Looking for a quantitative evidence on intangibles: current and future data sources

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Workshop on «Industrial Research and Innovation»,

Seville, 14 -15 June 2012

Outline of the presentation

Indicators for IA macro analysis

Intangibles in the CIS context

Measuring job skills and training

What can tell us admin. data on IA?

Available indicators for IA analysis at macro level

INNODRIVE: data sources (1/2) Piekkola et al. 2011

SOURCE	DESCRIPTION	DATA USED
EU Klems project database	Database (updated March 2011) on economic data at country/industry level from Eurostat (SBS) and OECD (STAN)	Data on investments in software (for 13 countries)
Eurostat database (Structural Business Statistics)	SBS data corrected with trend information from private sources.	Investments on advertising Investments on market research
National accounts data	Mainly GFCF data (also supply and use tables)	Software GFCF Mineral exploration and literary/artistic originals
Eurostat CVTS (Continuing vocational training survey)	EU-wide harmonised survey	Data on form-specific human capital

INNODRIVE: data sources (2/2)

SOURCE	DESCRIPTION	DATA USED
OECD ANBERD	Database on R&D exp. and personnel from EU (also Eurostat) and other OECD countries	Business R&D expenditure
Eurostat SES (Structure of earnings survey)	EU-wide harmonised survey	Mean annual earnings by profession as a proxy of the competencies in enterprises
Eurostat LFS (Labour force survey)	EU-wide harmonised survey	Gross earnings of employees as a proxy of the level of competencies in enterprises
FEACO (Europ. Feder. of Management Consultancies Associations)	Private database, used if Eurostat SBS data on consultancy spending not available	Investments in external “organisational” competencies

Evaluation of data sources (1/2)

SOURCE	KEY POTENTIAL	ASSESSMENT
EU Klems project database	Growth (32 industries) and productivity (72) accounting	☺ Coverage,timeliness ☹ Strict SNA approach, no data on intangibles
Eurostat database (Structural Business Statistics)	Industry analyses, long time series	☺ Coverage,timeliness ☹ Limited coverage on intangibles
National accounts data	To complement sectoral datasets	☺ High comparability ☹ Secondary source
Eurostat CVTS (Continuing vocational training survey)	Key indicators on vocational training	☺ High comparability ☹ Frequency (5y)

Evaluation of data sources (2/2)

SOURCE	KEY POTENTIAL	ASSESSMENT
OECD ANBERD	To complement structural datasets (industry level)	☺ High comparability ☹ Secondary source
Eurostat SES (Structure of earnings survey)	Key indicators on earnings (only a proxy for competencies)	☺ High comparability ☹ Proxy indicators
Eurostat LFS (Labour force survey)	Key indicators on earnings and training (used as proxies)	☺ High comparability ☹ Proxy indicators
Private databases	To complement structural datasets	☺ Focused on intangibles ☹ Potential problems on coverage and comparability

Data sources: remarks (1/3)

- Extensive use of proxies and ex-ante parameters (depreciation rates, capitalisation factors, price deflators,…) strongly affects the results of the analyses
- Convergence towards a set of agreed «parameters» highly advisable (starting with INNODRIVE+COINVEST?)

Data sources: remarks (2/3)

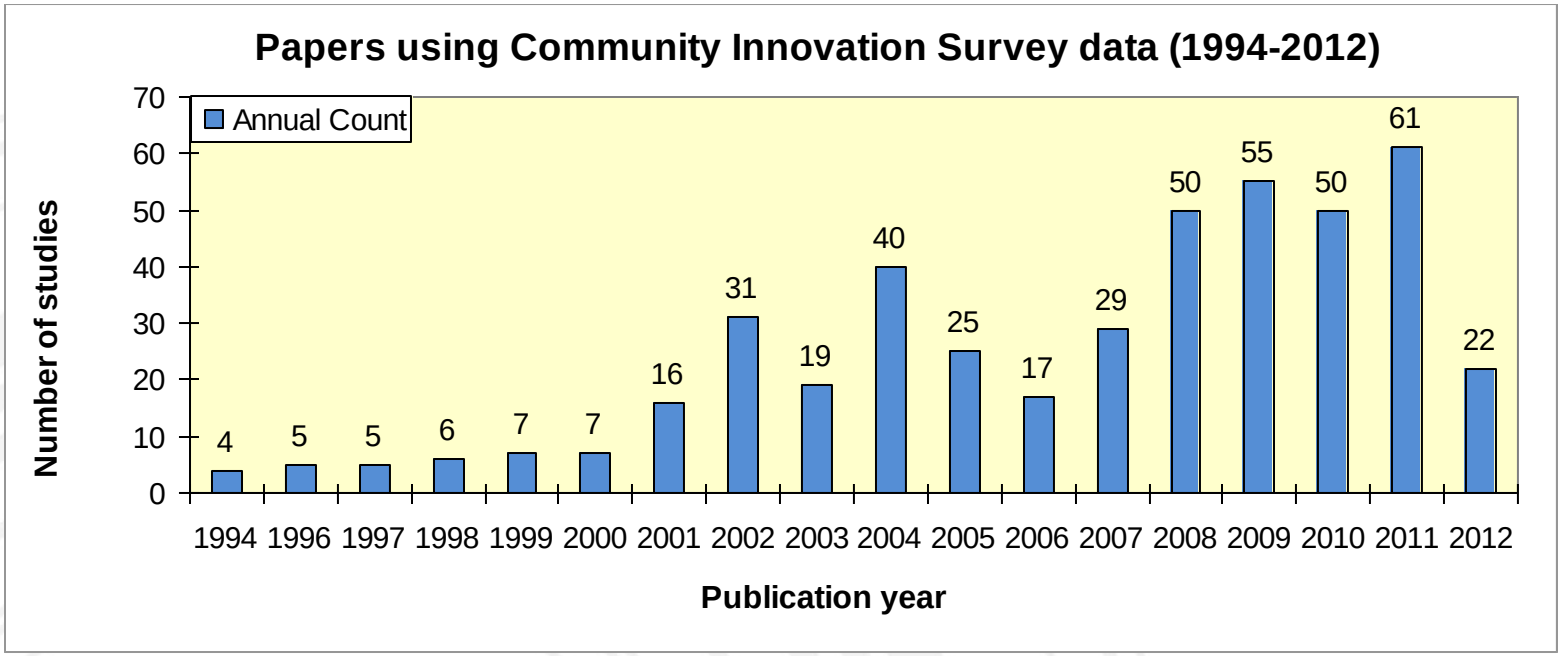
- Potential discrepancies among secondary data sources (SNA, EUKLEMS, ANBERD,…)
- Detailed reporting on inconsistencies to be adopted as a standard practice

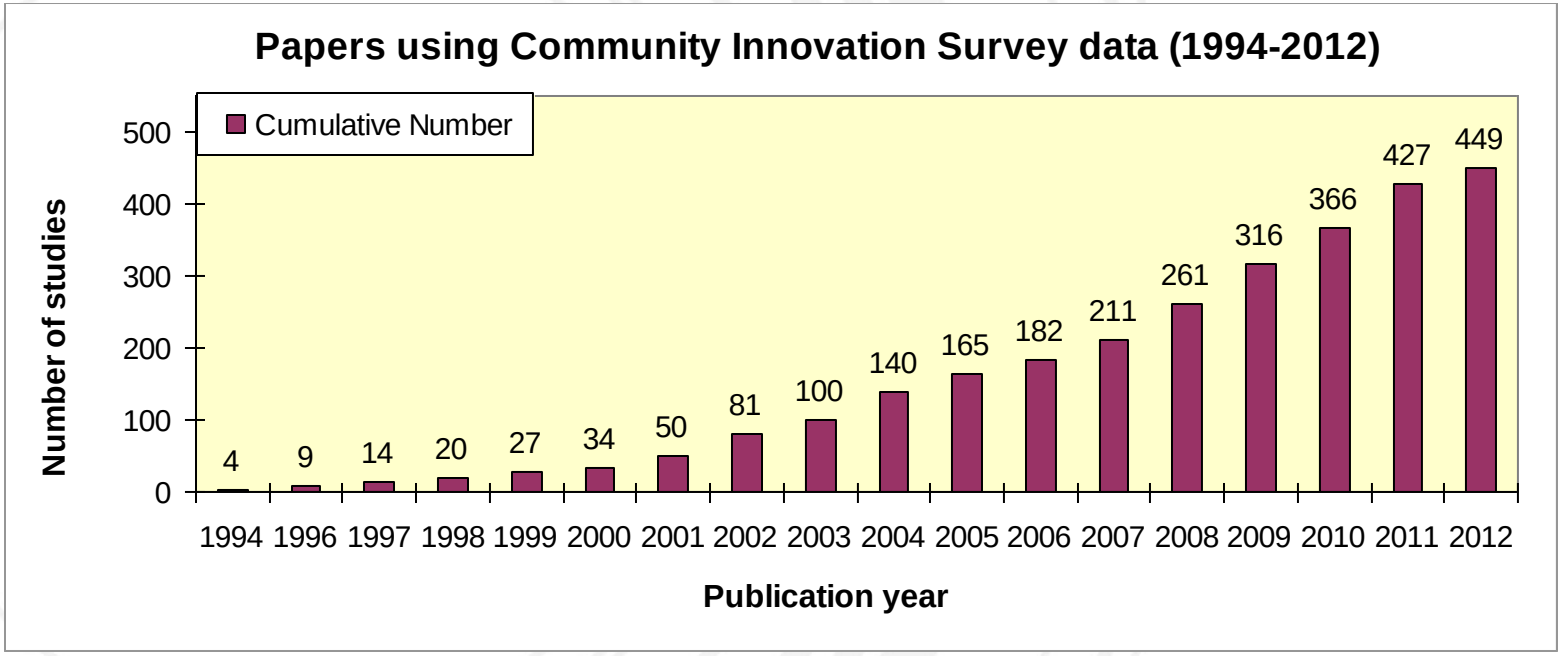
Data sources: remarks (3/3)

- Data processing practices and mixed use of public/private sources (as SBS + Zenith or ESOMAR to adjust for Adv. and marketing in INNODRIVE) may create biases

- Adopt statistical methodologies to deal with partial coverage of official data

Intangibles in the CIS context



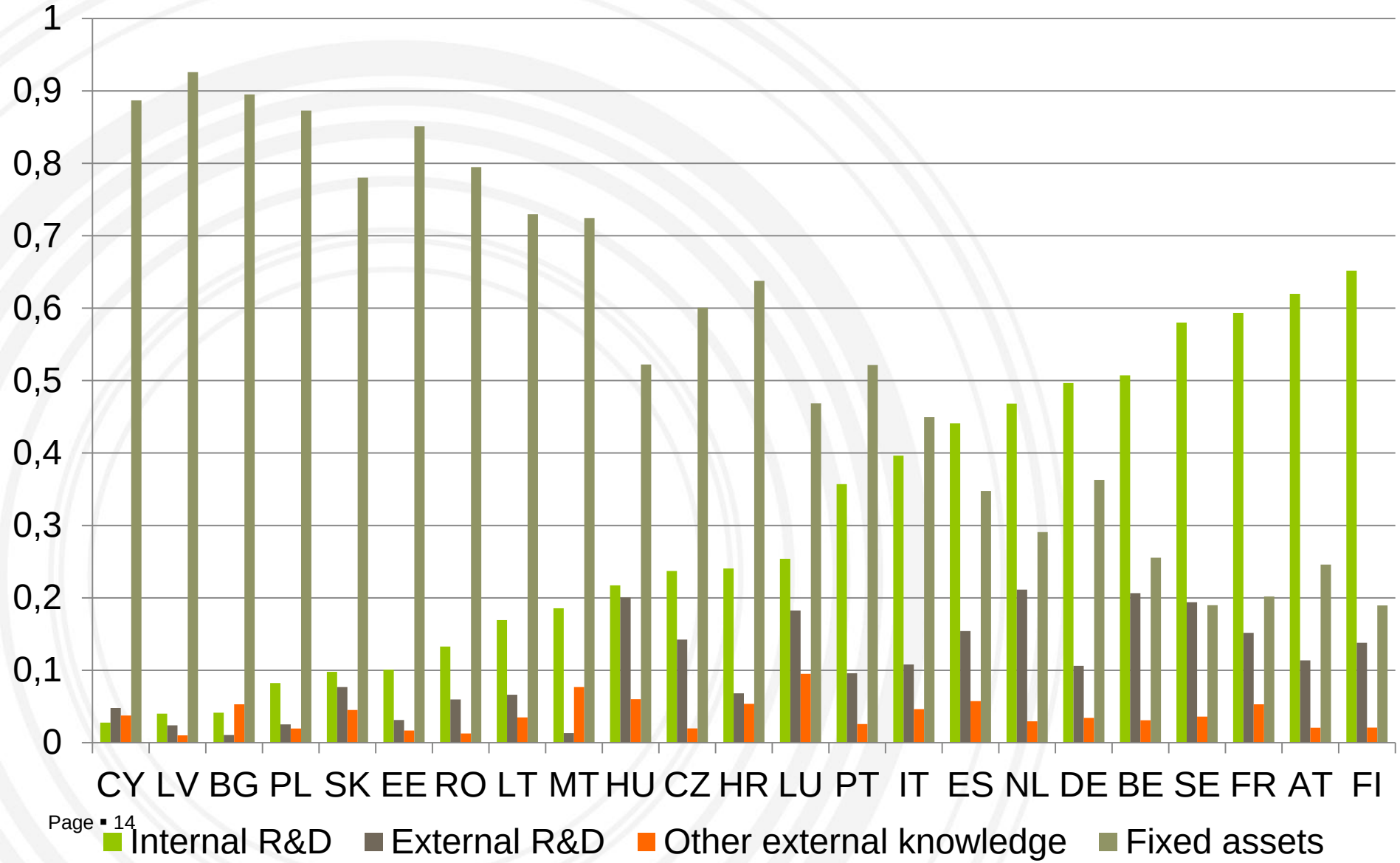


Results for 2012 incomplete

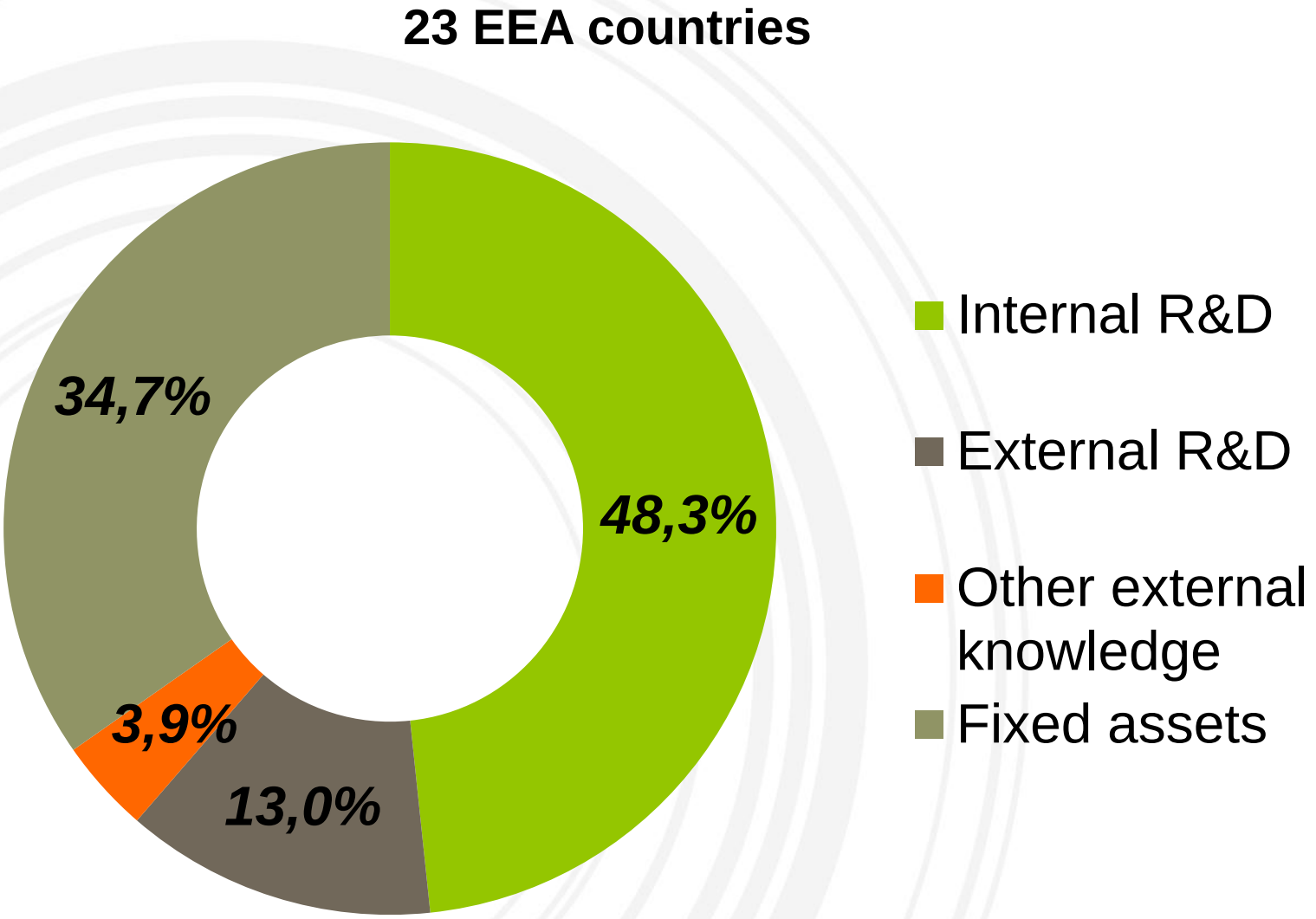
CIS basics

- Complementing the R&D «input» approach with «output» indicators
- Extending the coverage of the «innovative» behaviour by enterprises
- Sample survey, methodological harmonisation
- Policy relevance and interaction with users

CIS 2008: innovation investments



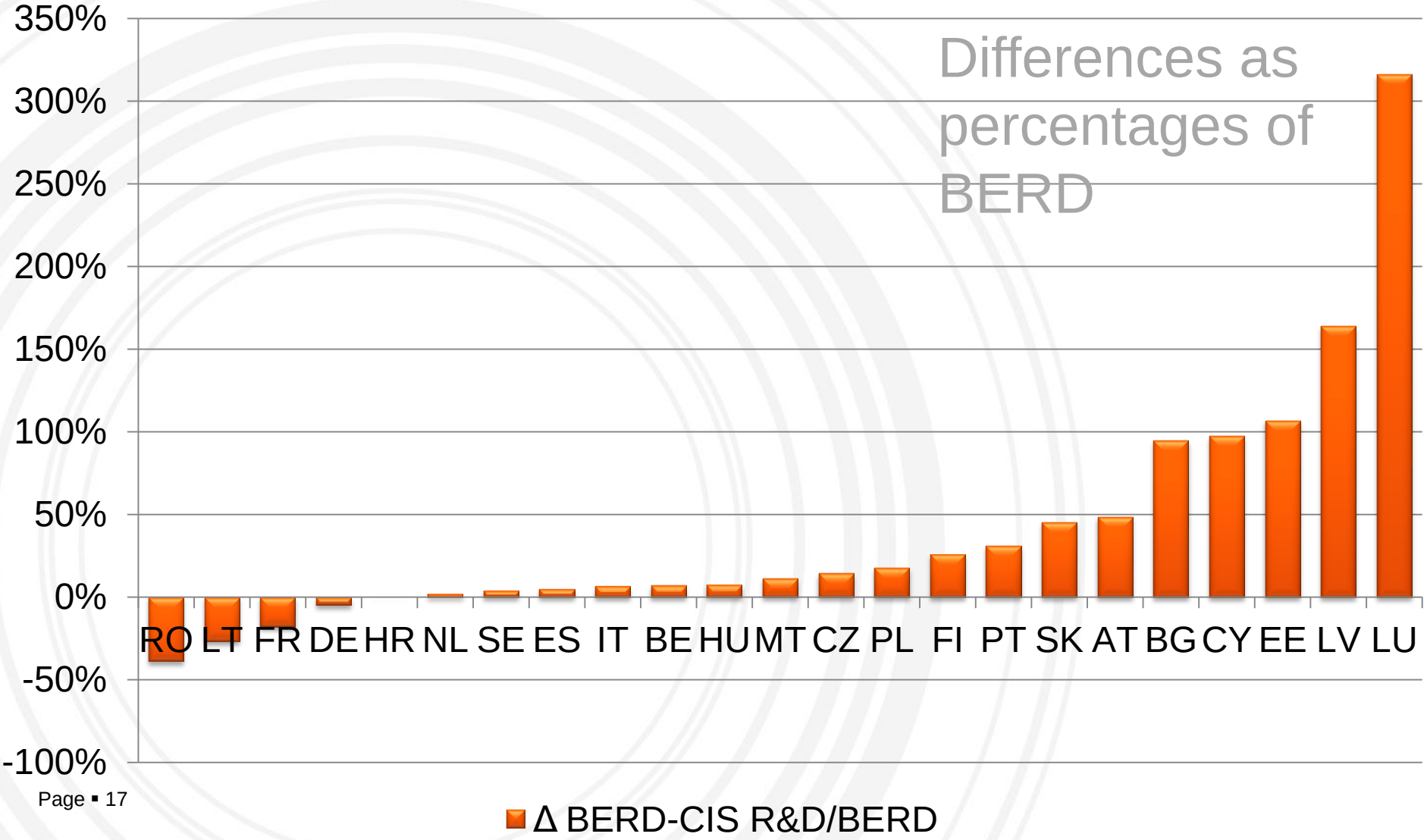
CIS 2008: innovation investments



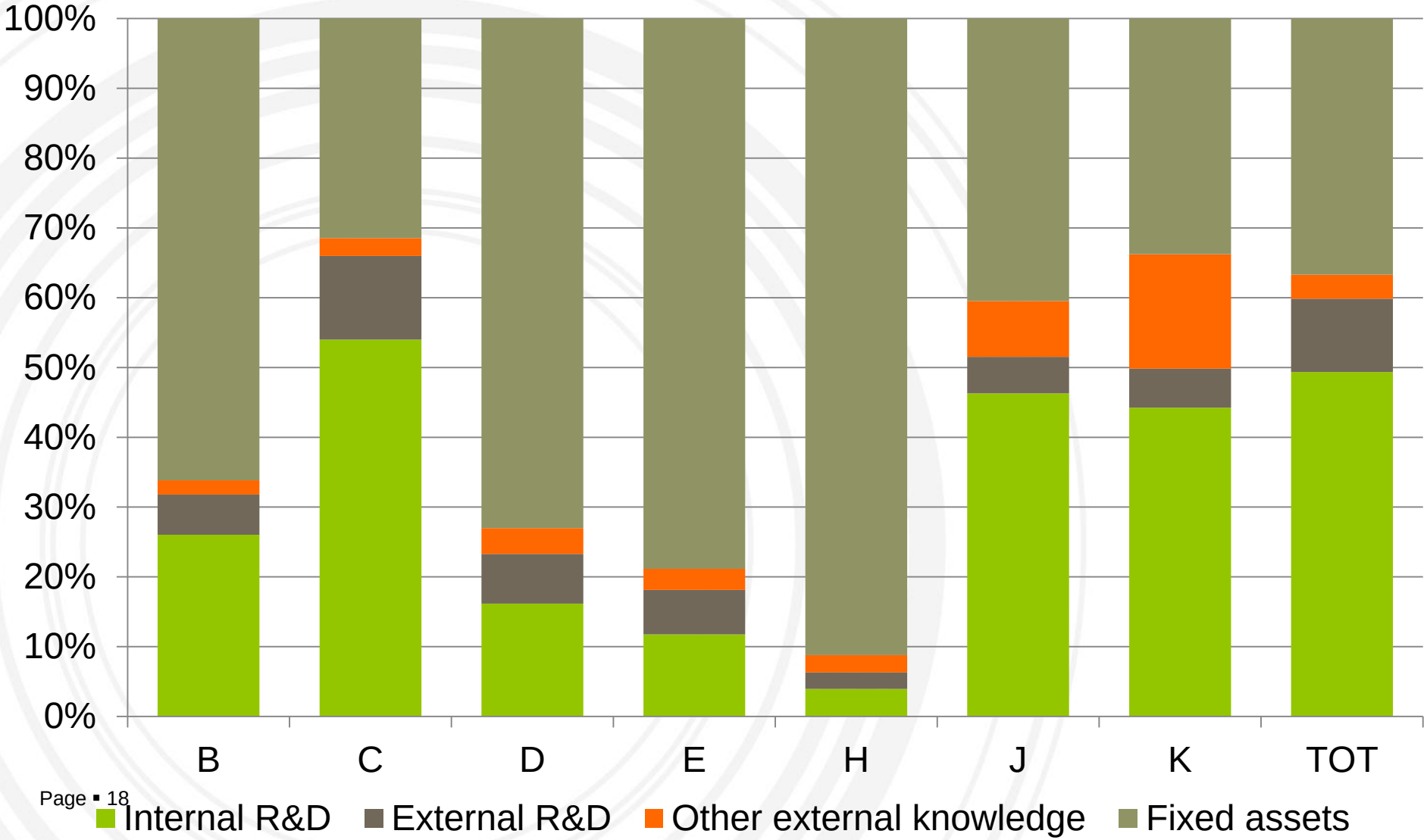
CIS: remarks

- Based on Schumpeterian concepts but little contribution to the «evolutionary» approach
- Rather than on «outputs» the survey still focuses on «innovation activities» (Godin 2009)
- Is there value added compared to BERD data?

CIS 2008: comparing CIS R&D with BERD



CIS 2008: innovation mix by NACE



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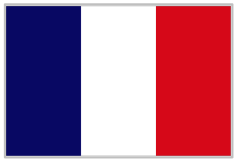

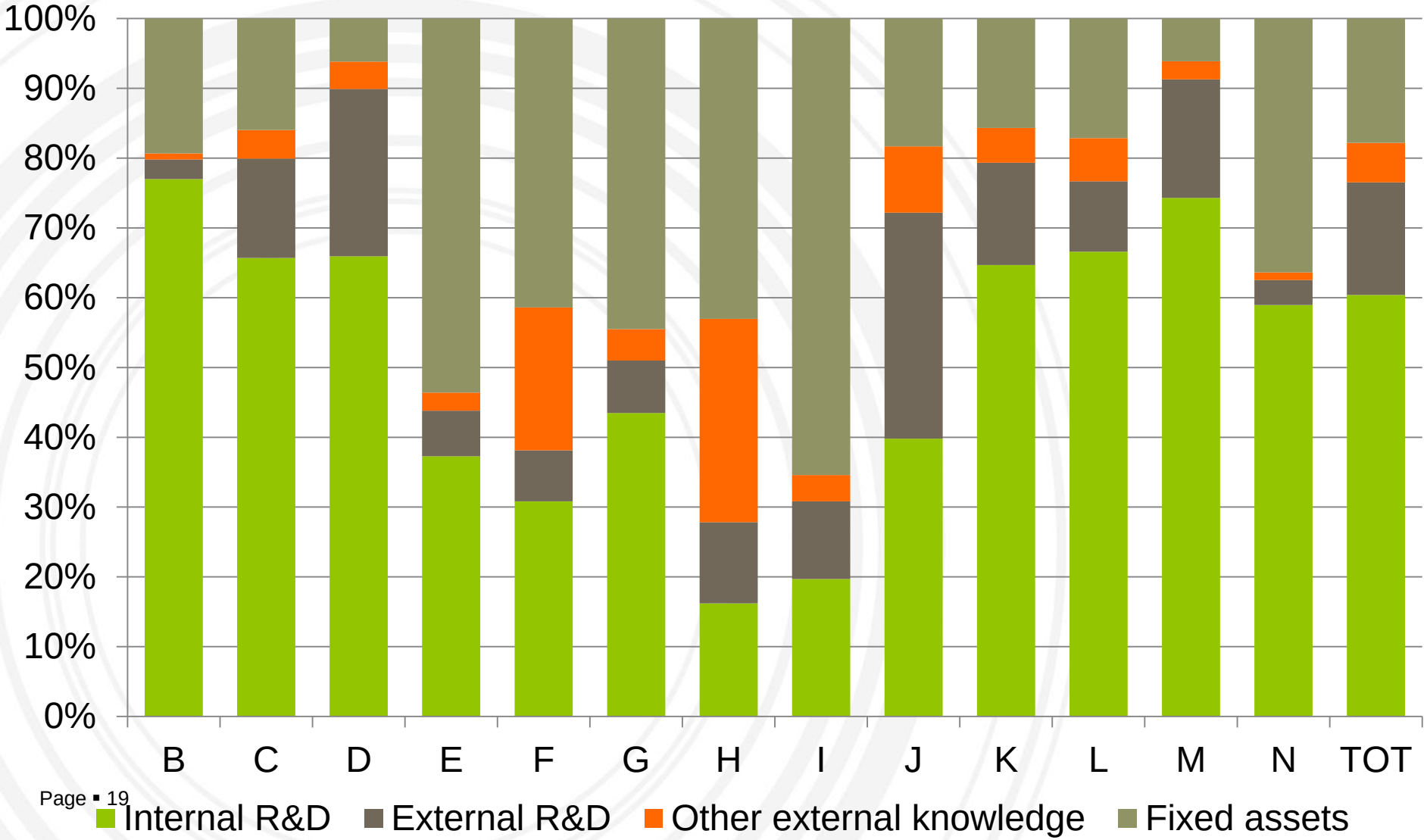

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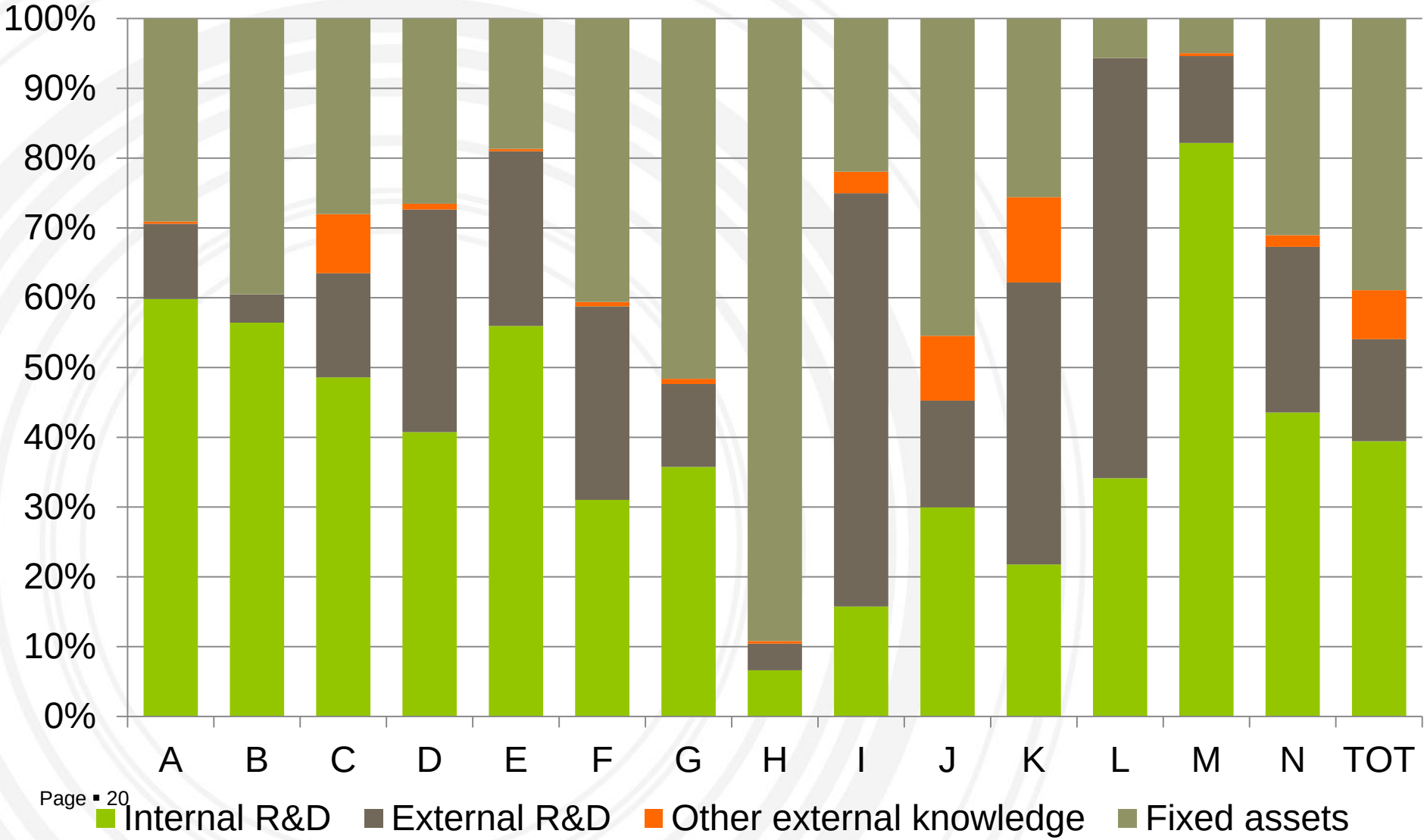

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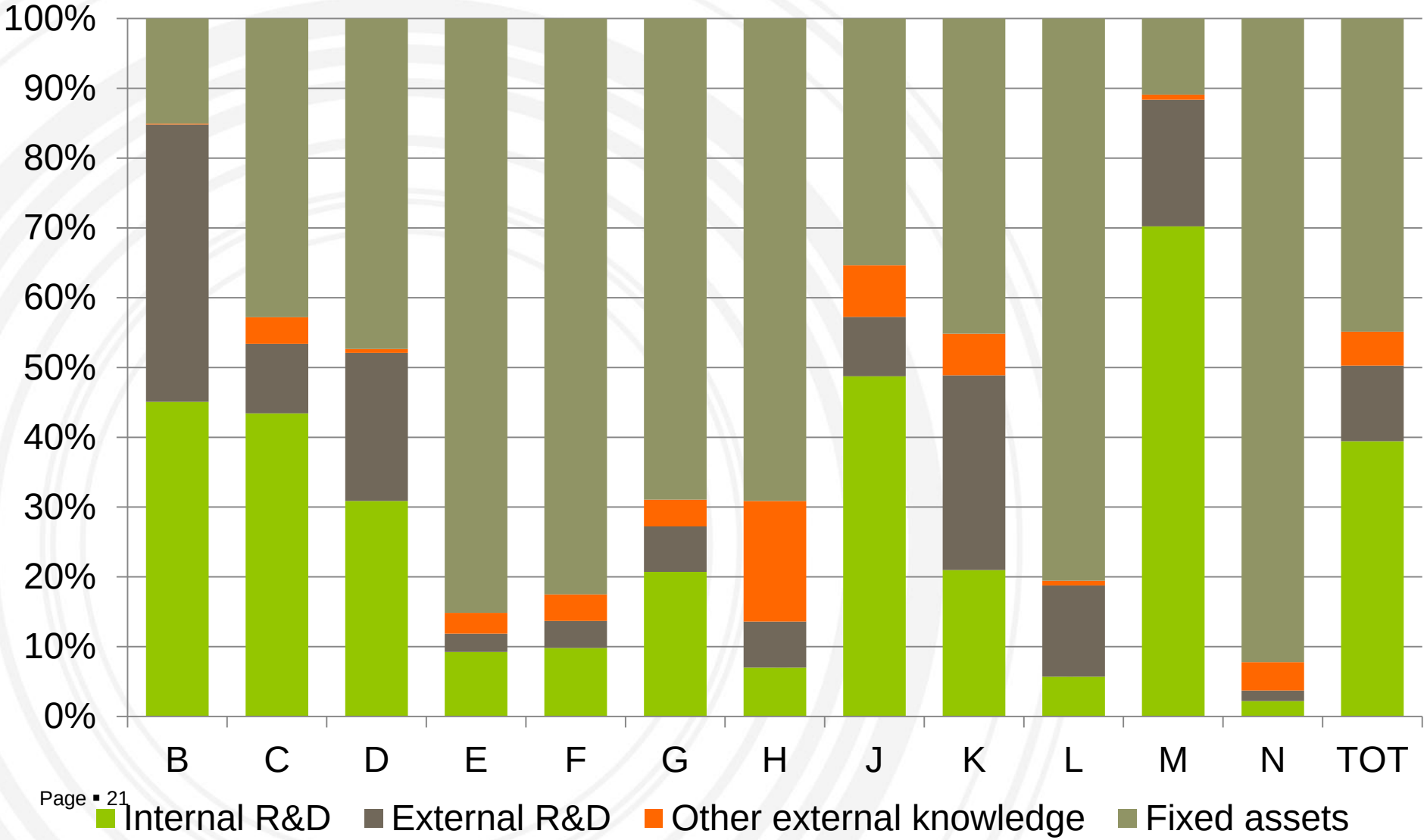

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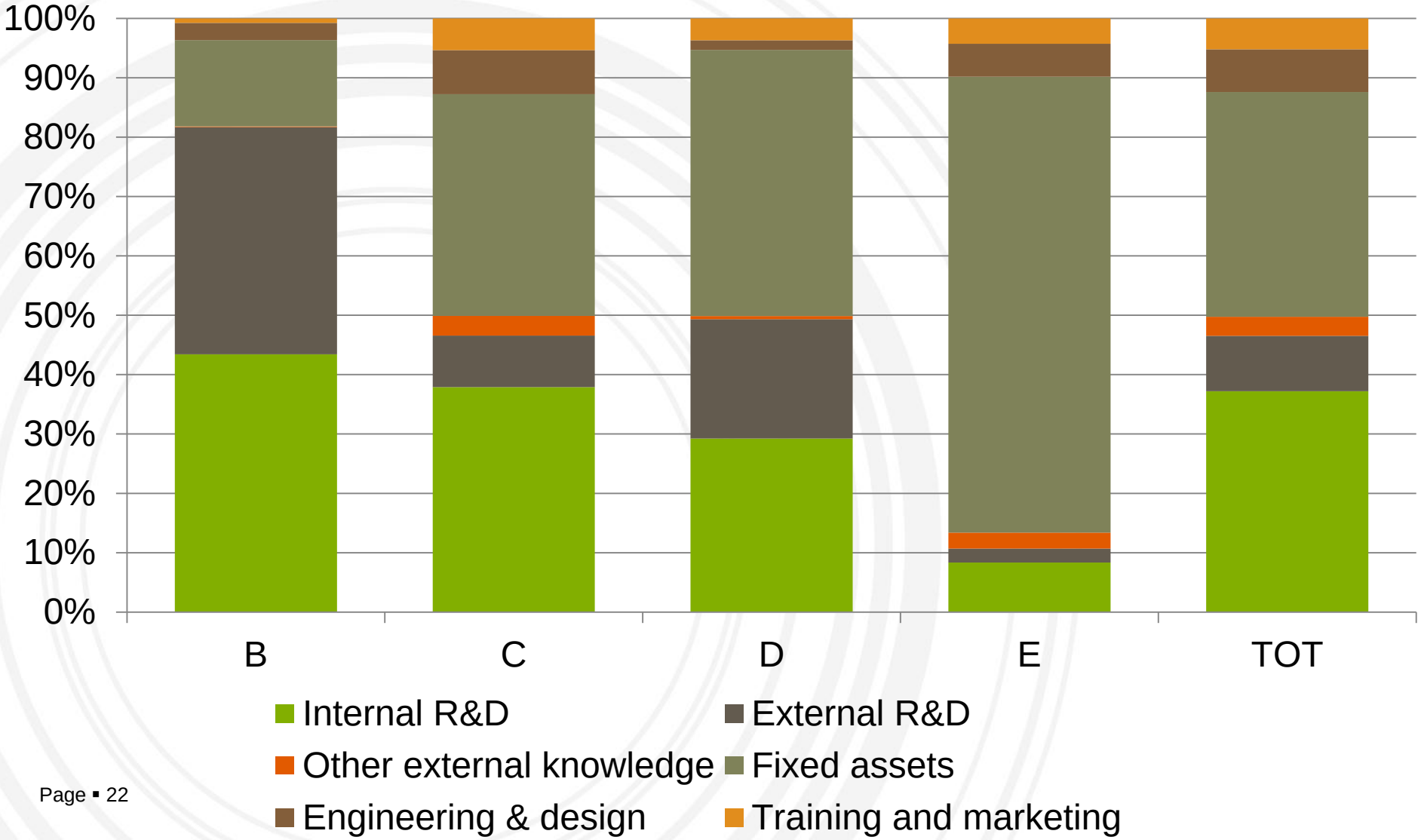


CIS: remarks

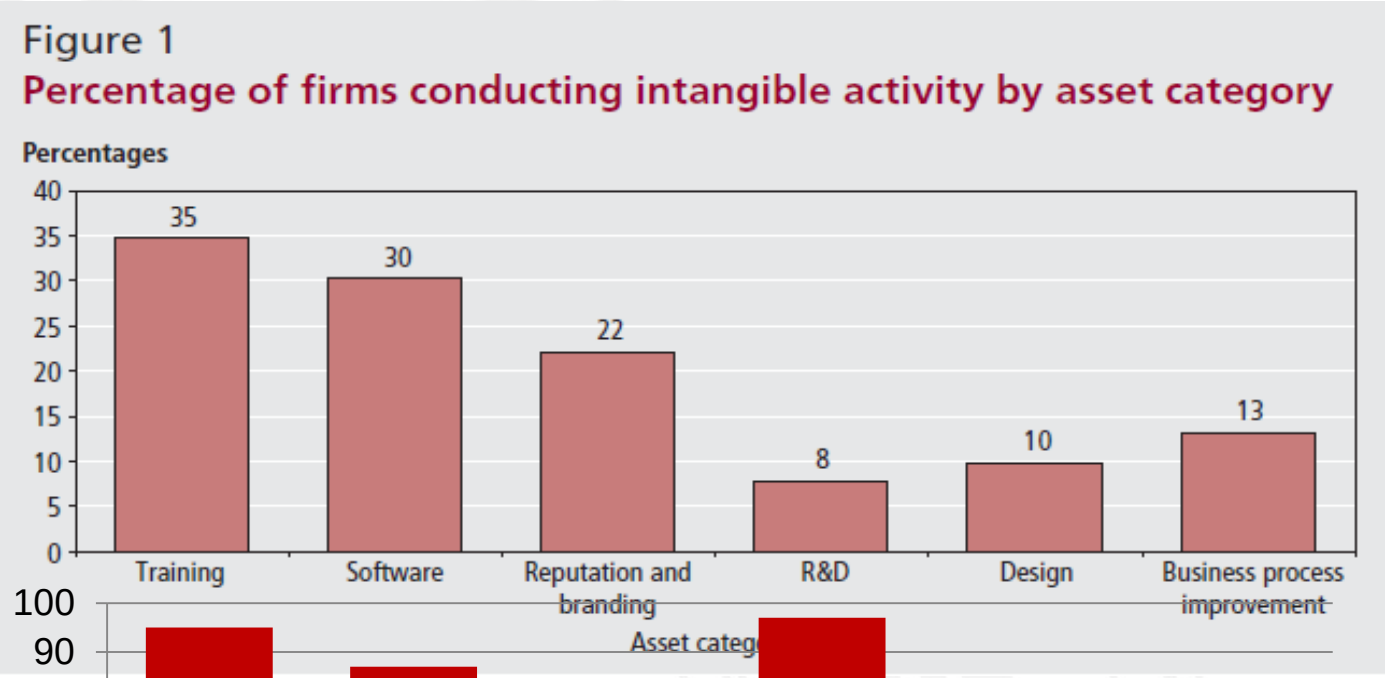
- The CIS «innovation activities» refer to the implementation of specific «innovation projects»: the forward looking approach of IA is totally neglected

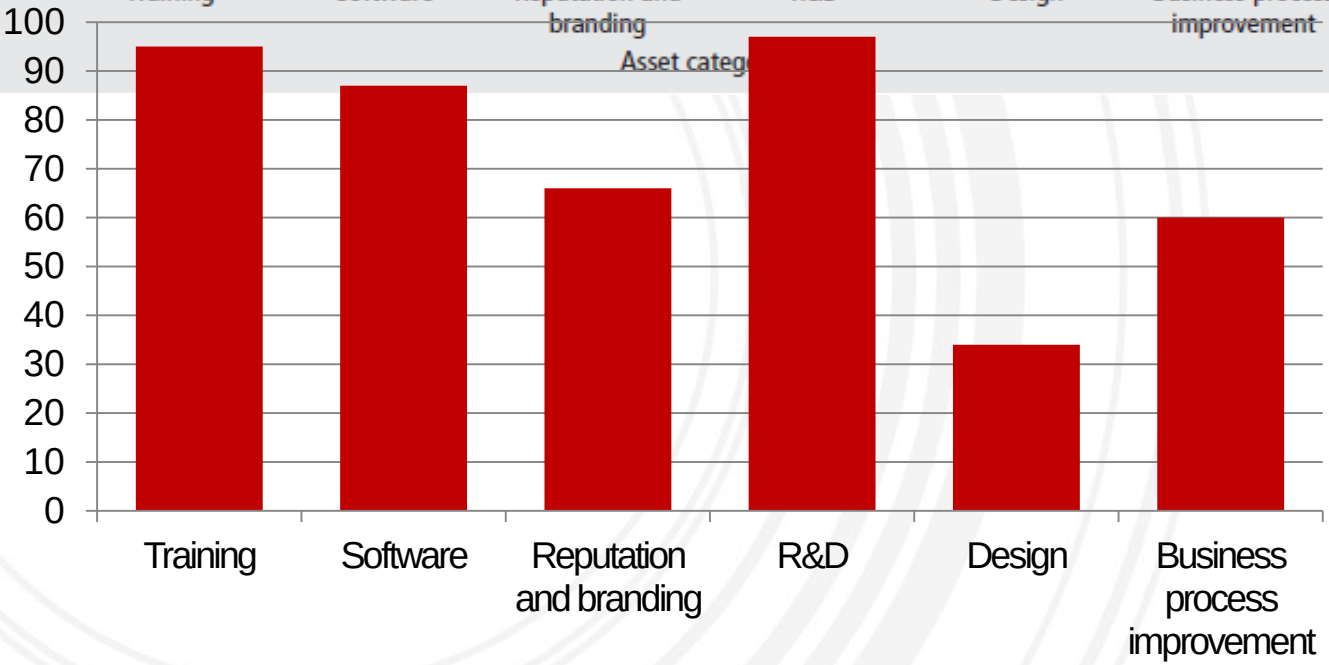
- Data on projects-related investments should be complemented by data on «strategic» (longer-term) investments

A new survey?

- The UK NESTA has sponsored an «intangible assets» survey first launched in 2009
- In Italy, a pilot IA survey (158 respondents) has been carried out in 2011
- Concepts and methodologies still under validation but positive feedbacks from respondents

Comparing UK 2009 / ITA 2011 IA surveys





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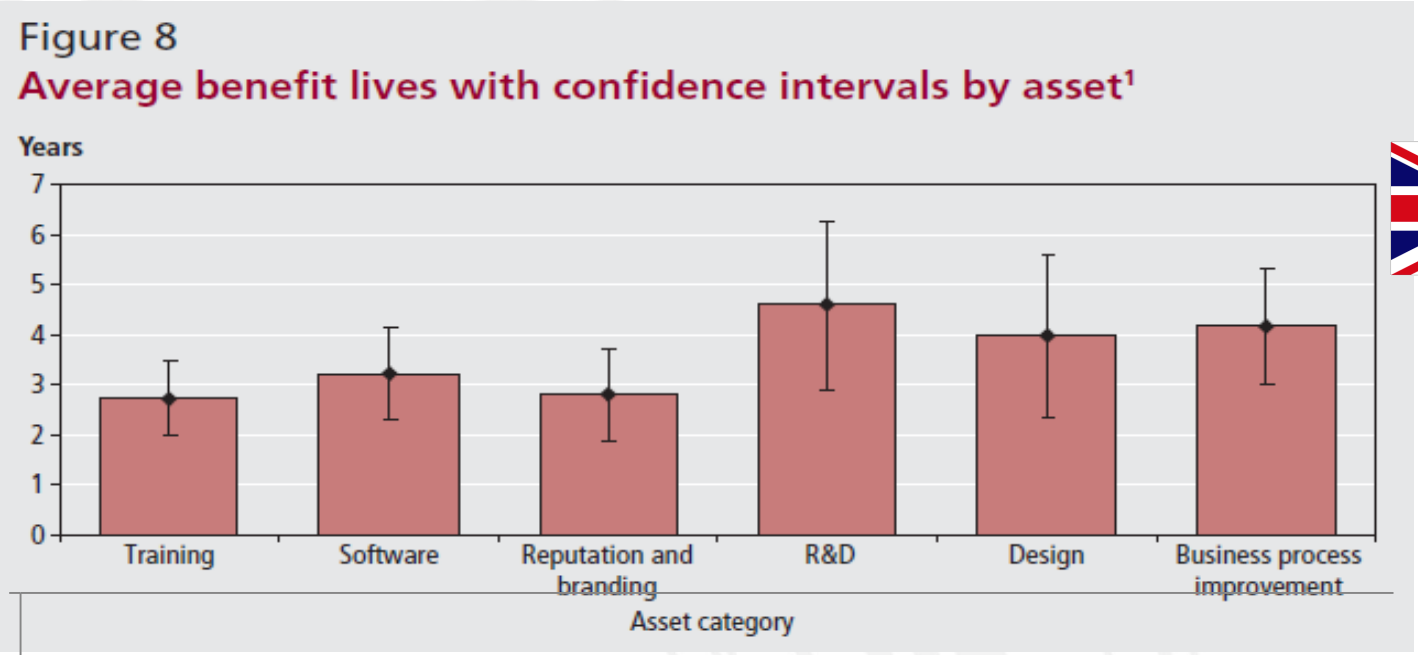

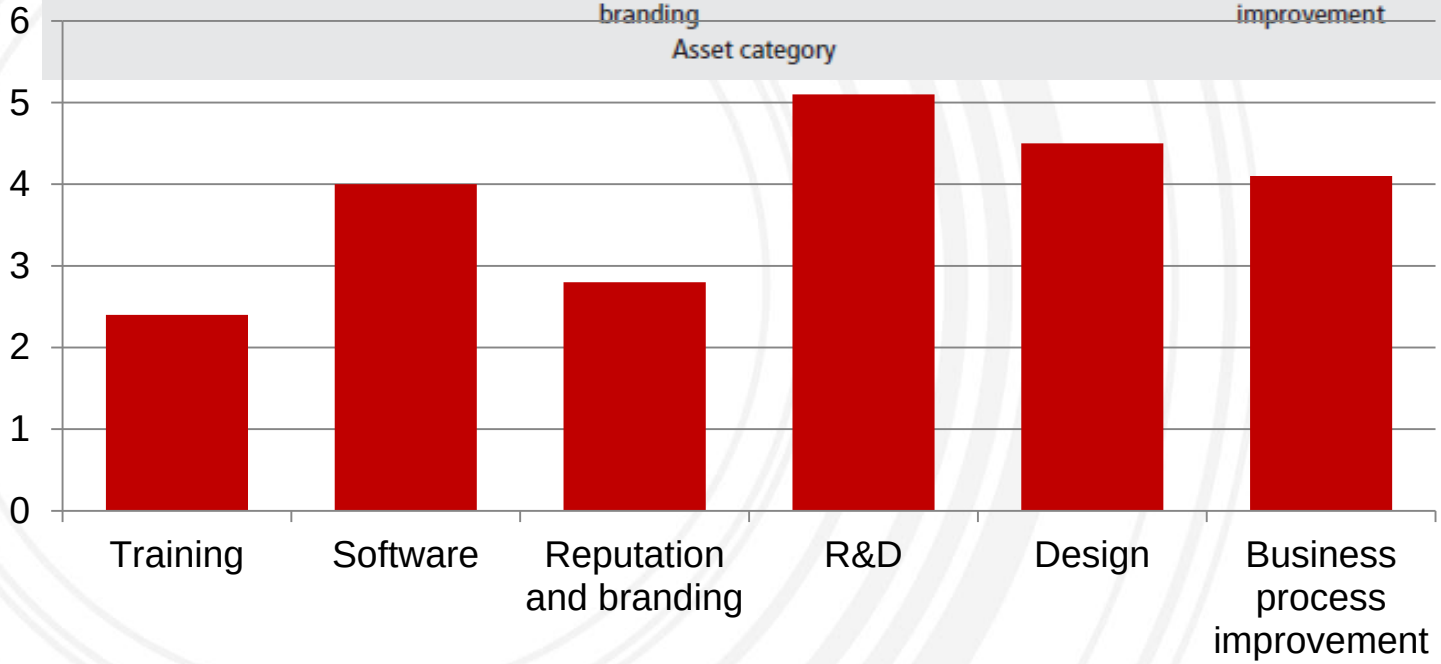

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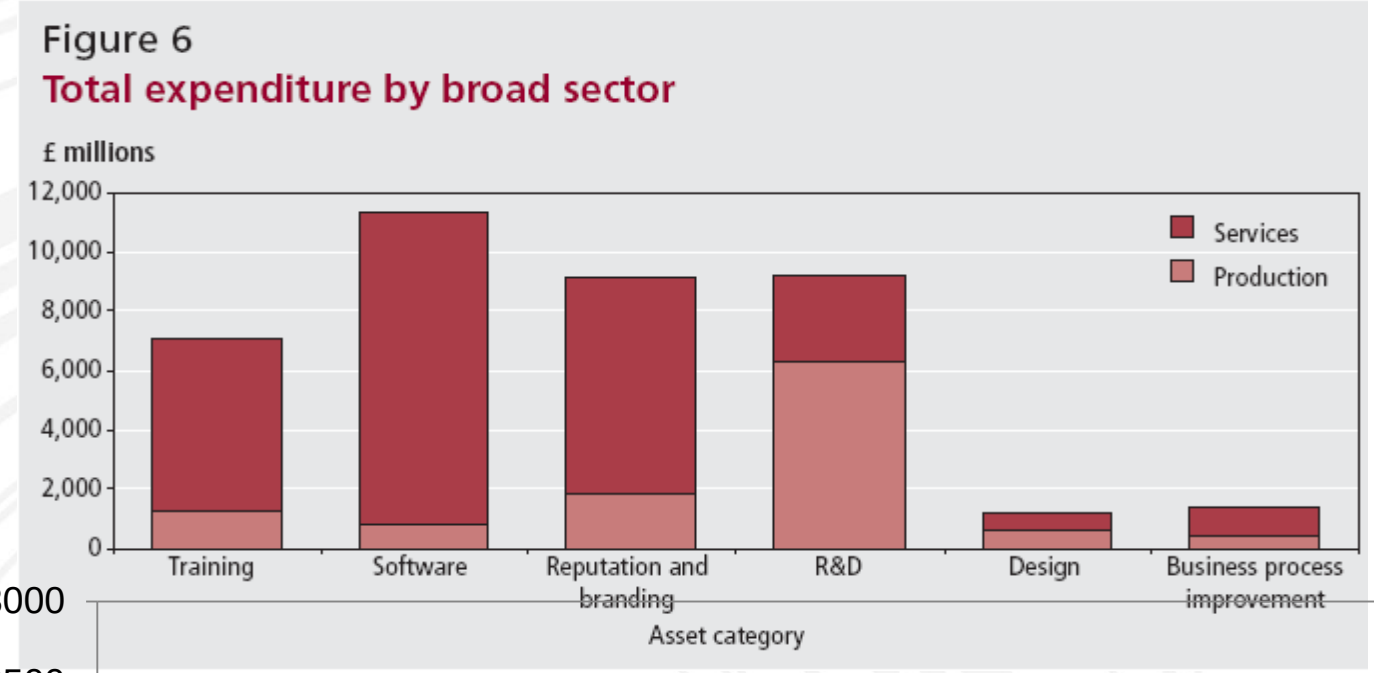
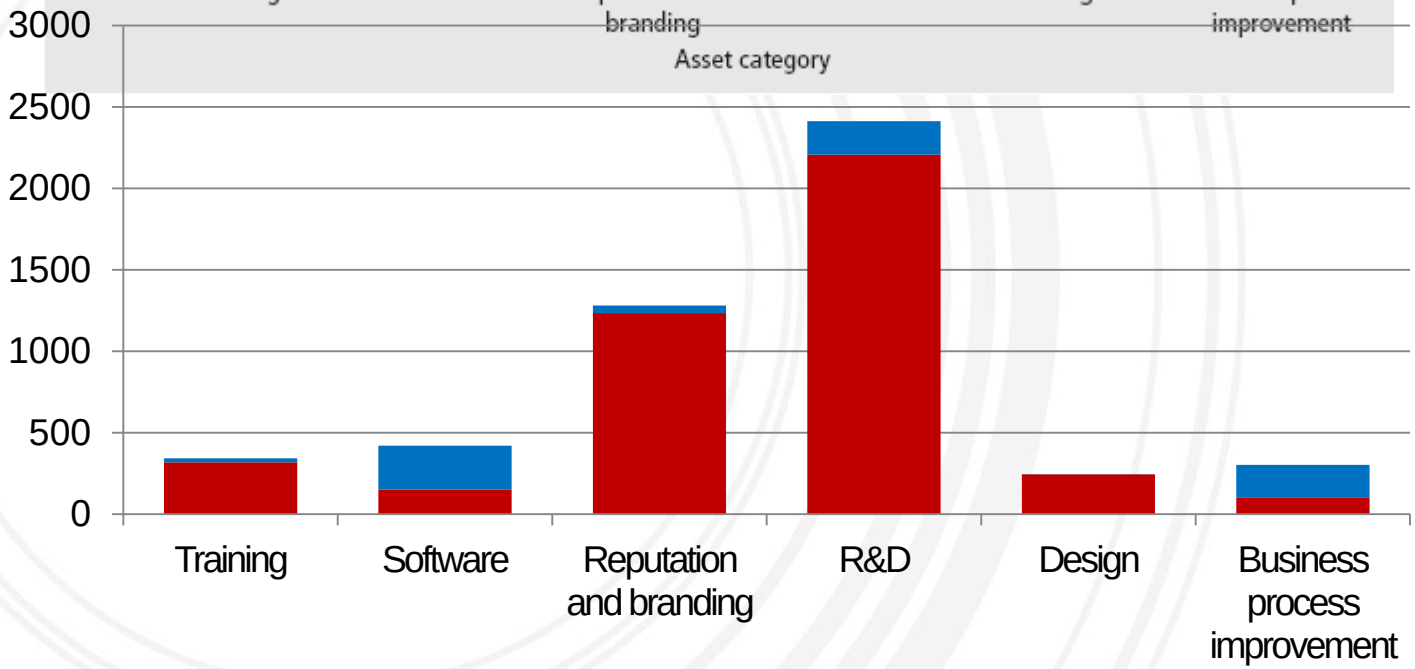




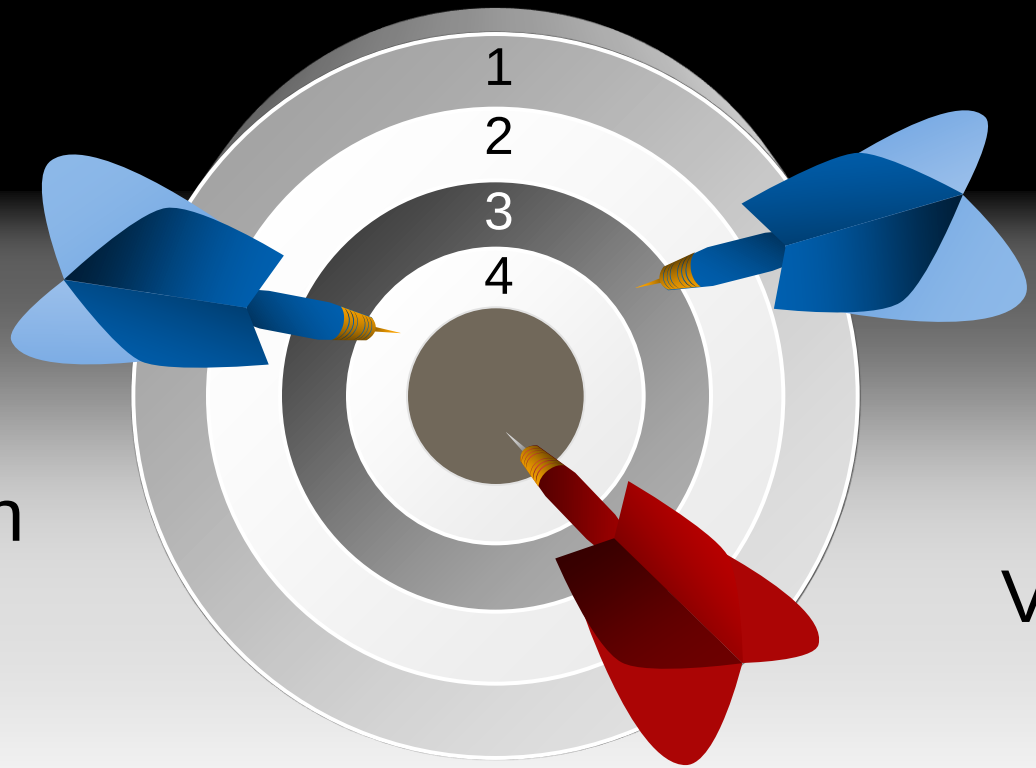
Measuring job skills and training

Education and Training statistics in the EU

- Strong policy commitment by the EC (ET 2020, New skills for new jobs, etc.)
- A harmonised system of surveys and administrative data collection activities in the ESS
- Complementarities among «social» and «economic» indicators
- International co-operation beyond the EU (OECD, UNESCO)

The ETS system

Training statistics
- LFS
- AES
- PIAAC



Education statistics
- UEO
- Transition from school to work
- PISA

Vocational training statistics
- CVTS
- LCS

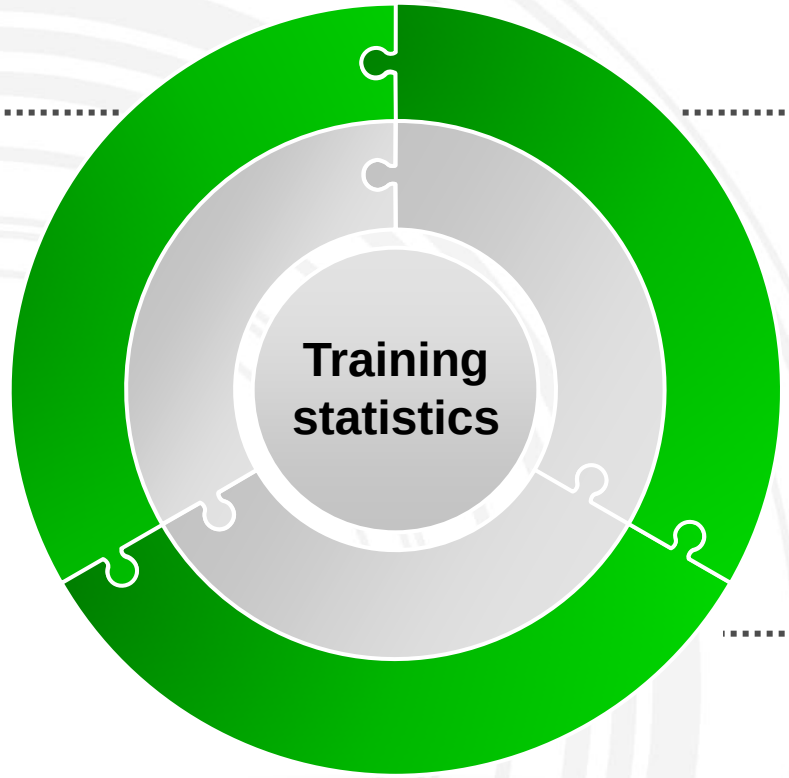
Education and Training statistics in the EU

- In September 2011, the CVTS was identified as a “negative priority” for ESS
- A Eurostat TF has been established in December 2011 to study how to deal with the dropping of the CVTS
- A «modular» structure is proposed by Eurostat in order to split the collection of vocational training data into three distinct surveys (with «merged» indicators)

A new «modular» approach for the ETS

«Participation» of the employees to training activities

AES, 4 years, HH survey, economic activity of the employer reported by the employee



Training costs

LCS,5 years, mixed survey, definitions not consistent

Training strategies and skill needs

CVTS, 5 years, Business survey, qualitative quest.

ETS in the EU: remarks

- Several key indicators requested by the EC will be no longer available (training cost per participant, cost of a training hour, …)
- The relationship between “skill needs” and training investments is going to be missed
- Even a complex sample design will allow only for a limited sectoral breakdown of «merged» indicators

A new survey on skills needs?

- **Cedefop** has launched a project to develop an employer survey to collect data on the skill needs in Europe
- A consortium of consultants has already carried out a pilot test in ten countries. Full pilot expected 2012.
- A relationship is identified at ISCO/NACE level wrt a predefined list of generic and specific skills
- Towards a broad or a specific survey?

European Centre for the Development of Vocational Training
CEDEFOP

What can tell us administrative data on IA?

Financial reporting by enterprises (1/4)

Some evidence on «intangibles» in the «financial statement» (IAS38):

- **balance sheet** (statement of financial position), wrt IAs acquired and development costs capitalised;
- **income statement** (R&D expenditures and IAs referred to personnel;
- **notes to financial statement**
- **management discussion and analysis**

Financial reporting by enterprises (2/4)

Secondary sources make available company data in a pre-formatted way:

- DBs gathering data from financial statements (e.g. Bureau van Dijk databases such as Orbis or Amadeus)
- DBs collecting mainly data filed to the US SEC in the Form 10-K (e.g. Standard & Poor's COMPUSTAT)
- DBs with key information from financial statements and/or annual reports

Financial reporting by enterprises (3/4)

Two issues by using commercial DB:

- Potential data overlapping, as data providers might be in the same time *competitors* and *suppliers* (e.g. Duns&Bradstreet or Standard & Poor's or Thomson Reuters are data providers for Bureau van Dijk)
- Data discrepancies due to methodological inconsistencies (e.g. R&D values in COMPUSTAT and the IPTS Scoreboard)

Financial reporting by enterprises (4/4)

Pro

1. Several options for estimating IA or proxies
2. Alternative definitions of “intangible assets” can be tested
3. Database providers (e.g. Standard & Poor's in COMPUSTAT) play a key role to harmonise the definitions of intangibles across national accounting standards

Cons

1. Data processing by database providers could be questionable
2. Biases towards large / listed / multinational companies
3. In some countries (e.g. in Italy), national accounting standards are applied, with discrepancies in the calculation of intangibles.
4. In MNEs, intra-group duplications and *elisions* regarding intangibles might be difficult to detect.

Measuring innovation by using company data: a reckless exercise?

The Australian Department of Industry (with ABS and PwC) has launched a project to «derive financial measures of innovation activity from the accounting records of model Australian firms».

All the items in the financial reports of enterprises have been linked with specific concepts of the Oslo and Frascati Manuals.

Types of innovation	R&D	Acquisition of other external knowledge or intellectual property	Acquisition of machinery and other capital goods
Account			
Current Assets			
Cash	Most unlikely	Most unlikely	Most unlikely
Accounts Receivable	Most unlikely	Most unlikely	Most unlikely
Inventory	Neutral	Neutral	Neutral
Prepayments	Neutral	Neutral	Neutral
Property, Plant and Equipment			
Land	Neutral	Most unlikely	Most likely
Buildings	Neutral	Most unlikely	Most likely
Equipment	Neutral	Most unlikely	Most likely
Vehicles	Neutral	Most unlikely	Most likely

Thank you for your attention.

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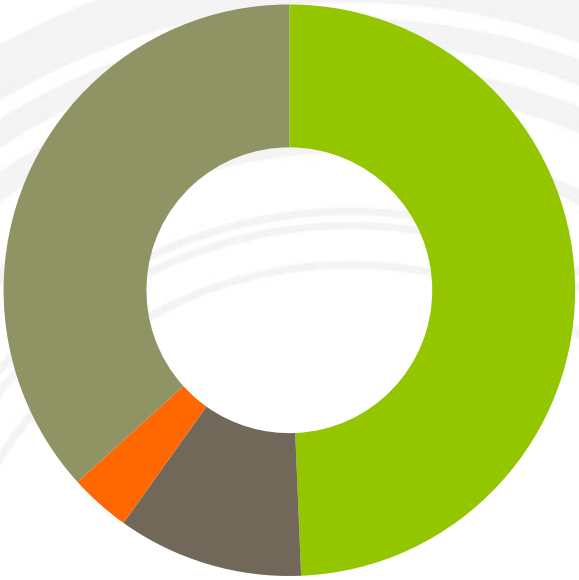
Claudio Cozza (claudio.cozza@me.com)

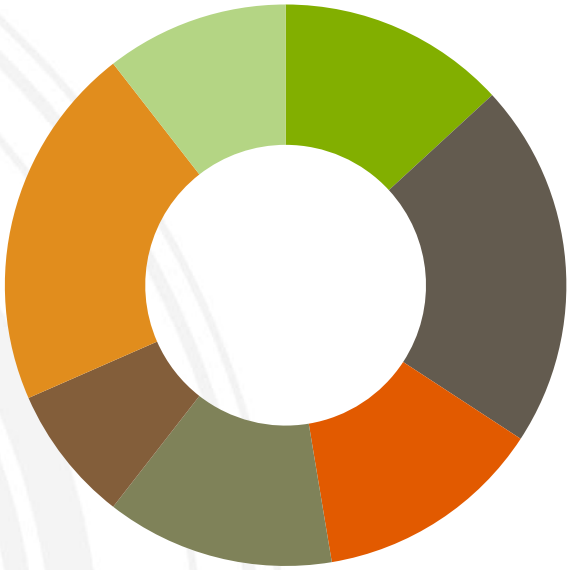
Comparing CIS 2008/INNODRIVE IA

CIS 2008



- Internal R&D
- External R&D
- Other external knowledge
- Fixed assets

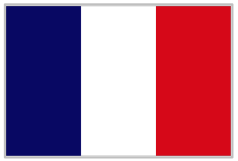
INNODRIVE 2005



R&D

- Software
- R&D
- Design
- New financial products
- Adv./market
- Organisational Cap.
- Training

Comparing CIS 2008/INNODRIVE IA



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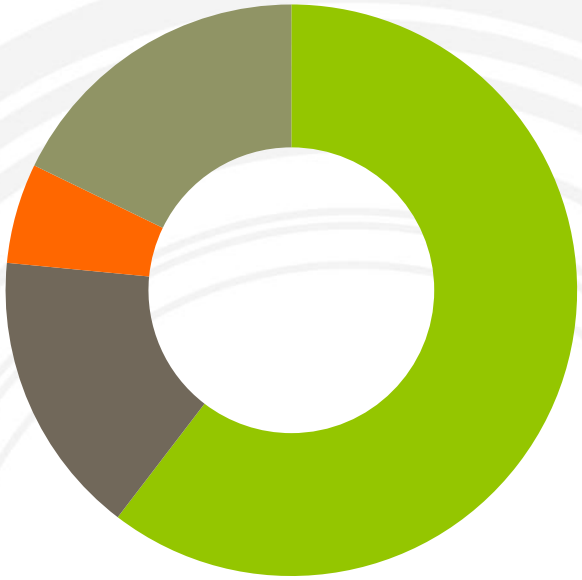

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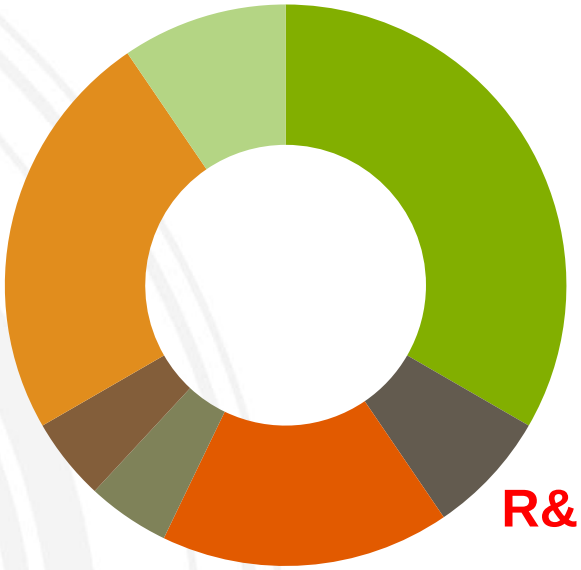

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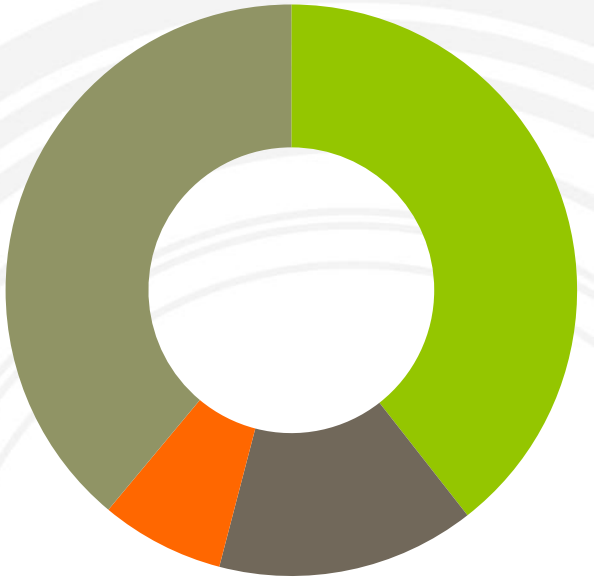

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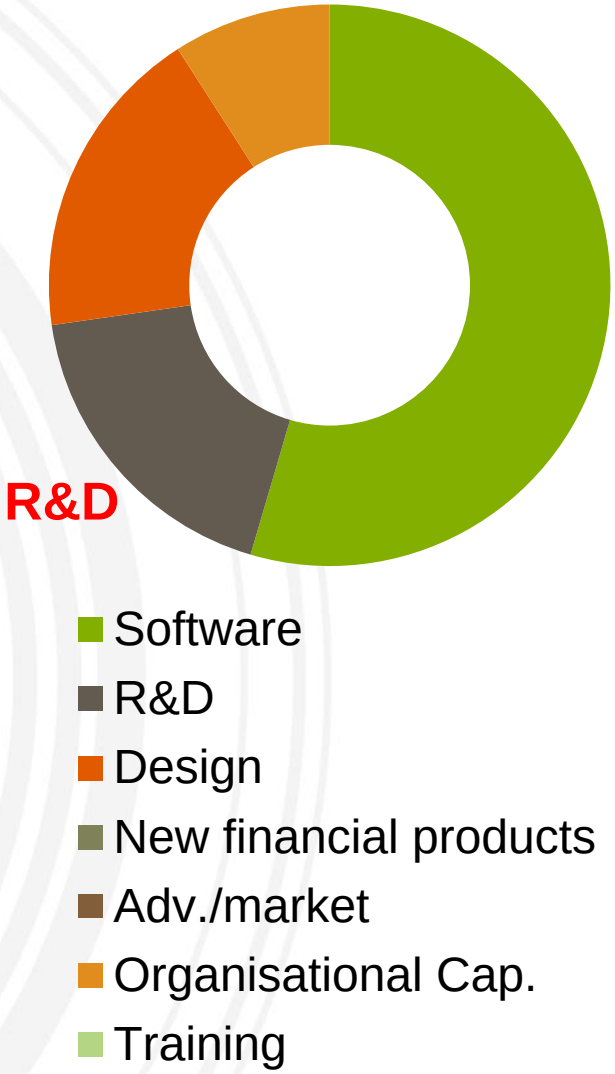

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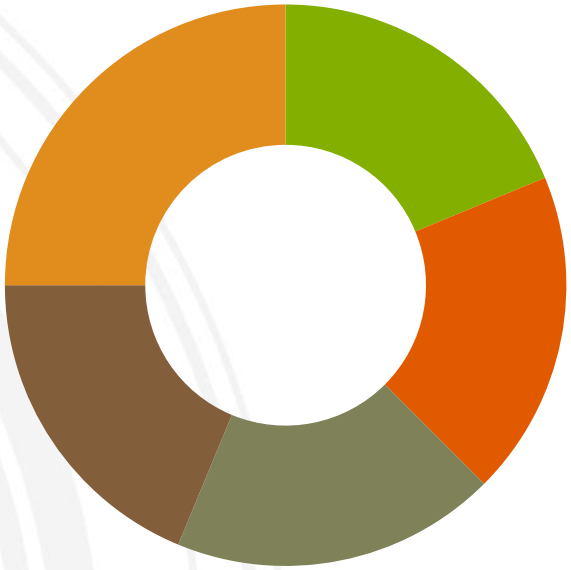

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