



MINISTRY OF FINANCE

The role of public funding in R&D&I

The case of Finland

31.10.2007

Markus Sovala, Deputy Budget Director



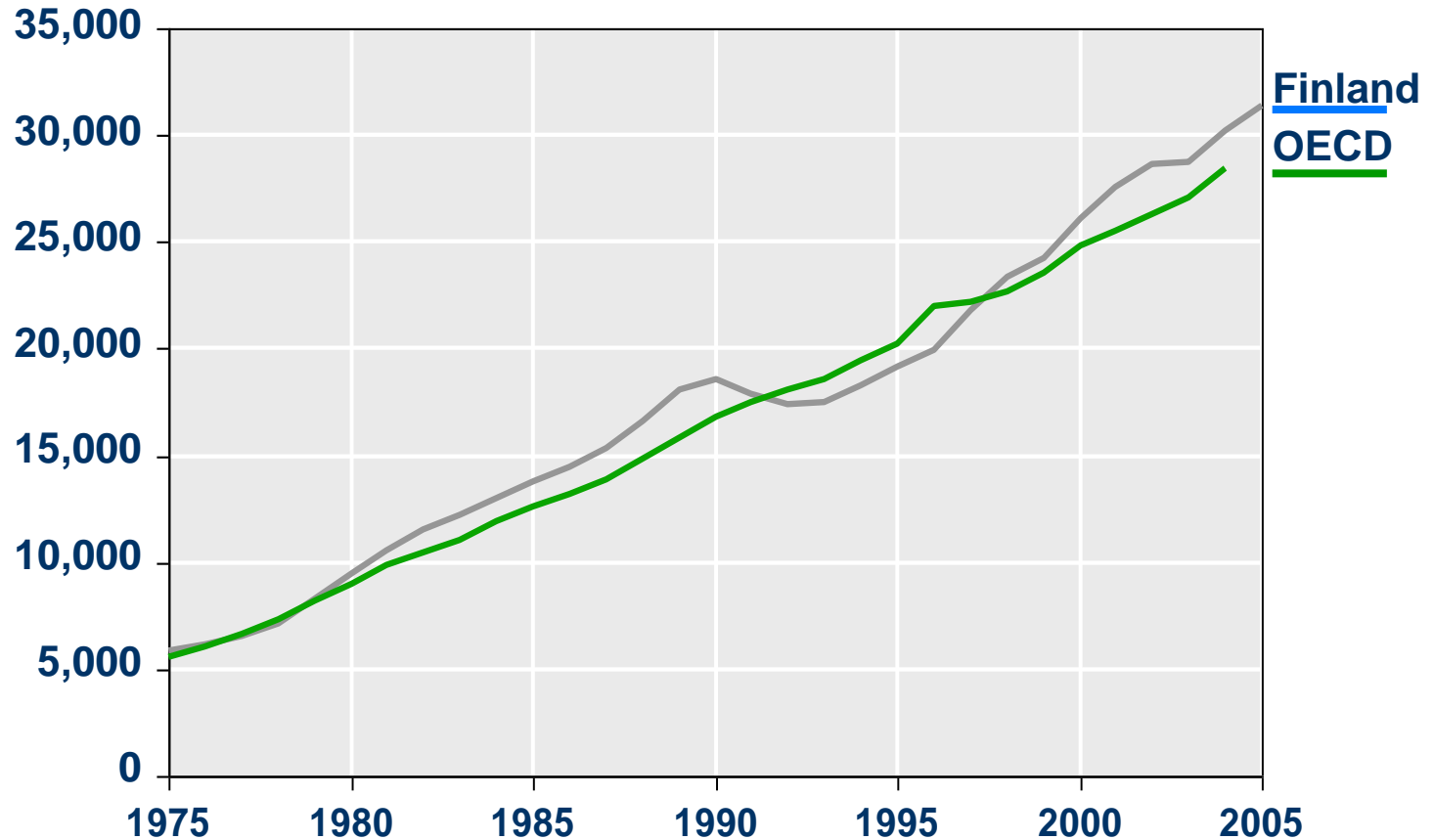
Economic “miracle” of Finland

GDP per capita



GDP in Finland has grown faster than the OECD average both before and after the recession.

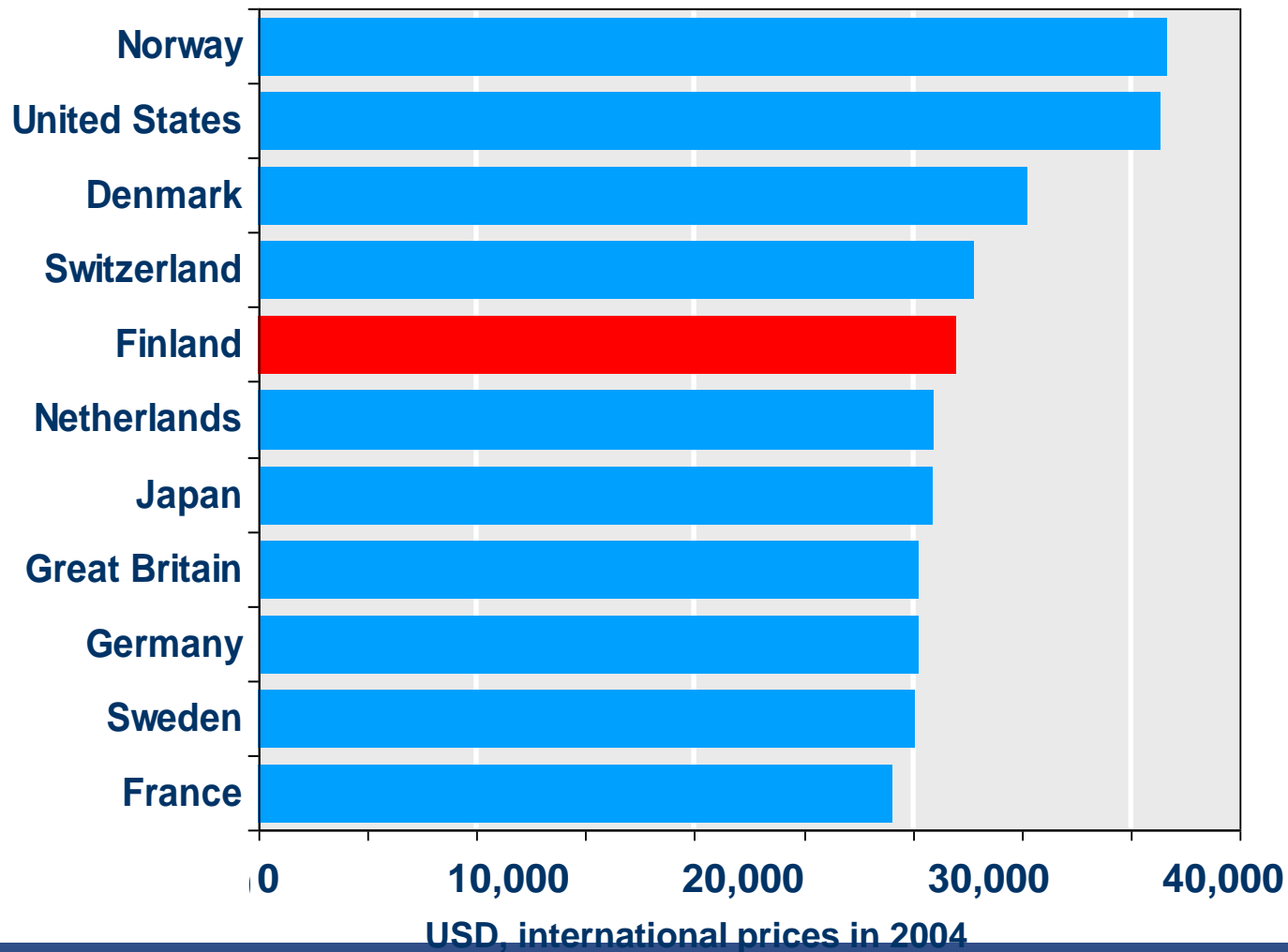
USD in current prices and PPPs



Figures for Finland according to new calculations from Statistics Finland.

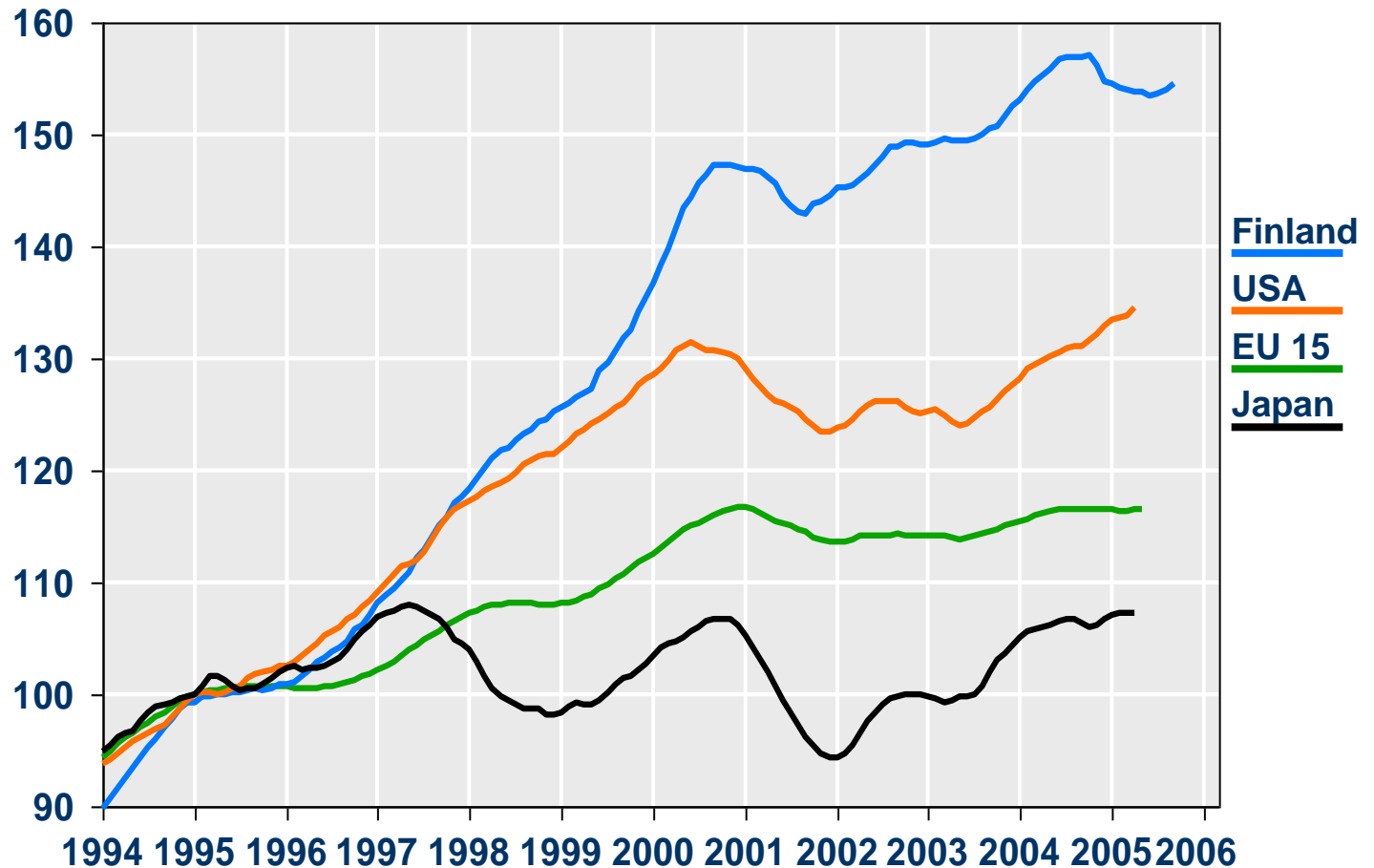


GDP per capita in 2006



Volume index of industrial production

1995=100

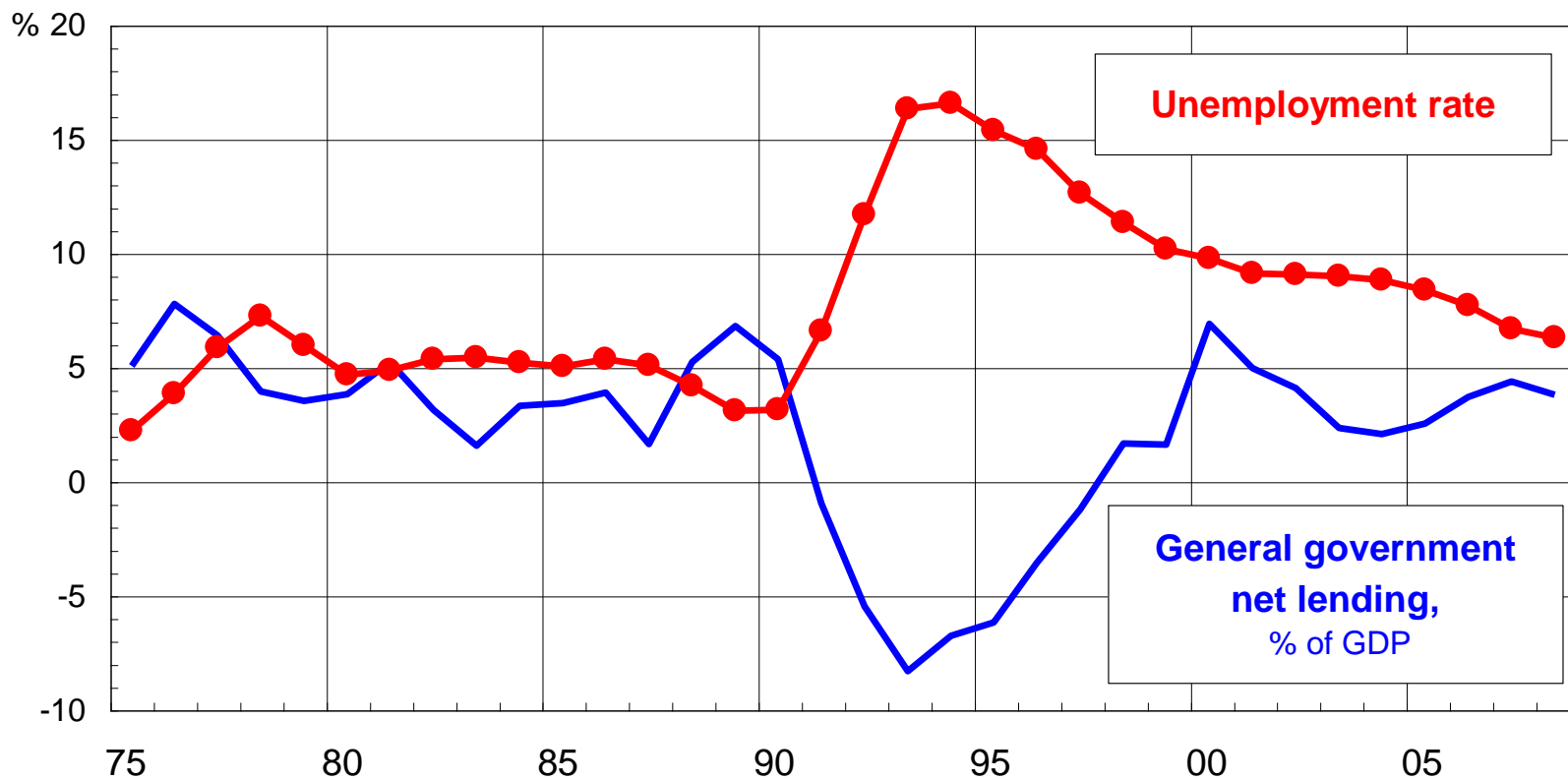


Industrial production has grown faster in Finland than in other developed nations.



Unemployment rate and general government net lending

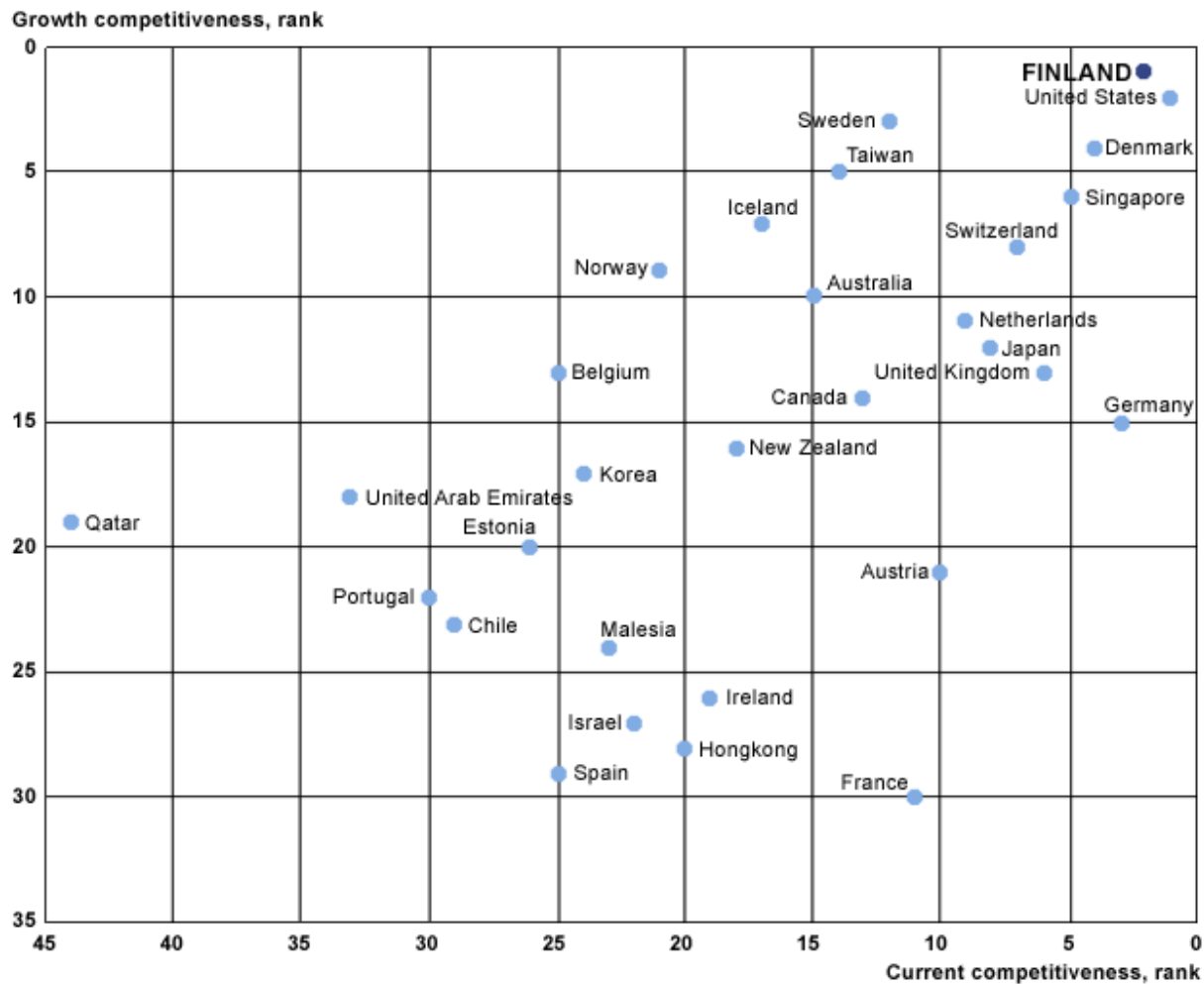
1975 - 2008**



31.8.2007/VM/KO/UL, Sources TK, VM (SK-2007:3)
18486.xls



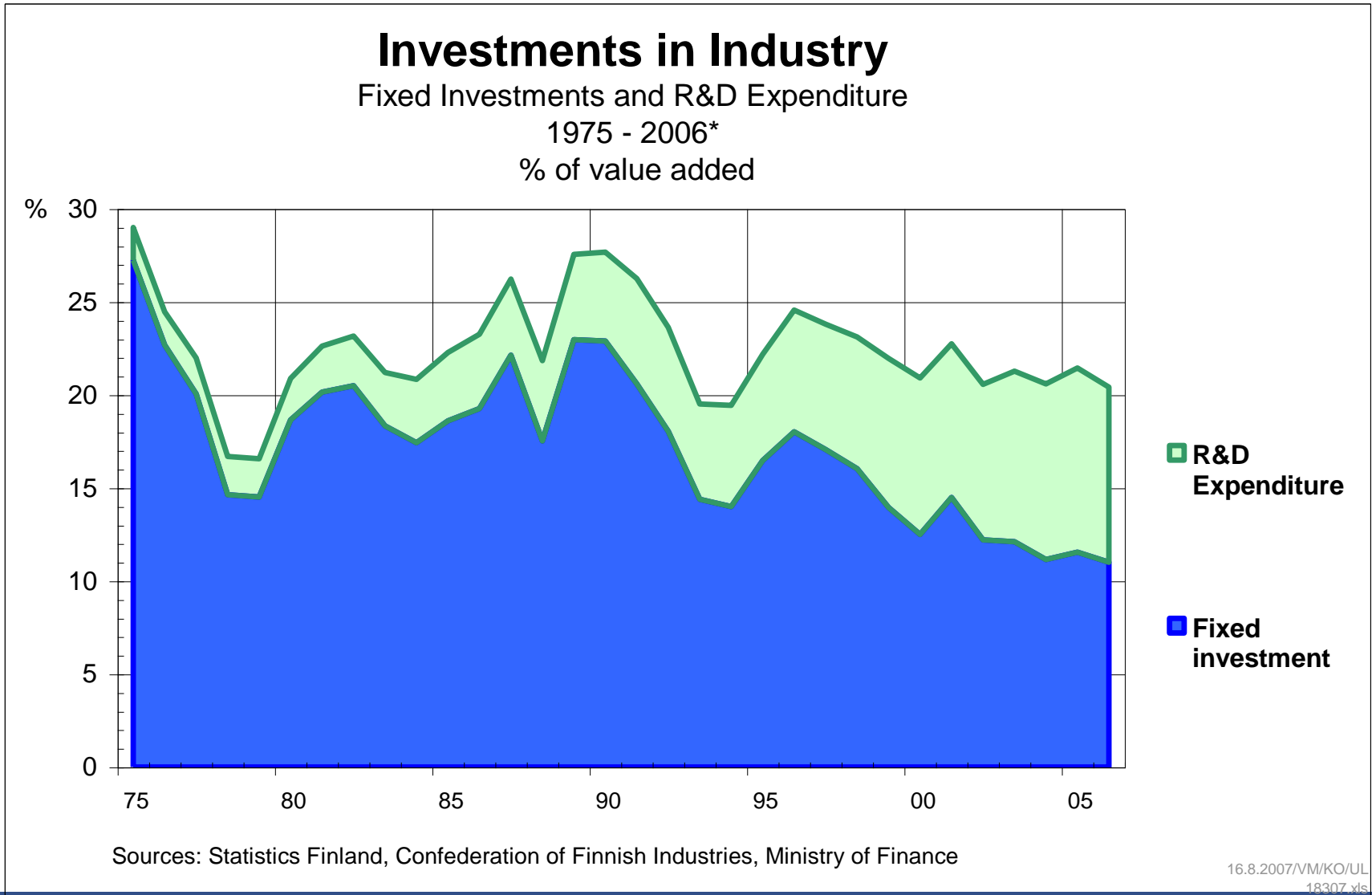
World Economic Forum (WEF): Finland is number one!





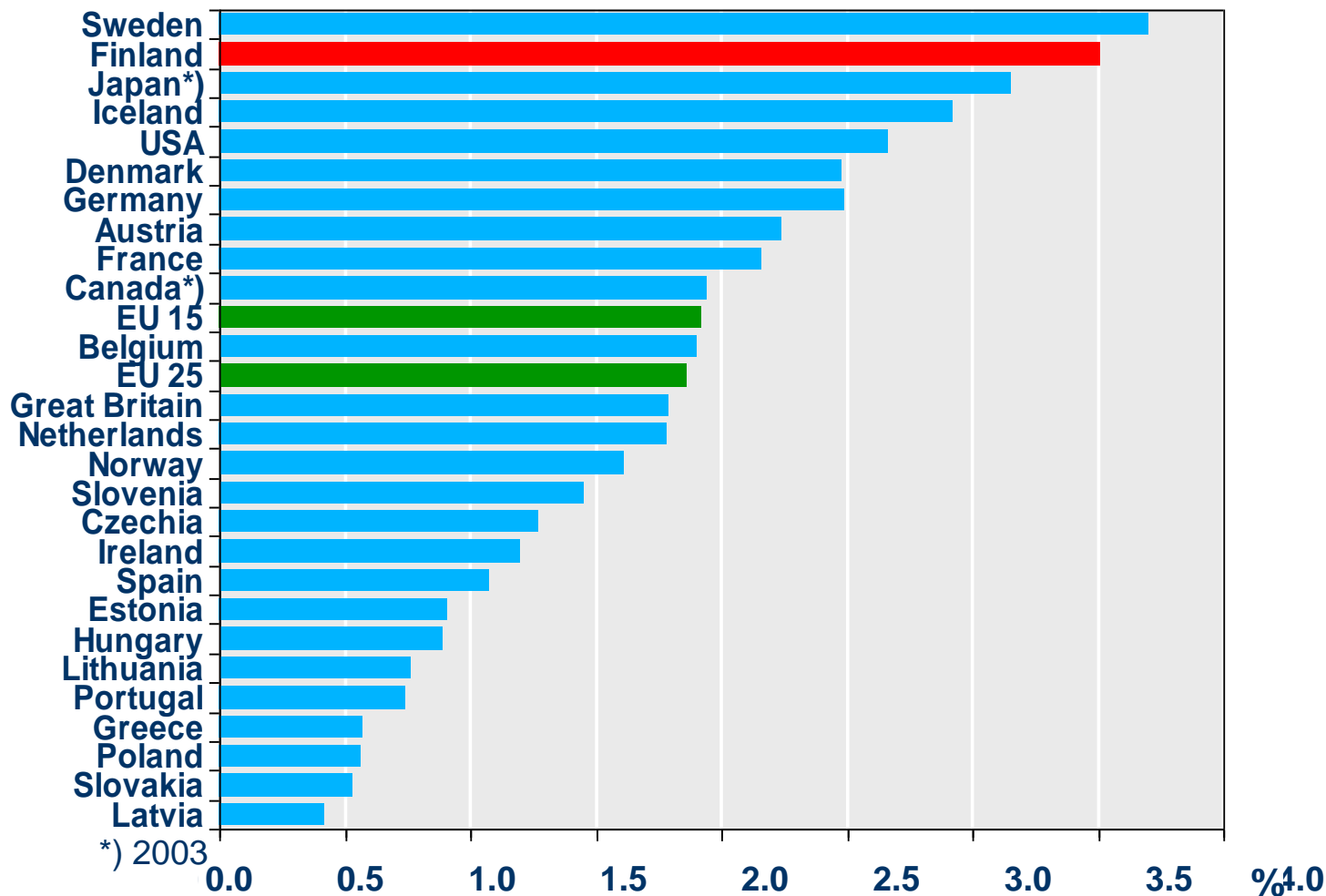
From capital intensive production to R&D&I intensive production

Growth without investments?

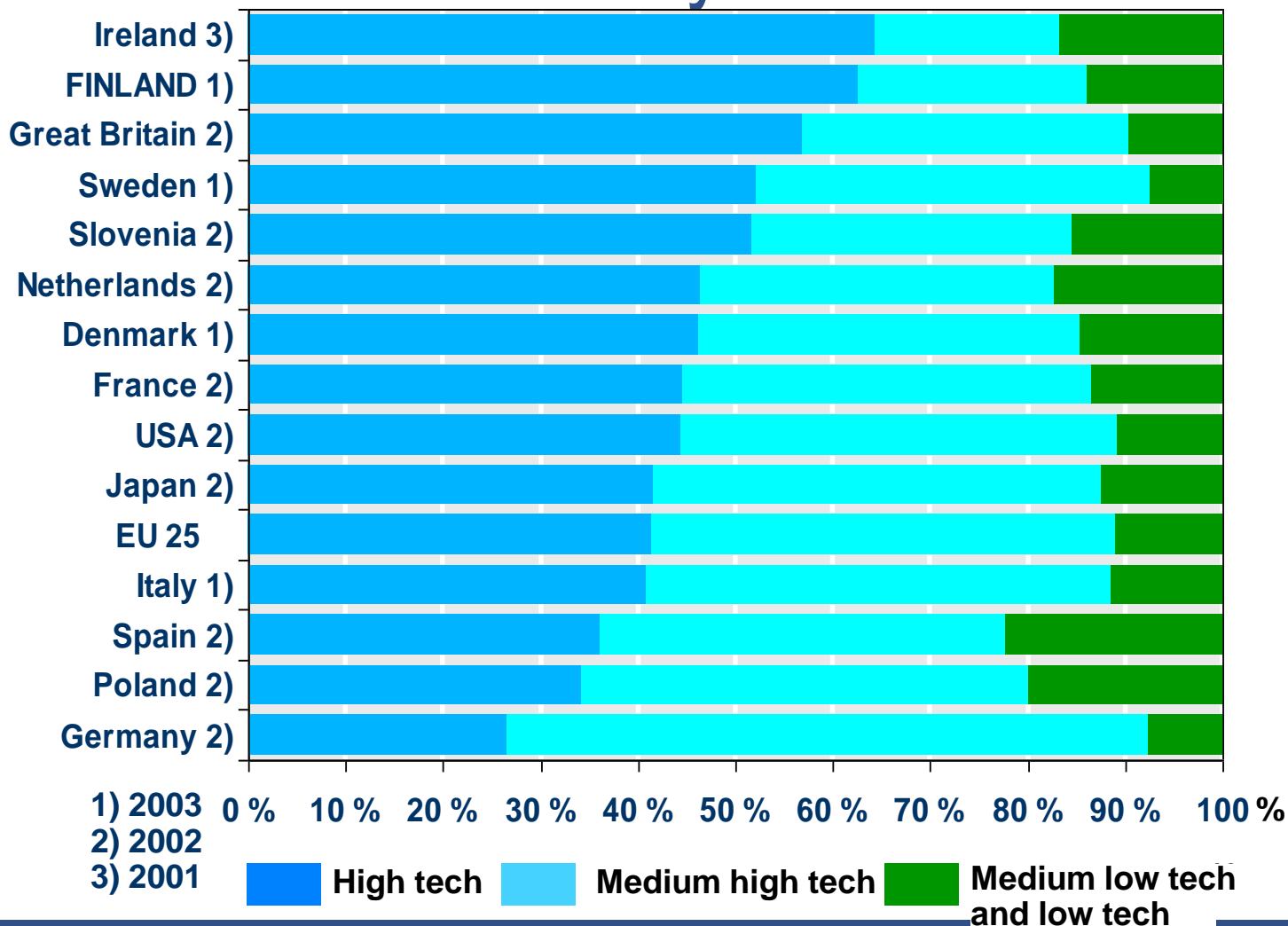


16.8.2007/VM/KO/UL
18307.xls

Total R&D funding in 2004 Percentage of GDP

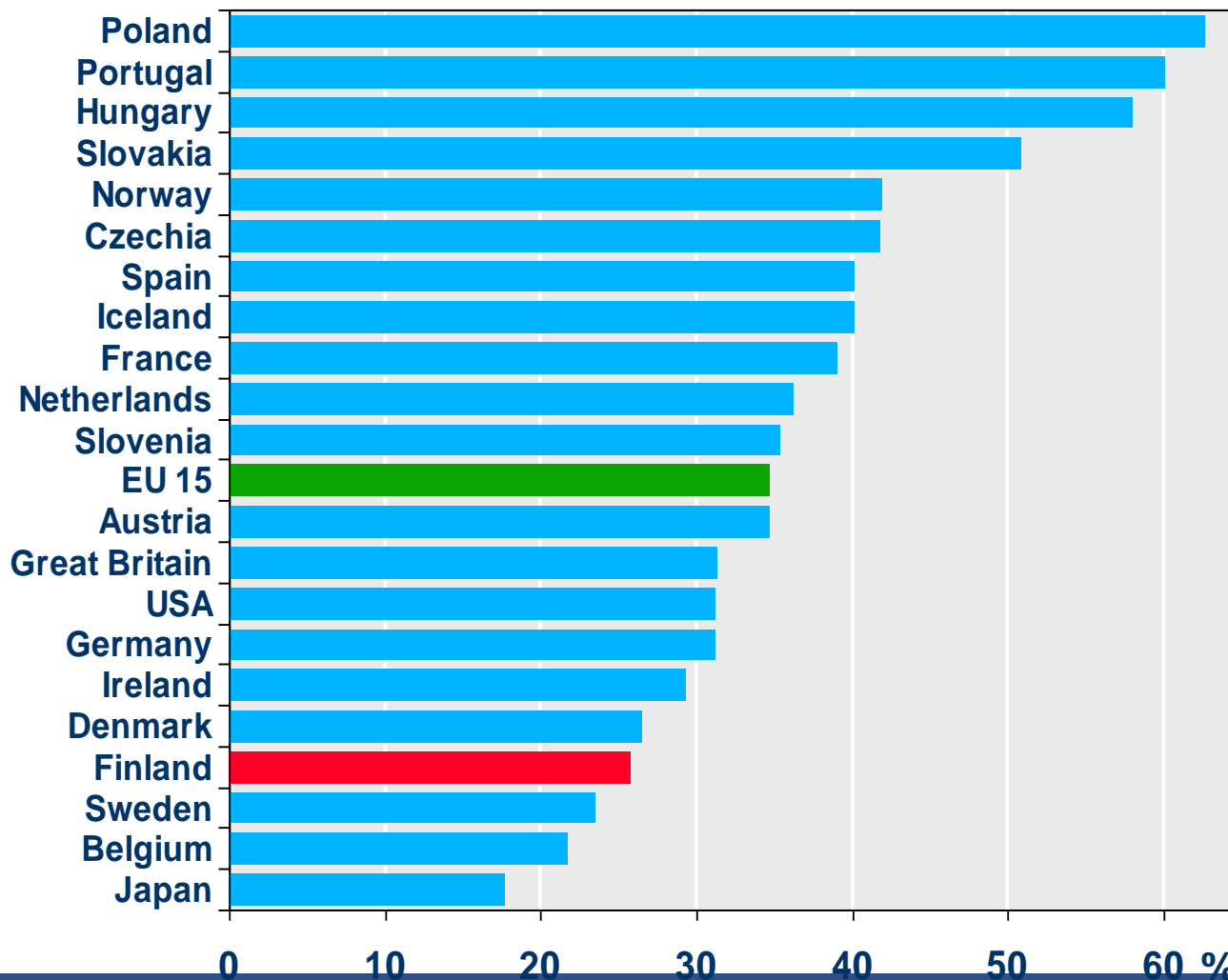


Industrial R&D according to technology intensity



Technology groups according to the OECD definition.

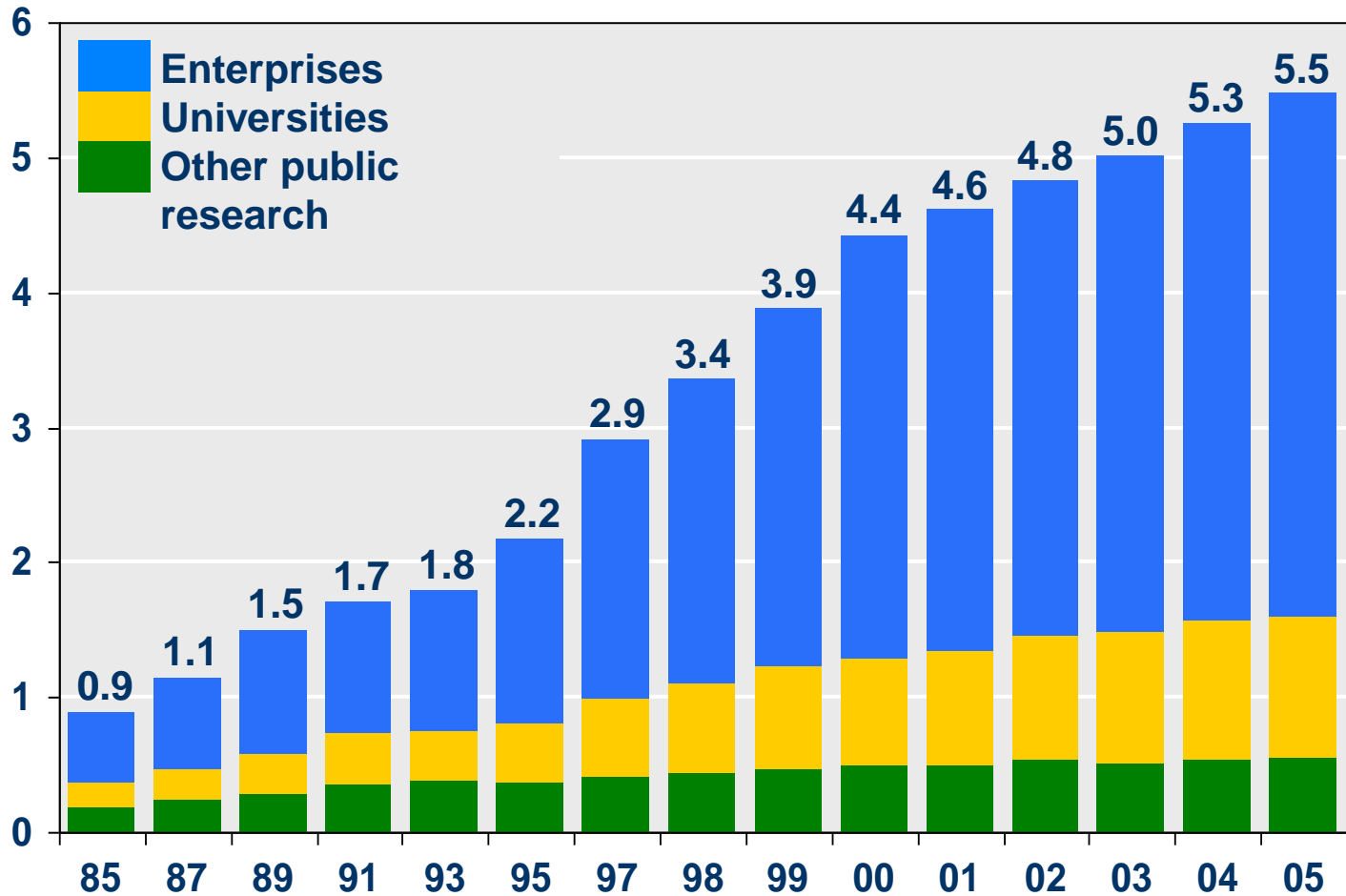
Public sector's share of total R&D funding in 2003





R&D in Finland

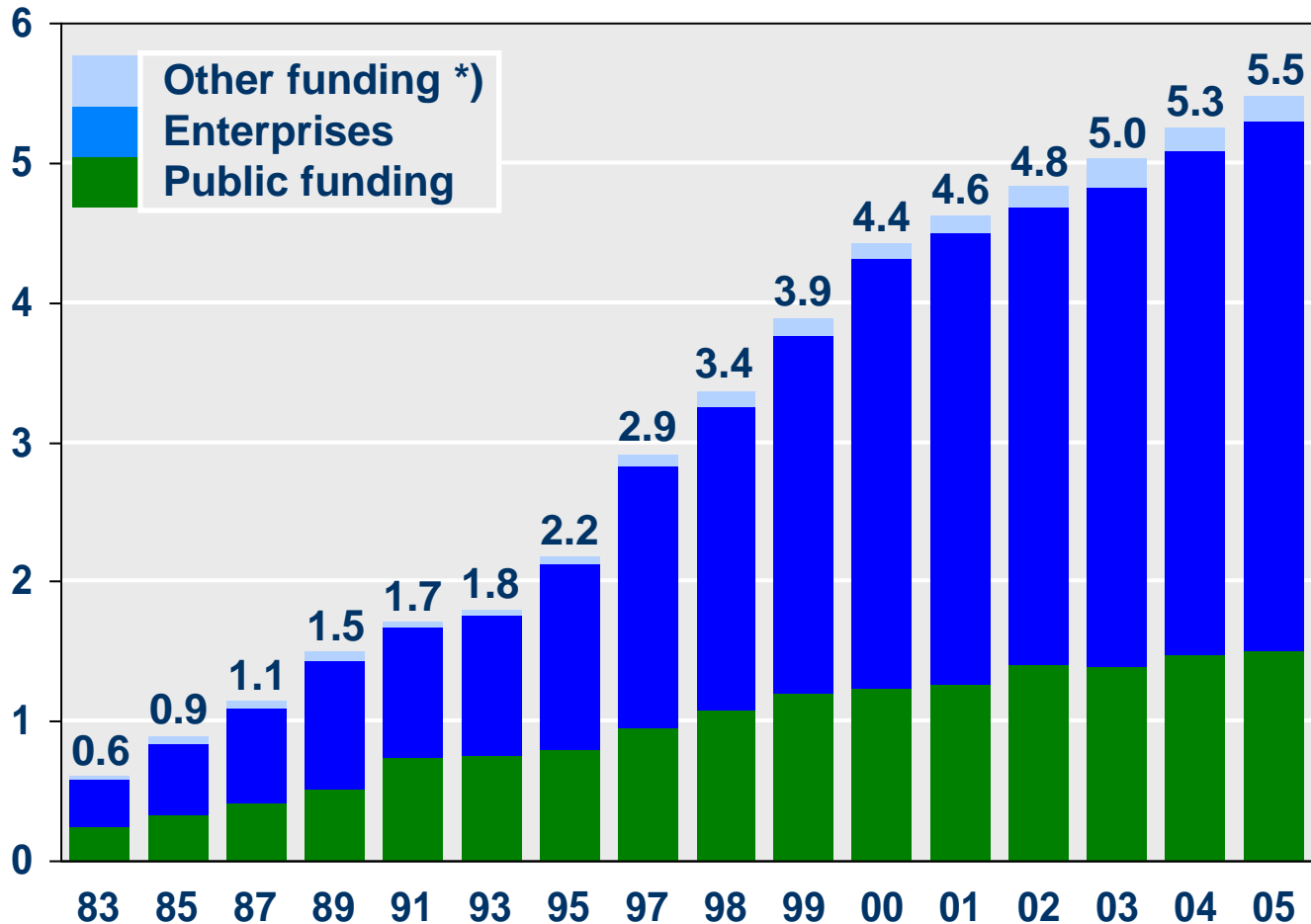
Billion euros





Funding of R&D expenditure

Billion euros

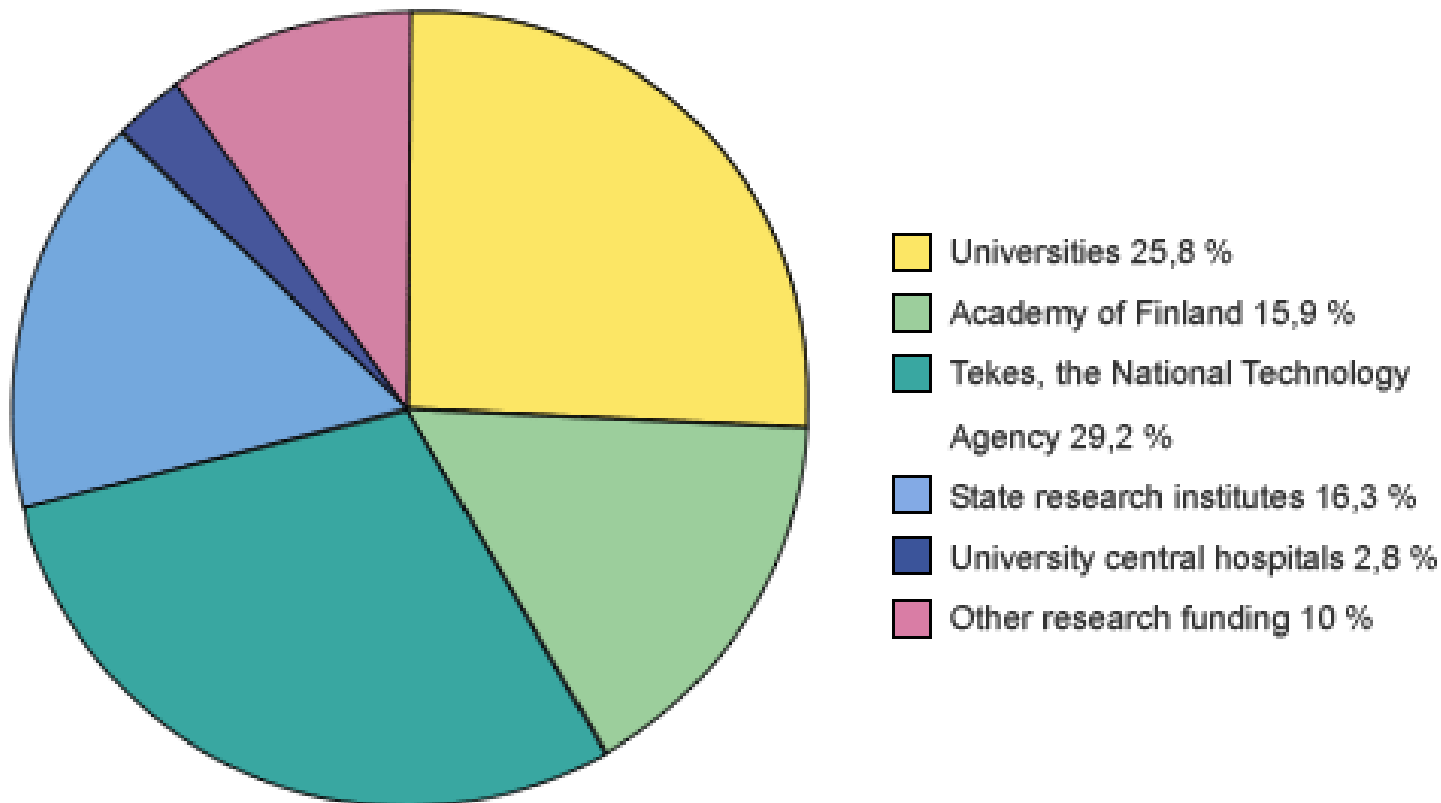


*) Funding from abroad, foundations, other sources



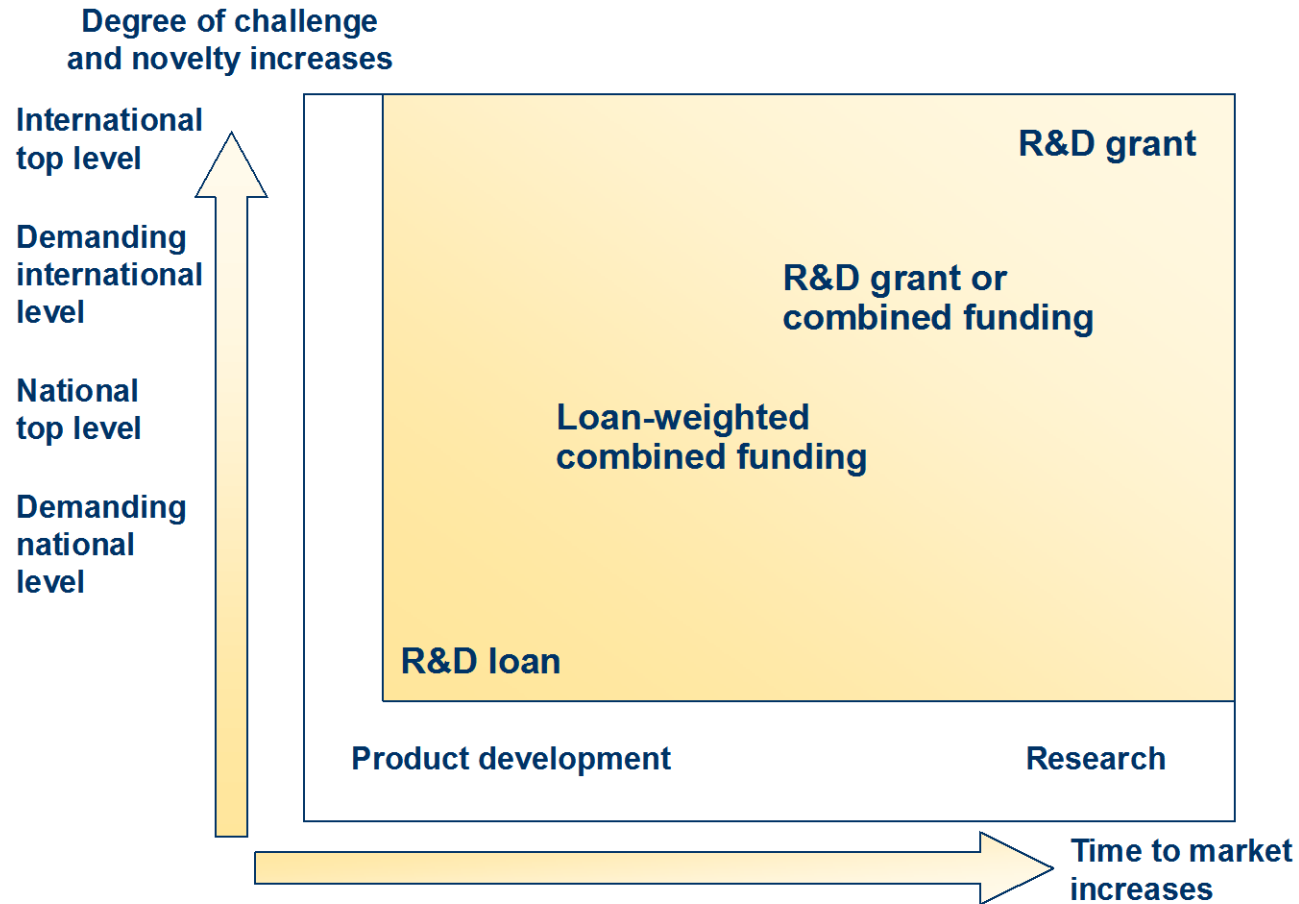
Is public R&D&I funding crowding-out or crowding- in private funding?

Allocation of the R&D funding in the state budget in 2007 (%)



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Tekes' funding depends on the project's degree of challenge, novelty and time to market



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Funding criteria for R&D projects of large companies

In addition to Tekes' basic funding criteria, the projects of large companies have to fulfil at least one of the following criteria

- Cooperation with SMEs
- Cooperation with a research institute or university
- Participation in a technology programme
- International cooperation
- Project comprises predominantly industrial research or results can also be widely utilised





TEKES funding for private companies

| | Share of rejected applications | |
|-------------|---------------------------------------|-----------------------------------|
| Year | Euros (%) | Number of applications (%) |
| 2001 | 57 | 30 |
| 2002 | 54 | 35 |
| 2003 | 39 | 23 |
| 2004 | 41 | 27 |
| 2005 | 36 | 28 |
| 2006 | 42 | 27 |
| Oct 2007 | 39 | 24 |



Preliminary conclusions

- Public R&D&I funding can not be a substitute for private funding, but it may be a complement.
- It does matter how public funding is managed.
- Marginal returns of R&D&I investments are diminishing. Finnish R&D&I activity is already over funded?
- Tax incentives for the R&D&I are sexy, but the Finnish experience shows these are not must.