

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

Country profile – Remuneration Canada

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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.

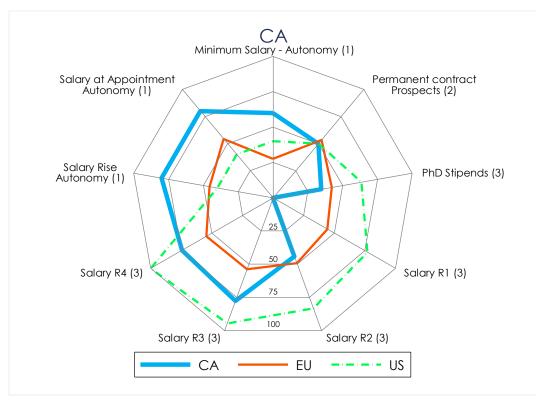
Further information on data collection and results of the study is available in:

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

		Type of c			ual Gross Sa currency an		Mand	latory insur	ances
Part	Hore	Employment status	contract duration	N NNIMUM	Average	Mathnun	Healthate	Unemployment	Pension
R1	PhD-Candidate ¹⁾	Stipendiary	Fixed < 1 year			50,000			
R1	Research Assistant ²⁾	Employee	Fixed < 1 year	(.) (.)	(.) (.)	(27,764) (.)		x	
R1	Teaching Assistant ³⁾	Employee	Fixed < 1 year		. (.)	(.)		х	
R2	Postdoctoral Fellow ⁴⁾	Employee	Fixed 1-2 years	. (.)	38,000 (21,101)	. (.)			
R3	Assistant Professor ⁵⁾	Employee	Other	45,590 (26,119)	88,932 (50,951)	111,500 (63,881)	х	х	х
R3	Associate Professor ⁶⁾	Employee	Permanent		109,535 (62,755)	137,000 (78,490)	х	х	х
R4	Professor ⁷⁾	Employee	Permanent	,	(80,129) (80,129)	(70,490) (.)	х	х	х

Source: MORE II - Expert Survey; National currency: CAD; Annual Gross Salary: Source: 1) 2012; Maximum stipend is given as value of Vanier Scholarship (most elite in Canada); 4) 2012; Value of SSHRC postdoctoral fellowship; 5, 6, 7) 2009; Statistics Canada (2011), Salaries and Salary Scales of Full-Time Teaching Staff at Canadian Universities, 2009/2010; Notes; ad 2) In some situations the employment contract can be terminated if the individual withdraws from being a doctoral student; ad 5) Pre-tenure period is usually 3 to 7 years; ad Stipends for Ph.D. candidates mainly come from (1) government scholarship programs or (2) university scholarships/fellowships. The major source of stipends for Ph.D. candidates are the three national granting councils, each of which operates competitive doctoral scholarship programs. In addition, some provincial governments also operate doctoral scholarship programs. Some of these scholarship programs have rules that limit eligibility to Canadian citizens or permanent residents, or there is a quota student can perform and still hold the scholarship. Ph.D. stipends provided and funded by universities are quite idiosyncratic and vary from small amounts of scholarship support that may be provided as a single payment to a student, to stipends that may be paid from professor research grants to support thesis research that is directly related to the research grant. The terms of these arrangements are usually determined by the professor in discussions with the candidate, but will follow relevant university policies (funds will be paid through the university); **PPP**: Salaries and Stipends in national currency are converted into PPV 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

(133% of average wage)

Income bracket in national currency from Income bracket in national	0	41,545	83,089	128,801			
Income bracket in national							
currency to 41	41,544	83,088	128,800	max			
Marginal Tax rate 1	15.0	22.0	26.0	29.0			

 Tax Wedge in % of labour costs

 Single, no children (average wage)
 30.25

 Single, no children (167% of average wage)
 32.60

 Married couple, two children (167% of average wage)
 26.20

 Married couple, no children (167% of average wage)
 27.00

Tax rate: <u>Source:</u> OECD, 2011*; **Levy of income tax:** <u>Source:</u> MORE II - Expert Survey based on question "Please indicate how personal income tax is usually levied?"; **Tax Wedge in % of labour costs:** <u>Source</u>: OECD, 2010*; <u>Note:</u> 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 re	Institutional levels determining remuneration aspects									
Salary (at appointment)	Individual negotiation; University	Unemployment insurance	National							
Salary rise	Individual negotiation; University	Health care insurance	Regional(state); University							
Minimum salary	Regional(state); University	Retirement pension insurance	National; Individual negotiation; University							
Working time	Individual negotiation; University									
Relevant factors for salary rise (incl. rank)	Other reasons(1); Performance(2); Seniority(3)									

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 month	s tenure	4 years	tenure	20 years tenure		
Notice period (in months)	riod (in months) riod (in months) 0.23-0.47 (varies by province) 0.23 (average for Quebec, Ontario, Alberta and British Columbia)		0.47-0.93 (province (average fo Ontario, All British Co	e)/0.79 r Quebec, berta and		2008	OECD
Severance pay (in months)	province) for Quebe Alberta a		0-4 weeks (provinc (average fo Ontario, All British Co	e) / 0 r Quebec, berta and	0-20 weeks (varies by province) / 9 weeks (average for Quebec, Ontario, Alberta and British Columbia)	2008	OECD
Duration of Compensation in case of Unemployment (in Months)	11	2010	OECD				
Average Net Replacement Rate in	case of Un	employmer	nt (in % of pr	revious inc	ome for a 40 year old)	
Two-earner married couple, no child	61		(Two-earne children	r married couple, two	65	

Dismissal of University Researcher: <u>Note:</u> 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):** <u>Note:</u> 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:** <u>Source:</u> OECD, 2010*; <u>Note:</u> 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)	16.86	2007*	OECD	Public health spending (% of GDP)	7.01	2007*	OECD
Insurances usually go beyond wh	at is manda	ted by law					
Additional health care insurance							
Additional health care insurance by university		epends on e pends on co	• •	Do researchers usually have additional private health care insurance?	No		
Covered by researchers ' remuneration package (incl. mandatory insurance)	-						
Additional retirement pension insu	urance						
Additional retirement pension insurance by university		epends on e pends on co		Do researchers usually have additional private retirement pension insurance?	Yes		
Additional (private) retirement pension insurance is	Important			niversity: Source: MORE II - Ex			

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: There are national health care and pension programs. In addition, universities usually provide additional health insurance coverage to address health care costs not covered by the national government program (for example, to assist with prescription drug costs, the costs of glasses, physiotherapy, etc.). The national pension plan, the Canada Pension Plan, provides very modest pension support and universities offer pensions as an employment benefit. The costs of additional health care and university pension programs are usually shared between the employee and employer, with the latter paying the larger share of the costs; 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: Basic health care is provided through a national health insurance program. In addition, most universities offer additional health coverage as a benefit to the employee with some insurance costs paid by the employee and some paid by the employee. Finally, some universities provide employees with the option of purchasing even more health coverage (for example, full travel coverage or special coverage for family members). Employees are required to contribute to the national Canada Pension Plan and to pension funds operated by the university. In addition, many researchers/professors will save additional funds for retirement, perhaps through a personal savings plan, but no data source is available that would indicate the level of additional savings and the number of professors who save for retirement in addition to their institutional pension plan; 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?".

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



1.6 **Quality of Life**

Income and Welfare				Governance			
GDP per capita (in PPP €)	29,052	2011	Worldbank	Voice and Accountability #	11 / 46	2011	Worldbank
GDP per capita (in €)	36,168	2011	Worldbank	Political Stability and Absence of Violence #	14 / 46	2011	Worldbank
Human Development Index #	6 / 46	2011*	HDI	Government Effectiveness #	6 / 46	2011	Worldbank
Life expectancy	81.00	2011*	UNDESA	Regulatory Quality #	8 / 46	2011	Worldbank
				Rule of Law #	11 / 46	2011	Worldbank
				Control of Corruption #	10 / 46	2011	Worldbank
Quality of public child care				Quality of Education			
Net childcare costs (% avg wage)	29.08	2004	OECD	Average Years of Schooling #	24 / 45	2010	OECD
Childcare fees (% avg wage)	21.30	2004	OECD	PISA reading score #	5 / 43	2009	OECD
Public spending on childcare and early education (% GDP)	0.16	2007*	OECD	PISA mathematic score #	8 / 43	2009	OECD
Public spending on family benefits (% GDP)	1.38	2007*	OECD	PISA science score #	6 / 43	2009	OECD
Public spending on pre school services (% GDP)	0.16	2007*	OECD	Public expenditures on education (% of GDP)	4.78	2009	OECD
Ratio of child to carer	7.00	2009	OECD	Private expenditures on education (% of GDP)	1.3	2009	OECD
Ratio of children to teaching staff	11.50	2009	OECD				

Ranking within countries with available data covered in this study; GDP per capita (in PPP C): 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: <u>Note</u>: 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**: <u>Note</u>: 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 twoyear 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

Position	Salary (Range) Currency	Reported salary Year	Source Note
Assistant Professor	5206 PPP\$	Average monthly salary 2005-06	Altbach et al. (2008) Academic year
Full Professor	7992 PPP\$	Average monthly salary 2005-06	Altbach et al. (2008) Academic year
Lecturer	65500 PPP US\$	Average annual salary 2008	Coates et al. (2009)
Associate Professor	80500 PPP US\$	Average annual salary 2008	Coates et al. (2009)
Professor	100100 PPP US\$	Average annual salary 2008	Coates et al. (2009)
Assistant Professor	65500 PPP US\$	Average annual gross salary 2005-06	Deloitte (2008)
Associate Professor	80500 PPP US\$	Average annual gross salary 2005-06	Deloitte (2008)
Professor (minimum)	100100 PPP US\$	Average annual gross salary 2005-06	Deloitte (2008)
Lecturer	28949 PPP US\$	Average annual salary 2003-00	Horsley et al. (2005) minimum
Lecturer	34264 PPP US\$	Average annual salary 2001-02	Horsley et al. (2005) middle of scale
Lecturer	39337 PPP US\$	Average annual salary 2001-02	Horsley et al. (2005) maximum
Senior Lecturer	35076 PPP US\$	Average annual salary 2001-02	Horsley et al. (2005) minimum
Senior Lecturer	43048 PPP US\$	Average annual salary 2001-02	Horsley et al. (2005) middle of scale
Senior Lecturer	50952 PPP US\$	Average annual salary 2001-02 Average annual salary 2001-02	Horsley et al. (2005) maximum
Associate Professor			Horsley et al. (2005) maximum Horsley et al. (2005) minimum
	43183 PPP US\$	Average annual salary 2001-02	Horsley et al. (2005) minimum Horsley et al. (2005) middle of scale
Associate Professor	54151 PPP US\$	Average annual salary 2001-02	
Associate Professor	65326 PPP US\$	Average annual salary 2001-02	Horsley et al. (2005) maximum
Professor	54006 PPP US\$	Average annual salary 2001-02	Horsley et al. (2005) minimum
Lecturer (Assistant/Associate Lecturer)	49248 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) maximum
Lecturer (Assistant/Associate Lecturer)	34790 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) minimum
Lecturer (Assistant/Associate Lecturer)	42019 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) average
Assistant Professor (Lecturer)	61453 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) maximum
Assistant Professor (Lecturer)	42089 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) minimum
Assistant Professor (Lecturer)	51771 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) average
Associate Professor	77814 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) maximum
Associate Professor	52690 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) minimum
Associate Professor	65252 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) average
Professor	65342 PPP US\$	Average annual salary 2006-07	Kubler & Lennon (2007) minimum
Lecturer/Lecturer B	64886 CA\$	Average annual salary 2003	Robinson (2006)
Assistant Professor/Senior Lecturer	69886 CA\$	Average annual salary 2003	Robinson (2006)
Associate Professor/Senior Lecturer/Reader	87509 CA\$	Average annual salary 2003	Robinson (2006)
Professor	109258 CA\$	Average annual salary 2003	Robinson (2006)
Lecturer/Lecturer B	53892 CA\$	Average annual salary 2003	Robinson (2006)
Assistant Professor/Senior Lecturer	58045 CA\$	Average annual salary 2003	Robinson (2006)
Associate Professor/Senior Lecturer/Reader	72682 CA\$	Average annual salary 2003	Robinson (2006)
Professor	90746 CA\$	Average annual salary 2003	Robinson (2006)
Assistant Professor	3887 €	Monthly gross salary 2007	Academic Careers Observatory (ACO) minimum
Assistant Professor	4856 €	Monthly gross salary 2007	Academic Careers Observatory (ACO) average
Assistant Professor	6382 €	Monthly gross salary 2007	Academic Careers Observatory (ACO) maximum
Associate Professor	4937 €	Monthly gross salary 2007	Academic Careers Observatory (ACO) minimum
Associate Professor	6096 €	Monthly gross salary 2007	Academic Careers Observatory (ACO) average
Associate Professor	7440 €	Monthly gross salary 2007	Academic Careers Observatory (ACO) maximum
Professor	5997 €	Monthly gross salary 2007	Academic Careers Observatory (ACO) minimum
Professor	7145 €	Monthly gross salary 2007	Academic Careers Observatory (ACO) average
Professor	9250 €	Monthly gross salary 2007	Academic Careers Observatory (ACO) maximum
Assistant Professor	6928 CA\$	Monthly salary 2010	Altbach et al. (2012) entry level
Associate Professor	8377 CA\$	Monthly salary 2010	Altbach et al. (2012)
Associate Professor	9190 CA\$	Monthly salary 2010	Altbach et al. (2012) with administrative duties
Associate Professor	8415 CA\$	Monthly salary 2010	Altbach et al. (2012) without administrative duties
Full Professor	10704 CA\$	Monthly salary 2010 Monthly salary 2010	Altbach et al. (2012) without administrative durite
Full Professor	11578 CA\$	Monthly salary 2010 Monthly salary 2010	Altbach et al. (2012) Altbach et al. (2012) with administrative duties
Full Professor Full Professor	10567 CA\$	Monthly salary 2010 Monthly salary 2010	Altbach et al. (2012) with administrative duties
Rank 4	5733 PPP US\$		
		Average monthly salary 2010	Altbach et al. (2012) public universities
Rank 3	6140 PPP US\$	Average monthly salary 2010	Altbach et al. (2012) public universities
Rank 2	7424 PPP US\$	Average monthly salary 2010	Altbach et al. (2012) public universities
Top rank	9458 PPP US\$	Average monthly salary 2010	Altbach et al. (2012) public universities