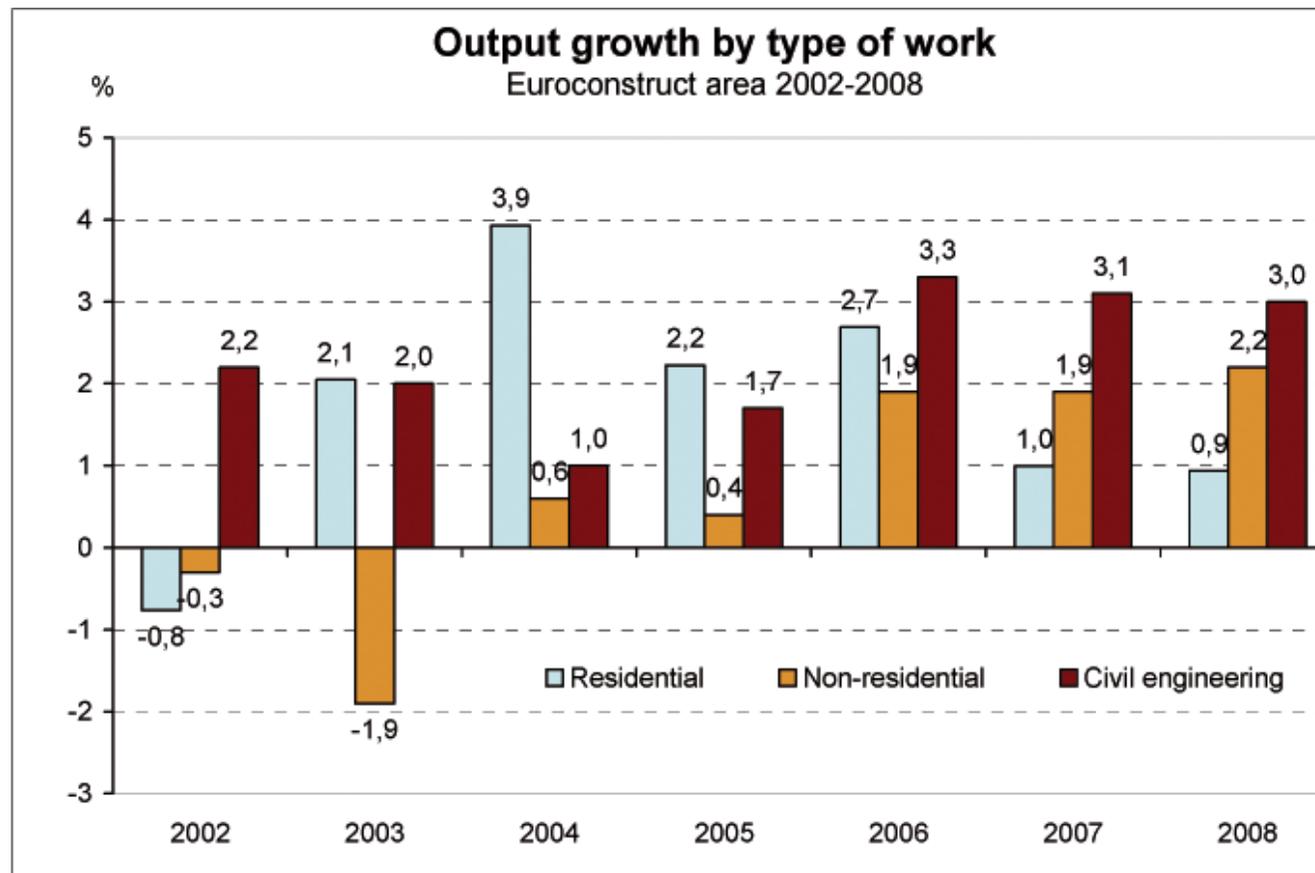
Construction and economic growth
Euroconstruct area 2002-2008



Total construction in Europe



The constructional sector



Source: Euroconstruct Amsterdam June 2006

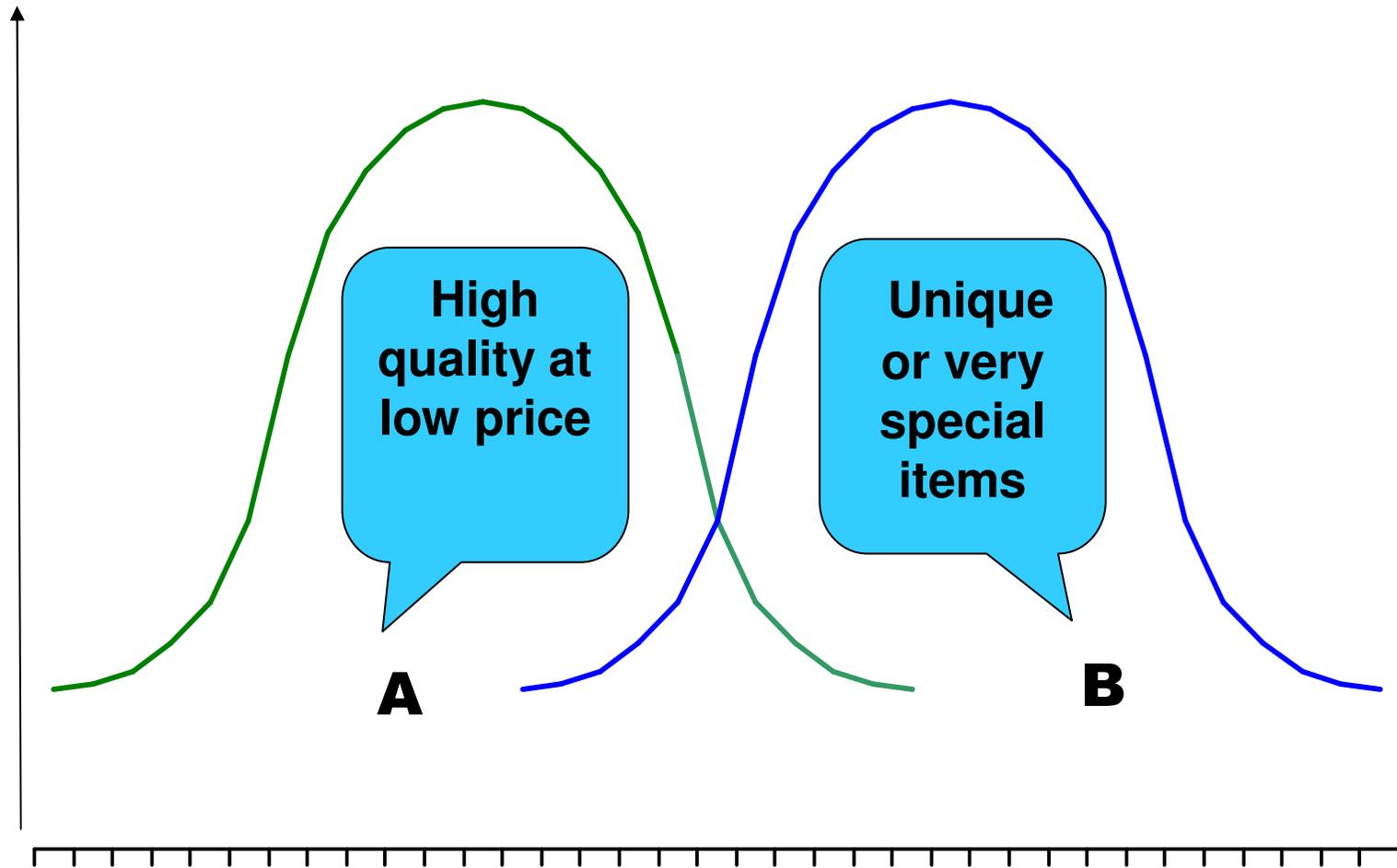
Situational consumption: The outcome of getting richer



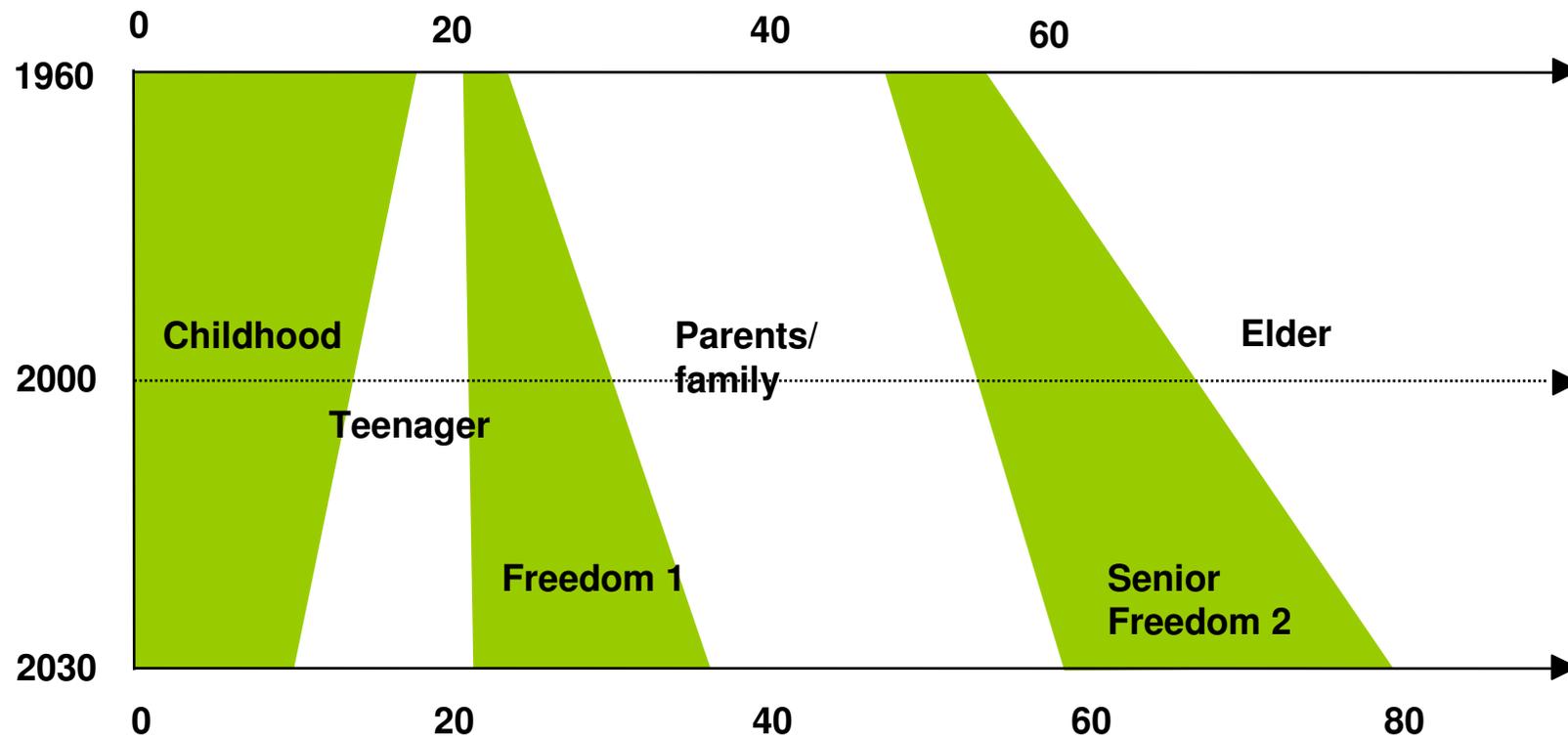
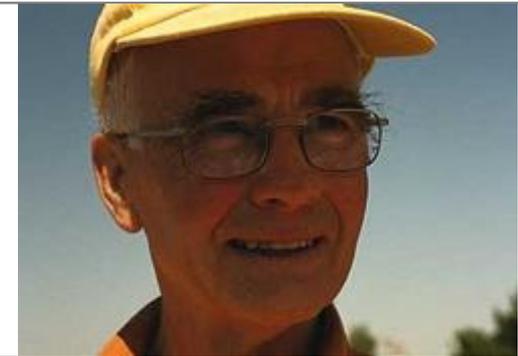
- Private consumption doubles every 30-odd years
- Consumers do not buy because of needs, but increasingly because of inspiration, temptation or simply coincident
- Retail Institute Scandinavia research
- The old lifestyle segments are disappearing - everybody buys everything – but not at the same time or in the same mood
 - Research on elections, sociology of families and research into the way we raise children all confirms this
 - Consumer segments no longer exist as well as classes and the old hierarchical society

The dual world of modern consumers

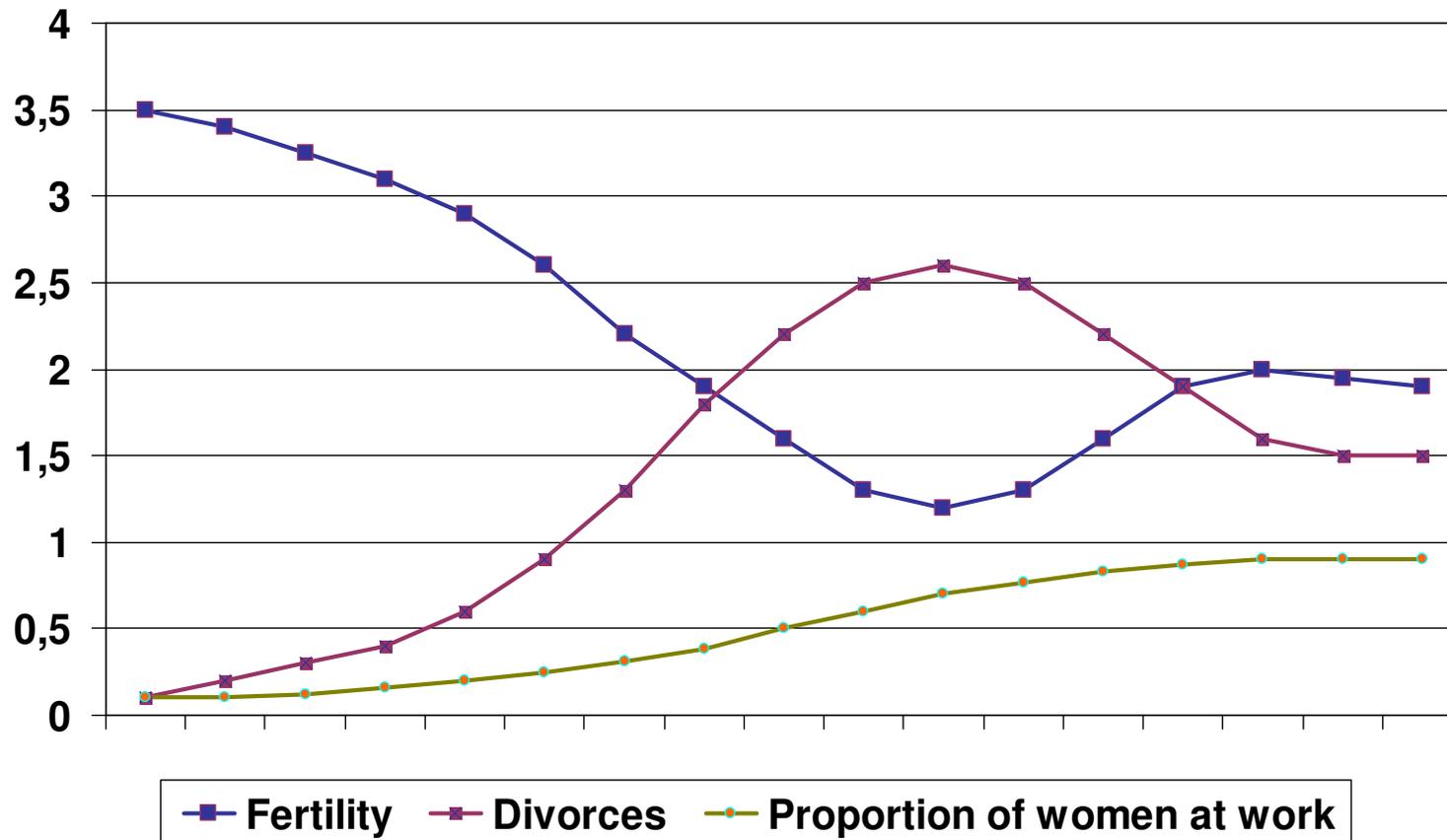
Density



The New Phases of Life



Family Pattern



Average age of marriage - women

NORTHERN EUROPE

Channel Islands

..

Denmark 1970 22,1 2001 30,7

Estonia 1989 22,1

Finland 1970 22,5 2000 30,2

Iceland 1974 21,9 2000 30,5

Ireland 1971 23,5 2002 30,9

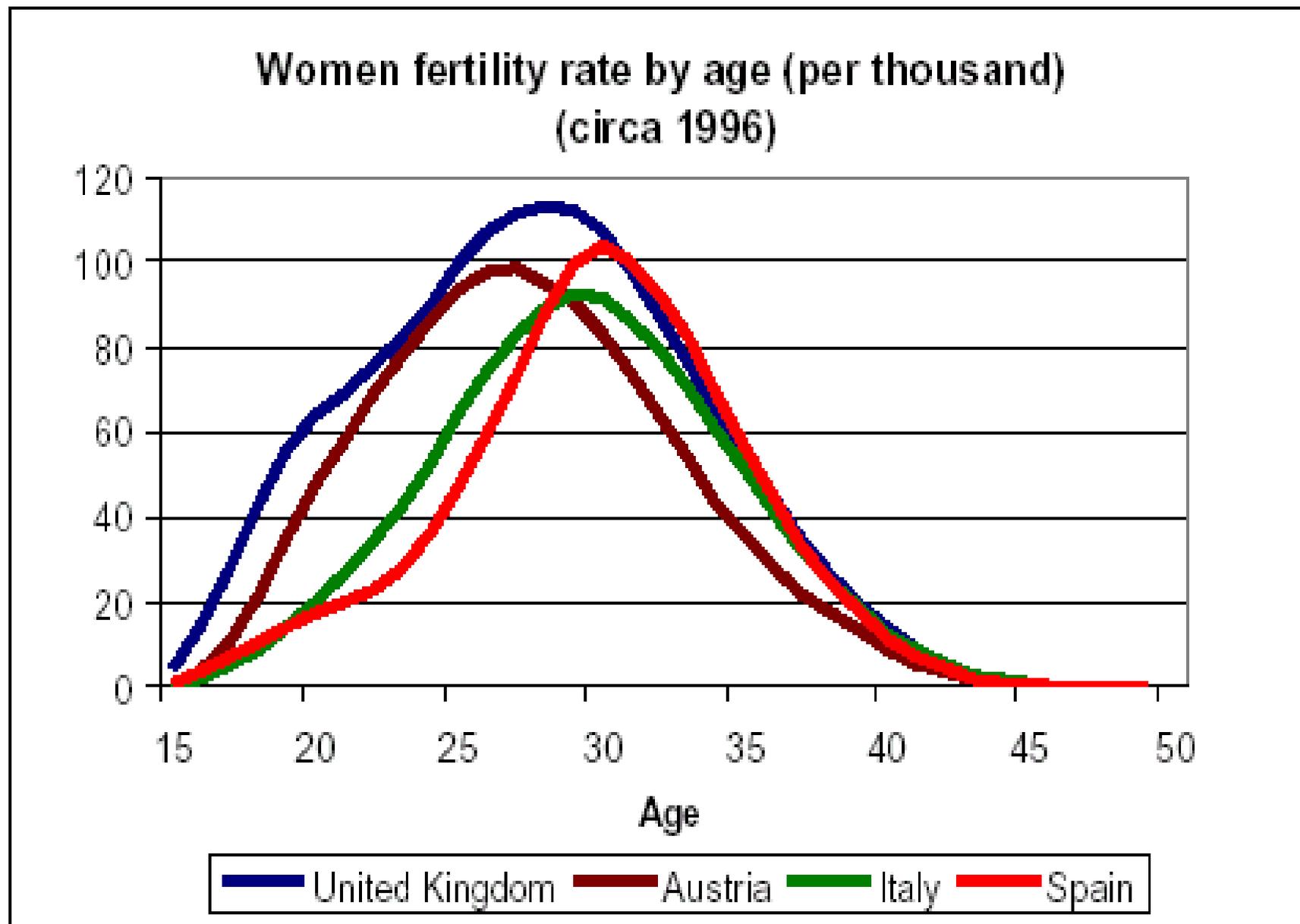
Latvia 2002 26,9

Lithuania 2001 24,8

Norway 1970 21,9 2002 31,4

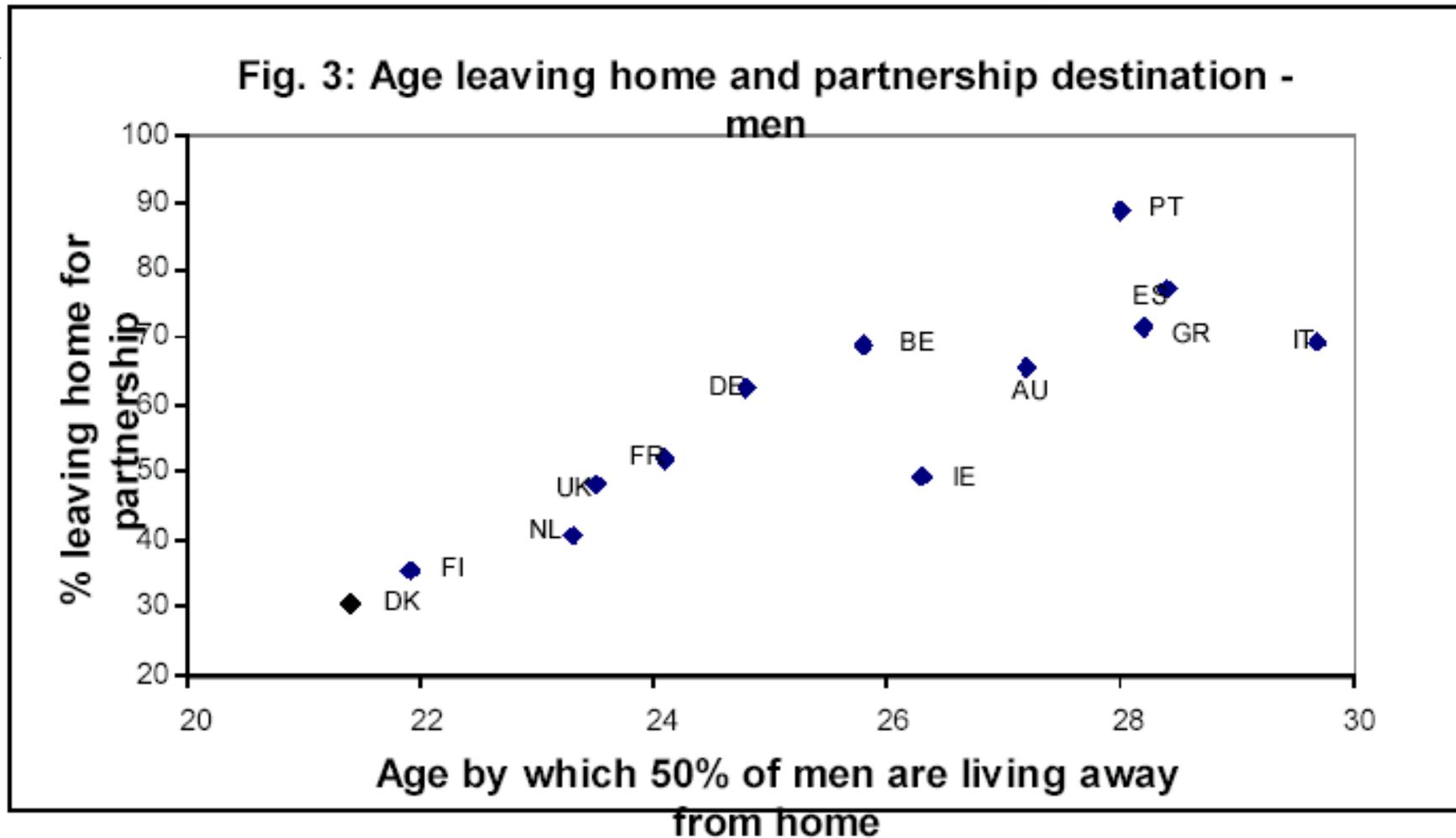
Sweden 1970 23,7 2001 32,3

United Kingdom 1971 21,3 1991 26,4



Source: Observatoire démographique européen, St Germain, France
(UK: data only for England-Wales)

To stay at home...



Modernism after the industrial era

- In the industrial society the production was in focus
- Spending, relaxation and reproduction happened with production in mind
- Purpose determined in behavior and body - discipline
- Post modern is all about spending
- The body is an uncontrollable spending platform – head for desire
- This is reflected in the homes, the behavior and perception of society:
 - A job is spending, individual interior design, snacks and coffee on-the-go, loose party arrangements, constant changing appointments, films, books, music as constant on-going spending

Equality and the Do It Yourself line in Europe

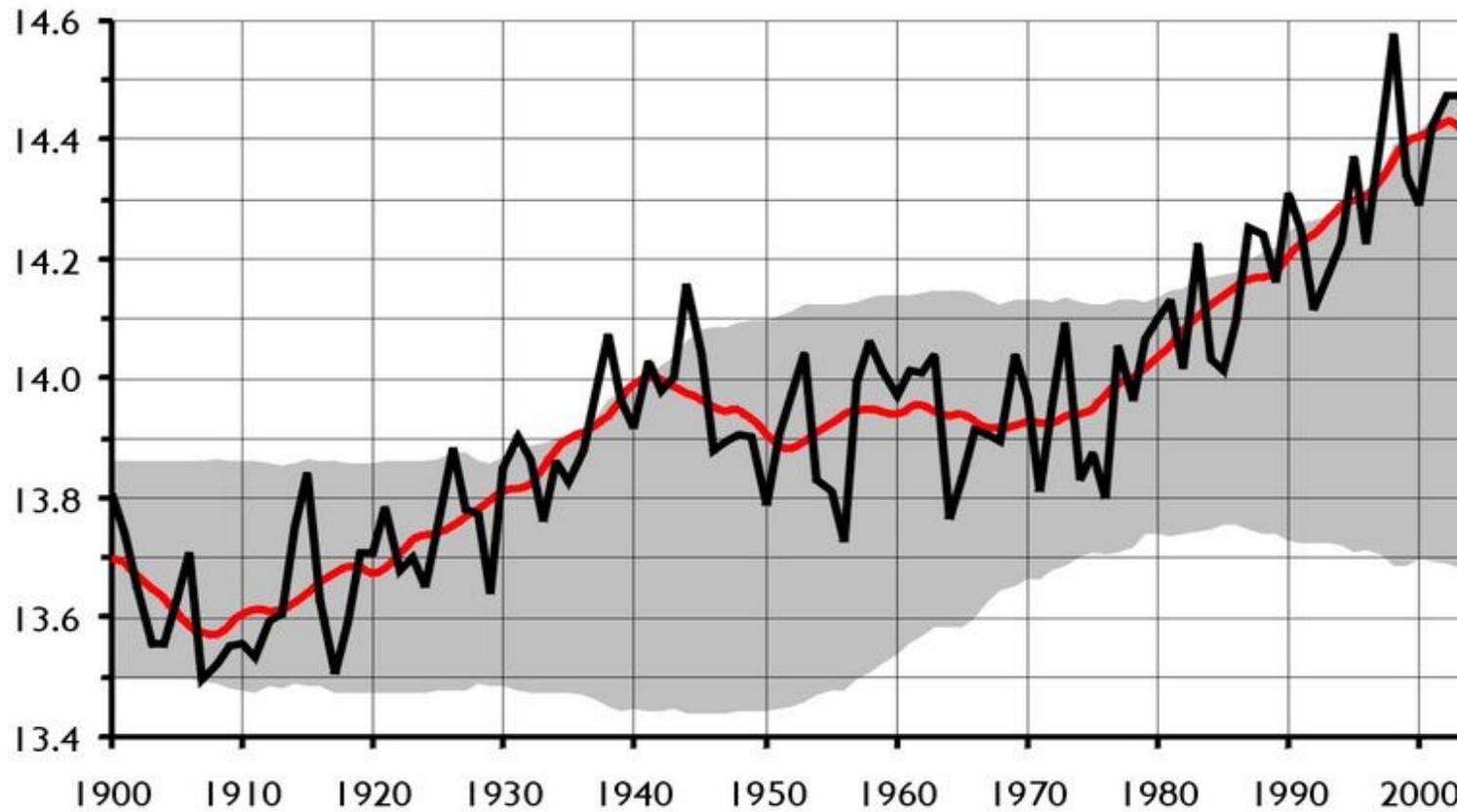
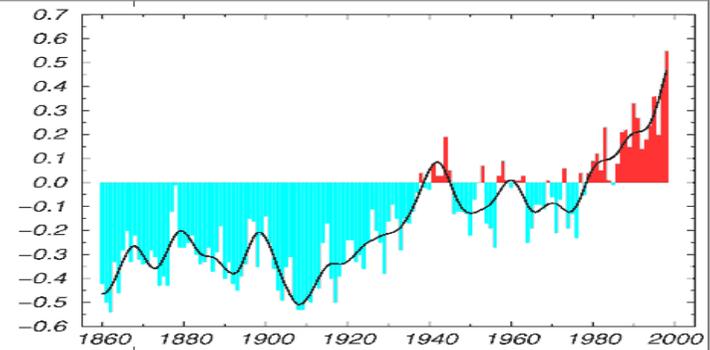


- **Europe is still divided in a protestant and catholic part**
- **In the north we generally have the same income, pay a large amount in taxes of our salary, like to work hard, when we are off. DIY is huge.**
- **In the south the incomes are much more varied – there are rich people in the south – and others do the work around the house: Tradesmen do it all!**

Construction in the future

- **When will automatisisation reach construction?**
- **A residential house costing 30.000 euro including climatization, automatic shopping and self cleaning should be available today if:**
 - **Productivity had raised at the same pace as the automobile industry and consumer electronics**
- **A lot of barriers have caused a different development:**
 - **Organizations of the building site**
 - **Role of the builders**
 - **Lack of prefab elements in certain fields**
- **Benchmarking – all over Europe**

Temperature on earth



Environmental regulation and construction

- **A building will have to be better isolated in the future**
- **We come from old standards and move towards zero-energy and plus-energy houses**
- **Houses are under the new regulatory regime allowed to produce energy and deduct that energi from the overall calculation of consumption**
- **Solar energy, photovoltaic cells, geothermic energy and all sorts of electricity produzing surfaces will be an integrated part of construction element in a few years**
- **You can put all of that on the roof and the other surfaces**

Construction as a process

- **More focus on prefab elements**
- **From building a building to assembling at the site**
 - **A lot more will be produced in factories**
 - **Constructions workers are too expensive**
 - **Time is waisted during the wellknown process**
 - **You might end up selling roofs and climate shields assembled**

Who is building for whom?

- **Developers**
- **Investors**
- **The builder (bygherren)**
- **Architects and all the other advisers**
- **Stakeholders in the neighborhood**
- **Stakeholders in society**
- **In the future, more focus on the cost of running the building – not just on building it**
 - **Total life cycle cost**

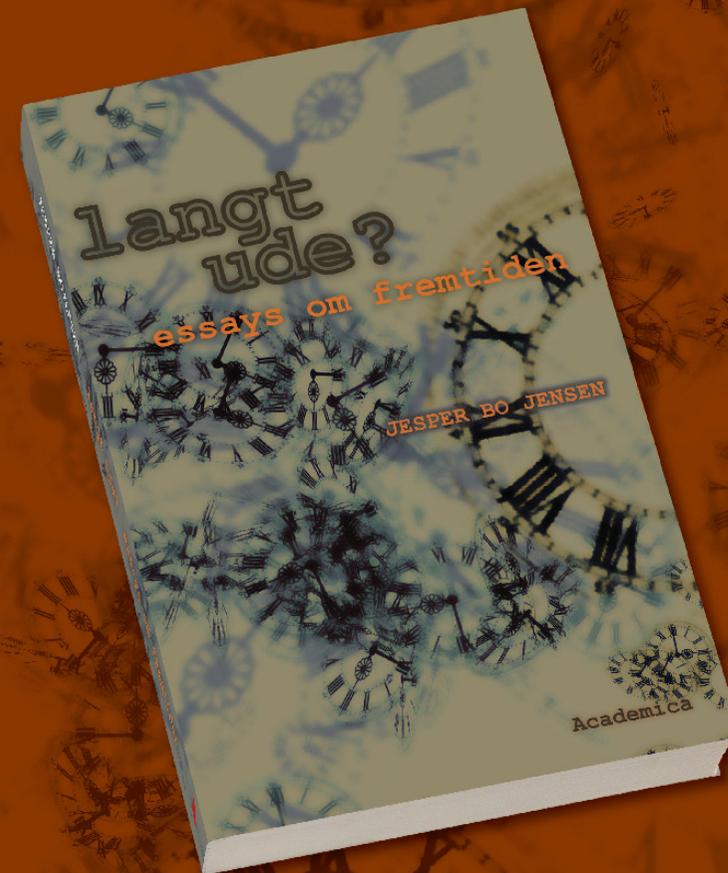
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