

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

Country profile – Remuneration Singapore

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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.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
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.

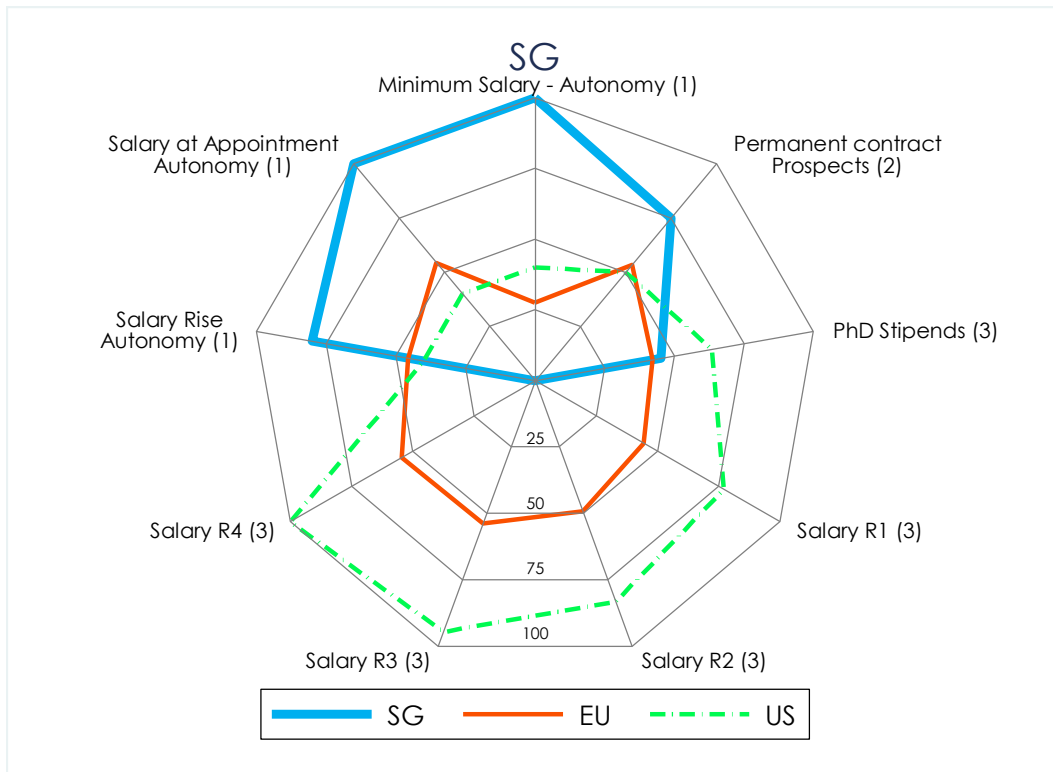
Finally, where available the profiles also contain information on the gross annual and hourly earnings of non-academic researchers based on Eurostat's Structure of Earnings Survey, and a summary table on salary data collected in other studies.

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.

¹ 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 ¹⁾	Stipendiary	Fixed 2-4 years	24,000 (11,318)	26,400 (12,450)	30,000 (14,147)			
R1	Research Analyst / Senior Research Analyst ²⁾	Employee	Fixed 1-2 years	.	.	.	X		X
R2	Post Doctoral Research Fellow ³⁾	Civil Servant	Permanent	.	.	.	X		X
R2	Post Doctoral Research Fellow ⁴⁾	Employee	Fixed 1-2 years	.	.	.	X		X
R3	Assistant Professor / Associate Professor ⁵⁾	Civil Servant	Fixed 2-4 years	.	.	.	X		X
R3	Assistant Professor / Associate Professor ⁶⁾	Employee	Fixed 2-4 years	.	.	.	X		X
R4	Professor ⁷⁾	Civil Servant	Permanent	.	.	.	X		X
R4	Professor ⁸⁾	Employee	Other	.	.	.	X		X

Source: MORE II - Expert Survey; National currency: SGD; Annual Gross Salary: Source: 1) 2011; NUS and NTU Research; Notes: ad 2, 4, 5, 6, 8) Contracts can be terminated in case of lack of funding; ad 3, 7) Sometimes the contract is fixed term; 8) Usually it is a 3 year contract and if approved the researchers becomes tenured; ad Stipends: There are no restrictions with regard to the nationality of PhD students awarded, but there are differences in the amount of stipend. For instance, research scholars in PhD programme, monthly stipends for Singapore Citizens, Singapore Permanent Residents and International Students are currently S\$2,500, S\$2,200 and S\$2,000 respectively. For certain scholarships, a one-time settling-in allowance and airfare grant are awarded to international students. Research scholars are not allowed to accept any form of employment, whether or not he/she is remunerated unless it has been approved by relevant authority; 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	20,001	30,001	40,001	80,001	120,001	160,001	200,001	320,001
Income bracket in national currency to	20,000	30,000	40,000	80,000	120,000	160,000	200,000	320,000	max
Marginal Tax rate	0.0	2.0	3.5	7.0	11.5	15.0	17.0	18.0	20.0

Levy of income tax The employee pays the income tax after her annual tax declaration

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)	Individual negotiation	Unemployment insurance	Individual negotiation
Salary rise	Individual negotiation; University	Health care insurance	National; University
Minimum salary	Individual negotiation	Retirement pension insurance	National; Individual negotiation
Working time	University		

Relevant factors for salary rise (incl. rank) Seniority(1); Performance(2)

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?	Yes
Covered by researchers' remuneration package (incl. mandatory insurance)	Ambulant treatment; Hospital treatment; Rehabilitation		
Additional retirement pension insurance			
Additional retirement pension insurance by university	-	Do researchers usually have additional private retirement pension insurance?	Yes
Additional (private) retirement pension insurance is...	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?"; **Country-specific comment:** Universities provide what is called Term Life insurance. This provides general health and medical insurance as well as surgical insurance. This will cease when the employee/researchers quits employment; **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:** It is not compulsory for researchers to purchase additional health care insurance. This depends on the individuals. Researchers who are Singaporean and permanent residents do have a medical scheme which is paid by a portion of compulsory pension saving plan. However, the medical scheme does not have comprehensive medical coverage therefore they will still purchase additional medical health care insurance on top of that. Additional private retirement pension depends on the individuals. Some Singaporean and permanent residents do purchase additional pension funds although there is a compulsory pension schemes as it may not be sufficient for retirement. There is no pension scheme provided in the remuneration package for foreigners. Therefore they will have to purchase their own; **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 €)	43,896	2011	Worldbank	Voice and Accountability #	43 / 46	2011	Worldbank
GDP per capita (in €)	33,219	2011	Worldbank	Political Stability and Absence of Violence #	8 / 46	2011	Worldbank
Human Development Index #	24 / 46	2011*	HDI	Government Effectiveness #	3 / 46	2011	Worldbank
Life expectancy	81.10	2011*	UNDESA	Regulatory Quality #	5 / 46	2011	Worldbank
				Rule of Law #	12 / 46	2011	Worldbank
				Control of Corruption #	8 / 46	2011	Worldbank
Quality of public child care				Quality of Education			
Net childcare costs (% avg wage)	-			Average Years of Schooling #			
Childcare fees (% avg wage)	-			PISA reading score #	4 / 43	2009	OECD
Public spending on childcare and early education (% GDP)	-			PISA mathematic score #	2 / 43	2009	OECD
Public spending on family benefits (% GDP)	-			PISA science score #	3 / 43	2009	OECD
Public spending on pre school services (% GDP)	-			Public expenditures on education (% of GDP)	3.08	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.

1.7 Salary data of university researchers by country – A literature survey

Singapore						
Position	Salary (Range)	Currency	Reported salary	Year	Source	Note
Senior Lecturer	55385	PPP US\$	Average annual salary	2001-02	Horsley et al. (2005)	minimum
Senior Lecturer	83077	PPP US\$	Average annual salary	2001-02	Horsley et al. (2005)	middle of scale
Senior Lecturer	110769	PPP US\$	Average annual salary	2001-02	Horsley et al. (2005)	maximum
Associate Professor	83077	PPP US\$	Average annual salary	2001-02	Horsley et al. (2005)	minimum
Associate Professor	120000	PPP US\$	Average annual salary	2001-02	Horsley et al. (2005)	middle of scale
Associate Professor	156923	PPP US\$	Average annual salary	2001-02	Horsley et al. (2005)	maximum
Professor	129231	PPP US\$	Average annual salary	2001-02	Horsley et al. (2005)	minimum