

**COINVEST**

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**COINVEST:**

**Competitiveness, Innovation and Intangible Investment in Europe**

# **French Intangible Investment: Sectoral estimates, Growth accounting and Innovation policy**

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# Overview

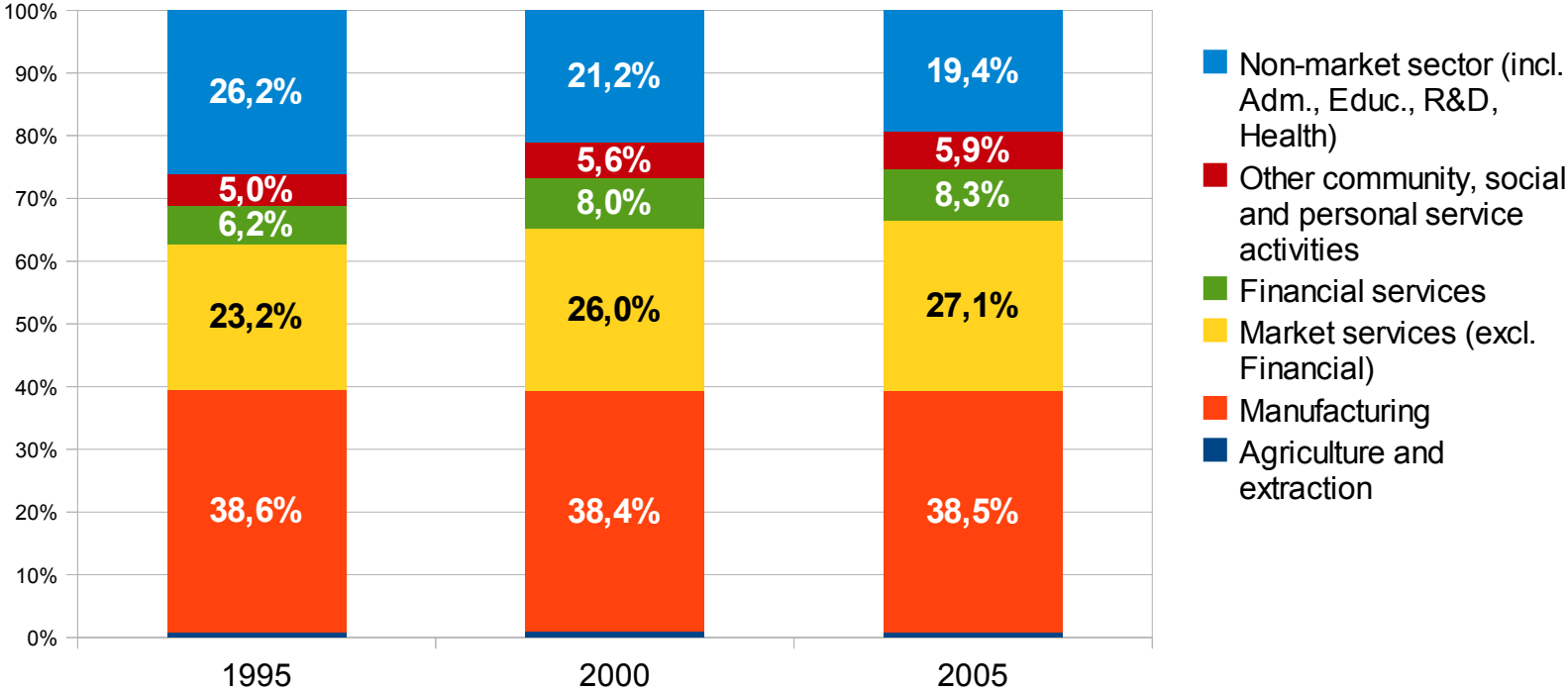
- Estimation of industry-level intangible investment (2-digit NACE)
  - Manufacturing vs. services
  - Financial industry
  - Non-market R&D, Education and Health
- Growth accounting
  - Extended to all sectors
  - “New” VS “old” intangibles
- Innovation policies
  - What effect of R&D incentives on labour productivity?
- Intangible measurement standards, first-mover advantage?
  - Need for closer ties with national statistics offices

# Industry-level estimates (1)

- GFCF and IC data availability (French NA)
  - 118 products/industries over 1999-2006 (NES classification)
  - Translated into 2-digit NACE and 1-digit NACE
- Backcast using constant shares in upper categories
- Labour-cost based estimates
  - Available at a 2-digit NACE level over 1993-2008, hardly reliable

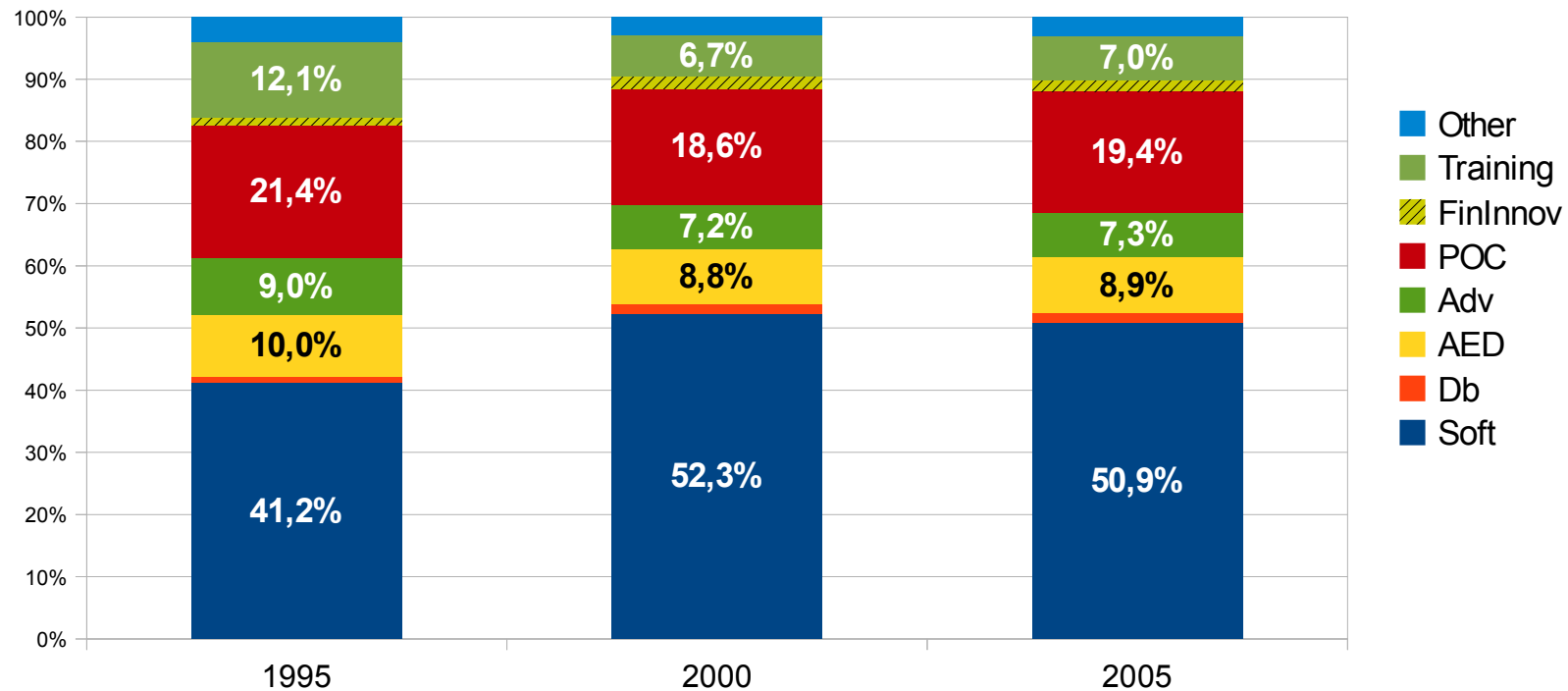
# Industry-level estimates (2)

## Intangible investment Sectoral distribution



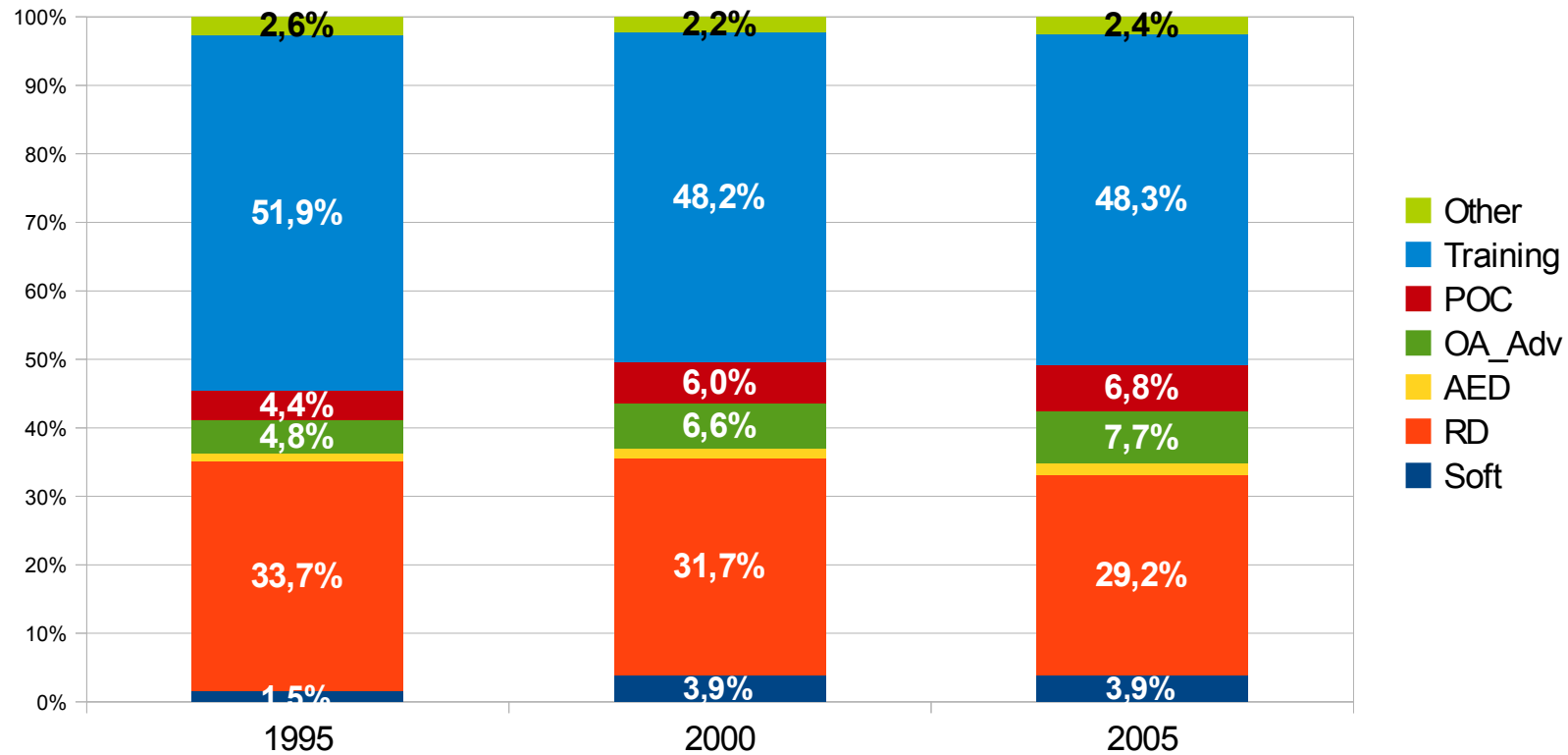
# Industry-level estimates (3)

## Financial industry's intangible investment breakdown by type



# Industry-level estimates (4)

## Non-market sector intangible investment

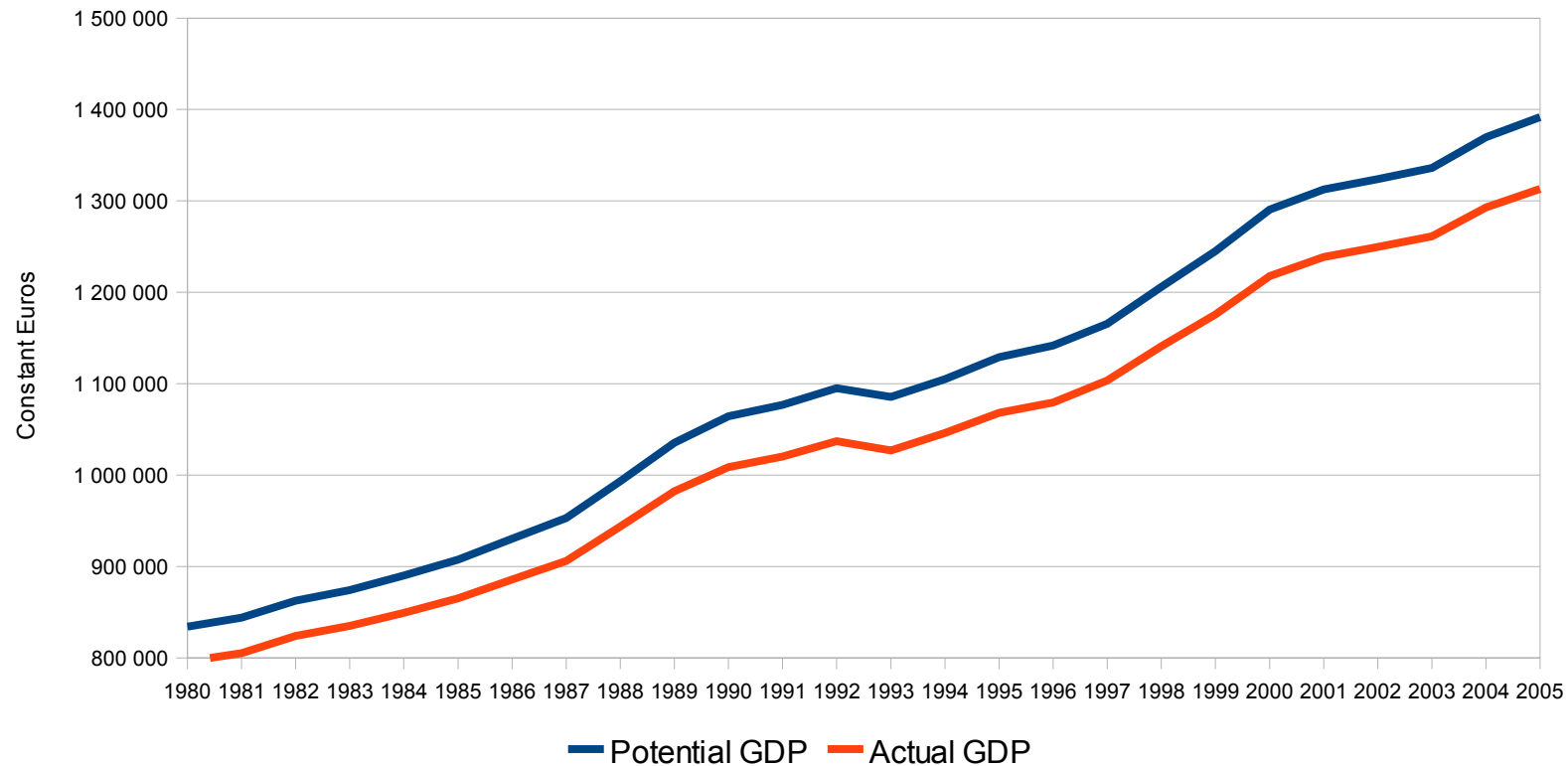


# Growth Accounting (1)

- Extend the exercise to all sectors
  - Better reflects the economy
  - Large non-market sector
- Focus on the effect of new intangibles
  - What is at stake in terms of NA?
  - How would they affect growth and productivity?

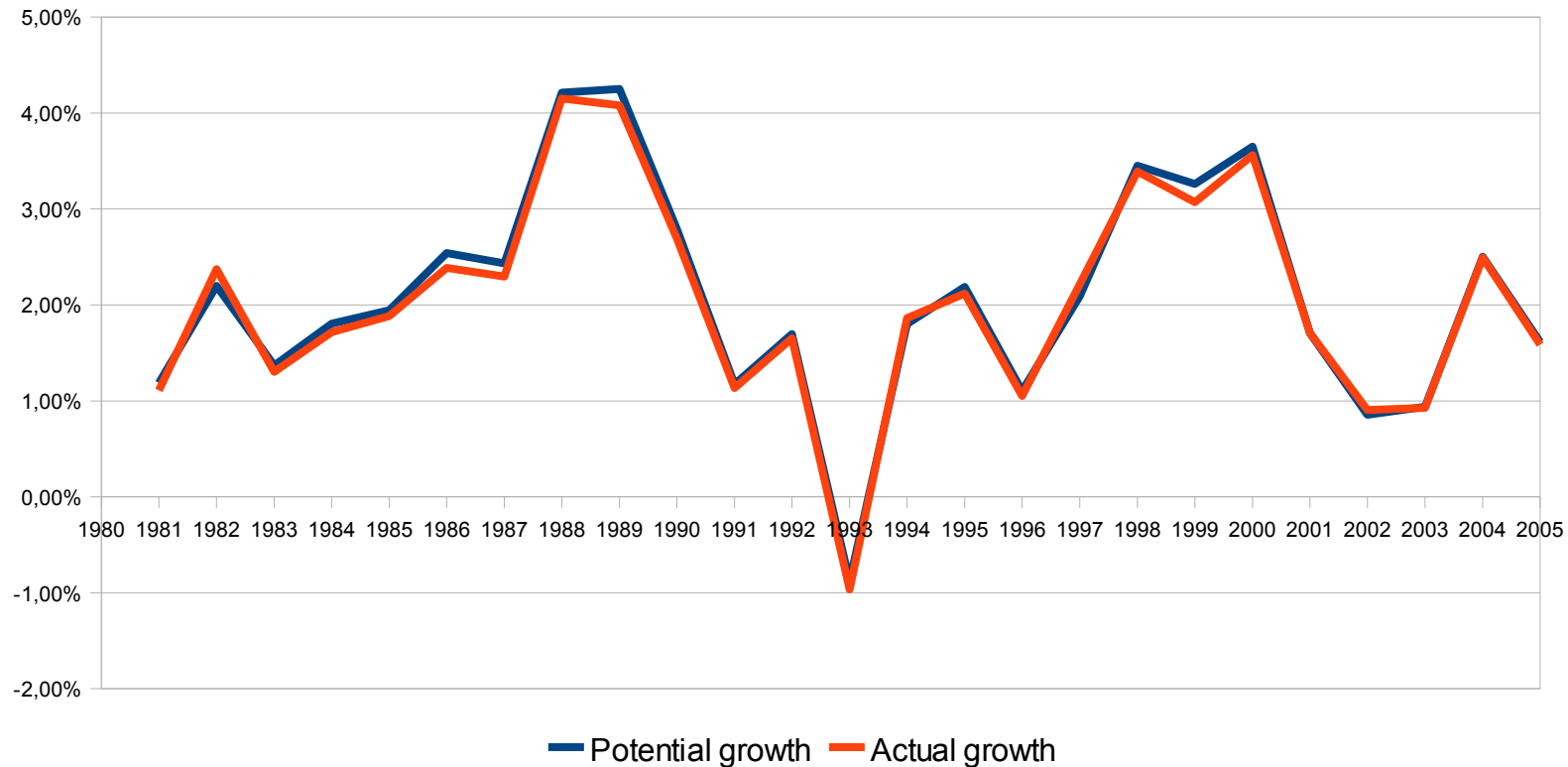
# Growth Accounting (2)

## Actual and potential real GDP



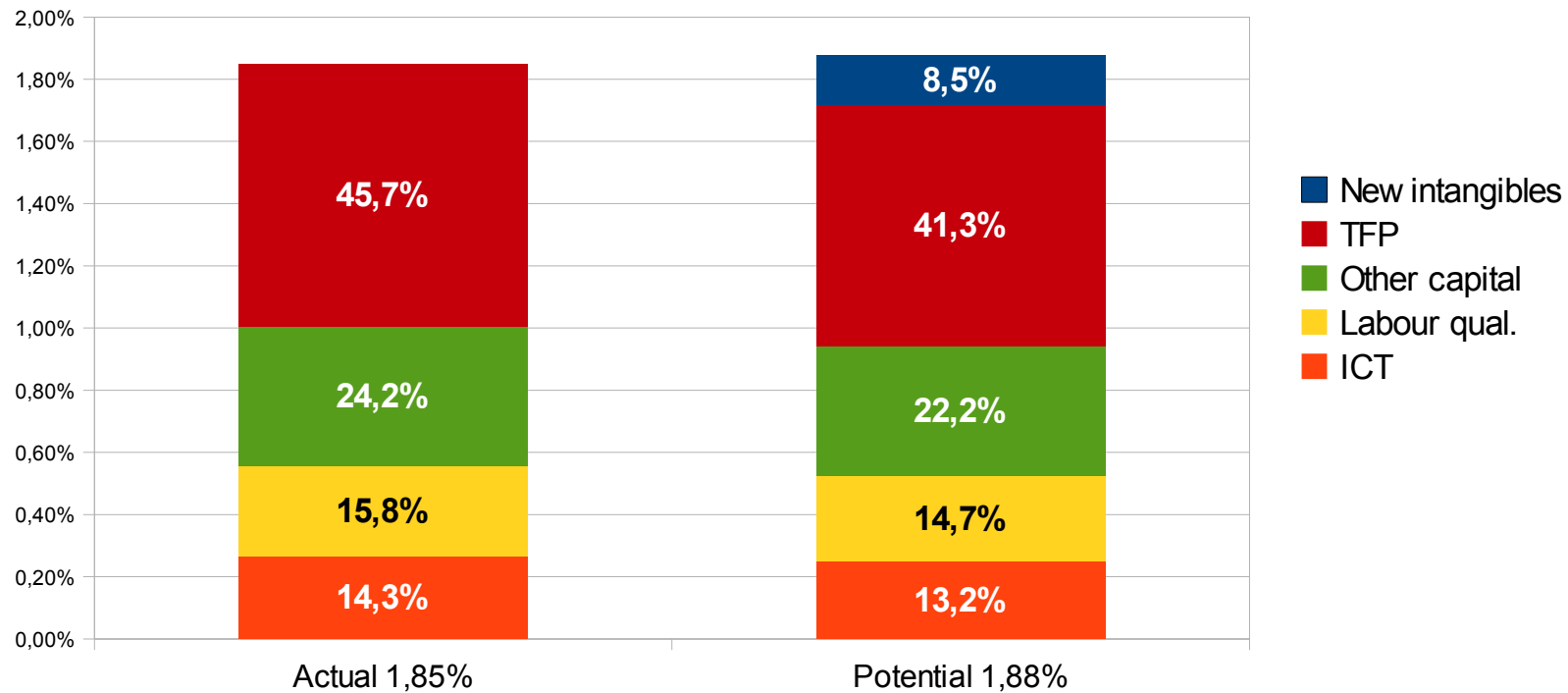
# Growth Accounting (3)

## Actual and potential GDP growth



# Growth Accounting (4)

## Contributions to annual labour productivity growth 1995-2003

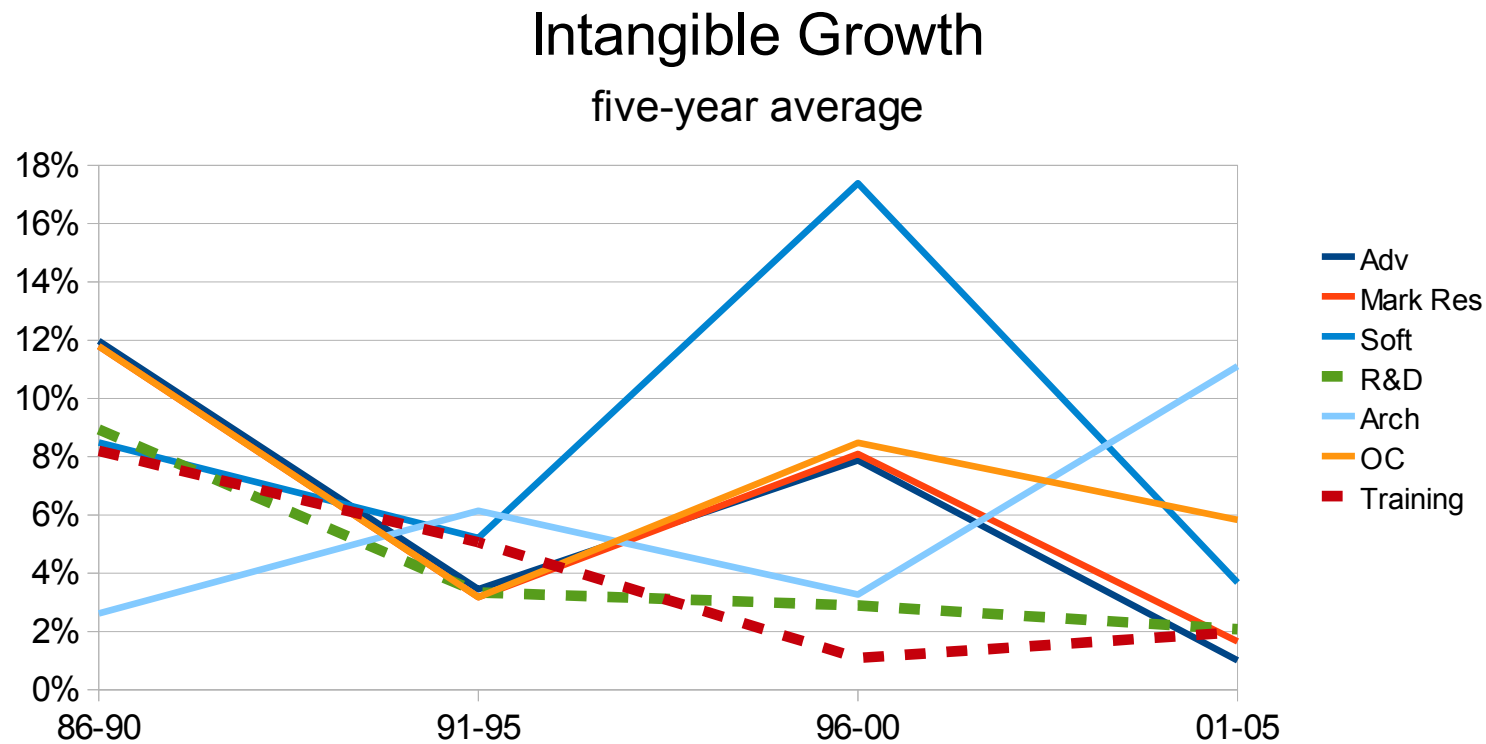


# Active innovation policies (1)

- The role of the non market sector
  - R&D is highly state-funded
  - Should innovation be increasingly promoted?
- Simulation
  - Not just a “trick” for statisticians
  - Why should we spend more on R&D?

## Active innovation policies (2)

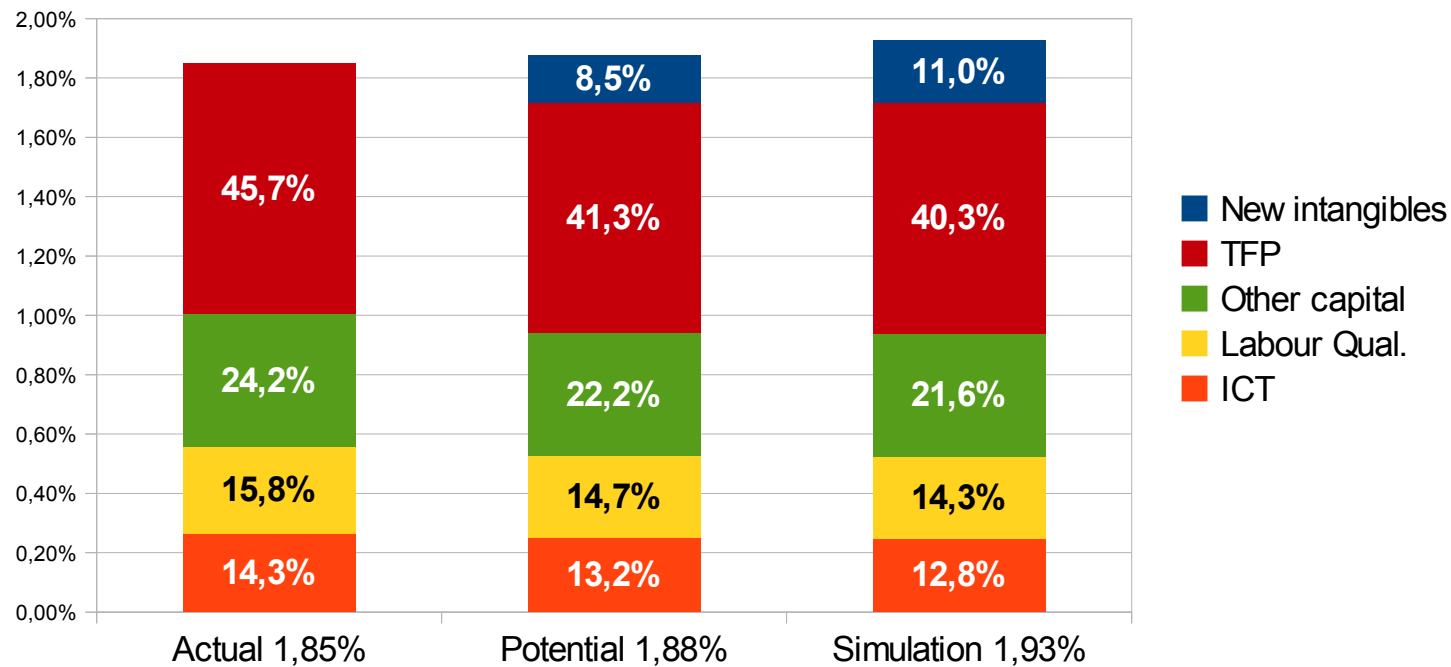
- What happened to R&D?
  - R&D investment has been slowing down since the 1980's



## Active innovation policies (3)

- What impact of a 5% annual increase in R&D on LPG?

### Direct effect of active R&D policies



# Measurement standards (1)

- Looking back to COINVEST
  - Why / **How** should we measure intangibles?
  - Research objective vs. Accounting objective
- CHS: first-mover advantage?
  - Imperfect methodology but dominant reference
  - COINVEST could (should?) be a benchmark for future research

## Measurement standards (2)

- Need for closer ties with national statistics
  - European countries do have harmonised NA
  - National statistics offices provide homogeneous data
  - The future of intangibles measurement goes along with NA standards
- **INNODRIVE / COINVEST**
  - How do we coordinate?
  - Two projects, one goal?
  - Need for a joint conclusion

# What's next?

- Deeper into the « dark side » of intangible investment
  - Financial innovation (from the financial industry point of view)
  - Organisation capital, not only internal but also “network capital”
- Keep working with national accountants
  - Intangible investment is also scrutinised by NA institutions
  - R&D investment is in the 2008 SNA