

Enquadramento e Organização do Ensino Superior Nacional

U.PORTO



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Covilã, 14 Abril 2012

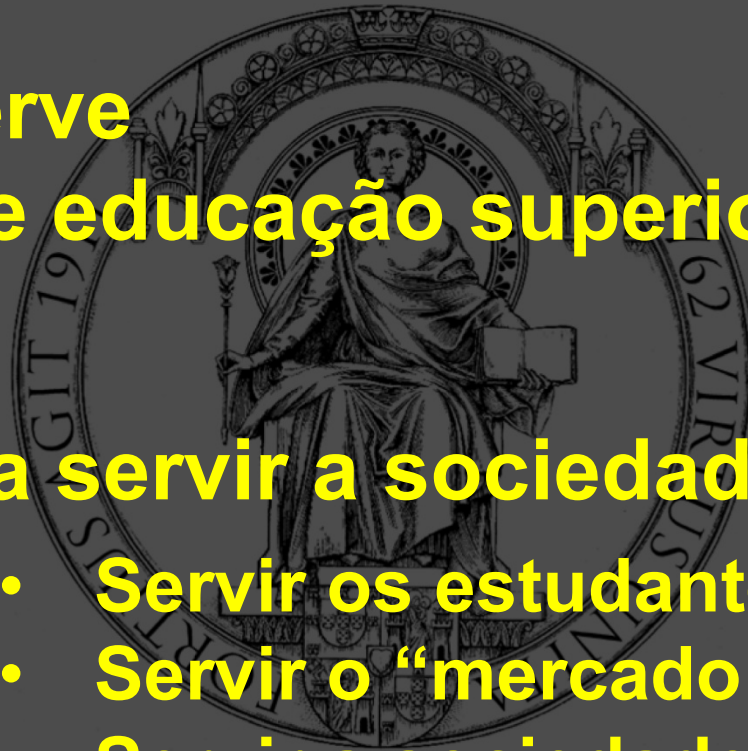
Enquadramento e Organização do Ensino Superior Nacional

Para que serve uma rede de educação superior?

Para servir a sociedade!

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- Servir os estudantes
- Servir o “mercado de trabalho”
- Servir a sociedade
 - Desenvolvimento regional



Education and jobs

Room at the bottom

The latest shock-horror figures about underemployed graduates are more depressing for non-graduates

ONE person out of every three who graduated from university in the past six years is in a job requiring only the skills of a school-leaver, up from one in four a decade ago. A 21-year-old graduate is about as likely to be unemployed in the year he leaves full-time education as a 16-year-old school-leaver with only GCSEs. The official figures make depressing reading for young people hoping that the better job higher education is meant to assure them will pay back the sums they have borrowed for college. This is not all a consequence of the recession.

As the chart shows, the proportion of newish graduates in lower-skilled jobs

was rising even before economic growth reversed in 2008; the downturn just steepened the slope. The laws of supply and demand are one reason. The number of recent graduates rose by almost half between 2001 and 2011; it is not surprising that some moved downmarket to find work. And though higher-skilled jobs have grown faster than lower-skilled ones over time, burger-flipping and the like are more available at the moment. Such jobs turn over frequently and are heavily advertised in job centres.

But if the outlook for graduates is dim, it is far worse for their less-educated counterparts. Though about a quarter of both new graduates and GCSE-holders are unemployed for a while when they leave full-time study, in two years less than 9% of graduates are still looking for work, compared with almost 27% of school-leavers. Overall, graduates earn more too.

The push to send more young people to university does, in most cases, improve their chances. But it also increases the pressure on those left behind. Graduates, no less than migrants and older people working on, are taking jobs that less-skilled young Brits might once have had, notes Jim Hillage of the Institute for Employment Studies. It is an unintended consequence, but an important one.

Reality check

Recent university graduates*



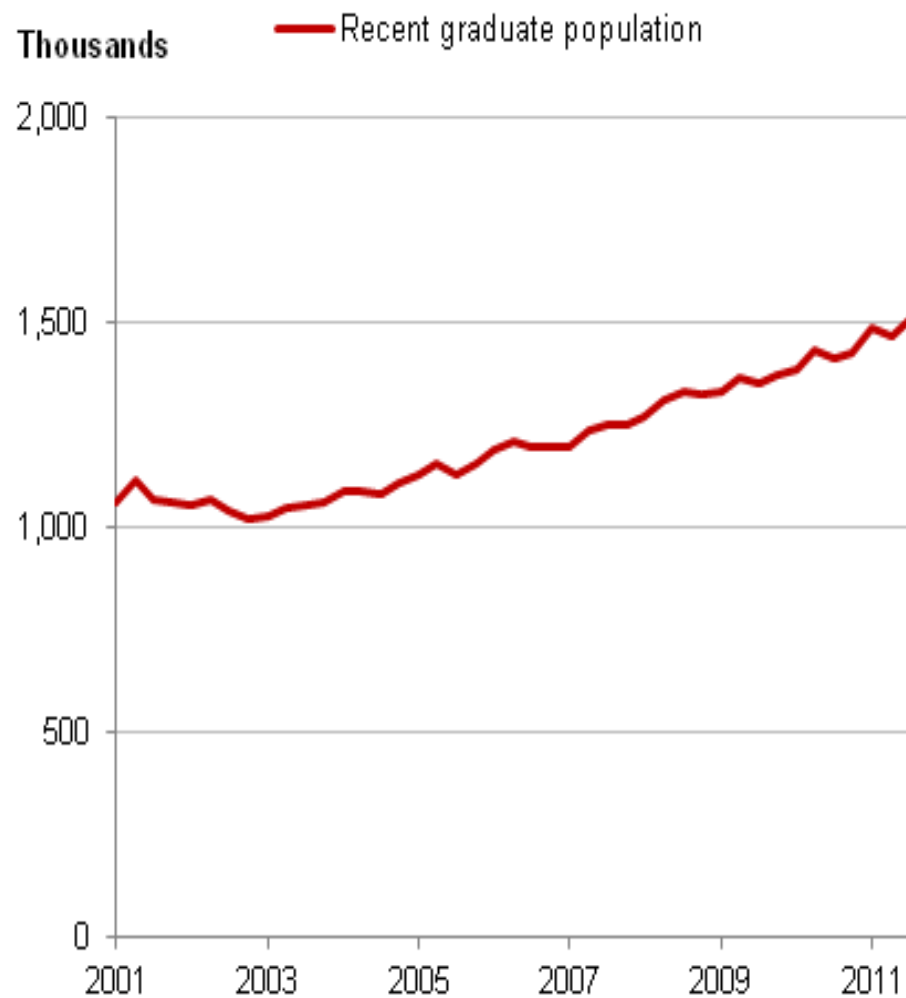
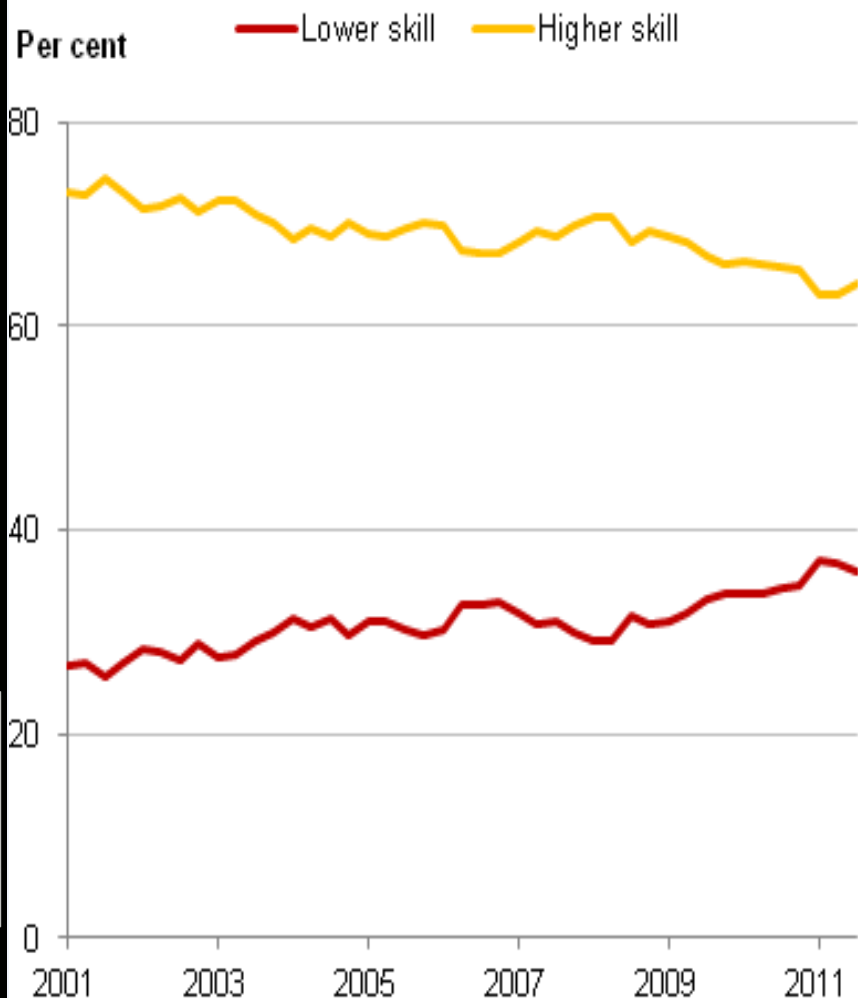
Source: ONS

*Within past six years

No Reino Unido:

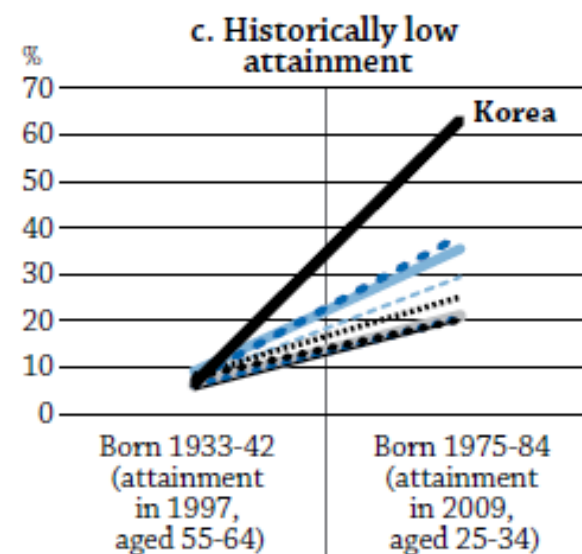
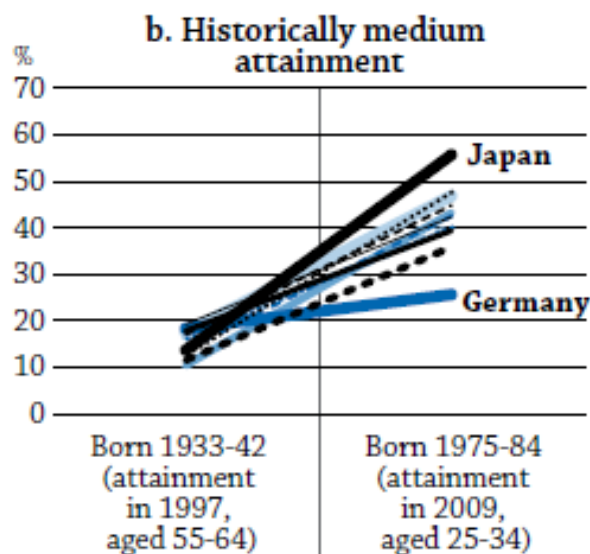
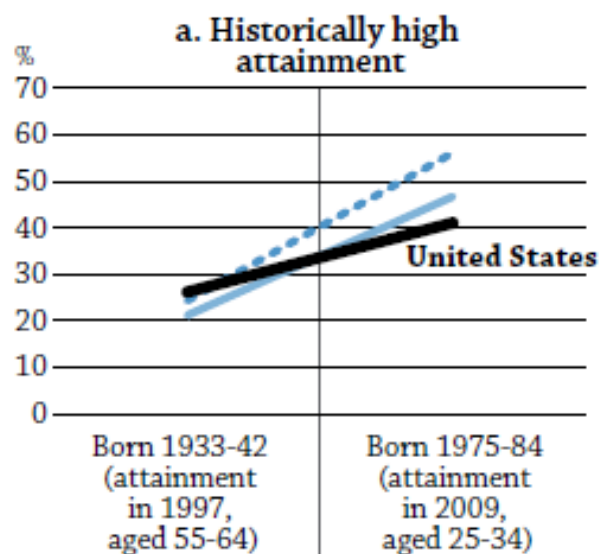
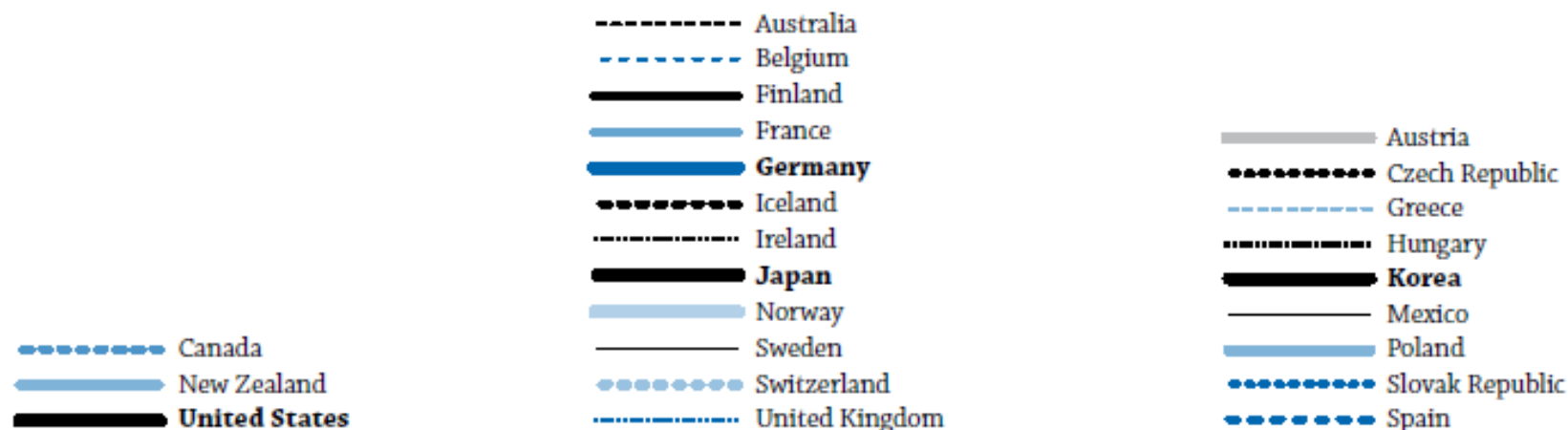
Recent graduates by skill level of occupation (per cent), Q2 2001 - Q4 2011, UK

UK, seasonally adjusted



Source: Labour Force Survey - Office for National Statistics

Progress in attainment of tertiary education over half a century, by country



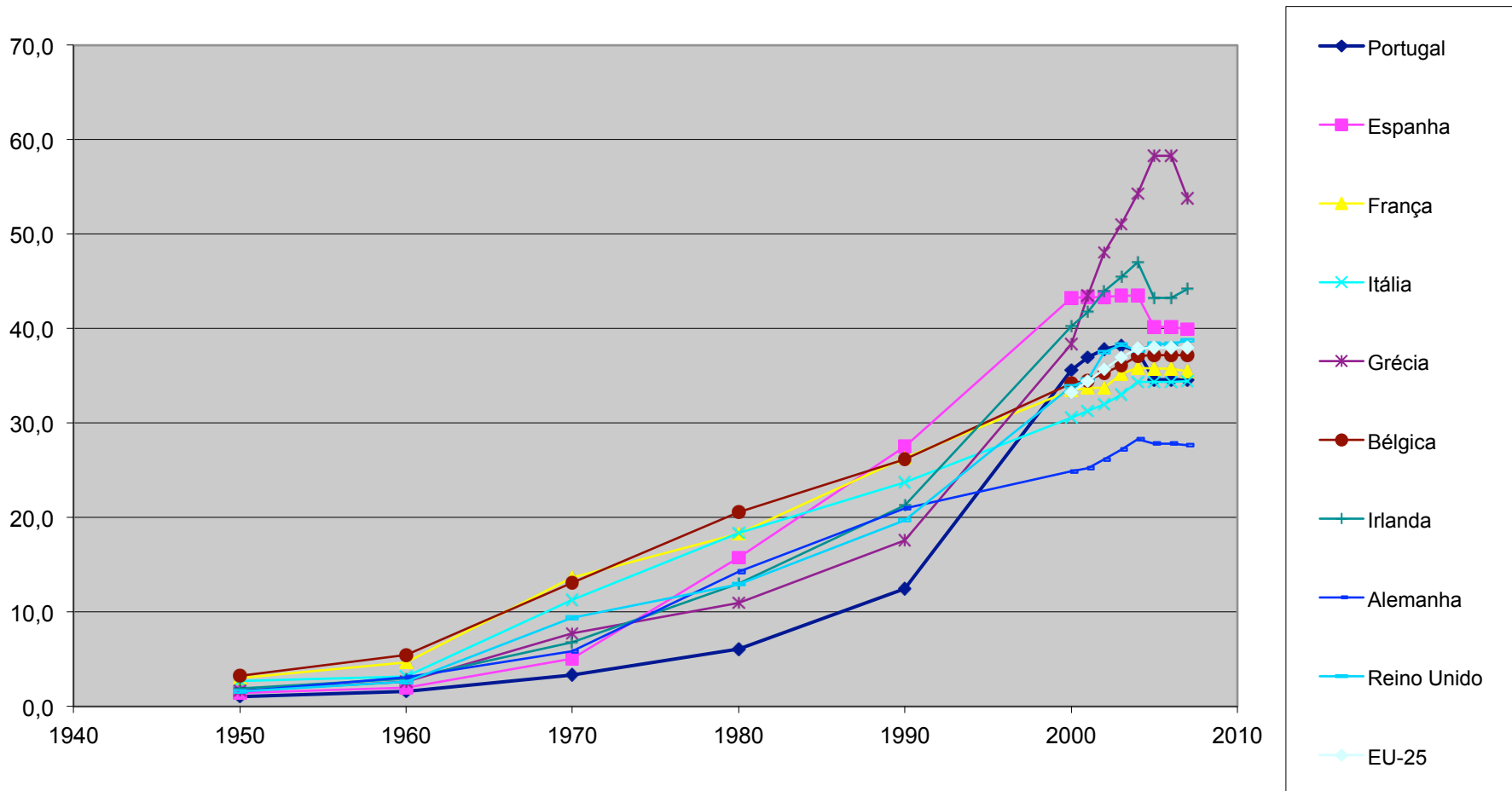
Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2011).

StatLink <http://dx.doi.org/10.1787/888932479002>

1. Late massification of HE

- The last 50 years

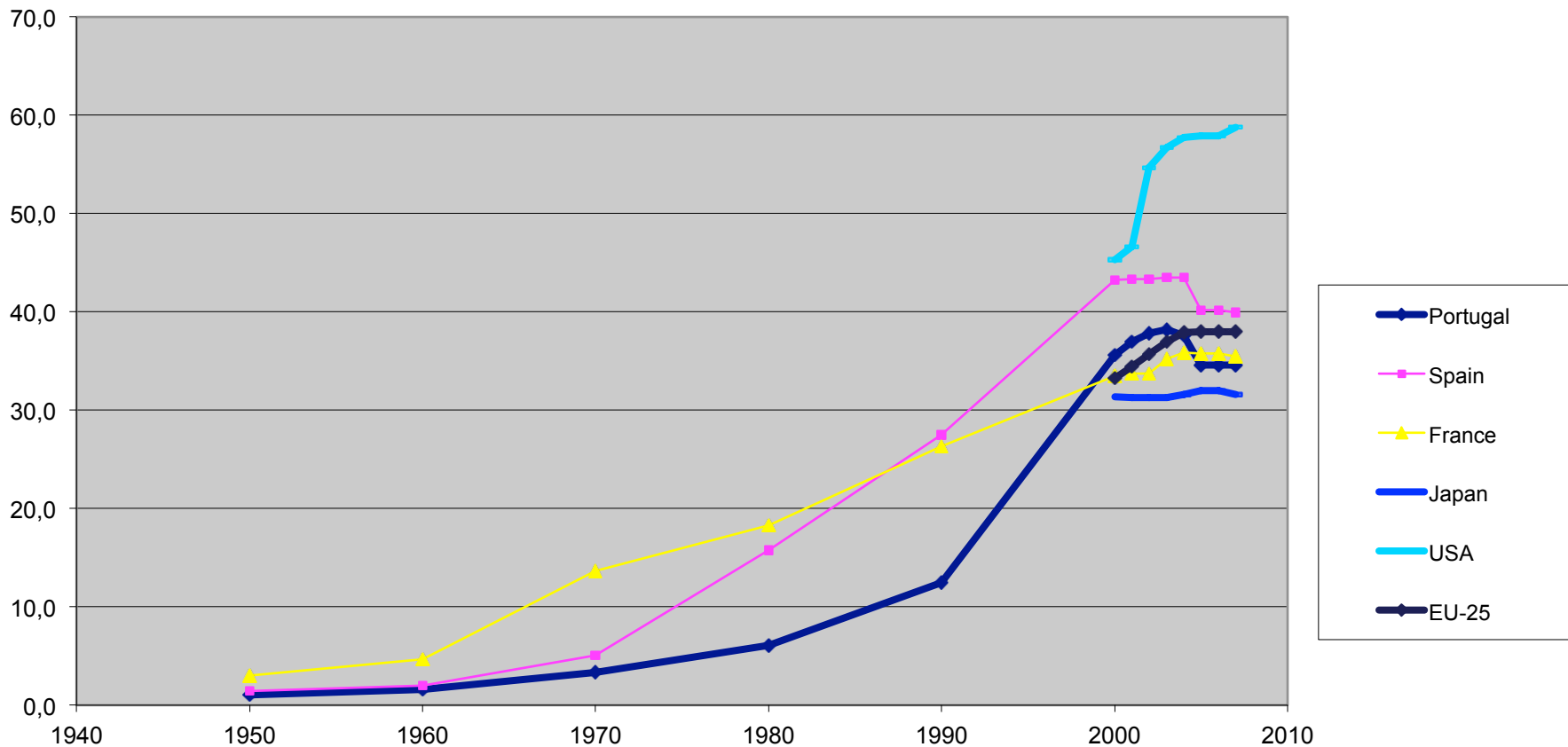
Growth of HE enrollment in Europe, per 1000 hab



1. Late massification of HE

- The last 50 years

Higher education enrollment, per 1000 hab.



Educação superior em Portugal

2009/10	Enrollment	(of which non-nationals)	CET	Entry 2010
Universities, public	183 806	(11 482)	438	35 236
Polytechnic, public	110 022	(2 872)	4 806	28 679
Total, public	293 828	(14 354)	5 244	63 915
Universities, private	60 174	(4 184)	773	13 888
Polytechnic, private	29 625	(680)	197	5 830
Total, private	89 799	(4 869)	970	19 718
Grand Total	383 627	(19 425)	6 214	83 633

Cohort ca. 110 000

Portugal

2009/10	Stud(L+M)	Grad.BA	Grad.MA	yr/Lic
Univ	232 586	35 883	19 544	6.5
Polit.	139 870	24 541		5.7
	372 456	60 424	19 544	

yr/Lic+Ms
4.2

Espanha 2008

Conv PT: 4.6

2008	Stud(pres.)	Grad.BA	Grad.MA	yr/grado
Ciclo Largo	99 622		17 736	7.8
Ciclo corto	129 092	14 862		6.7
	228 714	32 598		

UNED: 128 601 + 6 405
 UOC: 46 612

Dinamarca 2009

Conv PT: 0.556

2009/10	Students	Grad.BA	Grad.MA	yr/Lic+Ms
Bac+Long	212 081	48 754	24 637	4.4
Med+Short	158 820	36 844		4.3
	370 901	85 597		4.3

http://www.dst.dk/pukora/epub/upload/16218/03edu.pdf

Holanda:

Conv PT: 1.68

2009/10	Students	Grad.BA	Grad.MA	yr/Lic+Ms
Univ	138 761	15 476	17 262	4.2
hbo	240 046	36 905		6.5
	378 807	54 167		

http://www.cbs.nl/nr/rdonlyres/84d0493e-8a94-4509-b0f1-310add8e7614/0/2011a3pub.pdf

USA 2010

Conv PT: 31.3

	Students	Grad. BA	Grad. MA	GradRate at 1.5time
4-yr	332 201			55%
2-yr	250 735			33%
	582 936			

http://www.dst.dk/pukora/epub/upload/16218/03edu.pdf

Alemanha 2011

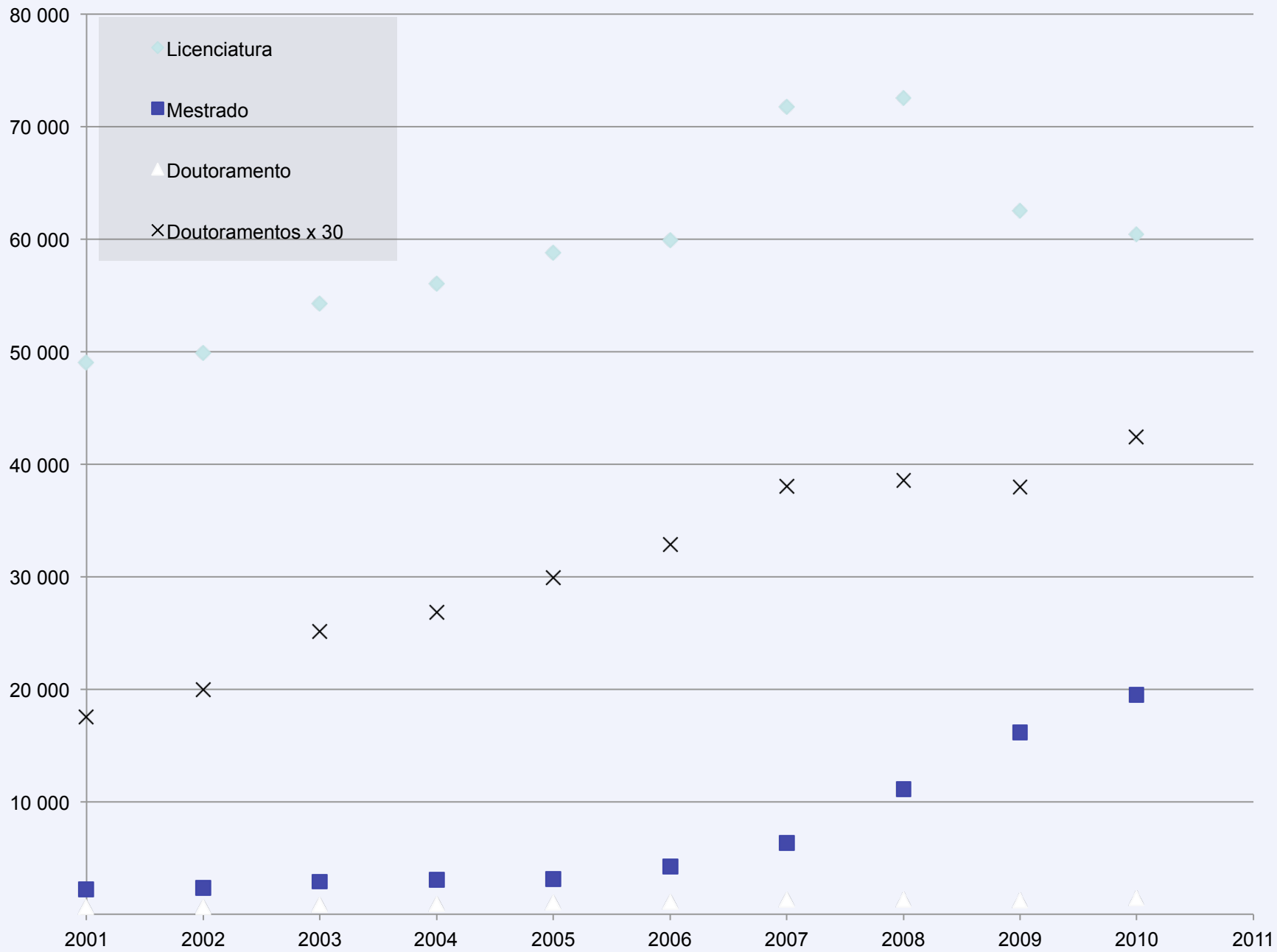
PT: 8.19 Inscr. Grad

Universidades	191 440
Hochschulen	98 797
Total	290 236

A educação superior em grandes números: a realidade portuguesa

	Estudantes Inscritos					Diplomados					Inscritos	Diplomado	Inscritos	Diplomado
	Lic+MI	Mestr 2º	Doutor	CET	Outros	Lic(+MI)	Mestr	Doutor	CET	Outros	Total ES	Total ES	Total 3º	Total 3º
Pub-U	142 793	30 876	16 826		2 469	25 416	14 596	1 339	103	2 139	192 964	43 490	192 964	43 593
Pub-P	100 372	12 905		6 054	1 545	17 583	1 057		1 971	1 029	114 822	19 669	120 876	21 640
Priv-U	51 129	7 788	1 467		66	9 997	3 349	74	495	53	60 450	13 473	60 450	13 968
Priv-P	23 094	3 499		1 123	1 245	6 922	290		79	973	27 838	8 185	28 961	8 264
Militar-U						470	252					722		722
Militar P						36				63		99		99
Púb-U	142 793	30 876	16 826		2 469	25 886	14 848	1 339	103	2 139	192 964	44 212	192 964	44 315
Púb - P	100 372	12 905		6 054	1 545	17 619	1 057		1 971	1 092	114 822	19 768	120 876	21 739
Público	243 165	43 781	16 826	6 054	4 014	43 505	15 905	1 339	2 074	3 231	307 786	63 980	313 840	66 054
Privado	74 223	11 287	1 467	1 123	1 311	16 919	3 639	74	574	1 026	88 288	21 658	89 411	22 232
Universitá	193 922	38 664	18 293		2 535	35 883	18 197	1 413	598	2 192	253 414	57 685	253 414	58 283
Politécnico	123 466	16 404		7 177	2 790	24 541	1 347		2 050	2 065	142 660	27 953	149 837	30 003
Total	317 388	55 068	18 293	7 177	5 325	60 424	19 544	1 413	2 648	4 257	396 074	85 638	403 251	88 286

tipo	Vagas 1.ª Fase	Matric. 1.ª fase	Matric. 2.ª fase	Matric. 3.ª fase	Total	Cand. 1.ª Opçã coloc/vag	1ªopc/vag
Universitário	28 743	22 048	4 996	981	28 025	31 409	98%
Politécnico	24 757	12 807	4 549	806	18 162	15 227	73%



A educação superior por região: Acesso 2011

NUT II	Norte	Centro	LVT	Alentejo	Algarve	Madeira	Açores	In	Ganho%	Ganho
Norte	12 422	928	83	18	35	159	83	13 728	-4%	-8 660
Centro	2 411	9 321	667	186	145	228	136	13 094	2%	2 345
LVT	505	1 979	11 222	600	475	312	185	15 278	10%	14 505
Alentejo	62	278	273	870	129	34	13	1 659	-2%	- 620
Algarve	41	92	108	107	914	22	10	1 294	-9%	-2 040
Madeira	3	3	9	1	1	559	2	578	-26%	-4 500
Açores	16	24	15	1	3	14	483	556	-9%	-1 780
Out	15 460	12 625	12 377	1 783	1 702	1 328	912	46 187		

A educação superior por região: Acesso 2011

NUT II	Norte	Centro	LVT	Alentejo	Algarve	Madeira	Açores	Total
Matriculados U	8 161	6 023	11 322	932	551	559	477	28 025
Matriculados P	5 567	6 981	3 956	817	743	19	79	18 162
1ª opção U	11 182	5 496	12614	680	348	675	414	31 409
1ª opção P	5 044	4 967	3 964	506	633	46	67	15 227
Ganho U	- 3 021	527	- 1292	252	203	- 116	63	-3 384
Ganho P	523	2 014	- 8	311	110	- 27	12	2 935
Ganho U+P	- 2 498	2 541	- 1300	563	313	- 143	75	- 449

A educação superior por região: Acesso 2011

Transferência e estudantes entre regiões

	Região de ES norte litoral;	Região de ES norte interior;	Região de ES do Porto;	Região de ES do centro norte;	Região de ES do Centro litoral;	Região de ES do centro interior;	Região de ES de Lisboa;	Região de ES de Lisboa e sul do Tejo;	Região de ES do Alentejo;	Região de ES do Algarve;	Região de ES da Madeira;	Região de ES dos Açores.	In	ganho%	Ganho
Região de ES norte litoral	3286	96	464	60	15	6	11	7	3	10	26	17	4001	-12%	-8 680
Região de ES norte interior	475	837	486	151	29	23	20	15	7	6	18	9	2076	2%	359
Região de ES do Porto	887	254	5637	515	70	34	33	22	8	19	115	57	7651	7%	7 651
Região de ES do centro norte	217	83	419	1663	167	97	73	22	11	17	24	13	2806	-12%	-5 200
Região de ES do Centro litoral	438	223	539	1059	3633	288	536	143	65	88	131	81	7224	8%	2 117
Região de ES do centro interior	166	114	181	343	182	775	175	53	78	23	44	24	2158	3%	610
Região de ES de Lisboa	151	72	144	251	693	226	6166	3618	481	383	278	160	12623	3%	4 079
Região de ES Lisboa e sul Tejo	59	23	87	69	162	38	1235	1522	151	109	63	43	3561	-5%	-2 087
Região de ES do Alentejo;	32	9	21	29	104	43	201	174	870	129	34	13	1659	-1%	-124
Região de ES do Algarve;	20	2	19	10	38	16	73	63	107	914	22	10	1294	-2%	-408
Região de ES da Madeira;	2	0	1	1	2	0	6	3	1	1	559	2	578	-4%	-750
Região de ES dos Açores.	4	4	8	4	12	2	15	6	1	3	14	483	556	-2%	-356
Out	5737	1717	8006	4155	5107	1548	8544	5648	1783	1702	1328	912	46187		-2 789

1. Late massification of HE

- The last 50 years
- **Private HE**

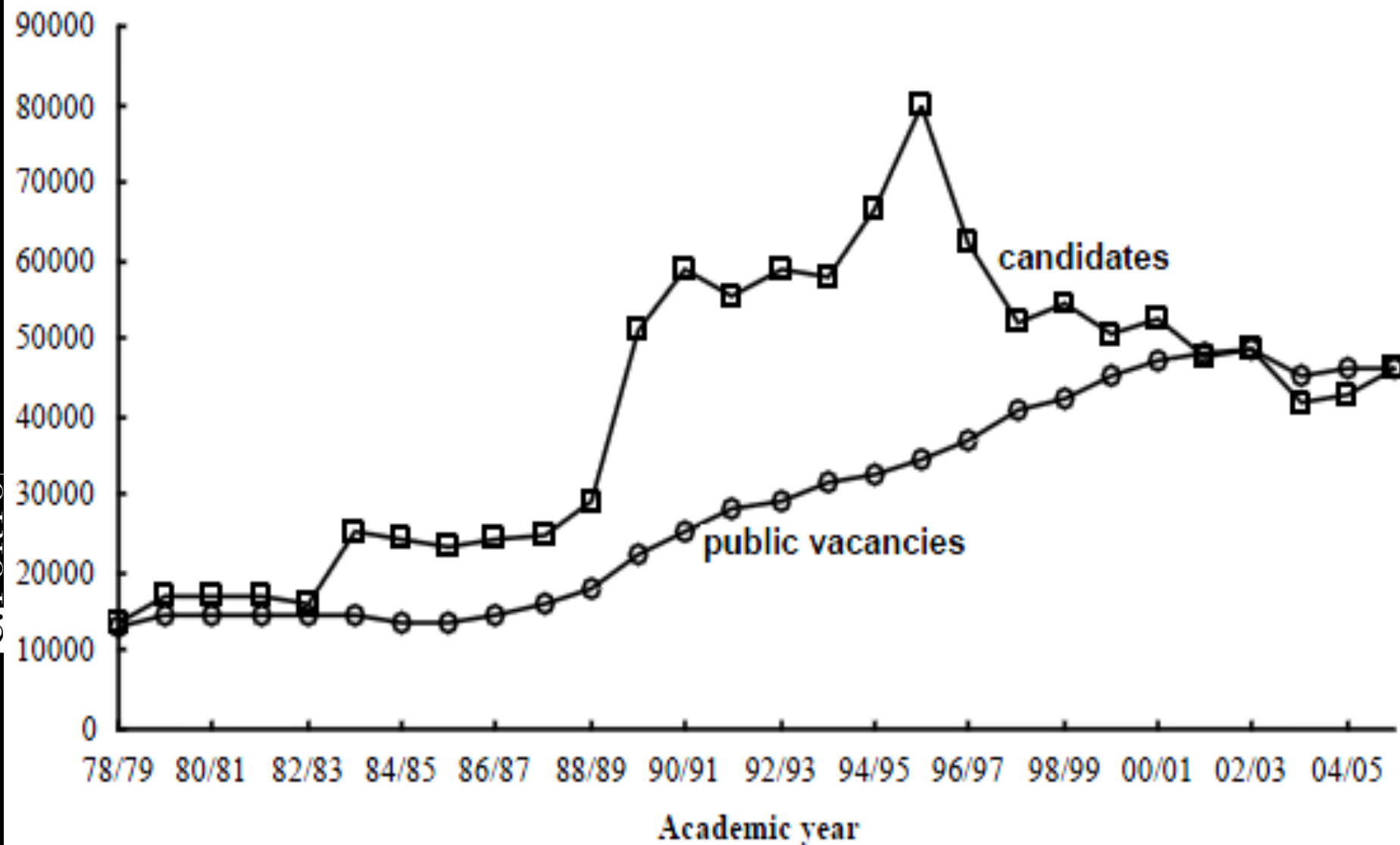
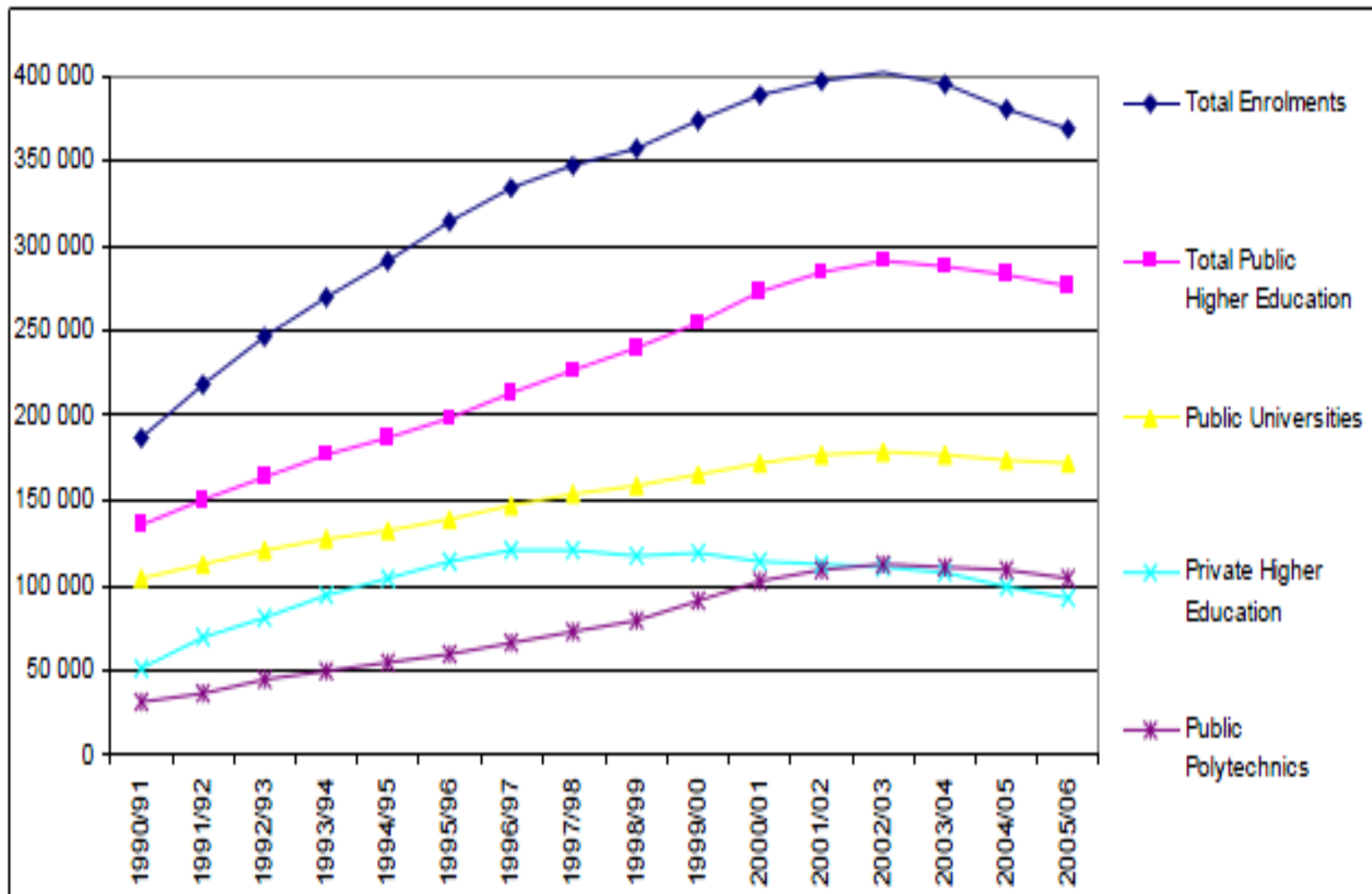


Figure 1.1 – Evolution of the overall number of students (graduate and post-graduate) enrolled in higher education in Portugal, 1990/91 – 2005/06



1. Late massification of HE

- The last 50 years
- Private HE
- **Universities and Polytechnics & CETs**

2009/10	Enrollment	(of which non-nationals)	CET
Universities, public	183 806	(11 482)	438
Polytechnic, public	110 022	(2 872)	4 806
Total, public	293 828	(14 354)	5 244
Universities, private	60 174	(4 184)	773
Polytechnic, private	29 625	(680)	197
Total, private	89 799	(4 869)	970
Grand Total	383 627	(19 425)	6 214

Cohort ca. 110 000

Current supply/demand (public)

2011 Entry (public)

Population	Region	OpeningsT	1 ^a optiT	Open/pop	1 ^a opt/Pop
3 743 333	Norte	15 420	16 226	82%	102%
2 378 485	Centro	15 145	9 002	127%	89%
2 835 387	Lisboa	16 225	16 578	114%	137%
751 231	Alentejo	3 570	1 385	94%	43%
435 833	Algarve	1 852	981	84%	53%
247 483	Madeira	605	721	49%	68%
245 592	Açores	683	481	55%	46%
10 637 344	Total	53 500	45 374	100%	100%

Cohort

(15-24years 1 145 770)

110 000

Openings (public)

53 500

Placed

46 187

Placed (and not placed in 2010)

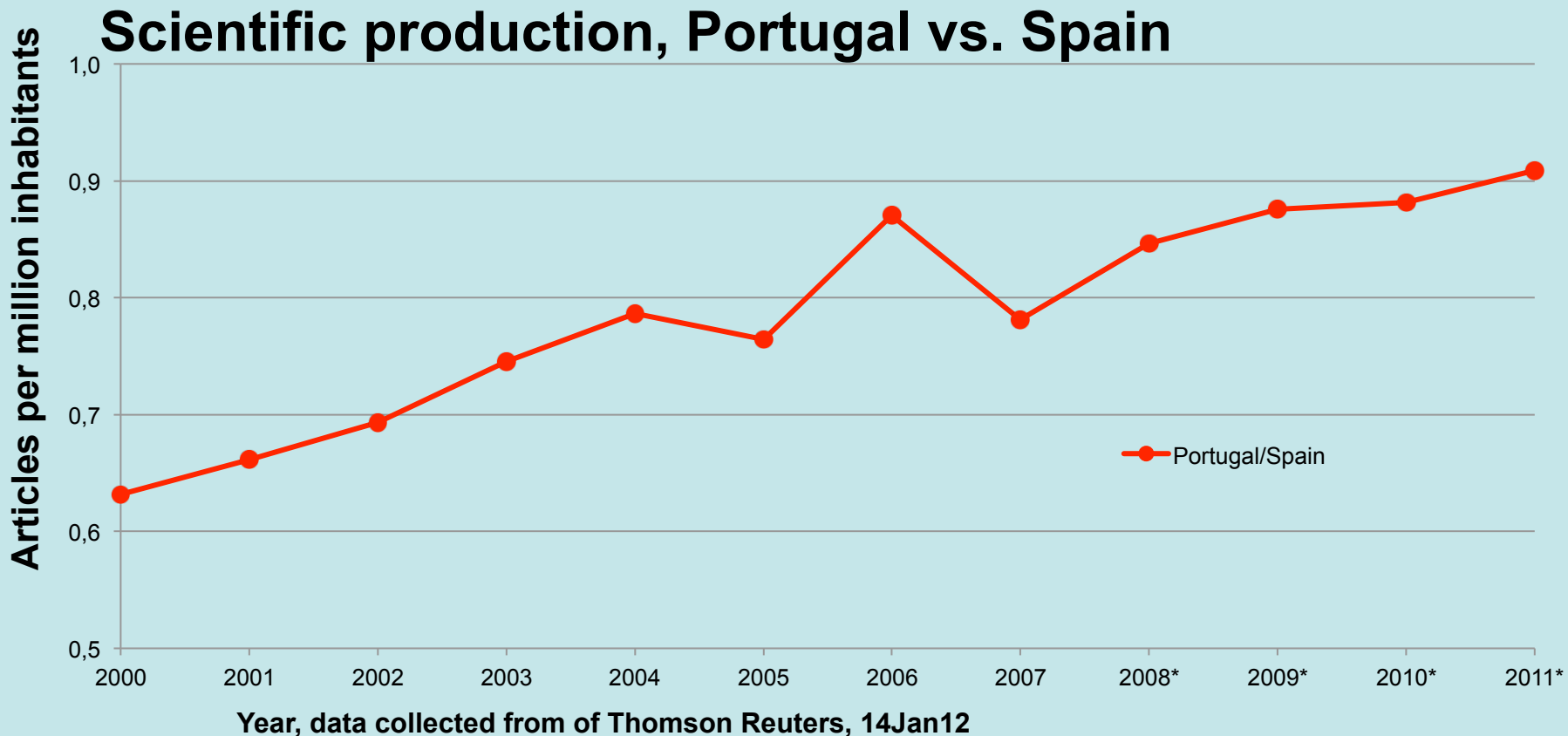
42 716

Entry in Polytechnics by other channels

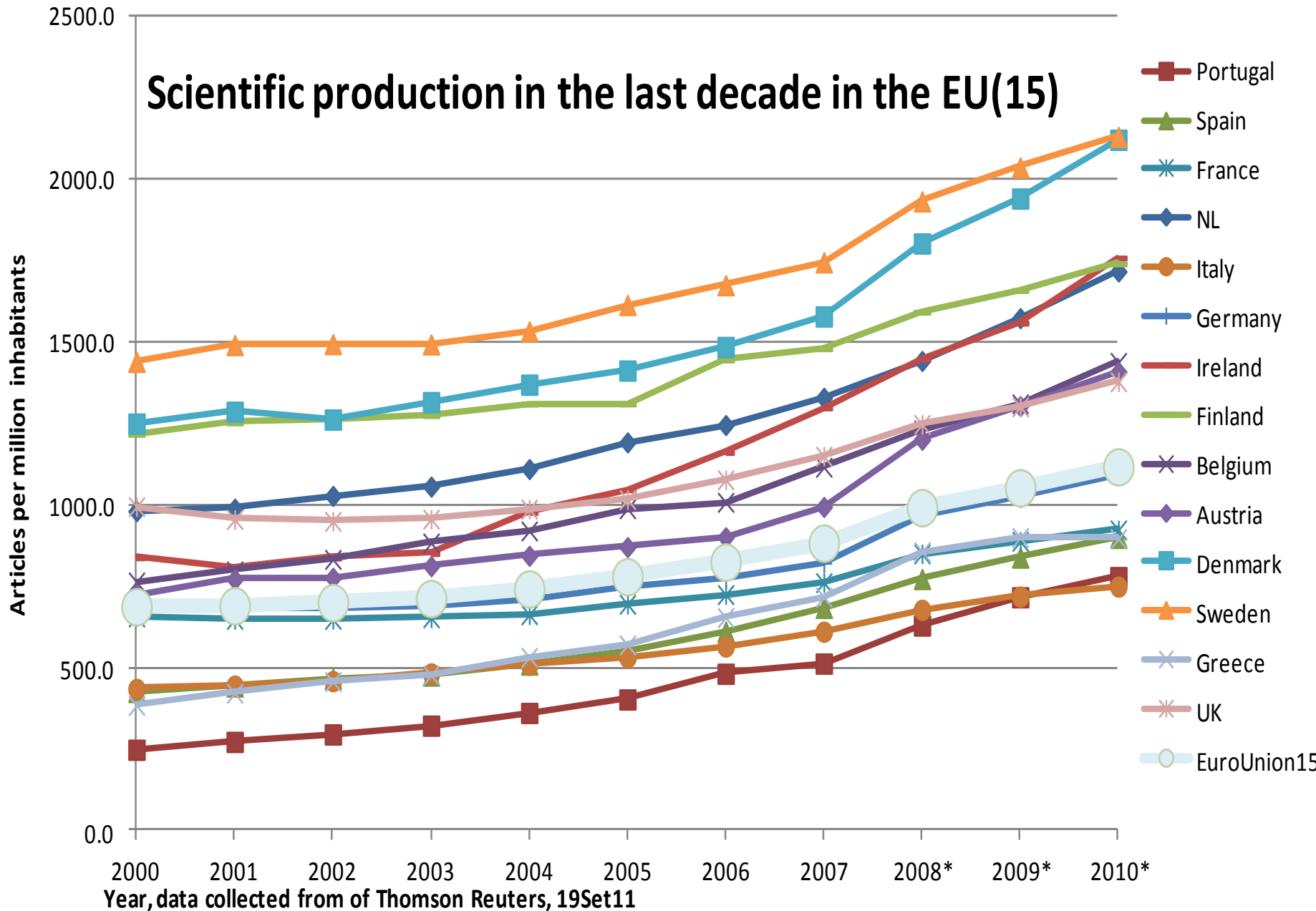
7 854

1. Late massification of HE

- The last 50 years
- Private HE
- Universities and Polytechnics & CETs
- **Science and knowledge transfer**



Scientific production in the last decade in the EU(15)



Public direct funding to institutions

Portugal		OE 2012	Enrolment	€/stud
Universities	TOTAL	€577,801,164	153423	€3,766
Polytechnics	TOTAL	€262,912,039	81146	€3,240

Switzerland		Public Funding	Enrolment	CHF/stud
University	TOTAL	CHF 5,067,000,000	110168	CHF 45,993
UAS	TOTAL	CHF 1,334,000,000	32534	CHF 41,003

1. Late massification of HE

2. Finance: direct subsidies and student support

Public direct funding to institutions

2000: €1,463,783,932

€5,958 per student

in 2010 euro incl. Gov. retirem. plan

2012: €840,713,203

€3,584 per student

2012: €747,814,000

€3,188 per student

Corrected for salary reduction in 2012

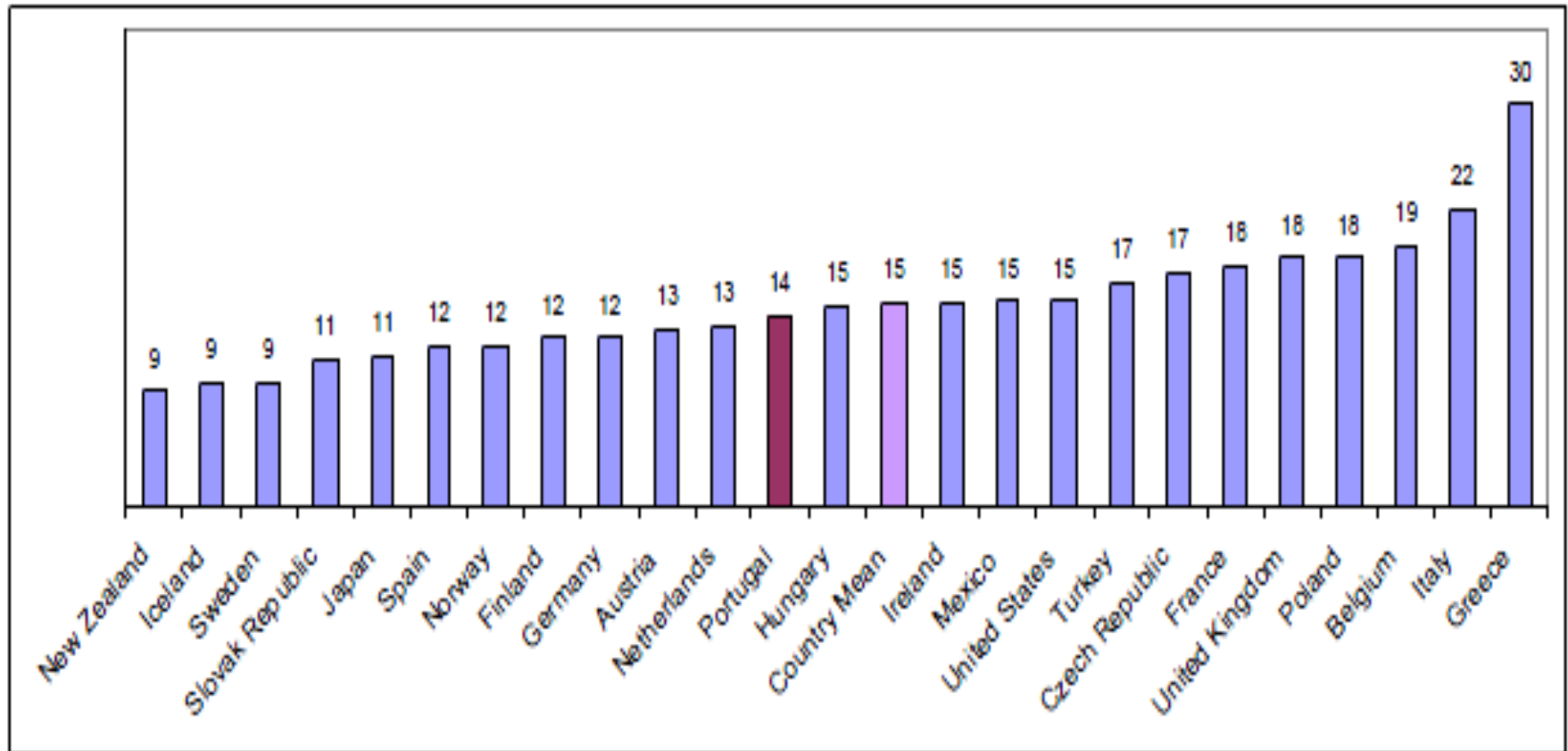
Change : -40%

Including student fees: €1000:	€4188	Change:	-30%
(24% of the total cost)		Salary reductions:	11%
		Other savings:	18%

1. Late massification of HE

2. Finance: direct subsidies and student support

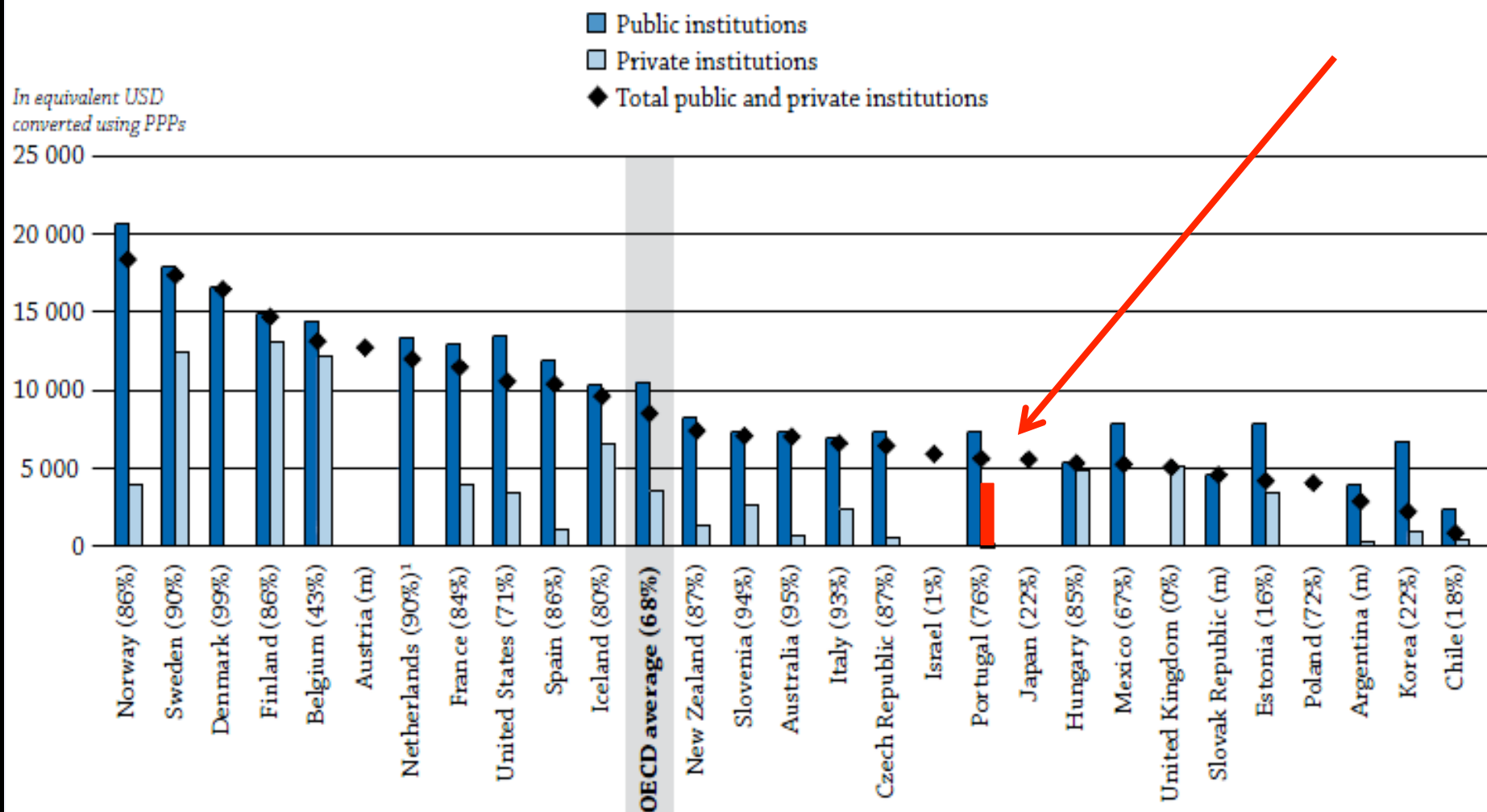
Figure 1.13 – Ratio of students to teaching staff in higher education in OECD (2003)



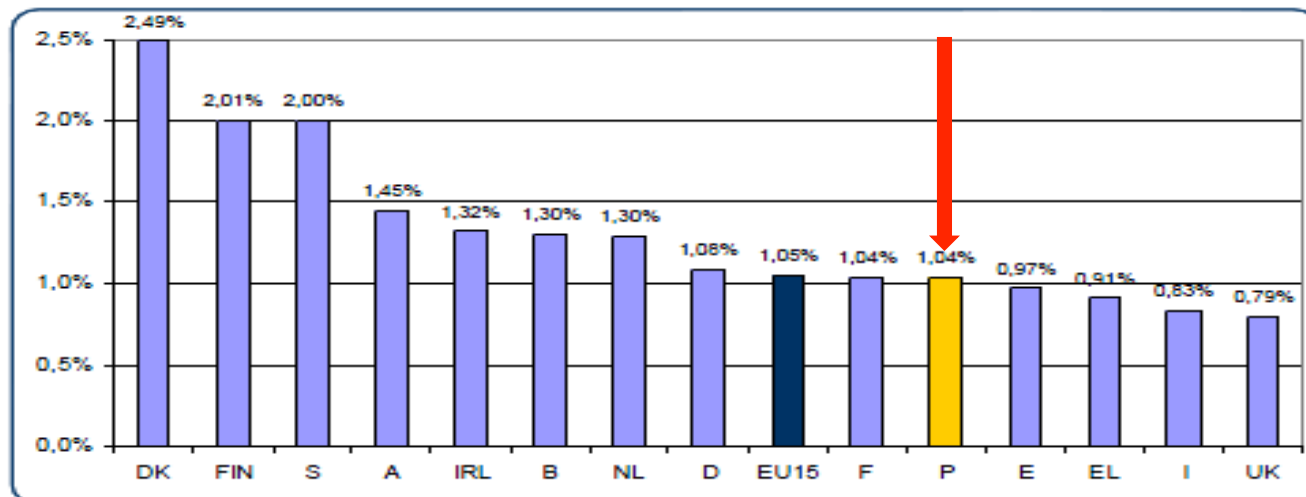
Notes: Teaching staff is based on full-time equivalents, FTEs; Norwegian and Portuguese data refer to public institutions only;

Sources: Portuguese data from DGESUP and OCES; otherwise: OECD (2005), Education at a Glance.

Chart B3.4. Annual public expenditure on educational institutions per student in tertiary education, by type of institution (2008)



Public expenditure on higher education, as a fraction of GDP (%)

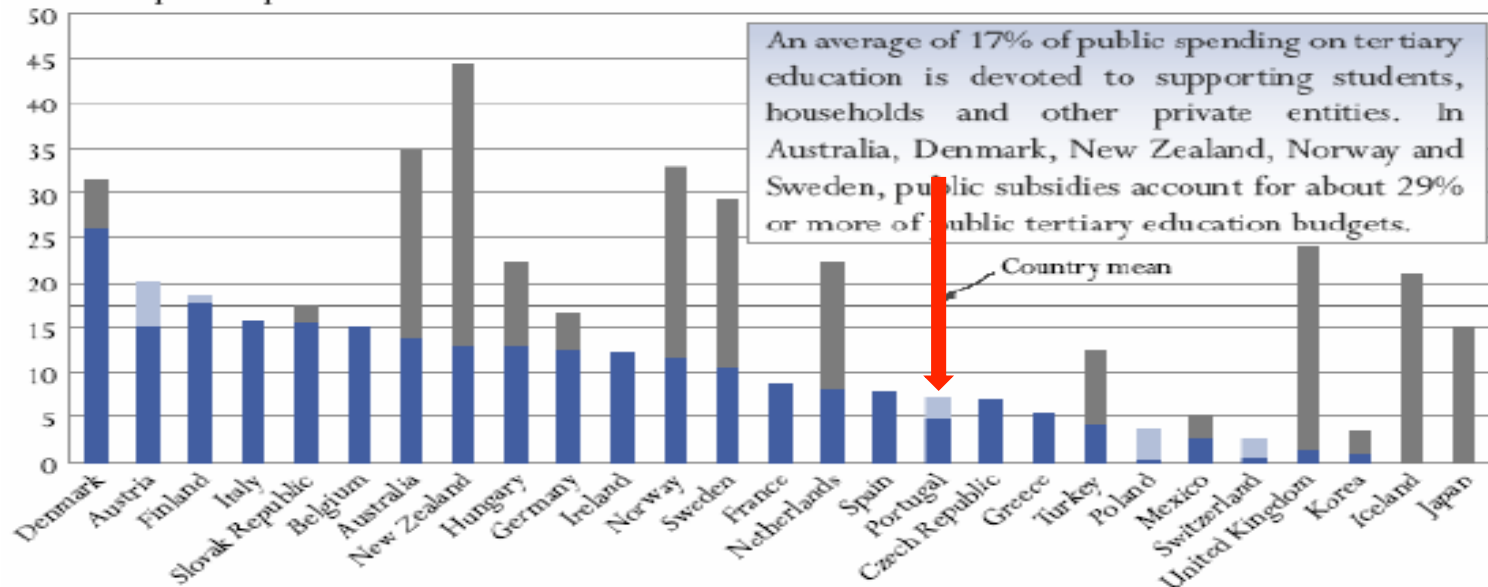


Source: "Education Across Europe 2003", Eurostat; data from last year available or 2000

Public subsidies for education in tertiary education, 2002

■ Scholarships/other grants to households ■ Transfers and payments to other private entities ■ Student loans

% of total public expenditure on education



Note: The chart presents different public subsidies for education to households and other private entities as percentage of total public expenditure on education, by type of subsidy. Public subsidies to households provide finance as grants or loans, and include: i)

Family income and choice of higher education sub-system.

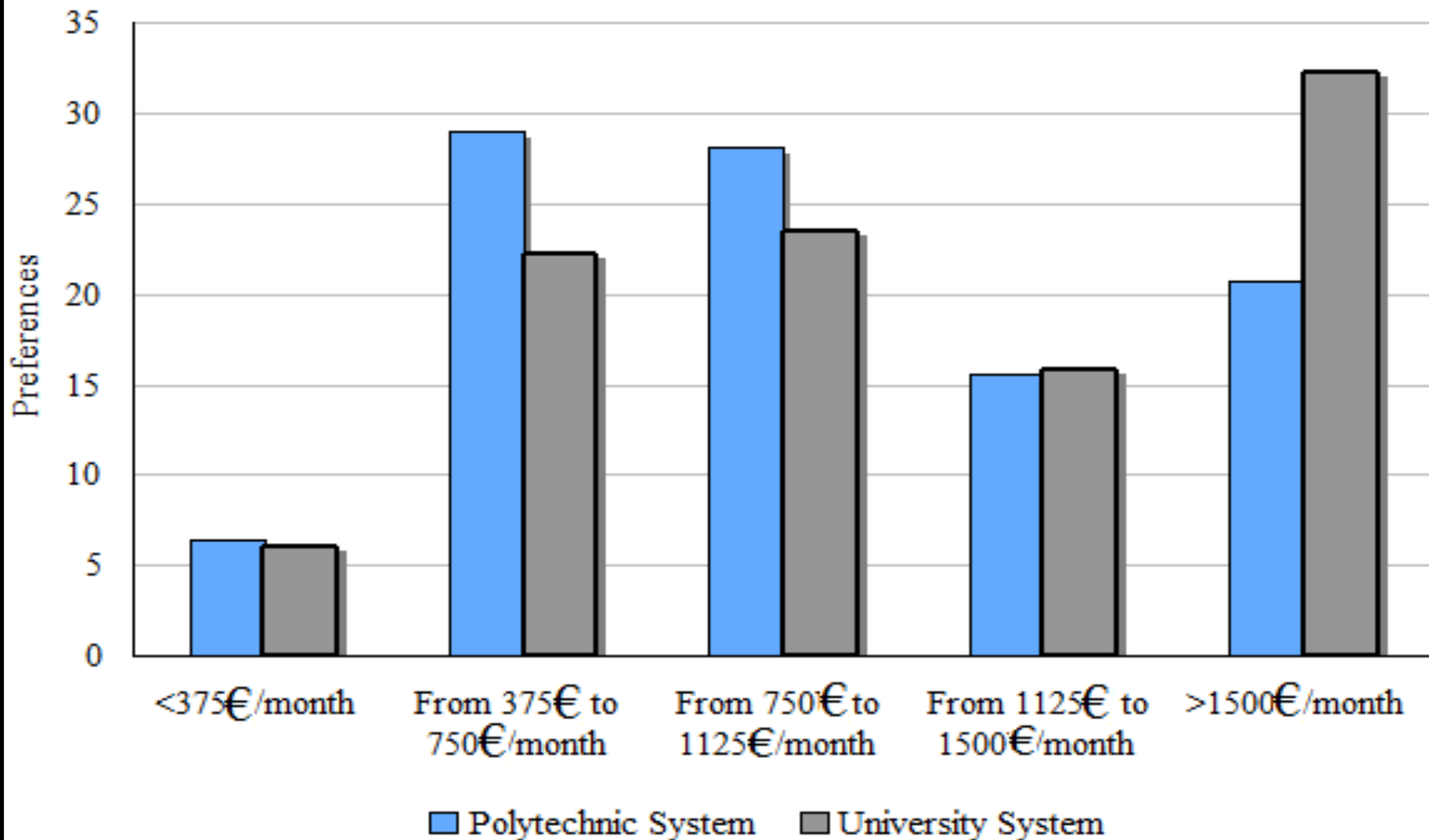


Chart B2.2. Expenditure on educational institutions as a percentage of GDP (2008)

From public and private sources, by level of education and source of funds

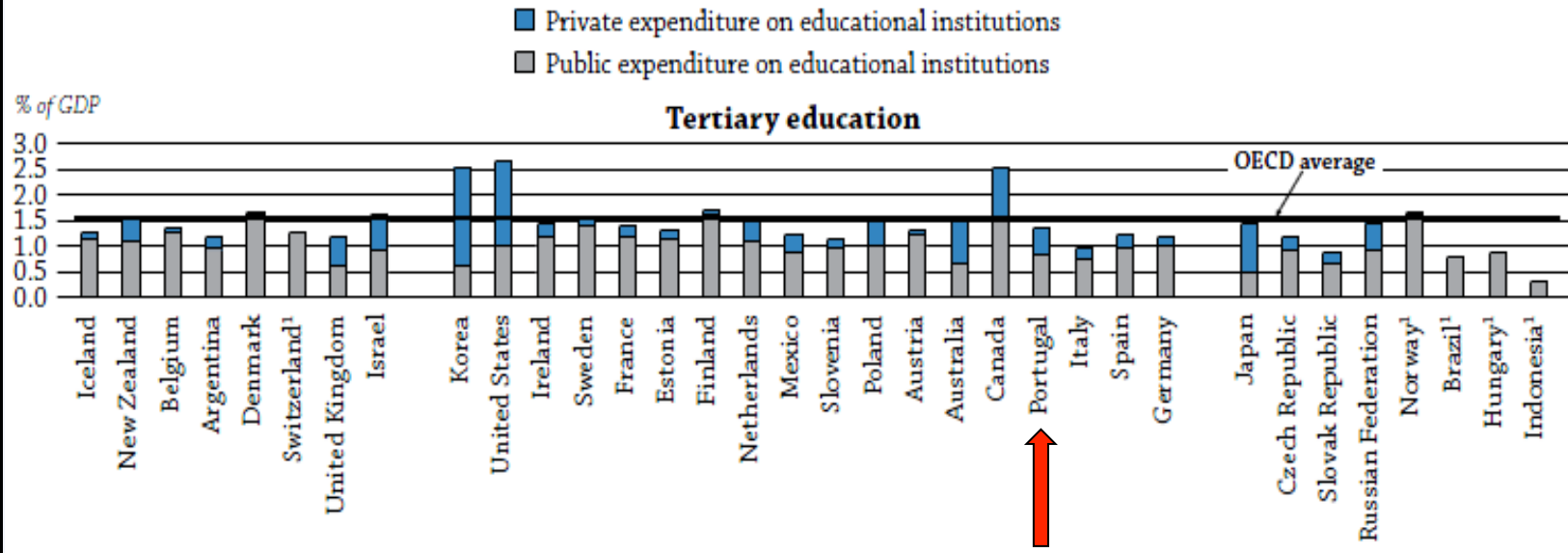
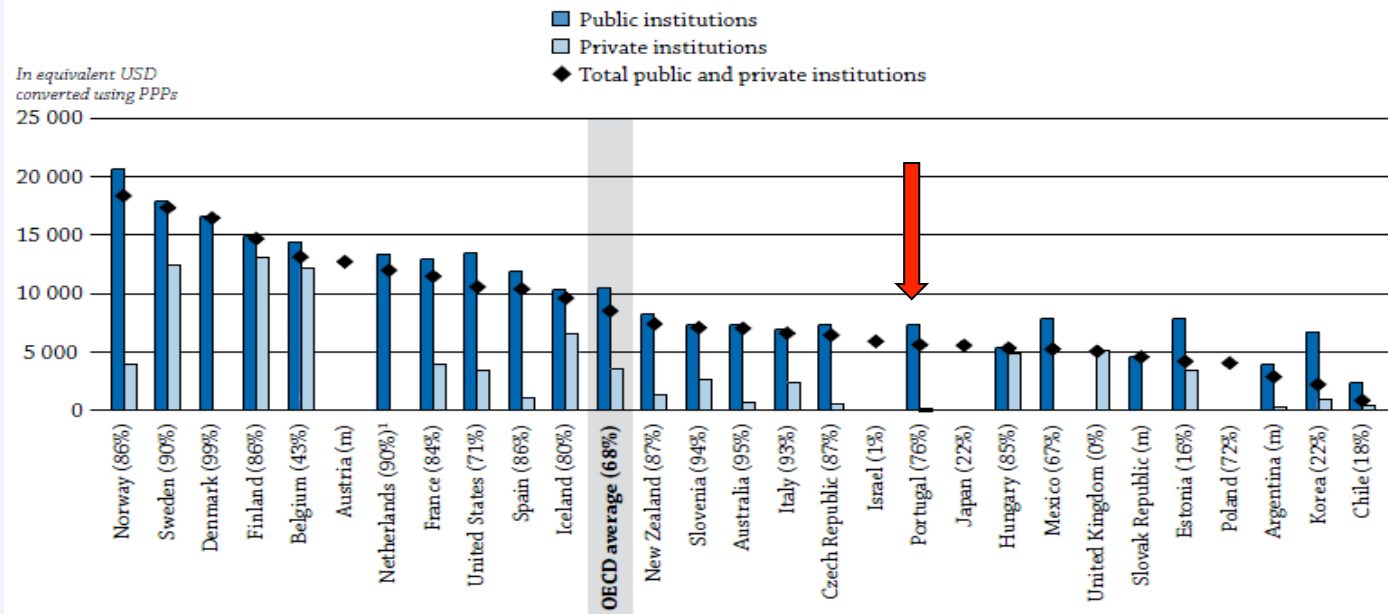


Chart B3.4. Annual public expenditure on educational institutions per student in tertiary education, by type of institution (2008)



1. Late massification of HE

2. Finance: direct subsidies and student support

3. Quality system

Voluntary system of institutional evaluation, before 1998

CNAVES, National council of evaluation, 1998-2005

A3ES, national agency for evaluation and accreditation
2007-

1. Late massification of HE

- The last 50 years
- Private HE
- Universities and Polytechnics & CETs
- Science and knowledge transfer

2. **Finance:** direct subsidies and student support

3. **Quality system**

4. **Consolidation strategies**

- **Differentiation**
- **Quality**
- **Public finance**
- **Knowledge transfer**

4. Consolidation strategies

- **Differentiation**
 - **Education & Training**
 - **CET**
 - **HE**
 - **Polytechnics**
 - **Universities**

How to strengthen the culture of the polytechnics?

4. Consolidation strategies

- Differentiation
 - Education & Training
 - CET
 - HE
 - Polytechnics
 - Universities

HE by NUT II region

Population	per million inhabitants	Univ	Poli	BA graduates	Total, Univ+Poli		Matr/100ç	BAgrad/Matr		
		MatricAc	MatricAc		MatricOu	Univ			Poly	MatricA
3 743 333	Norte	2180	1487	497	1561	949	3667	2510	85%	68%
2 378 485	Centro	2532	2689	1466	1727	1759	5221	3486	123%	67%
2 835 387	Lisboa &	3993	1602	692	2518	1050	5595	3568	94%	64%
751 231	Alentejo	1241	1088	724	724	732	2328	1456	147%	63%
435 833	Algarve	1264	1705	0	987	1411	2969	2398	132%	81%
247 483	Madeira	2259	77	0	1952	150	2336	2101	80%	90%
245 592	Açores	1942	322	0	672	419	2264	1091	116%	48%
10 637 344	Total	2635	1707	738	1759	1130	4342	2889	99%	99%

Ballance the offer of HE (U & P) all over the country!

4. Consolidation strategies

Da população de 19 anos (INE, Anuário Estatístico de Portugal 2010)						
Univ	Poli	Poli	Licenciados		Total, Univ+Poli	
MatricAcesso	MatricAcesso	MatricOutro	Univ	Poly	MatricAcesso	Licenciados
18%	12%	4%	13%	8%	31%	21%
23%	25%	13%	16%	16%	48%	32%
40%	16%	7%	25%	10%	56%	36%
12%	11%	7%	7%	7%	23%	14%
12%	17%	0%	10%	14%	29%	23%
17%	1%	0%	14%	1%	17%	15%
13%	2%	0%	5%	3%	15%	7%
24%	15%	7%	16%	10%	39%	26%
		Privado:	560	4395		
		Total:	16%	14%		
		Sucesso(público):	67%	46%		

4. Consolidation strategies

- **Differentiation**
- **Quality**
 - **A3ES**
 - **Evaluation for accreditation or for excellence**
 - **Learning outcomes**

Introduce the assessment of learning outcomes?

New in Europe!

4. Consolidation strategies

- **Differentiation**
- **Quality**
- **Public finance**
 - **Fees are among the highest in Europe**
 - **Social support may be insufficient for equity**
 - **Loan system exists but with very limited impact**
 - **Can we sustain current level of public finance?**
 - **Reductions will translate in loss of contact time (and quality)**

4. Consolidation strategies

- Differentiation
- Quality
- Public finance
- **Knowledge transfer**
 - **Universities started late**
 - **Results obtained in the last 8 years are encouraging**
 - **Global evaluation of the outcomes is missing**

Enquadramento e Organização do Ensino Superior Nacional

Obrigado!

U. PORTO

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Covilhã, 14 Abril 2012