

# Support for continued data collection and analysis concerning mobility patterns and career paths of researchers

## **Country profile – Remuneration Czech Republic**

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#### 1 RESEARCHER REMUNERATION IN ACADEMIA

#### 1.0 Introduction

This is one of a series of more than 40 country profiles summarising data on the remuneration of researchers and work-related benefits in the academic sector. Data were collected for the European Commission in 2012 by an extensive network of national experts as part of the MORE 2 study. The profiles provide also complementary data from official sources. <sup>1</sup>

A report containing a comparative analysis of the data and more qualitative information related to the remuneration of researchers will also be published as part of the MORE2 study.

The profiles are structured as follows:

- 1. Main indicators
- 2. Salaries, stipends and benefits by job position and employment contract
- 3. Tax system
- 4. Labour legislation in the Higher Education Sector
- 5. Social security system
- 6. Quality of life
- 7. Where available: Gross annual earnings and hourly earnings of non-academic researchers
- 8. Where available: Salary data of university researchers by country A literature survey

In the first section, the main indicators on remuneration (salaries, stipends, and the degree of autonomy of universities to decide on remuneration-related aspects) are compared with the EU-average and the US. In the second section, the profiles summarise minimum, average and maximum annual gross salaries (both in national currency and in purchasing power parities) for all available job positions and employment statuses.

The following sections present an assessment of the value of the gross annual salaries. As it is very difficult to collect data on net salaries that are meaningfully comparable across countries due to very specific regulations, the country profiles include information on the dues that are typically deducted from gross salaries in order to provide an indication of the level of net salaries. Furthermore, data are also presented on the public benefits researchers receive for these deductions. It is important to note that the data provide an indication of the remuneration package and do not offer an exact, comparable measure for researcher salaries across countries.

Finally, where available the profiles also contain information on the gross annual and hourly earnings of non-academic researchers based on Eurostat's Structure of Earnings Survey, and a summary table on salary data collected in other studies.

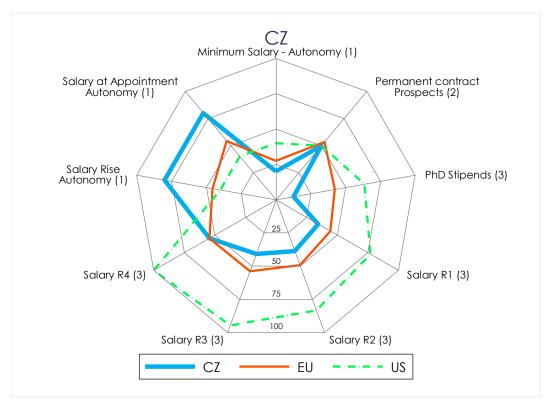
Further information on data collection and results of the study is available in:

IDEA Consult et al, 2013. MORE2 - Support for continued data collection and analysis concerning mobility patterns and career paths of researchers, Remuneration Cross-Country Report (WP4). European Commission, DG Research and Innovation.

<sup>&</sup>lt;sup>1</sup> Data have been collected in 2012. If there are more recent data available, they have not been included in the country profiles but the respective sources are listed in chapter 7 of the MORE2 WP4 report (IDEA et al. 2013).



#### 1.1 Main indicators



Source: MORE II expert survey; Spokes are normalised minimum = 0, and maximum = 100% in case of "PhD-Stipends" and "Salaries R1-R4", maximum = R1 in case of "Permanent contract", and maximum = 5 in case of "Salary rise", "Salary at appointment", and "Minimum salary". Missing values are set to zero.

- 1) **Degree of autonomy:** "Salary rise", "Salary at appointment", and "Minimum salary" based on question: "Please indicate the institutional level at which the following aspects of public university researchers are de-termined?" Scale: (1) National, (2) Regional (state), (3) Sector/collective agreements, (4) University, (5) Individual negotiation, (0) missing value;
- 2) **Prospect of a "permanent contract"** shows the lowest career stage (R1-R4) at which university researchers can obtain permanent contracts.
- 3) **Salaries:** "PhD Stipends", "Salaries R1-R4" show gross annual salaries (in PPP €) paid in the country as a percentage of the best paying country at this career stage.



### 1.2 Salaries, stipends and benefits by job positions and employment contract

		Type of c			ual Gross Sa currency an	•	Mandatory insurances			
Qan <sup>X</sup>	<sub>Katre</sub>	Employnent statute	Contract duration	en entireum	And the least of t	Mathur	Health Ore	Jrempornent	Pension	
R1	PhD-Candidate <sup>1)</sup>	Stipendiary	Other	57,000 (2,662)	75,000 (3,502)	100,000 (4,670)	Х	х	Х	
R1	Assistant / Junior Assistant <sup>2)</sup>	Employee	Fixed 2-4 years	170,000 (7,951)	288,456 (13,491)	390,000 (18,240)	Х	х	Х	
R1	Junior Researcher <sup>3)</sup>	Employee	Fixed >4 years	240,000 (11,224)	320,000 (14,966)	360,000 (16,836)	Х	х	Х	
R2	Assistant Professor / Senior Assistant <sup>4)</sup>	Employee	Fixed >4 years	200,000 (9,354)	372,170 (17,406)	900,000 (42,091)	Х	Х	Х	
R3	Docent (Associate Professor) 5)	Employee	Permanent	300,000 (14,030)	546,500 (25,559)	1,200,000 (56,122)	Х	Х	X	
R3	Senior Researcher <sup>6)</sup>	Employee	Permanent	420,000 (19,643)	450,000 (21,046)	610,000 (28,528)	х	Х	Х	
R4	Professor <sup>7)</sup>	Employee	Permanent	500,000 (23,384)	721,176 (33,728)	2,100,000 (98,213)	Х	Х	Х	

Source: MORE II - Expert Survey; National currency: CZK; Annual Gross Salary: Source: 1) 2011; HEIs; Ministry of Education; 2, 4, 5, 7) 2010; Institute for information on education; 3, 6) 2010; Estimate by the Country Expert; Notes: ad Salary: In national statistics published by the Institute for Information on Education, the two positions (Junior Researcher & Senior Researcher) are shown together (e.g. average annual salary 356 208 CZK). These data have been separated using the wage schedules of some typical HEIs obtaining the minimum and maximum salaries. The average salaries are estimated using the data from 3 investigated HEIs within MORE II. Both positions are not very frequent on Czech HEIs (both about 10% in academia). ad Stipends: Standard time of study in doctoral study programme (3 or 4 years); Public HEIs obtain financial means only for students who did not exceed standard time of study more then one year. The Ministry of Education provides financial means for PhD stipends only for PhD candidates on-site regularly participating in lectures, seminars, or classes. There are no restrictions concerning other income. Stipends are for national students only (foreign students can obtain other kind of stipends). The individual HEIs mostly make a difference in the value of stipends in the first, second and third (or fourth) year of the doctoral study; PPP: Salaries and Stipends in national currency are converted into PPP US-Dollar (2011) and the resulting PPPs are converted into EURO using the currency exchange rate of Eurostat 1,3920\$ = 1EURO; if the year of the salary or the stipend is not 2011, the amount was grossed up to to 2011 using the unit labour costs index of the AMECO database



#### 1.3 Tax System

Taxes								
Income bracket in national currency from	0							
Income bracket in national currency to	max							
Marginal Tax rate	15.0							
Levy of income tax	The emplo	yer automa	tically dedu	icts the inco	me tax fro	m the gross	salary	

Tax Wedge in % of labour costs								
Single, no children (average wage)	42.16	Married couple, two children (average wage)	21.24					
Single, no children (167% of average wage)	44.70	Married couple, two children (167% of average wage)	34.40					
Married couple, no children (133% of average wage)	40.00							

Tax rate: Source: OECD, 2011\*; Levy of income tax: Source: MORE II - Expert Survey based on question "Please indicate how personal income tax is usually levied?"; Tax Wedge in % of labour costs: Source: OECD, 2010\*; Note: Income tax plus employee and employer contributions less cash benefits in % of the labour costs for selected personal circumstances.

\* More recent data available, cf. IDEA et al. 2013, ch. 7.

#### 1.4 Labour legislation in the Higher Education Sector

Institutional levels determining remuneration aspects									
Salary (at appointment)	University	Unemployment insurance	National						
Salary rise	University	Health care insurance	National						
Minimum salary	National	Retirement pension insurance	National						
Working time	National								
Relevant factors for salary rise (incl. rank)  Seniority(1); Performance(2); Other reasons									

<u>Source:</u> MORE II - Expert Survey based on question "Please indicate the institutional level at which the following aspects of public university researchers are determined?"; <u>Country-specific comment:</u> Salary rises depend on the financial situation of the university. i.e. the resources from allocated by the state's budget.

Dismissal of University Researchers								
	9 months tenure		4 years ten	ure	20 years tenure			
Notice period (in months)	2	.0	2.0		2.0	2008	OECD	
Severance pay (in months)	0	.0	0.0		0.0	2008	OECD	
Duration of Compensation in case of Unemployment (in Months)	5	2010	OECD					
Average Net Replacement Rate in case of Unemployment (in % of previous income for a 40 year old)								
Two-earner married couple, no child	71			o-earner dren	married couple, two	72		

Dismissal of University Researcher: Note: Conversion into months if original data are listed in weeks or days: weeks/7 days \* 30 days; days \* 30 days; Duration of Compensation in case of Unemployment (in Months): Note: For a 40-year old (where benefits are conditional on work history, the table assumes a long and uninterrupted employment record); Average Net Replacement Rate: Source: OECD, 2010\*; Note: The percentage of a worker's pre-unemployment income that is paid out by the unemployment insurance when the worker becomes unemployed in two different categories of personal circumstances.

\* More recent data available, cf. IDEA et al. 2013, ch. 7.



#### 1.5 Social Security System

Insurances usually go beyond what is mandated by law								
Additional health care insurance								
Additional health care insurance by university	Do researchers usually have additional private health care insurance?							
Covered by researchers' remuneration package (incl. mandatory insurance)	Ambulant treatment; Hospital tr	reatment; Rehabilitation; Drugs/pha	armaceuticals					
Additional retirement pension ins	urance							
Additional retirement pension insurance by university	Do researchers usually have Additional private retirement yes pension insurance?							
Additional (private) retirement pension insurance is	Not important							

Additional health care/retirement pension insurances by university: Source: MORE II - Expert Survey based on question "Do universities provide the following social security insurances for university researchers, exceeding what is mandated by law?"; Do researchers usually have additional private health care/retirement pension insurance? Source: MORE II - Expert Survey based on questions "Do researchers usually purchase additional health care insurance/pension funds, beyond what is already provided in the remuneration package?"; Country-specific comment: Additional health care is not usual, but some of them presumably yes. The share of additional pension funds in total pension funds is relatively small (to about 10 %). Covered by researchers' remuneration package (incl. mandatory insurance): Source: MORE II - Expert Survey based on question "Please indicate the extent to which health care is compulsorily covered by researchers' remuneration packages in your country."; Additional (private) retirement pension insurance is...: Source: MORE II - Expert Survey based on question "How important is additional (private) retirement pension insurance for researchers in order to maintain their personal standard of living after retirement?".

#### 1.6 Quality of Life

Income and Welfare				Governance						
GDP per capita (in PPP €)	18,711	2011	Worldbank	Voice and Accountability #	26 / 46	2011	Worldbank			
GDP per capita (in €)	14,660	2011	Worldbank	Political Stability and Absence of	11 / 46	2011	Worldbank			
Human Development Index #	25 / 46	2011*	HDI	Government Effectiveness #	26 / 46	2011	Worldbank			
Life expectancy	77.70	2011*	UNDESA	Regulatory Quality #	20 / 46	2011	Worldbank			
				Rule of Law #	26 / 46	2011	Worldbank			
				Control of Corruption #	30 / 46	2011	Worldbank			
Quality of public child care				Quality of I						
Net childcare costs (% avg wage)	10.31	2004	OECD	Average Years of Schooling #	14 / 45	2010	OECD			
Childcare fees (% avg wage)	8.59	2004	OECD	PISA reading score #	30 / 43	2009	OECD			
Public spending on childcare and early education (% GDP)	0.44	2007*	OECD	PISA mathematic score #	22 / 43	2009	OECD			
Public spending on family benefits (% GDP)	2.46	2007*	OECD	PISA science score #	20 / 43	2009	OECD			
Public spending on pre school services (% GDP)	0.33	2007*	OECD	Public expenditures on education (% of GDP)	4.23	2009	OECD			
Ratio of child to carer	-			Private expenditures on education (% of GDP)	0.58	2009	OECD			
Ratio of children to teaching staff	13.35	2009	OECD							

<sup>#</sup> Ranking within countries with available data covered in this study; GDP per capita (in PPP €): Note: GDP per capita is converted into PPP US-Dollar (2011) and the resulting PPPs are converted into EURO using the currency exchange rate of Eurostat 1,3920\$ = 1EURO; Life expectancy: Note: Number of years a new born infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth stay the same throughout the infant's life; Net childcare costs: Note: for a dual earner family with full-time arrangements of 167% of the average wage in % of the average wage; Childcare fees: Note: Childcare fees per two-year old attending accredited early-years care and education services; Childcare fees in % of average wage; Public spending on childcare and early education: Note: Total spending in % of GDP; Public spending on family benefits: Note: Public expenditure on pre-school services in % of GDP; Public spending on pre school services: Note: Public expenditure on pre-school services, in % of GDP; Ratio of children to carers: Note: Shows the average child-to-carer/educator ratio for children not yet 4 years of age who attend licensed day care facilities; Ratio of children to teaching staff: Note: For children attending pre-school, certified teacher-to-child ratios are calculated by dividing the number of full-time equivalent children enrolled in pre-school programmes by the number of full-time equivalent teachers at that level.

<sup>\*</sup> More recent data available, cf. IDEA et al. 2013, ch. 7.



#### 1.7 Gross annual earnings and hourly earnings of non-academic researchers (2006, in PPP €)

Subsample						earnings	in the ref	erence ye	ear			А	verage	gross hou	rly earnin	gs in the	reference	e month	,	Annual days of holiday leave
		Number of Observations	Mean	p1	p5	p25	p50	p75	p95	p99	M	ean	p1	p5	p25	p50	p75	p95	p99	p50
Gender																				
	male	143633	21,937	2,297	4,912	14,183	18,827	25,509	45,319	76,402	10	.99	4.44	5.52	7.38	9.24	12.37	20.79	35.82	24
	female	161769	16,043	1,785	3,794	11,469	15,347	18,373	29,172	45,487	8	.41	4.11	5	6.5	7.53	8.84	13.8	21.64	25
Age																				
	<20	0	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	20-29	67278	13,785	1,434	2,714	7,194	12,777	17,132	27,413	42,162	7	.81	3.77	4.52	5.63	6.63	8.51	13.46	20.88	21
	30-39	77826	20,839	2,217	4,638	12,958	16,406	23,031	43,610	79,288	10	.55	4.45	5.41	6.68	7.99	11.39	20.85	38.01	25
	40-49	74249	21,123	3,076	6,679	14,853	17,150	22,251	39,031	65,501	10	.33	4.89	6.02	7.23	8.11	10.64	17.88	30.1	27
	50-59	62459	21,035	3,134	7,379	15,607	18,164	23,392	38,979	60,606	10	.24	5.01	6.27	7.71	8.67	11.01	17.59	26.65	26
	60+	23590	18,985	1,851	3,995	10,558	16,866	22,552	37,702	58,316	1	0.2	4.77	6.27	7.95	9.04	11.05	17.17	26.22	23

Source: Eurostat - Structure of Earnings Survey 2006, own calculations. Table displays mean and percentiles (p1-p99). Note: Non-academic researchers are identified if both criteria are fulfilled: ISCED Codes 5A/B or 6 and ISCO 2 or 3.

#### 1.8 Salary data of university researchers by country – A literature survey

Czech Republic			
Position	Salary (Range) Currency	Reported salary Year	Source Note
Scientific worker	29421 CZK	monthly average salary 2009	Altbach et al. (2012) public higher education institutions
Lecturer	25161 CZK	monthly average salary 2009	Altbach et al. (2012) public higher education institutions
Assistant	24585 CZK	monthly average salary 2009	Altbach et al. (2012) public higher education institutions
Senior assistant	31309 CZK	monthly average salary 2009	Altbach et al. (2012) public higher education institutions
Associate professor	45902 CZK	monthly average salary 2009	Altbach et al. (2012) public higher education institutions
Professor	60800 CZK	monthly average salary 2009	Altbach et al. (2012) public higher education institutions
Top rank	3967 PPP US\$	Average monthly salary 2010	Altbach et al. (2012) public universities
Rank 2	3058 PPP US\$	Average monthly salary 2010	Altbach et al. (2012) public universities
Rank 3	2087 PPP US\$	Average monthly salary 2010	Altbach et al. (2012) public universities
Rank 4	1642 PPP US\$	Average monthly salary 2010	Altbach et al. (2012) public universities
Rank 5	1655 PPP US\$	Average monthly salary 2010	Altbach et al. (2012) public universities
Rank 6	2562 PPP US\$	Average monthly salary 2010	Altbach et al. (2012) public universities