

University Graduates and the Labour Market Evidence from the Italian Experience

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- Italian context
- Introducing the AlmaLaurea Interuniversity Consortium
- AlmaLaurea's functions as a trend observatory
- Specific features
 - Degree effectiveness, satisfaction, need for credentials
 - Graduates' assessment of employers' innovativeness, etc.
 - Textual analysis of work task descriptions
- Prospects for research on new skills

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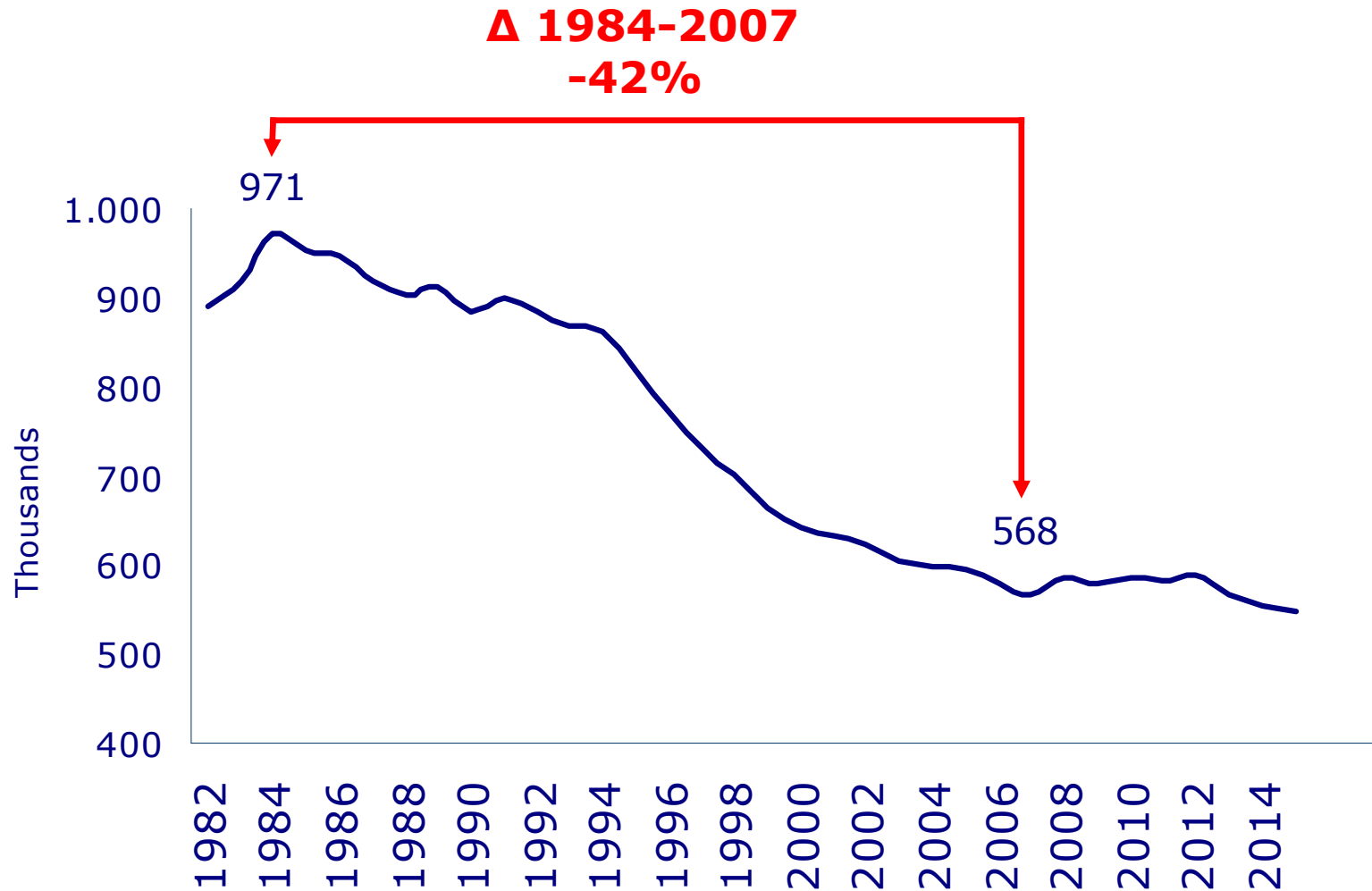
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Italian Context

- Sharp drop in number of 19-year-olds over last two decades
- Small incidence of higher education degree holders in both older and younger population
- Prevalence of small and medium businesses in economy
- Low public expenditure on higher education
- Low expenditure (public and private) on research and development

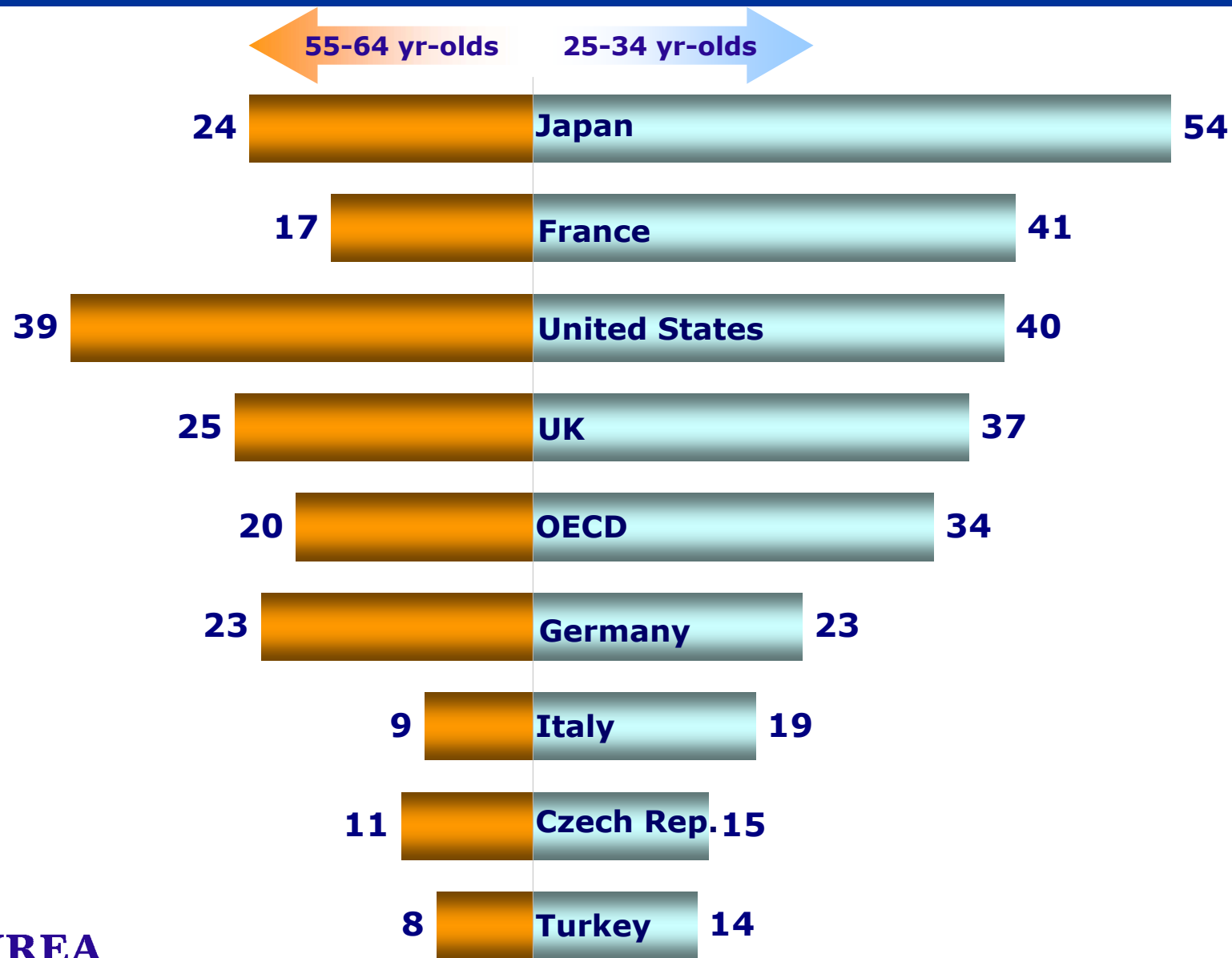
Evolution 19-yr-old Population in Italy: 1982-2015

Source:
re-working of
ISTAT data



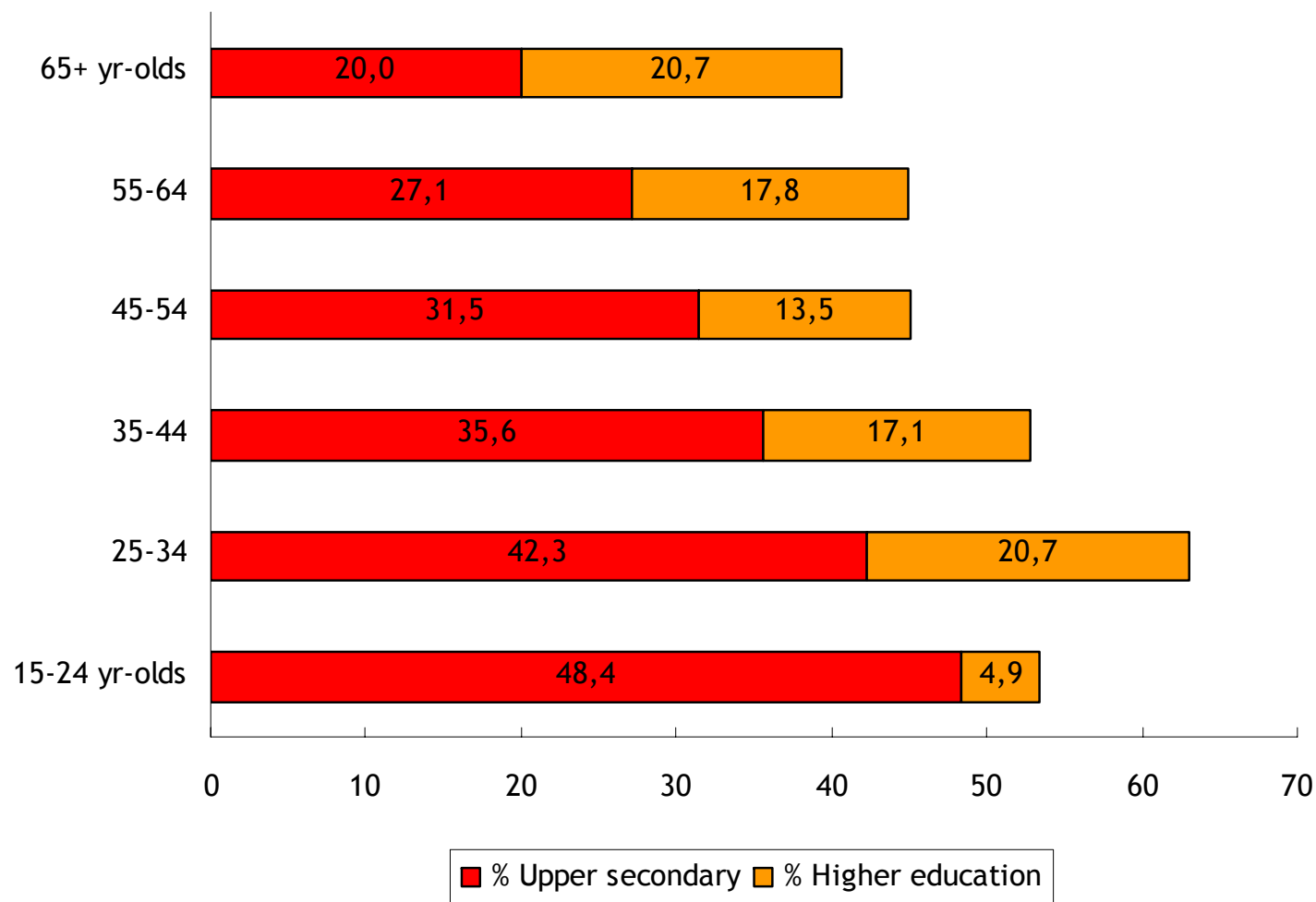
Population with Tertiary Education Degree by Age

Source: OECD, 2009
Ref. year: 2007



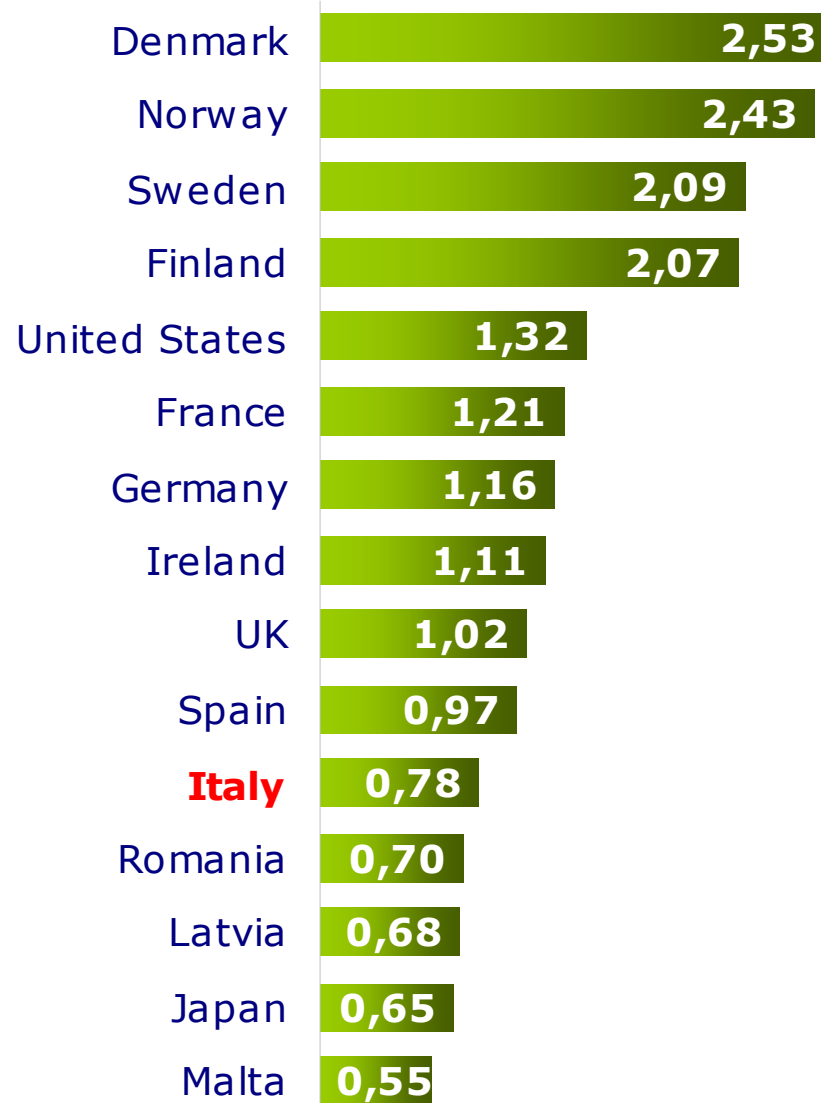
Percentage values

Presence of Upper Secondary and Higher Education Graduates in the Italian Workforce (2008)



Public Expenditure on Higher Education (% of GDP)

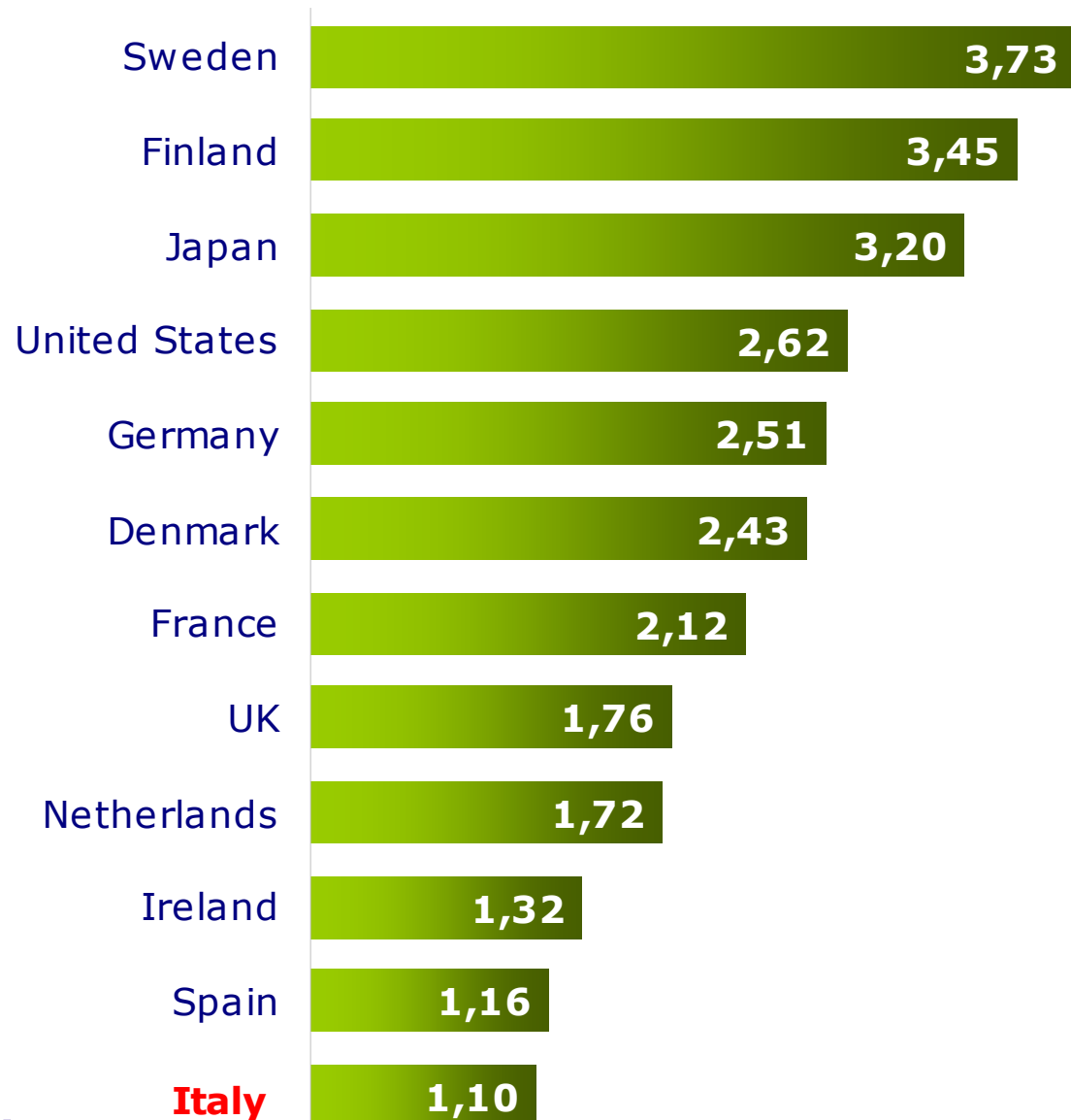
Source: Eurostat,
2008
Ref. year.: 2004



Percentage
values

Public and Private Expenditure on Research and Development (% of GDP)

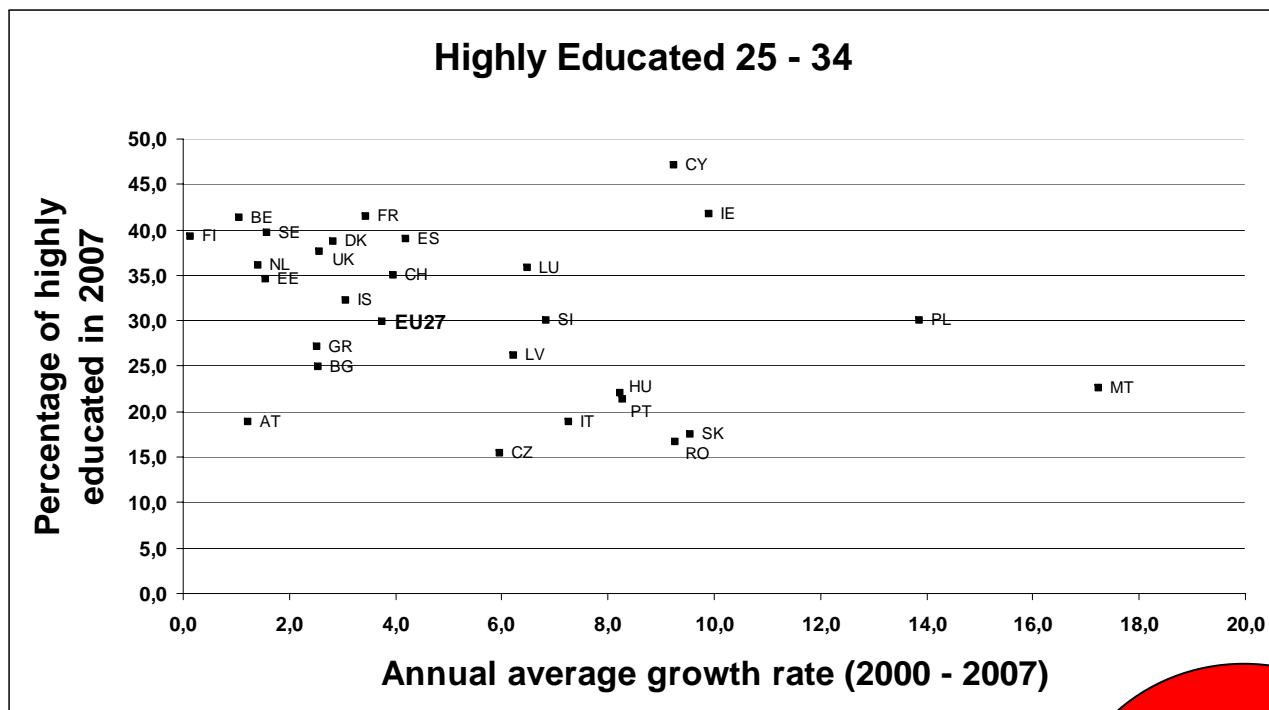
Source: Eurostat,
2008
Ref. year: 2004



Percentage
values

Incidence of Higher Education Graduates among 25-34-yr-olds and Their Growth over Time (2000-2007)

a confronto incidenza (2007) nella popolazione 25-34 di quanti sono in possesso di un titolo di terzo livello e velocita' di crescita (2000-2007) del numero dei laureati.



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AlmaLaurea's Mission

AlmaLaurea (AL) in Italy has the following main goals:

- *to provide national/local governments and member universities with the **most reliable and up-to-date information** on the evolution of graduates' academic careers*
- *to **foster graduates' employability** tracing **their working achievements** and promoting their access to successful careers and lifelong learning in a knowledge-based society and economy*

Birth and Evolution of AlmaLaurea

In Italy AL has been an authentic institutional innovation. The main steps of its *subsidiarity-based* experience are the following.

- 1988 foreign graduates survey in the occasion of the 900° anniversary of the founding of the University of Bologna
- 1993 establishment of the Statistical Observatory at the University of Bologna
- 1995 crossing of regional borders and mission assigned by the Italian Ministry of University and Research to coordinate a national information system
- 1997 availability of AL services on the Internet
- 2001 establishment of the AL Consortium among Italian universities
- 2009 **54 member universities, 70% of Italian graduates each year, 1,300,000 graduates CVs, all services translated in English, 450,000 CVs sold to firms in the 2008**

AL is today a *fully integrated information system* in which a graduate database represents the core of a large integrated set of research activities and services.

What AlmaLaurea Does

Graduate



CVs

to companies



Questionnaire

Certification



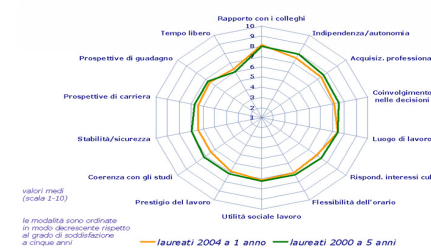
Statistics
for quality assurance



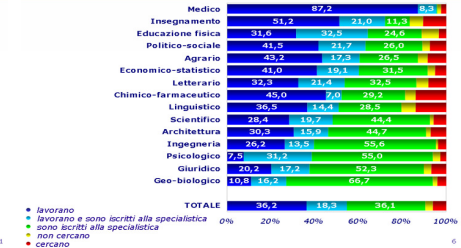
University

ALMA LAUREA

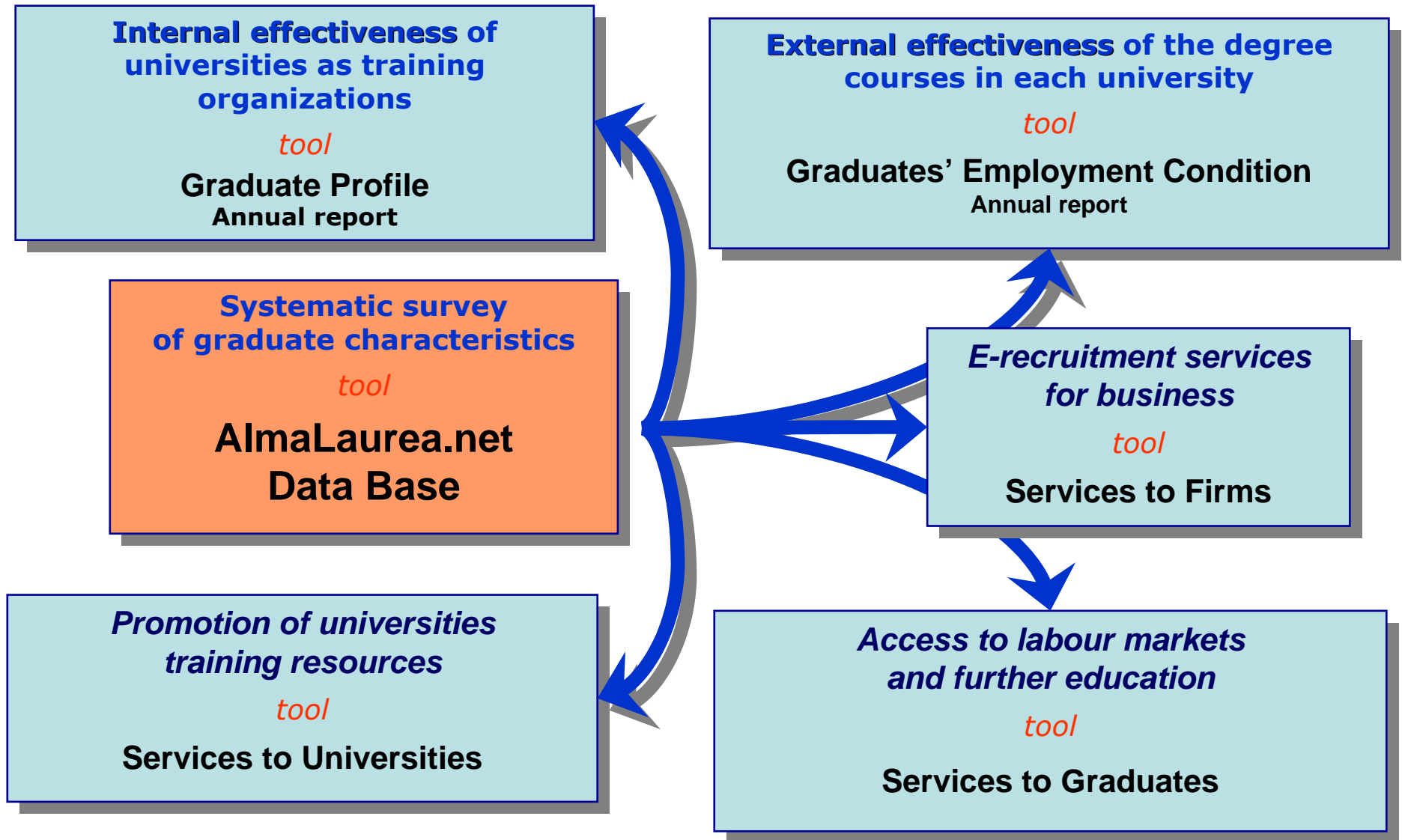
ALMA LAUREA Satisfazione per vari aspetti del lavoro svolto ad uno e cinque anni



ALMA LAUREA Laureati di primo livello: condizione occupazionale e formativa ad un anno per gruppi di corsi di laurea



The AlmaLaurea Model



Graduate Profile

- Systematic collection of information concerning graduates' performance, assessments, aspirations, further job and study intentions...
- A yearly portrait of human resource assets created by universities
- The survey supplies information for each university, department and single degree programme

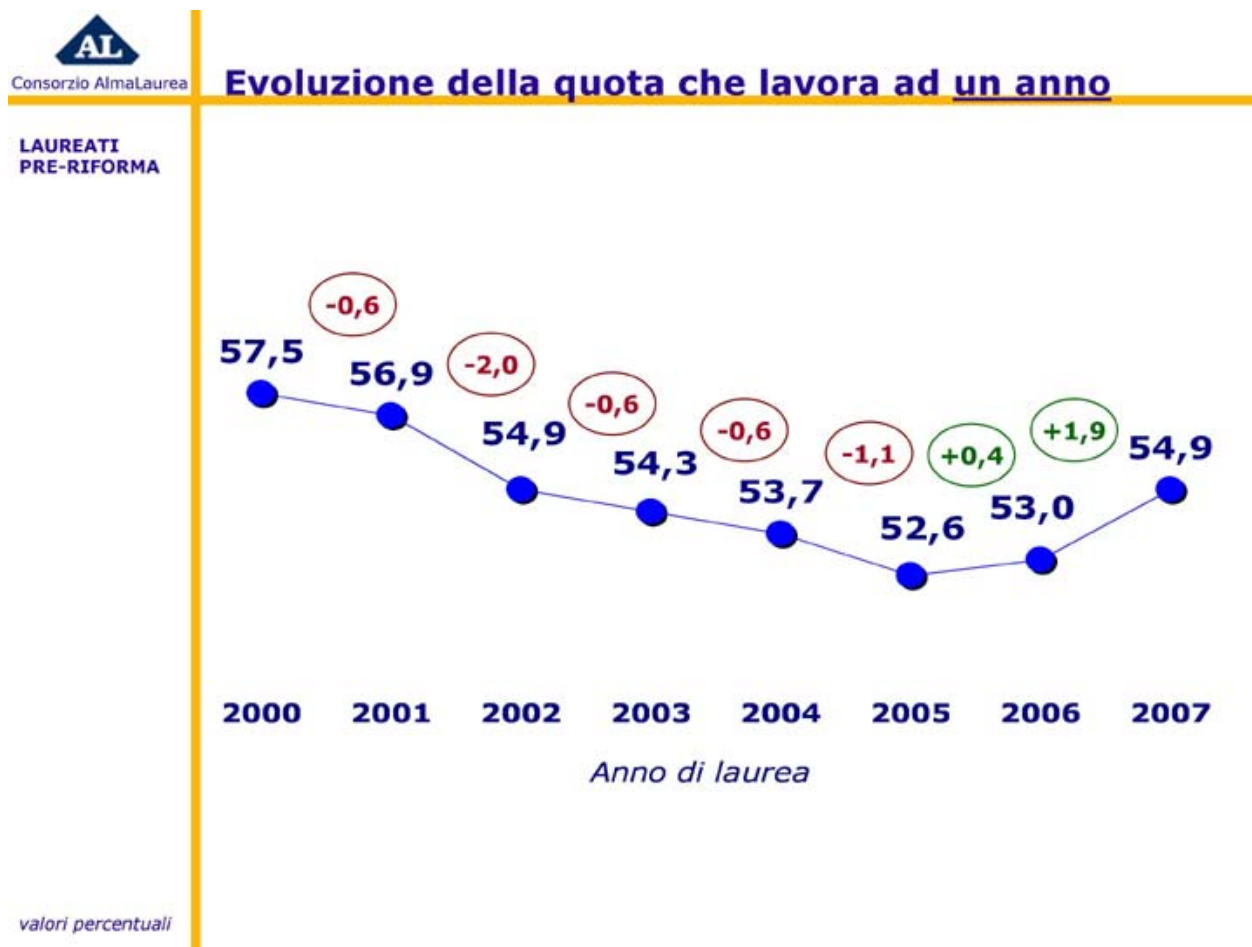
Survey of graduate employment

- The survey has been carried out thanks to graduates personal information kept in the in the data base
- Graduates are interviewed on their employment by telephone 1,3 and 5 years after their graduation
- The aim of the survey is to assess:
 - The ability of the labour market to take advantages of the Human Resources assets created by the University
 - The ability of the university to respond to society's requirements
- The survey is produced for every University, Faculty and Degree Course

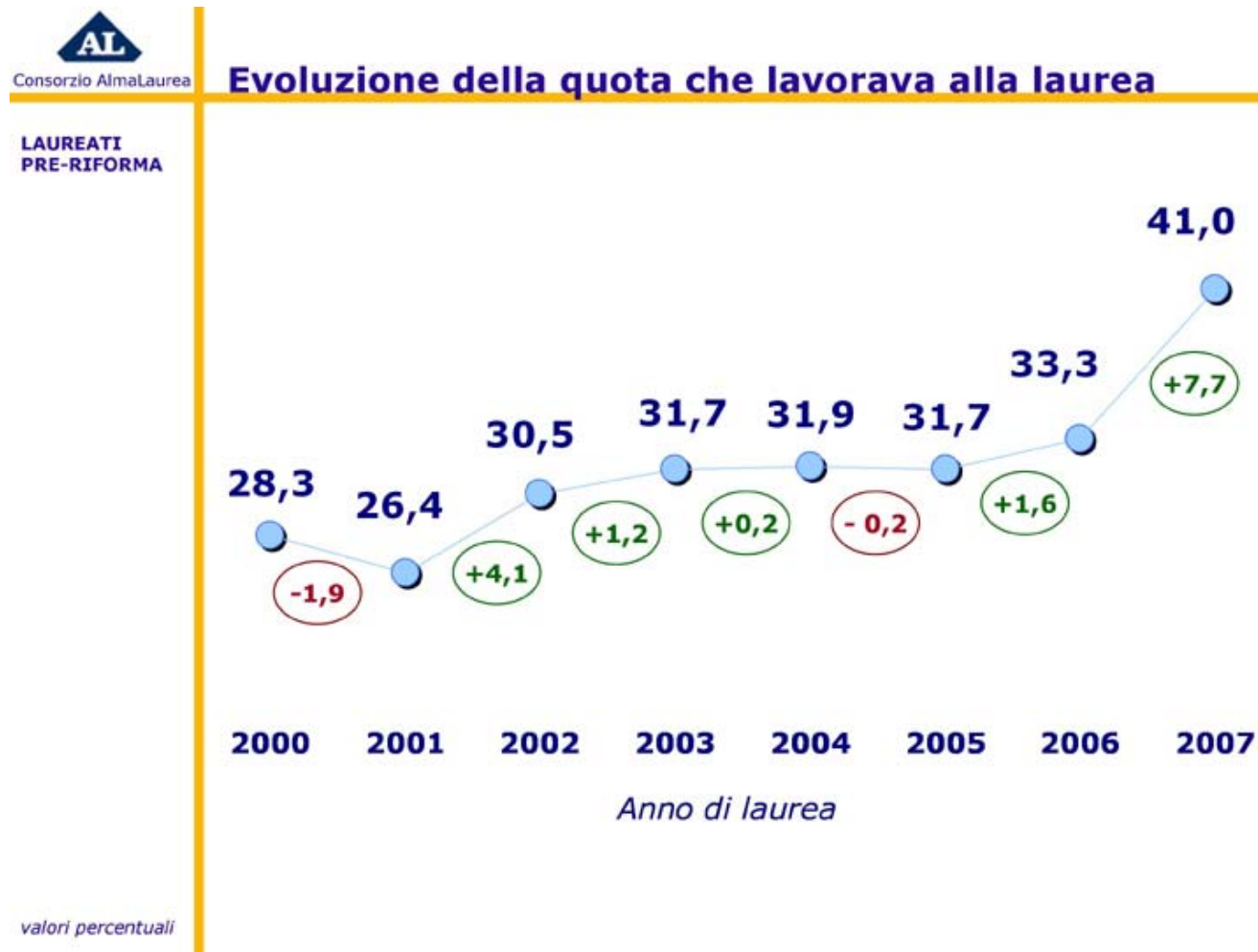
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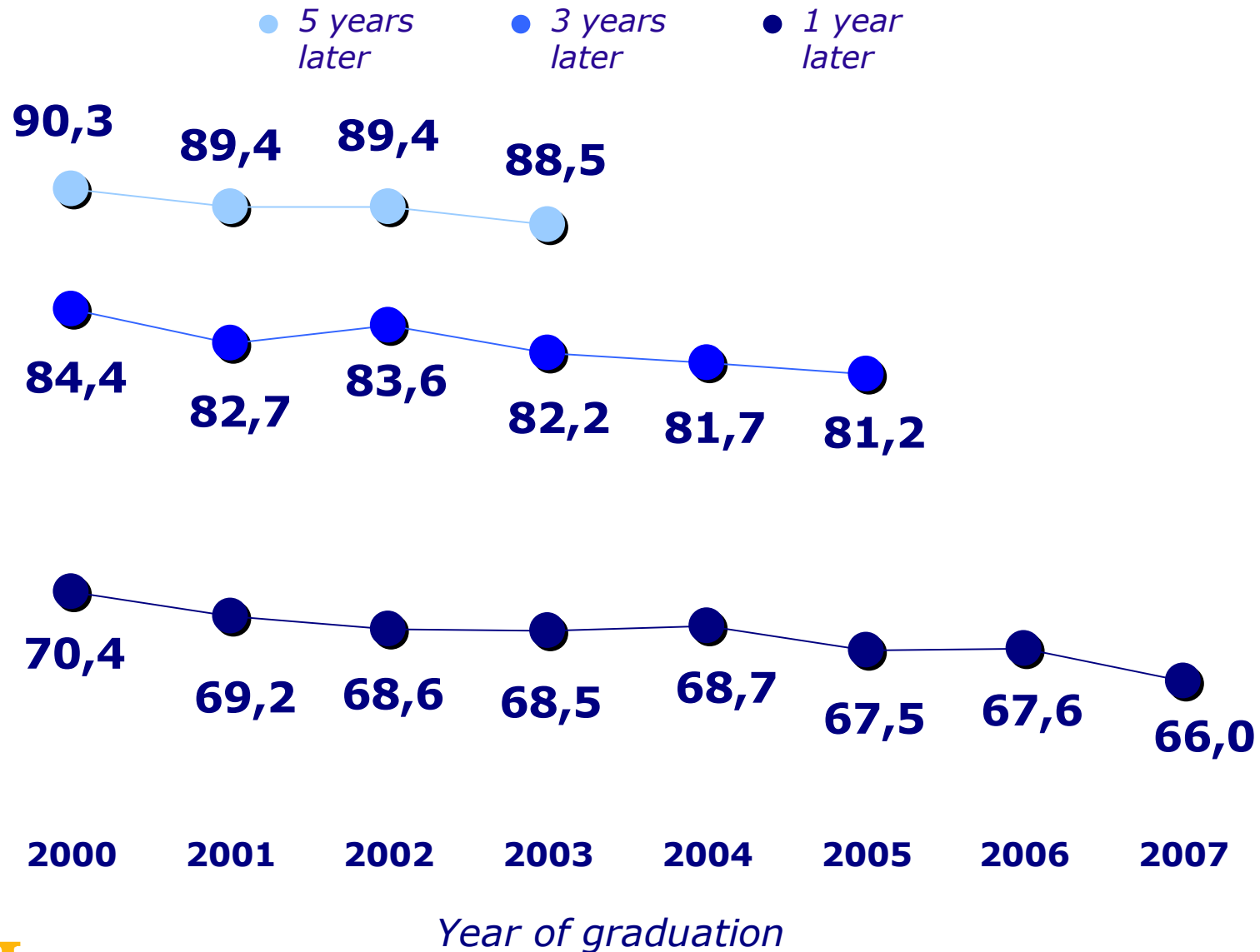
Trends (102)



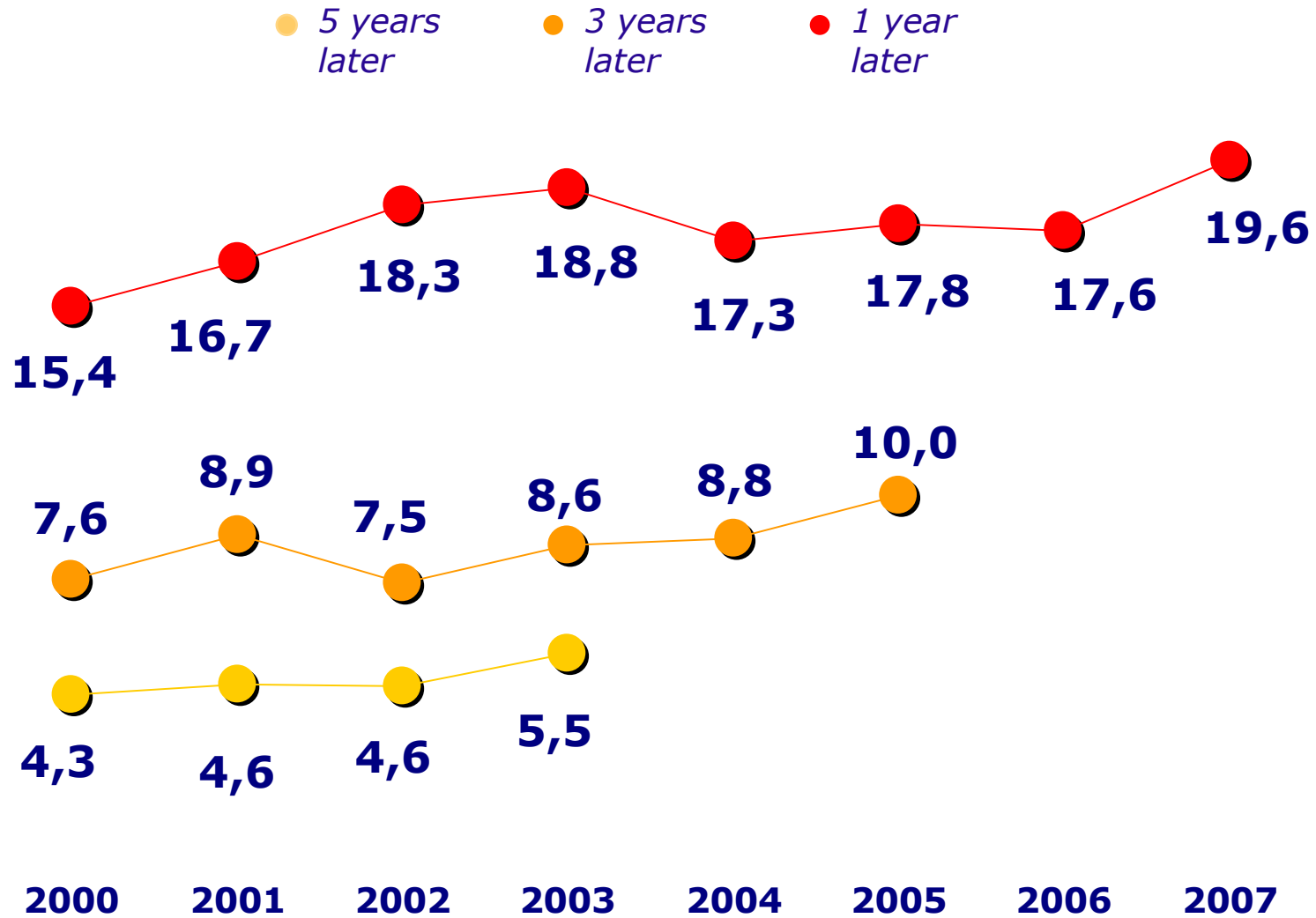
Trends (103)



Trends: Graduates' Employment Rates



Trends: Graduates' Unemployment Rates



Year of graduation

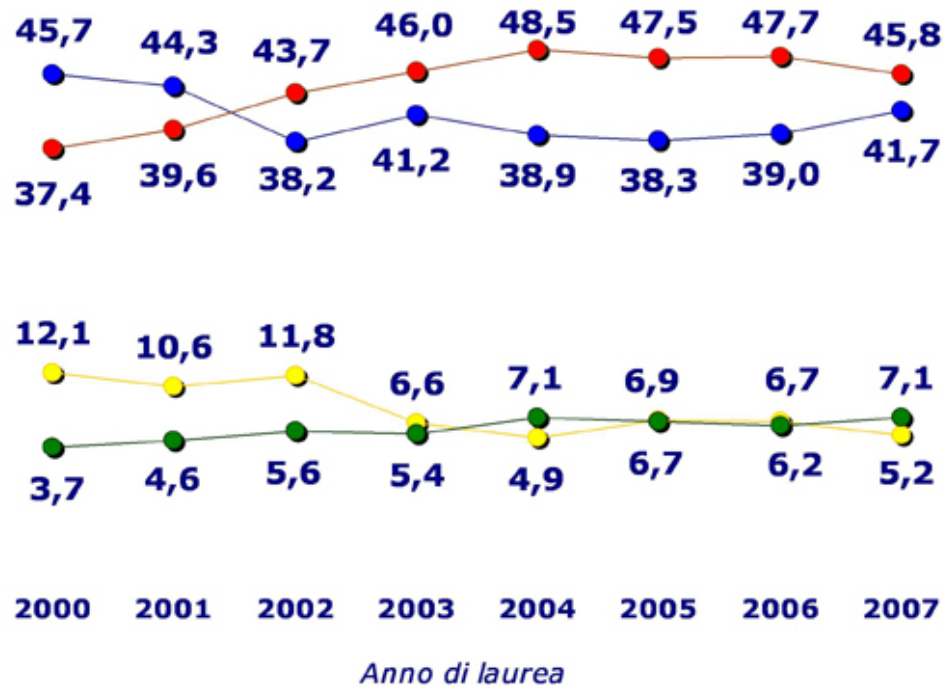
Trends (118)



Consorzio AlmaLaurea

Evoluzione della tipologia dell'attività lavorativa ad un anno

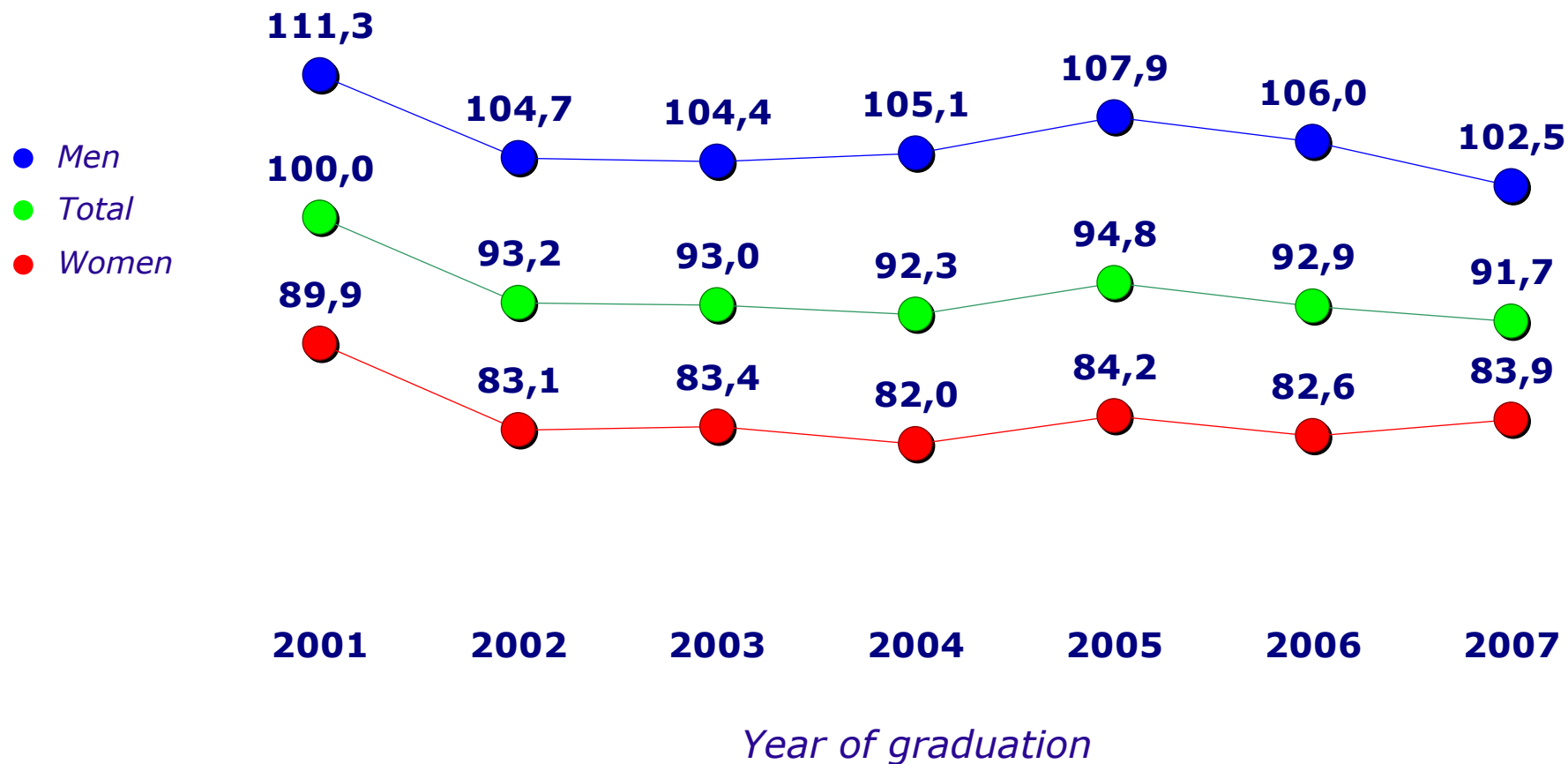
LAUREATI
PRE-RIFORMA



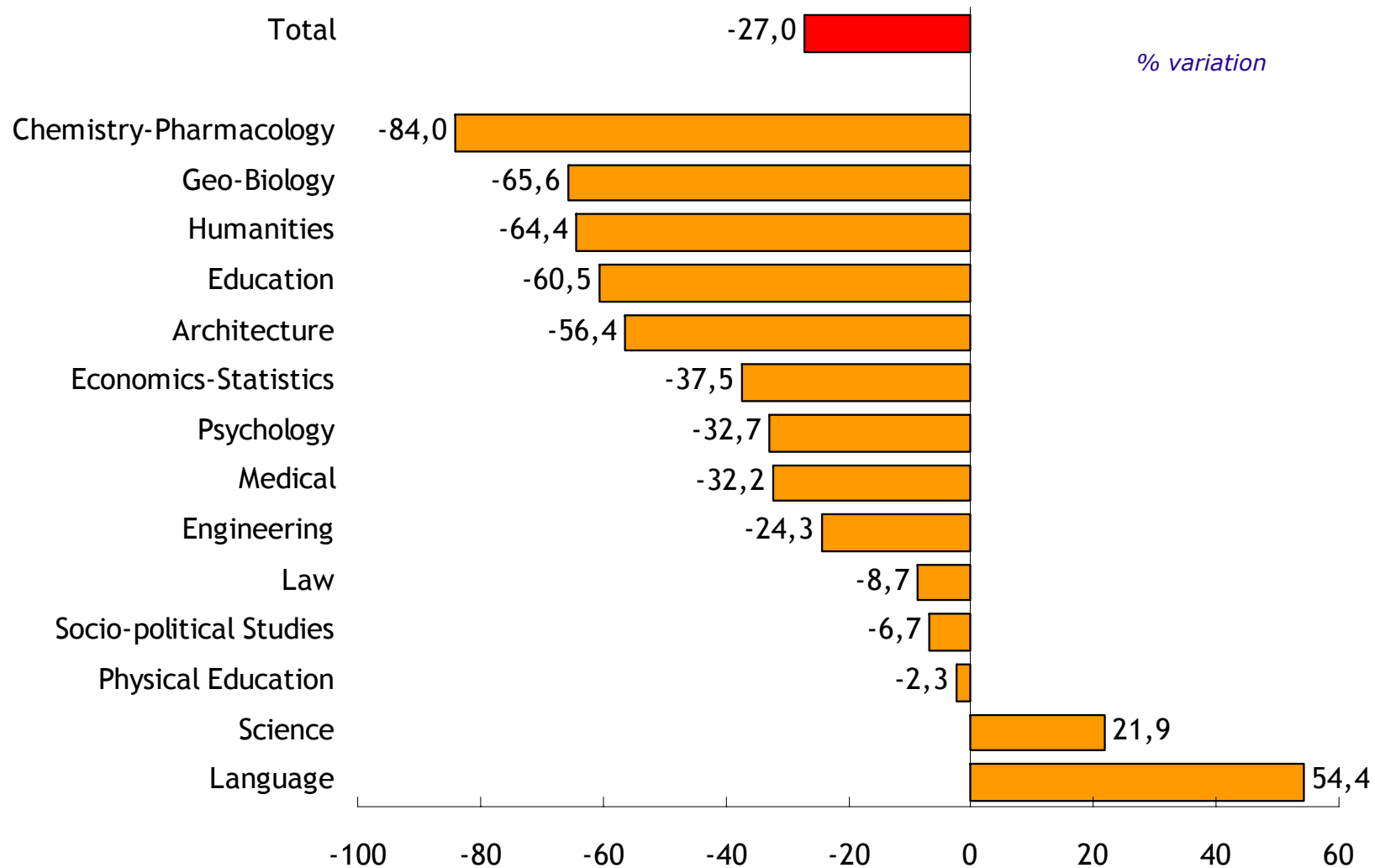
valori percentuali

- stabile (autonomo e tempo indeterminato)
- inserim./formaz. lav. e apprend.
- atipico
- senza contratto

Trends: Net Monthly Income (Current Value) 1 Year after Graduation, by Gender: Index Nos. (Base 100 = 2001)



Trends: Résumé Requests by Potential Employers (Early 2009 vs. Early 2008)



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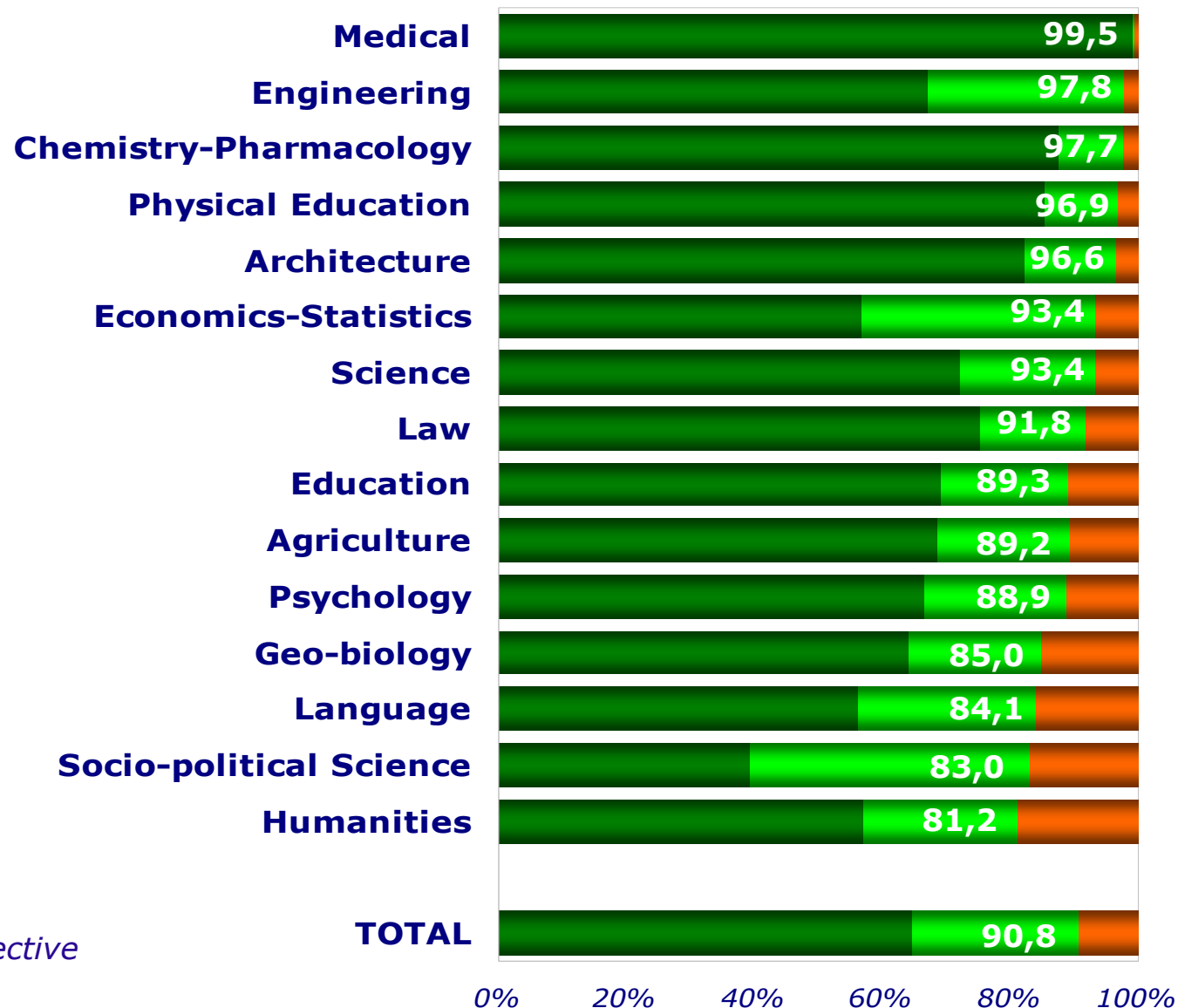
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Effectiveness* of Degree Five Years after Graduation, by Disciplinary Group

* Index combining the **job's legal / actual need for a degree** and the use of the **skills acquired** during university study

% refers to those graduates considering the degree at least "fairly effective"

- Very effective/effective
- Fairly effective
- Minimally/not at all effective



Definizione dell'efficacia della laurea

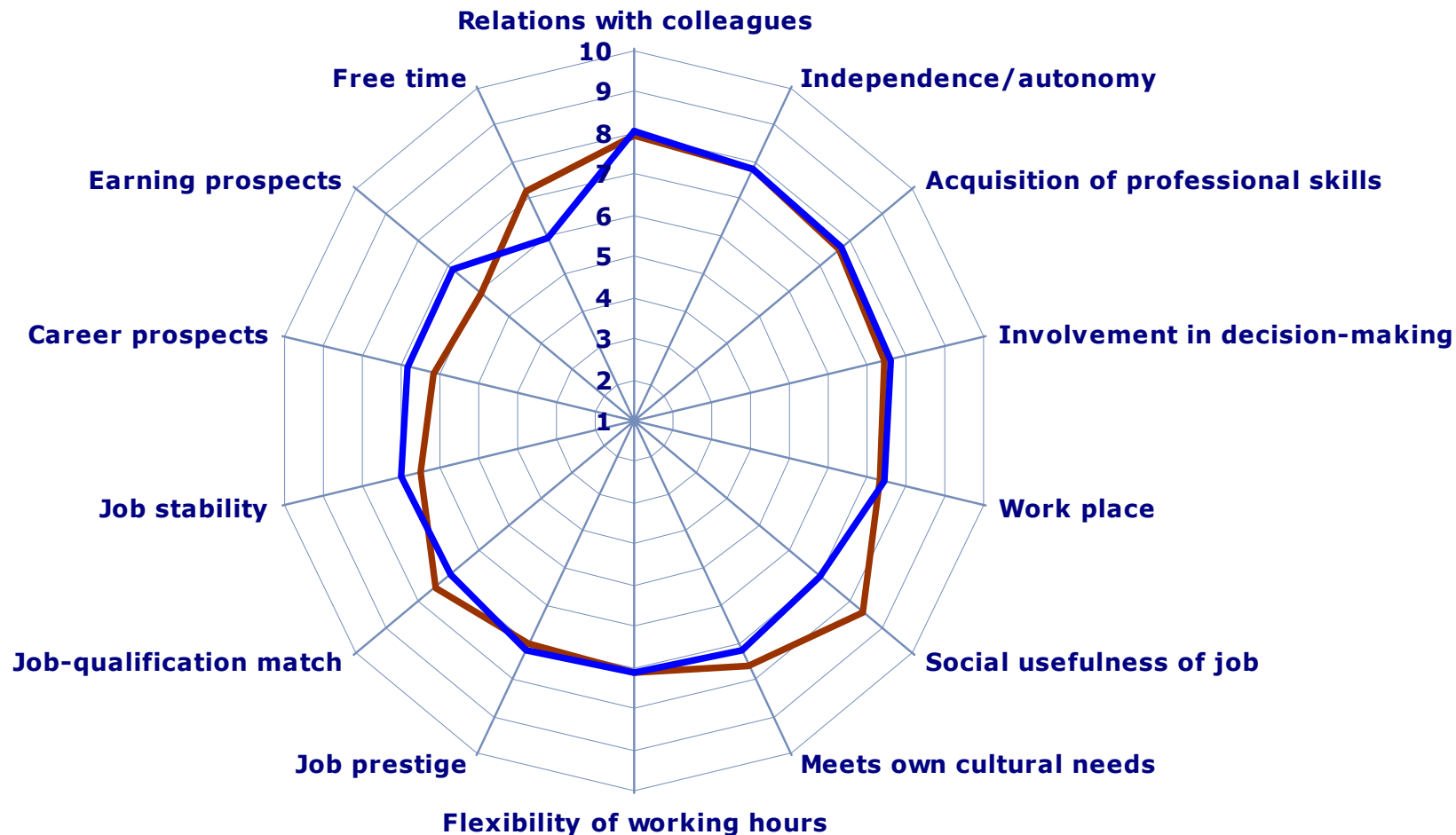
Utilizzo competenze universitarie	Utilità della laurea				
	richiesta per legge	necessaria	utile	non richiesta né utile	non risponde
elevato	ME	ME	E	NC	NC
ridotto	E	AE	AE	PE	NC
per niente	NC	NC	PE	NE	NC
non risponde	NC	NC	NC	NC	NC

Nella rilevazione 2008 la modalità "non classificabile" corrisponde a circa il 2% degli occupati ad uno, tre e cinque anni dalla laurea

ME molto efficace
E efficace
AE abbastanza efficace

PE poco efficace
NE per niente efficace
NC non classificabile

Satisfaction with Selected Features of Work Activity Five Years after Graduation



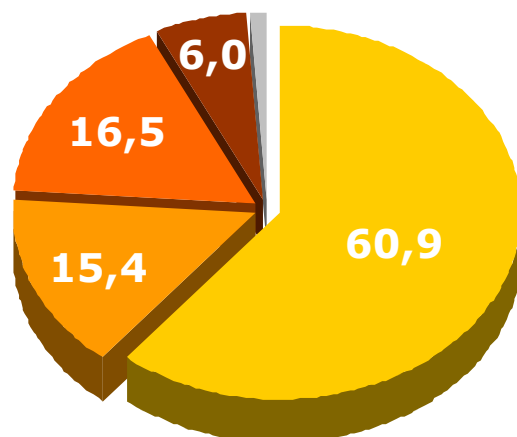
Average values
(scale 1-10)

Graduates' Opinions on Employers: Territorial Range of Employing Firm's Activities

2002 graduates
five years after
earning degree

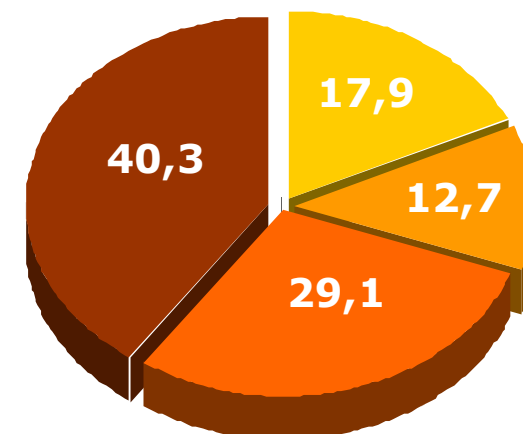
PUBLIC

Only employed
graduates (excl.
self-employed)



PRIVATE

- Local
- Regional
- National
- International
- NR



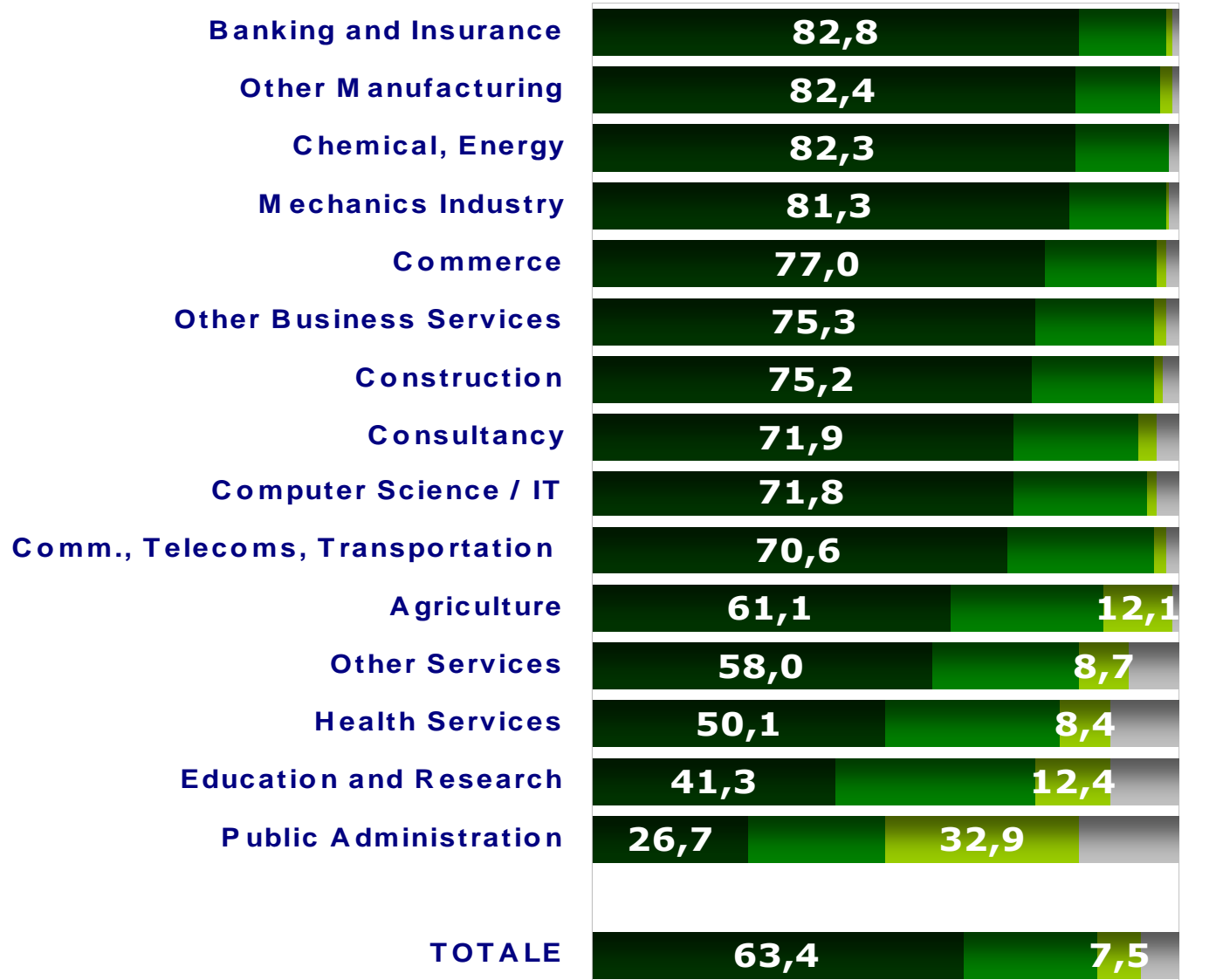
Percentage values

Graduates' Opinions of Employers: Competitiveness (by Economic Sector)

2002 graduates
five years after
earning degree

Only employed
graduates (excl.
self-employed)

- Very competitive
- Not very competitive
- Not at all competitive
- NR



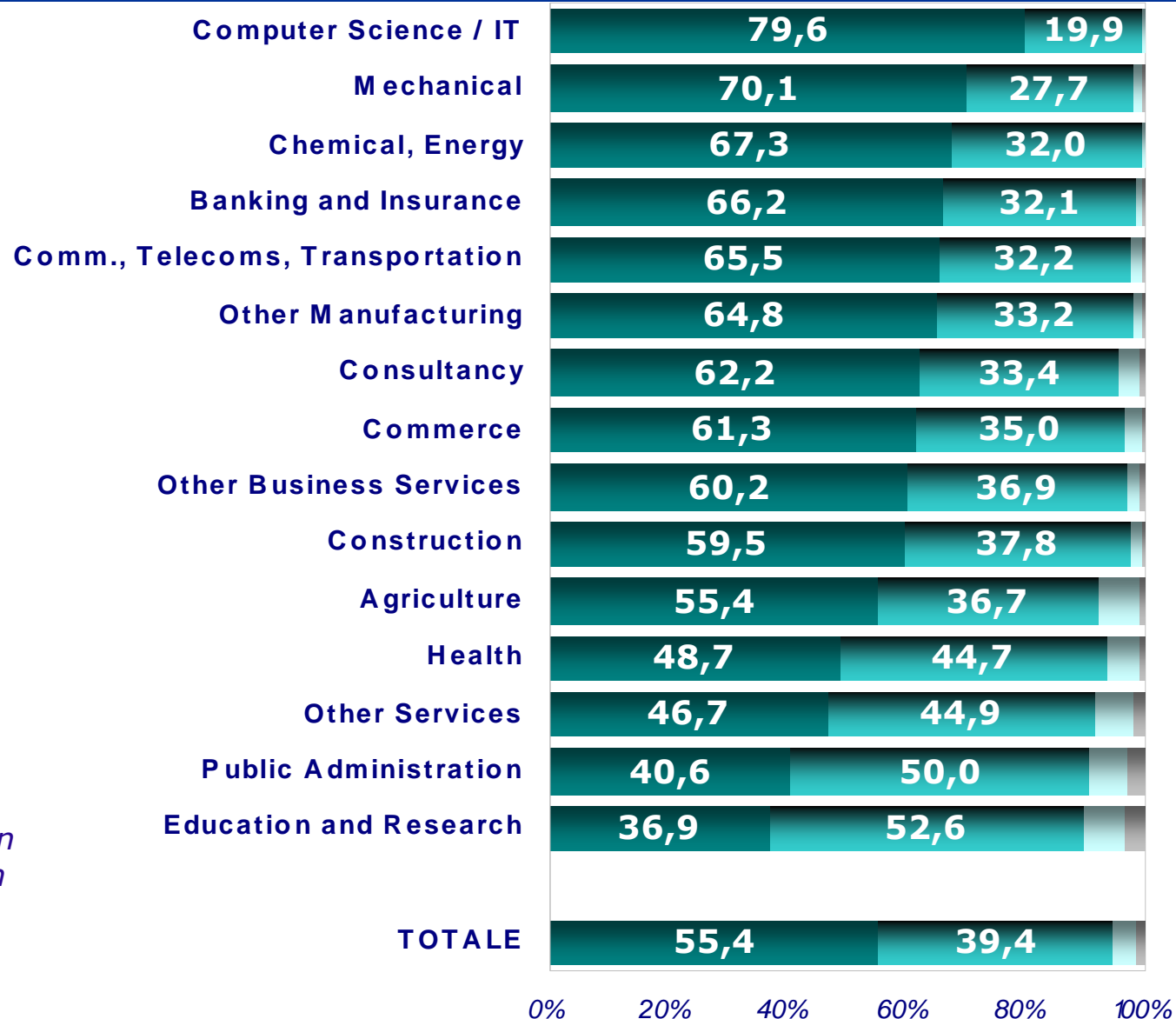
0% 20% 40% 60% 80% 100%

Graduates' Opinions of Employers: Innovativeness (by Economic Sector)

2002 graduates
five years after
earning degree

Only employed
graduates (excl.
self-employed)

- High degree of innovation
- Low degree of innovation
- No innovation
- NR



Graduates' Opinions of Employers: Perceptual Map (ACM)

LEGEND:

CA = Banking,
Insurance

CE = Chemical/Energy

COM = Commerce

CTT = Comm.,
Telecoms, Transport

CV = Consultancy

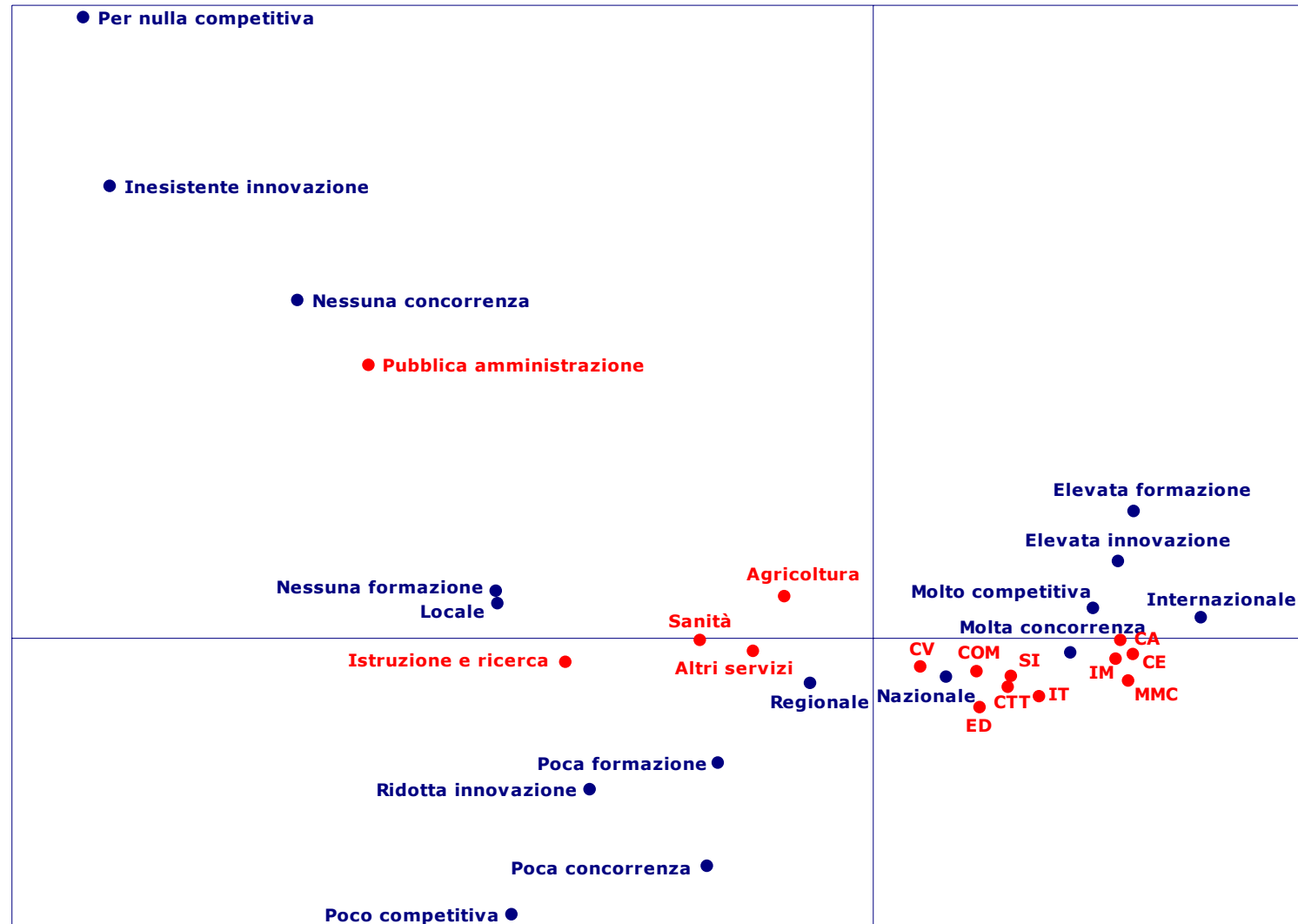
ED = Construction

IM = Other Manuf..

IT = Computer
Science, IT

MMC = Mech. Ind..

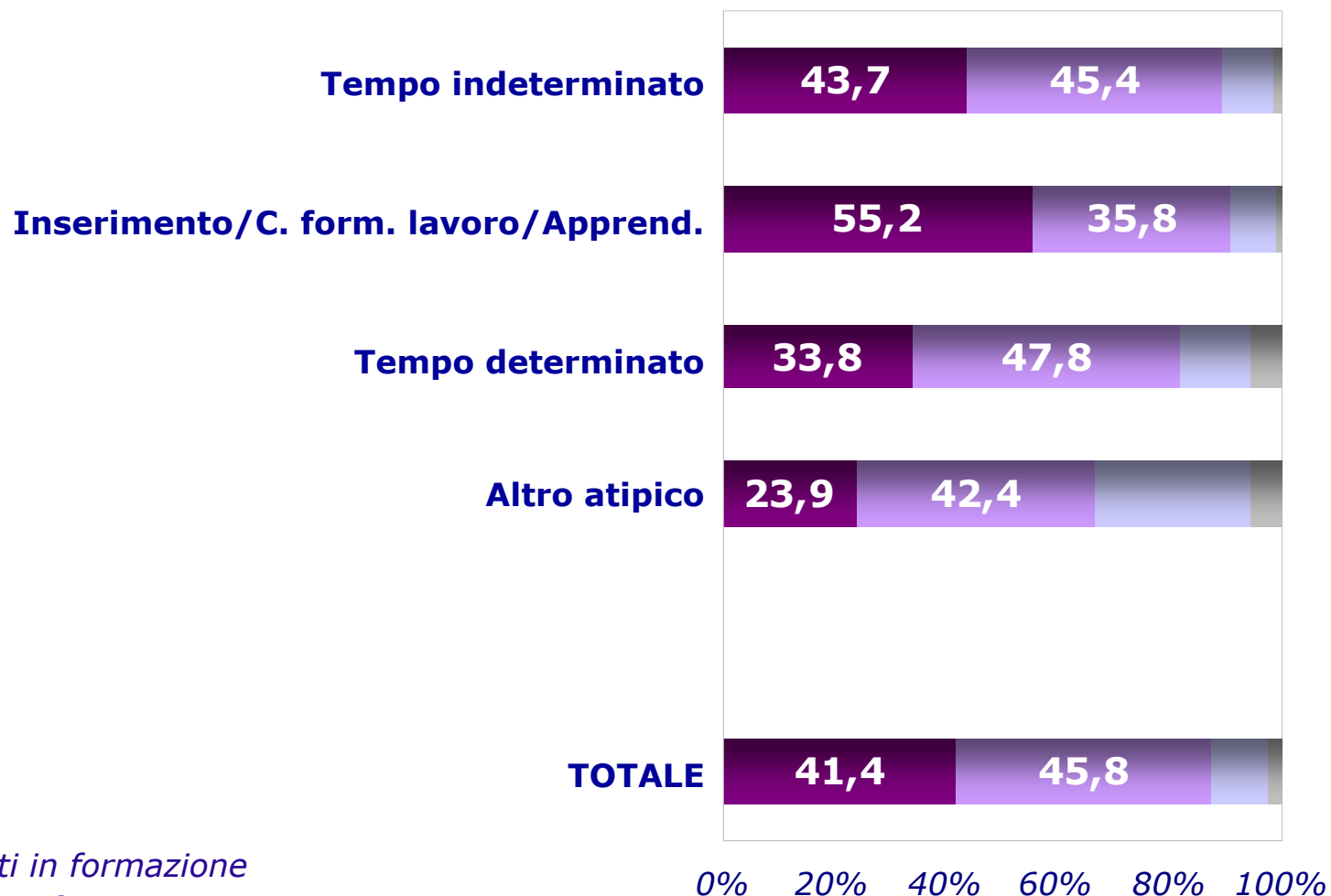
SI = Other Business
Services



Investimenti dell'azienda in formazione per tipologia di contratto

2002 graduates
five years after
earning degree

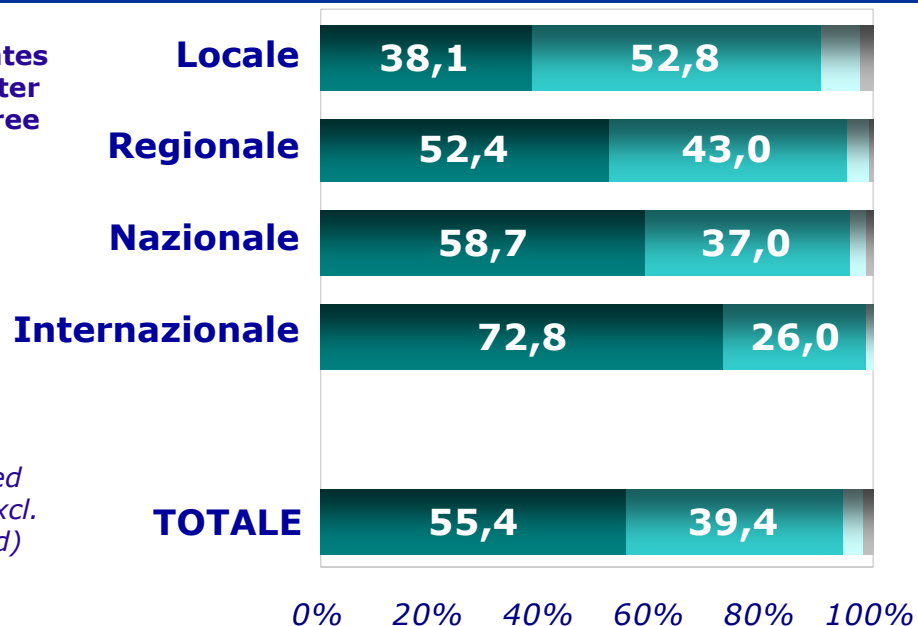
Only employed
graduates (excl.
self-employed)



- elevati investimenti in formazione
- pochi investimenti in formazione
- nessun investimento in formazione
- non risponde

Grado di innovazione e investimenti in formazione per ambito territoriale in cui opera l'azienda

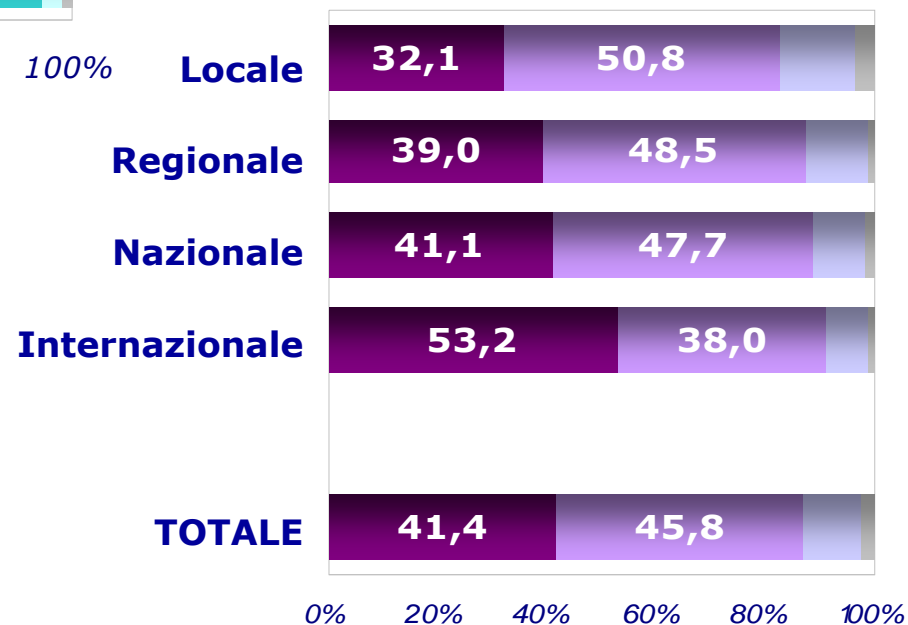
2002 graduates
five years after
earning degree



- elevato grado di innovazione
- ridotto grado di innovazione
- inesistente grado di innovazione
- non risponde

Only employed
graduates (excl.
self-employed)

- elevati investimenti in formazione
- pochi investimenti in formazione
- nessun investimento in formazione
- non risponde

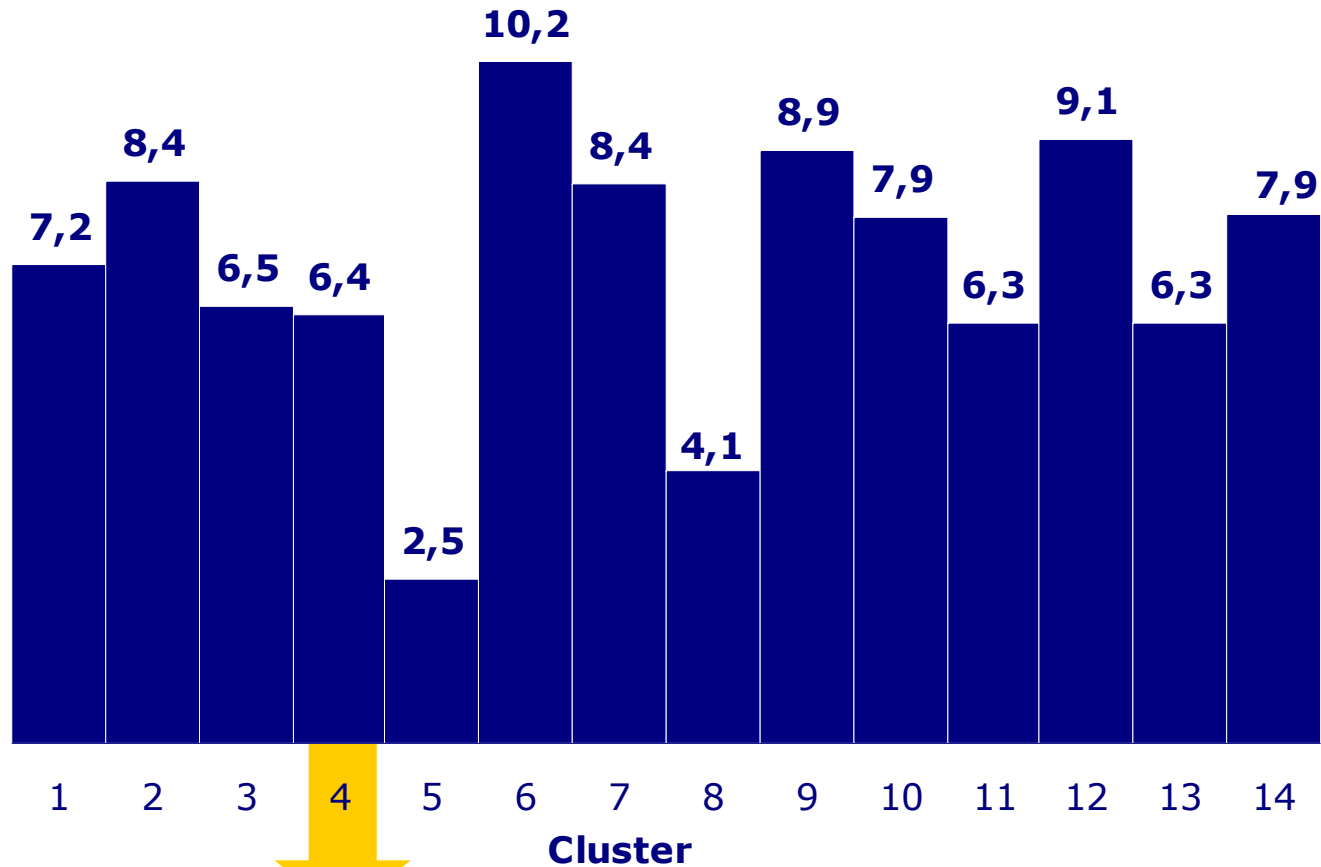


Textual Analysis of Graduates' Work Task Descriptions: Most Frequent Keywords

Rank	1997-98 Graduates' Job after 10 Years	2003 Graduates (After One Year)	
1	<i>Gestione</i> (management, administration)	2	↑
2	<i>Responsabile</i> (manager, supervisor)	7	↑
3	<i>Attività</i> (activity)	10	↑
4	<i>Sviluppo</i> (development)	32	↑
5	<i>Tecnico</i> (technician, technical)	18	↑
6	<i>Amministrativo</i> (administrative)	-	
7	<i>Ricerca</i> (research)	15	↑
8	<i>Progettazione</i> (planning, design)	1	↓
9	<i>Settore</i> (sector)	-	
10	<i>Commerciale</i> (commercial, business)	-	

Textual Analysis of Graduates' Work Task Descriptions: Occupational Clusters

1997-98
graduates

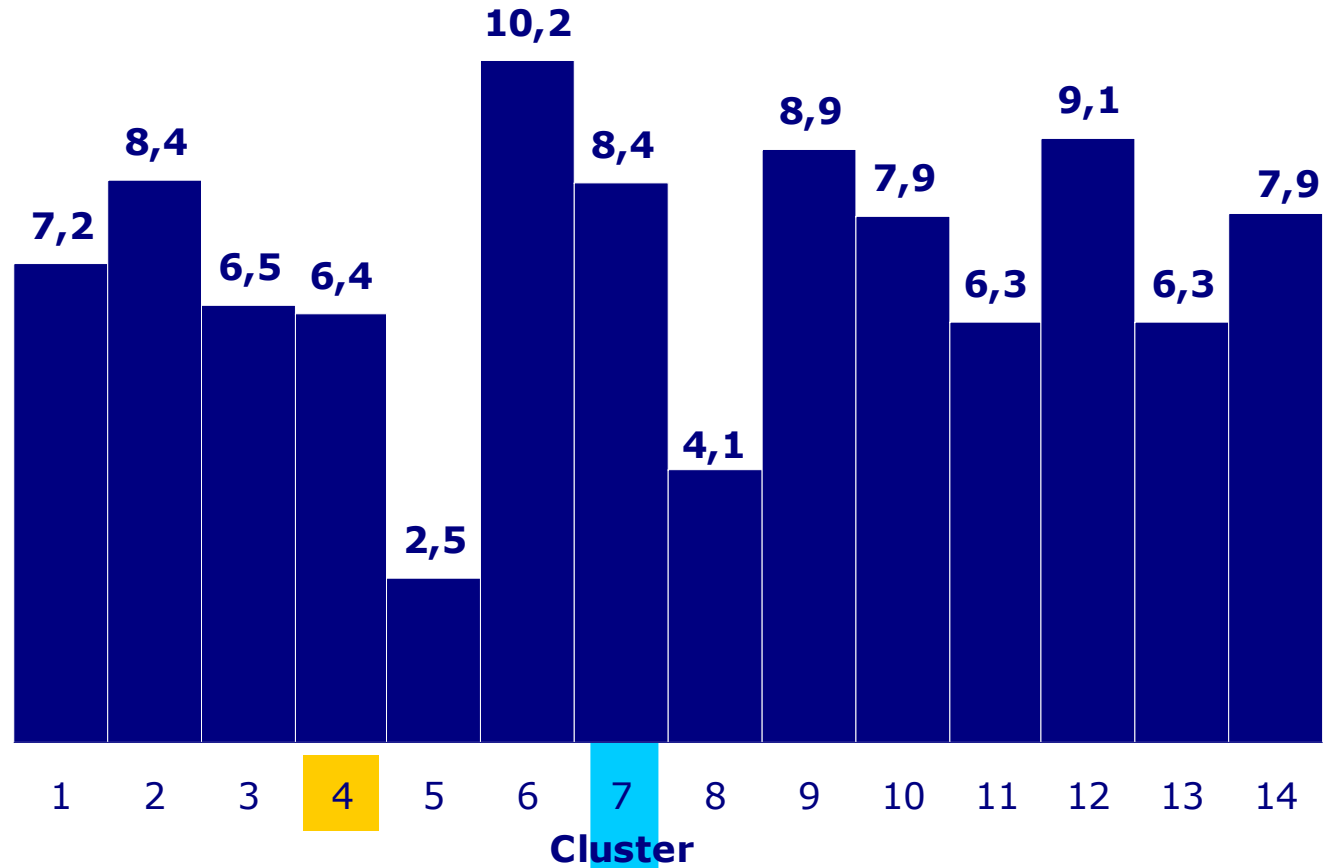


PROFESSIONALS

(lawyer, profession,
physician, owner,
liberal professional,
studio, representative)

Textual Analysis of Graduates' Work Task Descriptions: Occupational Clusters

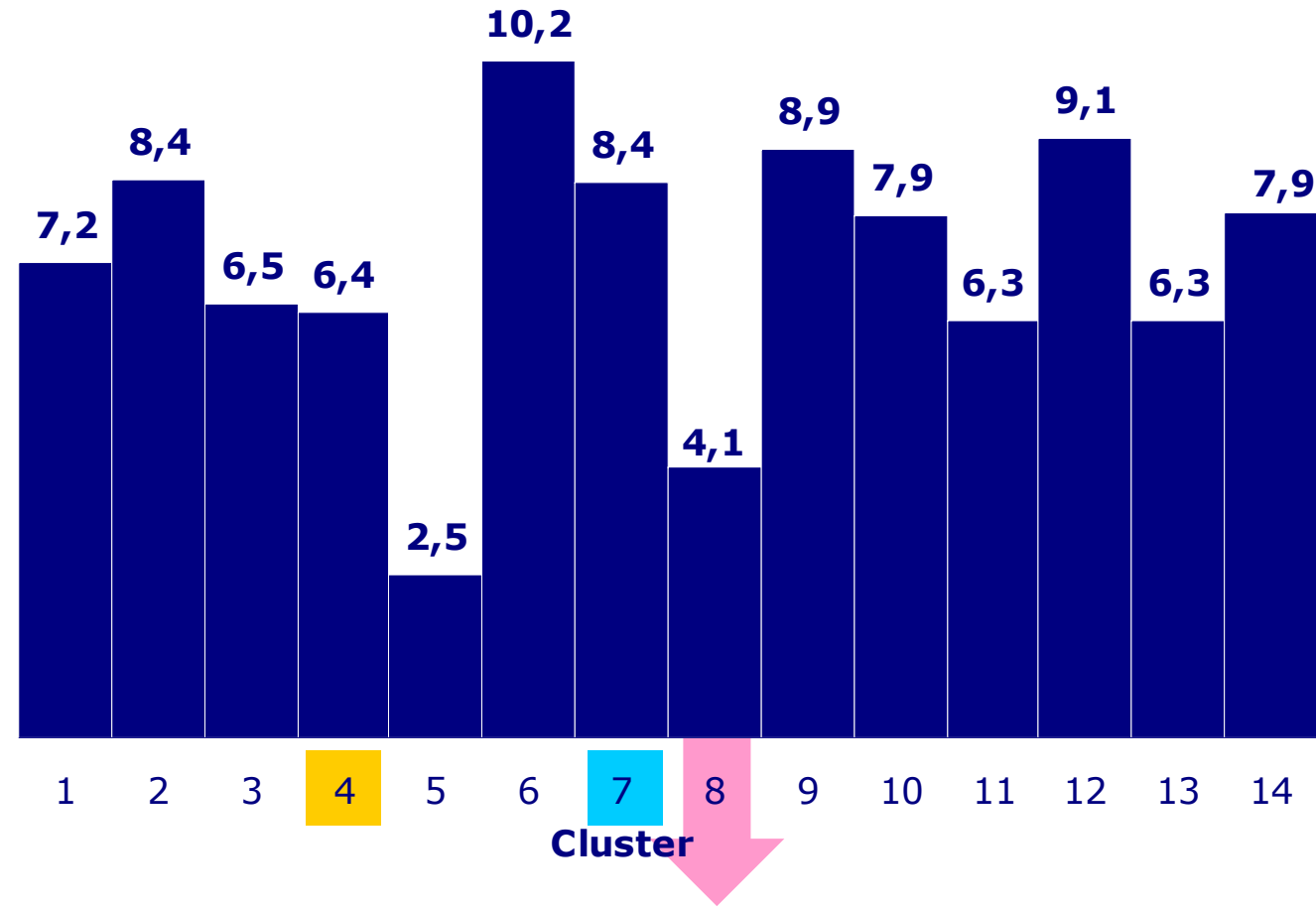
1997-98
graduates



**DESIGNERS /
PLANNERS**
(software, manager,
planner, hardware,
project, mechanical)

Textual Analysis of Graduates' Work Task Descriptions: Occupational Clusters

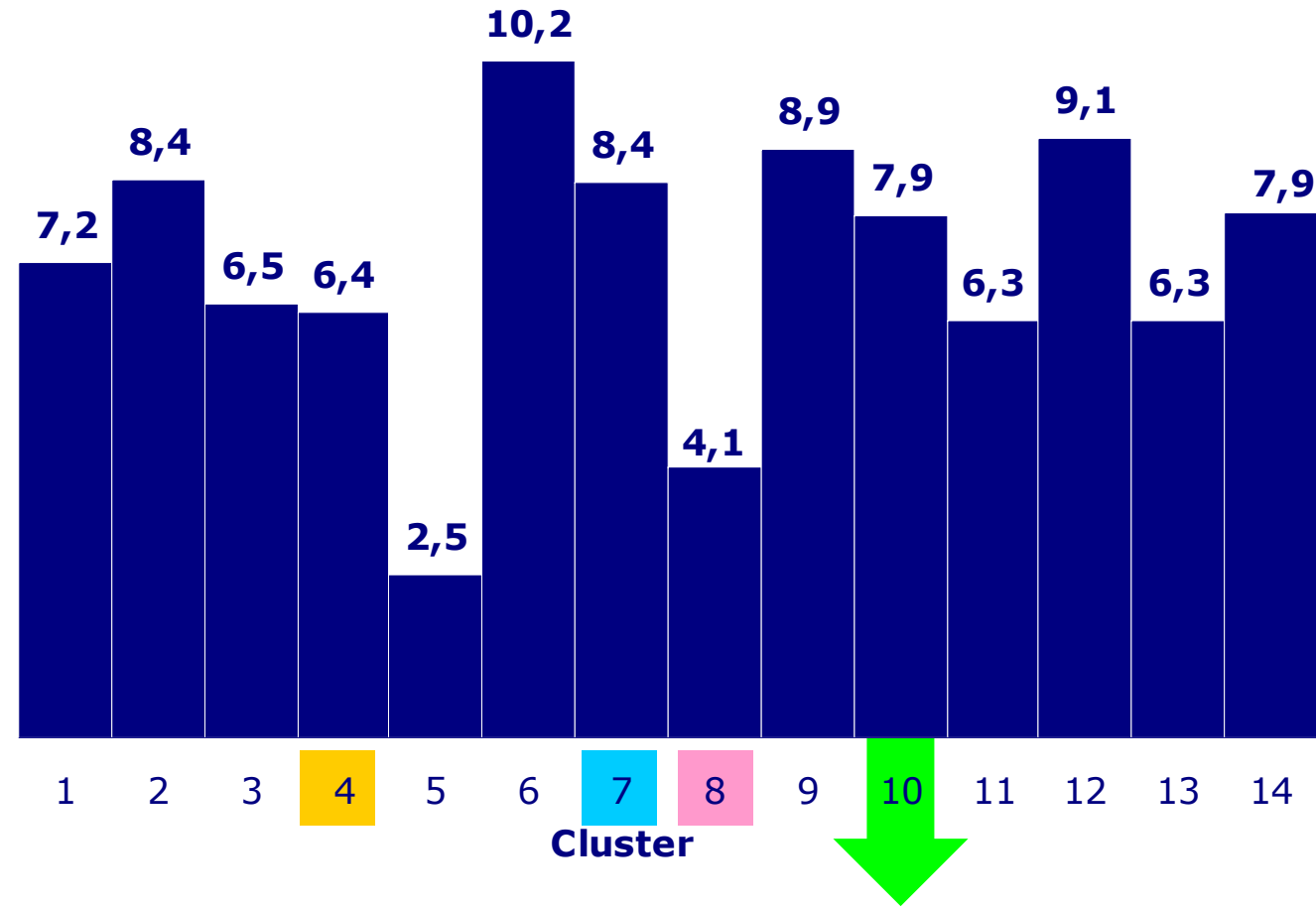
1997-98
graduates



RESEARCHERS
(researcher, university,
research, teaching,
university researcher,
scientific research)

Textual Analysis of Graduates' Work Task Descriptions: Occupational Clusters

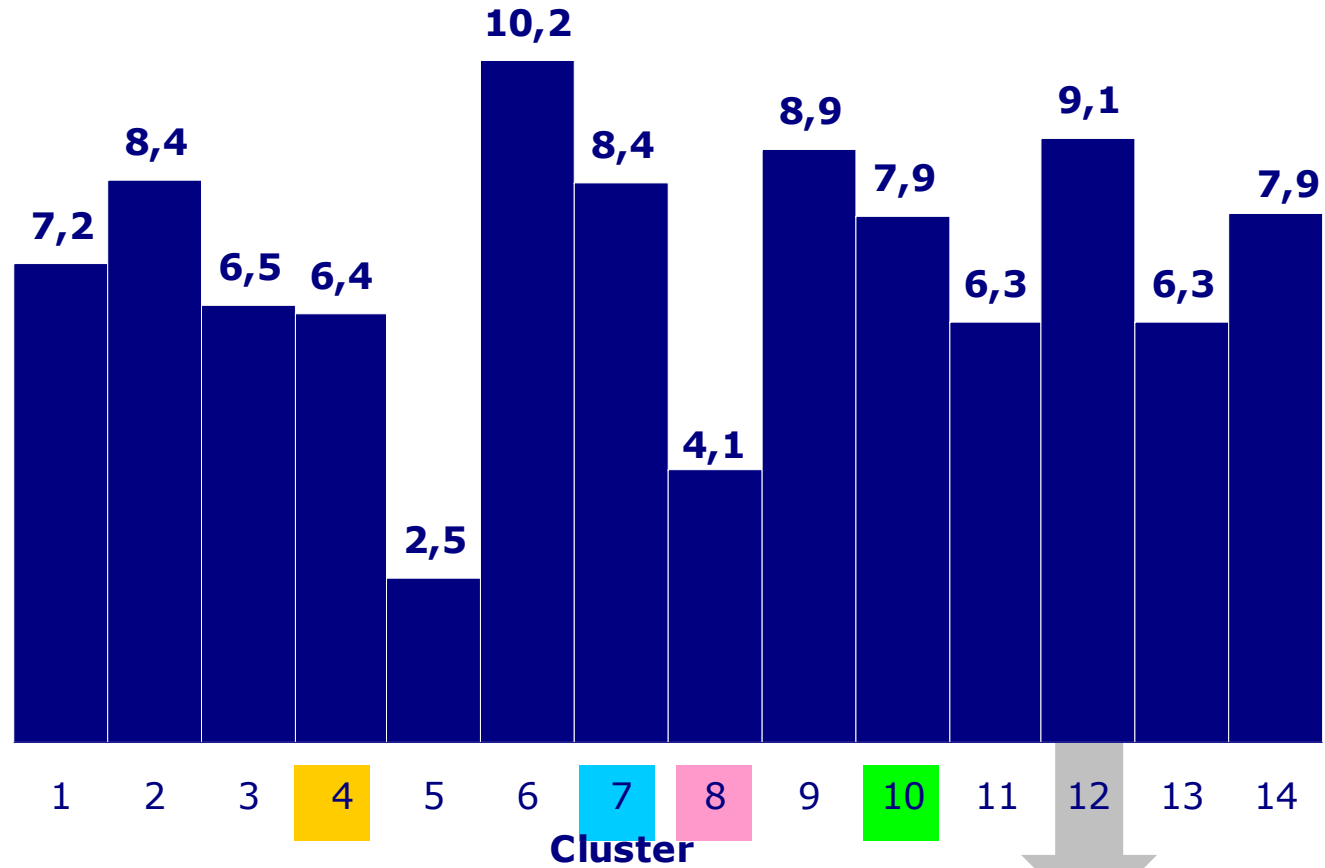
1997-98
graduates



TEACHERS
(teachers, school,
secondary school, level,
upper)

Textual Analysis of Graduates' Work Task Descriptions: Occupational Clusters

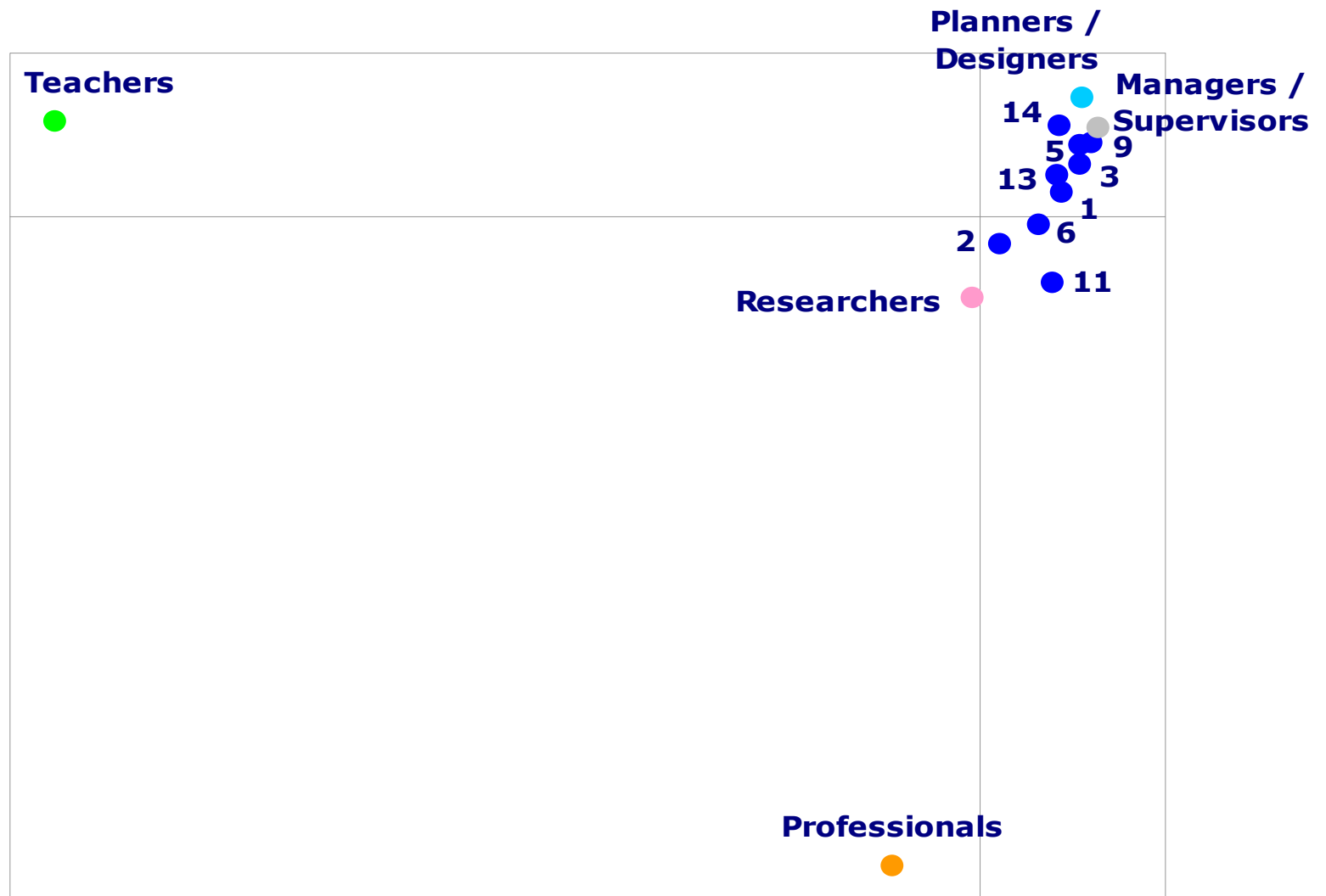
1997-98
graduates



**MANAGERS /
SUPERVISORS**
(responsible, quality,
laboratory, chemical)

Textual Analysis of Graduates' Work Task Descriptions: Cluster Map

1997-98
graduates



*Correspondence
analysis of lexical
units by cluster*

Occupational Clusters and Typical Degree Programmes

PROFESSIONALS	Law (41%) Medical (23%)
PLANNERS / DESIGNERS	Engineering (35%) Architecture (12%) Science (10%)
RESEARCHERS	Chemistry-Pharmacology (22%) Geo-biology (13%) Medical (12%)
TEACHERS	Humanities (32%) Language (15%) Education (12%)
MANAGERS / SUPERVISORS	Engineering (18%) Chemistry-Pharmacology (16%)

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Prospects for Research on New Skills

Foundations for further developments

- Strong relationship of trust with member university alumni (high response rates)
- Strong relationship with prospective employers and institutions
- Need for universities to enhance their sensibility towards graduate employability and ability to achieve mandated human capital goals

Prospects for Research on New Skills

Possible developments

- Specific surveys on older graduates who now occupy consolidated positions in the labour market
- Specific surveys on employers purchasing AlmaLaurea's CVs
- Development of existing initiatives (Tuning... ⇒ Italian "Bologna Promoters", Reflex, Excelsior...)
- Deepening of AL's international dimension