

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

Country profile- Remuneration Bosnia and Herzegovina

1	RES	EARCHER REMUNERATION IN ACADEMIA	2
	1.0	Introduction	2
	1.1	Main indicators	3
	1.2	Salaries, stipends and benefits by job positions and employment contract	4
	1.3	Tax System	5
	1.4	Labour legislation in the Higher Education Sector	5
	1.5	Social Security System	6
	1.6	Quality of Life	6

Brussels, October 2012















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.¹

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
- 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.

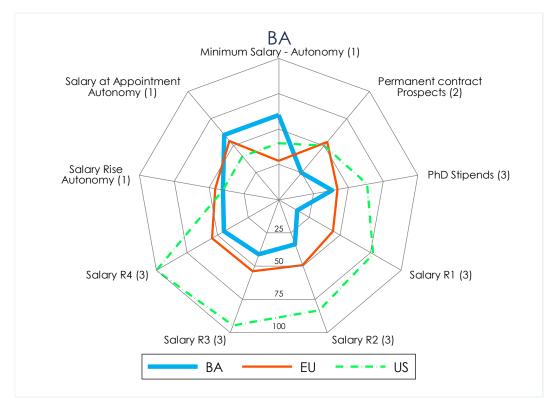
Further information on data collection and results of the study is available in:

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.

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		Annual Gross Salary in national currency and (in PPP $\mathfrak E$)			Mandatory insurances		
Rank Notice	Emportent status	Control durati	Minimum	And the last of th	Makinum	Health Ore	Unemploymen	Perkion
R1 PhD-Candidate 1)	Stipendiary	Fixed < 1 year		12,000				
R1 Research Associate ²⁾	Employee	Fixed 1-2 years	(.)	(9,519) 6,000 (4,759)	(.) (.)			
R2 Research Scientist ³⁾	Employee	Fixed 2-4 years	(.)	18,252 (14,478)	(.)	×	х	Х
R2 Senior Research Scientist ⁴⁾	Employee	Fixed 2-4 years	(.)	22,308 (17,696)	· (.)	х	Х	Х
R3 Scientific Consultant Docent ⁵⁾	Employee	Fixed >4 years	(.)	30,420 (24,130)	(.)	х	Х	Х
R4 Professor ⁶⁾	Employee	Permanent		45,000 (35,696)	· (.)	х	×	Х

Source: MORE II - Expert Survey; National currency: BAM; Annual Gross Salary: Source: 1, 2, 3, 4, 5, 6) 2012; Interviews with university researcher; Notes: ad Stipends: PhD-candidates are mainly employed at faculties as assistants. o BiH is member of the CEEPUS programme providing scholarships to foreign students varying from 500 to 550€ per month covering the costs of living in BiH for up to three month. Republik Srpska offers three funds available for PhD students. The Ministry of Science and Technology fund does not specify a-priori the individual amount a candidate can receive but the overall budget is fixed. In the Federation BiH, the Ministry of Education provides single scholarships up to 2000 BAM to PhD candidates who finished and defended their thesis. Cantonal ministries of education periodically publish calls for grants for PhD candidates depending on their economic status and development; 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	10.0						
Levy of income tax	The employer a	The employer automatically deducts the income tax from the gross salary					

Tax Wedge in % of labour costs							
Single, no children (average wage)	-	Married couple, two children (average wage)	-				
Single, no children (167% of average wage)	-	Married couple, two children (167% of average wage)	-				
Married couple, no children (133% of average wage)	-		-				

Tax rate: Source: MORE II - Expert Survey; **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)	Regional(state); University	Unemployment insurance	Regional(state)				
Salary rise	Regional(state); Sector/collective agreements; University	Health care insurance	Regional(state)				
Minimum salary	Regional(state)	Retirement pension insurance	Regional(state)				
Working time	National; Sector/collective agreements						
Relevant factors for salary rise (incl. rank) Performance(1); Seniority(1); Other reasons(3)							

<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?".

Dismissal of University Researchers								
	9 months tenure	4 years tenure	20 years tenure					
Notice period (in months)	-	-	-					
Severance pay (in months)	-	-	-					
Duration of Compensation in case of Unemployment (in Months)	-							
Average Net Replacement Rate in case of Unemployment (in % of previous income for a 40 year old)								
Two-earner married couple, no child	-	Two-earne children	r married couple, two	-				

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

Public social spending (% of GDP)	-	Public health spending (% of GDP)
Insurances usually go beyond wh	at is mandated by law	
Additional health care insurance		
Additional health care insurance by university	Depends on university; I on contract	Depends Do researchers usually have additional private health care Yes insurance?
Covered by researchers' remuneration package (incl. mandatory insurance)	Ambulant treatment; Hos	spital treatment; Drugs/pharmaceuticals
Additional retirement pension ins	urance	
Additional retirement pension insurance by university	Depends on university; I on contract	Depends Do researchers usually have additional private retirement Yes pension insurance?
Additional (private) retirement pension insurance is	Very 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?"; 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 €)	6,530	2011	Worldbank	Voice and Accountability #	44 / 46	2011	Worldbank
GDP per capita (in €)	3,463	2011	Worldbank	Political Stability and Absence of Violence #	44 / 46	2011	Worldbank
Human Development Index #	42 / 46	2011*	HDI	Government Effectiveness #	46 / 46	2011	Worldbank
Life expectancy	75.70	2011*	UNDESA	Regulatory Quality #	43 / 46	2011	Worldbank
				Rule of Law #	42 / 46	2011	Worldbank
				Control of Corruption #	43 / 46	2011	Worldbank
Quality of public child care				Quality of Education			
Net childcare costs (% avg wage)	-			Average Years of Schooling #	43 / 45	2010*	UNESCO
Childcare fees (% avg wage)	-			PISA reading score #	-		
Public spending on childcare and early education (% GDP)	-			PISA mathematic score #	-		
Public spending on family benefits (% GDP)	-			PISA science score #	-		
Public spending on pre school services (% GDP)	-			Public expenditures on education (% of GDP)	-		
Ratio of child to carer				Private expenditures on education (% of GDP)	-		
Ratio of children to teaching staff	-						

[#] 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.

^{*} More recent data available, cf. IDEA et al. 2013, ch. 7.