

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

### Country profile – Remuneration Serbia

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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.

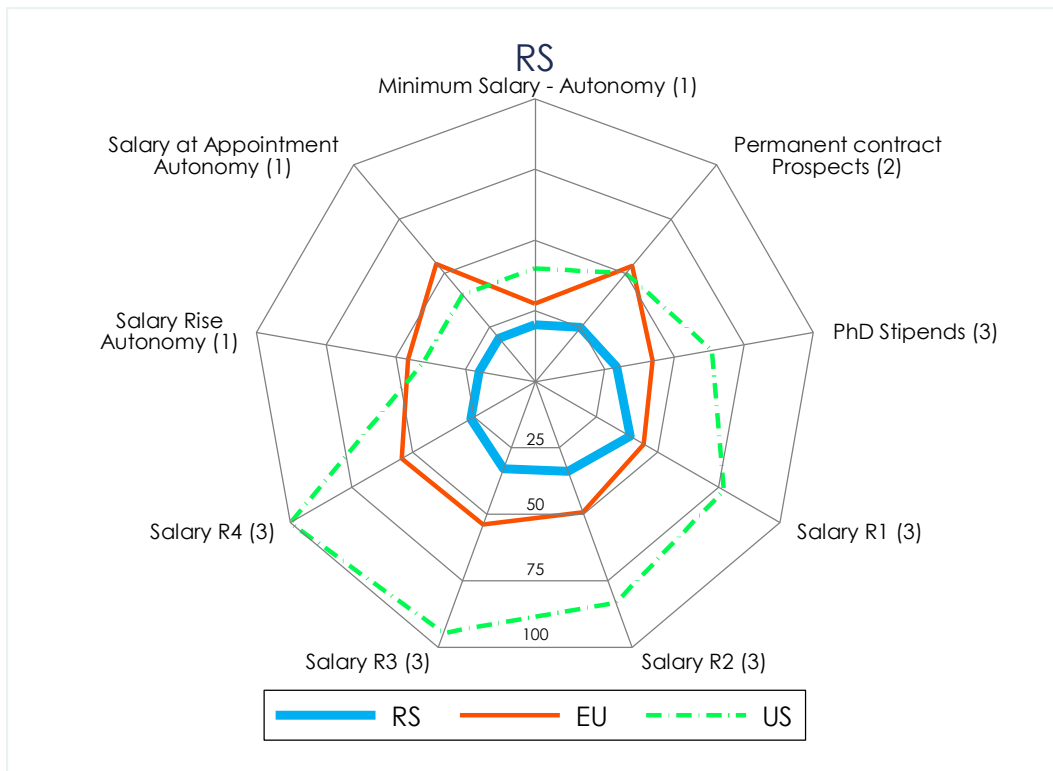
Further information on data collection and results of the study is available in:

*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.*

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<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

Rank	Name	Type of contract		Annual Gross Salary in national currency and (in PPP €)			Mandatory insurances		
		Employment status	Contract duration	Minimum	Average	Maximum	Health care	Unemployment	Pension
R1	PhD-Candidate <sup>1)</sup>	Stipendiary	Other	435,900 (6,641)	.	.			
R1	Research Assistant (Faculty) <sup>2)</sup>	Employee	Fixed 2-4 years	720,000 (10,970)	960,000 (14,627)	1,200,000 (18,283)	X	X	X
R1	Research Assistant (Institute) <sup>3)</sup>	Employee	Fixed 2-4 years	780,000 (11,884)	1,080,000 (16,455)	1,380,000 (21,026)	X	X	X
R1	Research Trainee <sup>4)</sup>	Employee	Fixed 2-4 years	720,000 (10,970)	960,000 (14,627)	1,200,000 (18,283)	X	X	X
R1	Teaching Assistant <sup>6)</sup>	Employee	Fixed 2-4 years	780,000 (11,884)	1,080,000 (16,455)	1,380,000 (21,026)	X	X	X
R2	Assistant Professor <sup>7)</sup>	Employee	Fixed >4 years	900,000 (13,712)	1,230,000 (18,740)	1,560,000 (23,768)	X	X	X
R2	Research Associate <sup>8)</sup>	Employee	Fixed >4 years	900,000 (13,712)	1,230,000 (18,740)	1,560,000 (23,768)	X	X	X
R3	Associate Professor <sup>9)</sup>	Employee	Fixed >4 years	1,020,000 (15,541)	1,410,000 (21,483)	1,800,000 (27,425)	X	X	X
R3	Senior Research Associate <sup>10)</sup>	Employee	Fixed >4 years	1,020,000 (15,541)	1,410,000 (21,483)	1,800,000 (27,425)	X	X	X
R4	Full Professor <sup>11)</sup>	Employee	Permanent	1,080,000 (16,455)	1,500,000 (22,854)	1,920,000 (29,253)	X	X	X
R4	Principal Research Fellow <sup>12)</sup>	Employee	Permanent	1,080,000 (16,455)	1,500,000 (22,854)	1,920,000 (29,253)	X	X	X

Source: MORE II - Expert Survey; National currency: RSD; Annual Gross Salary: Source: 1) 2012; Ministry of Education, Science and Technological Development, Sector of fundamental research and development of research personell (<http://www.mpn.gov.rs>); 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12) 2012; Ministry estimate; Notes: ad Stipends: PhD candidates monthly receive a flat rate gross stipend for 1 year with the possibility to extend up to 4 years if they qualify. PhD candidates must apply for the stipend in a call for proposals. In the last call they had to fulfil the following requirements: born 1986 or later; good performance; Serbian citizen with a registered permanent address; unemployed; receiving no other stipends or loans; 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 2011 using the unit labour costs index of the AMECO database.

### 1.3 Tax System

Taxes						
Income bracket in national currency from	0	18,219	32,739	54,368		
Income bracket in national currency to	18,218	32,738	54,367	max		
Marginal Tax rate	2.3	10.8	42.0	52.0		

Levy of income tax	The employer automatically deducts the income tax from the gross salary; The employee pays the income tax after her annual tax declaration
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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)	National	Unemployment insurance	National
Salary rise	National	Health care insurance	National
Minimum salary	National	Retirement pension insurance	National
Working time	National		

Relevant factors for salary rise (incl. rank)	Performance(1); Seniority(2)
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Source: 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-earner married couple, two children	-

**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)	-	
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Insurances usually go beyond what is mandated by law			
Additional health care insurance			
Additional health care insurance by university	Always	Do researchers usually have additional private health care insurance?	No
Covered by researchers' remuneration package (incl. mandatory insurance)	Ambulant treatment; Hospital treatment; Rehabilitation; Drugs/pharmaceuticals		
Additional retirement pension insurance			
Additional retirement pension insurance by university	Always	Do researchers usually have additional private retirement pension insurance?	No
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?"; **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 €)	8,563	2011	Worldbank	Voice and Accountability #	38 / 46	2011	Worldbank
GDP per capita (in €)	4,457	2011	Worldbank	Political Stability and Absence of Violence #	40 / 46	2011	Worldbank
Human Development Index #	39 / 46	2011*	HDI	Government Effectiveness #	42 / 46	2011	Worldbank
Life expectancy	74.50	2011*	UNDESA	Regulatory Quality #	42 / 46	2011	Worldbank
				Rule of Law #	43 / 46	2011	Worldbank
				Control of Corruption #	41 / 46	2011	Worldbank
Quality of public child care				Quality of Education			
Net childcare costs (% avg wage)	-			Average Years of Schooling #	42 / 45	2010*	UNESCO
Childcare fees (% avg wage)	-			PISA reading score #	38 / 43	2009	OECD
Public spending on childcare and early education (% GDP)	-			PISA mathematic score #	38 / 43	2009	OECD
Public spending on family benefits (% GDP)	-			PISA science score #	38 / 43	2009	OECD
Public spending on pre school services (% GDP)	-			Public expenditures on education (% of GDP)	5.04	2009*	UNESCO
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.