

CWEN/RFÉ Report on the Status of Women in Canadian Economics, 2015

Abstract

Women remain a smaller share of the academic economics workforce than they are of students studying economics at the undergraduate and graduate levels. Overall, roughly a quarter of permanent positions in Canadian economics departments are held by women. Over the past decade, there has been a considerable increase in the proportion of women at the Associate Professor level and at the Professor level, partly as a result of a pipeline effect. At the same time, however, there has been decline in the proportion of women at the Assistant Professor level, a trend which is not clearly evident in comparable US data, nor in the percentage of graduating PhD students.

Les femmes représentent toujours une plus faible proportion des emplois chez les économistes universitaires, que celle des femmes qui étudient en économie au niveau du baccalauréat, ou des femmes dans la population. En tout, environ le quart des postes permanents dans les départements d'économie au Canada sont détenus par des femmes. Au cours de la dernière décennie, il y a eu une augmentation considérable de la proportion de femmes au niveau de professeur agrégé et de professeur titulaire. Ceci est partiellement le résultat d'un effet de 'pipeline'. Par contre, il y a eu une diminution de la proportion des femmes au niveau de professeur adjoint, une tendance qui n'est pas clairement évidente dans les données comparables pour les États Unis, ni dans le pourcentage d'étudiants sortant au doctorat.

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Introduction

This report updates Duhaime-Ross (2013) with data on women in academic economics departments in Canada up to the 2014-15 academic year.

Over the past decade, women have accounted for roughly a stable percentage of Canadian undergraduate economics students. About a third of honours students in economics are women, as are roughly 40% of students taking economics majors. This may mean that economics is being chosen slightly less frequently by women and more frequently by men who are studying at university. There has been some increase in their representation in graduate programs, although with perhaps a slight dip after 2005. There appears to have been a drop in the percentage of recent hires in economics departments (Assistant Professors) who are women, while women are still an increasing proportion of the Associate and Full Professor ranks in Canada. The drop in the percentage of women at the Assistant Professor level is somewhat odd – it does not seem likely that it reflects a decline in women graduating from PhD programs in Canada and the US, nor is the same pattern visible in the US data. Indeed, it appears that Canadian institutions have been less likely to hire women than those in the US, a reversal of the previous While the previous CWEN-RFÉ report situation. (Duhaime-Ross, 2013) suggested that women are "becoming more and more present in the "pipeline"", this does not appear to be consistently true based on the most recent data.

Going forward, a key issue is that data in this area are not very good, and becoming worse. Statistics Canada is no longer publishing data on women in universities. If we wish to have information on the percentage of economics students and faculty who are women, then it will be increasingly up to us to collect the data. Data on faculty are likely to be relatively easy to collect every one to two years, simply through an update of data from economics departments' websites. Data on students may be more difficult to collect. Continuing to rely on surveys of economics departments may be the only viable option there, though the quality of the data will depend on the willingness of individual departments to respond to data requests.

Data on Women in Economics in Canada

Keeping track of the proportion of women studying or working in academic economics departments in Canada entirely straightforward. While organizations collect data on women studying or teaching in academic institutions, Canada's relatively small population overall often leads to data not being released at the disciplinary level in most public use data sets. And in cases where there are confidential sources of the data, official surveys have often been run on an ad-hoc basis, or otherwise have been recently discontinued (as in the case of the Survey of Earned Doctorates, collected only between 2003 and 2008, and the University and College Academic Staff System, collected from 1970 until 2011).

On the other hand, this small numbers issue can help make data collection easier - compared to the US, it is relatively easy to survey all Canadian bachelors degreegranting institutions. CWEN/RFÉ has taken advantage of this twice in the past to distribute questionnaires to chairs of economics departments across Canada asking for the numbers of women and men studying and working in their departments (Duhaime-Ross, 2013; Special Committee, 2001). Response rates for this survey have been good, but not been quite as high for CWEN surveys as for Statistics Canada surveys. Appendix A shows the Canadian departments of economics that have responded to each of the past surveys. It can be problematic drawing conclusions about trends in the profession over time when there are gaps in the institutions who respond, especially when more of the bigger universities do not respond. For most of the surveys, the response rate has been just below 70% of departments. This compares with CSWEP, which has been increasingly successful at eliciting responses, likely the result of a longer-running program with consequent greater recognition among survey respondents combined with a get out the response set of tactics (including having designated representatives in most departments to encourage department chairs to submit the surveys).

Another source of data that is becoming more useful over time is individual departmental websites. We have collected data from departments' faculty pages on the numbers and ranks of women and men at each of the major permanent academic ranks. While this approach may be associated with some measurement error, particularly in identifying the gender of each faculty member, our review of the responses to the 2015 survey suggests that it is also true of survey data that is not checked for validity against external sources (see Appendix C for a comparison of the percentage female taken from data from the CWEN/RFÉ before and after cleaning). An advantage of using faculty information from the Web is that it allows an almost complete census of all permanent, full-time teaching positions in economics in Canada at a given point in time, without placing costs on already hard working administrators to respond to information requests. It also allows longitudinal tracking of individuals based entirely on publicly available information. Gender can be difficult to identify from a simple faculty list since names are not always clearly gendered, but when combined with additional sources of information, including personal knowledge of individuals, photographs on faculty websites, and other sources that mention gender, it is possible to get a quite accurate identification for permanent faculty. Because these additional sources of information and checks are not as commonly available for students and for temporary or part-time faculty members, the CWEN survey is the only source of information on women's participation at those levels.

Data on students is particularly difficult to obtain at present. As noted, the Survey of Earned Doctorates has been undertaken by Statistics Canada for only a few years. Data on undergraduate students by field is also no longer available in any public use file produced by Statistics Canada. And the survey data from the CWEN survey seems to be less reliable than information on faculty numbers (this is not surprising, given that a count of faculty is relatively straightforward for most chairs, while statistics on the gender composition of their undergraduate and graduate student population is likely to be less readily available). This data should be used with some caution.

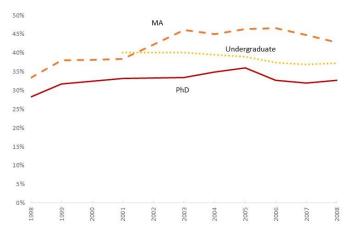
Canadian Economics Students

Duhaime-Ross (2013) notes that "In Canada, despite a steady increase in female enrolment over the past few years, the proportion of female students is much lower in economics than in other social science

fields. In 2008-2009, only 37% of undergraduate students, 43% of Master's students and 33% of PhD students in economics were women." At the same time, however, there had been an increase in the overall percentage of undergraduate and post-graduate students who were women. In this respect, economics appears rather more like computer science or mathematics – fields in which the initial share of women was relatively low, and in which the proportion of women seems not to have increased. The implication is that a smaller proportion of women who are at university are choosing to enter these disciplines than previously.

The Statistics Canada data, reported by CAUT, is shown in Figure 1. In the decade from 1998-99 to 2008-09, economics graduate programs saw the share of women increase slightly - at the Masters level, from 33.4% to 43% of all students, and at the PhD level from 28.4% to 32.7%. That said, both at the Masters and Phd levels, there was some evidence of a small decline in the proportion of female students after 2005-06. higher proportion of women at the Masters than at the undergraduate level is interesting – it is not consistent with the pattern for all university students, which has women in a strong majority at the undergraduate level, a smaller majority at the Masters level, and a smaller percentage again at the PhD level. As is well known, the proportion of economics students who are women is lower at all levels than the proportion of women in the university population overall – in 2008-09, women were 57.6% of all undergraduate students, 55.6% of Masters students, and 47% of PhD students. Economics' shares are around 10% points lower at the Masters level, and 15-20% points lower at the undergraduate and PhD level. While there has been some catch up at the graduate level, this has not been the case at the undergraduate level, where women's enrolments have increased relative to men as a whole, while they have drifted slightly down for economics enrolments.

Figure 1. Canadian university students in economics, percentage female, by level of study



Source: CAUT Almanac, various years, drawing on Statistics Canada data (now discontinued). Note that data points for 2000-01 and 2002-03 are missing – in the chart, they are interpolated. 1998 refers to academic year 1998-99.

Unfortunately, Statistics Canada discontinued their data series after 2008-09, so that we do not have another complete survey of students by level of study. CWEN-RFÉ has, however, surveyed economics departments about student numbers. Response rates for these surveys are reasonably good at the PhD level, with 14 of 23 PhD granting economics departments in Canada responding with student numbers (15 PhD granting departments responded to the survey). Response rates were weaker for undergraduate student numbers, with only 20 institutions reporting any numbers, and with some potential confusion on reporting numbers of majors vs honours economics students. Relative to the student numbers reported in the most recent CAUT/Statistics Canada data, the most recent CWEN survey reflects roughly 40% of PhD students, 50% of MA students, but only 20% of undergraduate students. Finally, the departments that responded to the survey are not the same in the two years. The survey results, shown in Table 1, should therefore be used with some caution.

The survey shows a slight decrease in the percentage of women among registered PhD students who have completed their comprehensive exams, but perhaps some increase in first year PhD students relative to 2013. Figures on recent graduates do not seem to be reliably comparable across the two surveys. There seems to have been some increase in the proportion of

MA students who are female, but a slight dip at the undergraduate level. As in the StatCan data, a greater proportion of the student body are women at the MA level than at either the undergraduate level or the PhD level.

Table 1. Economics students - numbers and percentage women, from CWEN/RFÉ survey

	2013		2	2015
	Total	% Women	Total	% Women
PhD	14/17		1	4/15
1st year	83	33.7%	94	41.5%
Registered PhD thesis writers	240	32.1%	159	27.7%
Graduated in previous year	64	29.7%	22	45.5%
Masters students	19/21		2	2/25
Current students	663	42.4%	670	44.6%
Graduated in previous year	425	36.7%	417	43.9%
Undergraduate students	1	9/33	2	1/33
Major in Economics	2381	44.4%	2646	42.1%
Honours Economics	528	35.6%	1028	31.2%

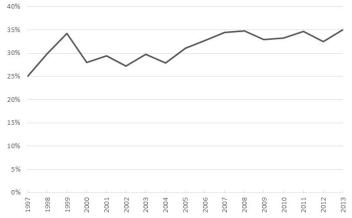
Source: CWEN/RFÉ Surveys, 2013 and 2015. Figures next to program show the number of departments who reported student numbers in the survey year and the number of **responding** departments who reported having a program at that level. There are currently 27 departments offering PhDs in Canada (including departments of agricultural economics and business), and 35 offering MA programs. Total is the total number of students reported, and % women is the percentage of those reported to be women. The full list of responding departments is in Appendix.

The pipeline for academic economists – PhD students in Canada and the US

Data from Canada on graduating PhD students are more volatile than those from the US, and since US graduates are a key source of new hires in Canadian universities, it is perhaps more appropriate to look south of the border to see what the pipeline is like for academic jobs.

Figure 2 shows the share of women in the graduating PhD cohorts in the US. There has been a slow but steady rise since 2000, with just over a third of graduating cohorts currently female.

Figure 2. Percent female in graduating PhD cohort, US



Source: CSWEP (2015)

Canadian data on this are not as reliable, and are naturally more volatile from year to year, mostly due to small sample issues. In this report, we have two key sources of current data: the CWEN/RFÉ survey, and departmental websites. Of PhD students whose names were posted on Canadian university's websites for the 2014-15 recruiting year, 12 of 60 job market candidates, or roughly 15%, were women. This paints a somewhat different picture from the survey, which suggested that 46% of graduating PhD students were women. There are two key differences in the data: (1) the survey data are for those who graduated in 2013-14; and (2) the University of Toronto has a very large PhD program, but did not respond to the survey. The results from the survey are closer to those from a review of websites for current PhD students - both suggest close to one third of currently registered PhD students (averaging over first year and post-comp students) are women. It may also be that women could be less likely to search for an academic job, and therefore may not be as commonly listed on departmental web pages that are mainly targeted at that market.

Another source of data on graduating students is the CEA newsletter. The key disadvantage with that data is that gender may not be easily identifiable. Nonetheless, with information going back to at least 1997, it is worth exploring for future reports

Economists in Academic Jobs

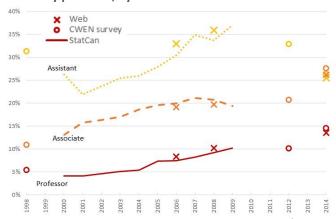
Canada

According to data provided in the CAUT Almanac using Statistics Canada data, the percentage of women in

tenured and tenure track positions in Canadian economics departments increased from 12.6% in 2000-01 to 20.5% in 2009-10. Across all years of this data set, women were more represented in the more junior than in the more senior ranks. This is consistent with the notion of career progression, and of increasing opportunities for women to enter the junior academic ranks. The lack of updated data on Canadian academic jobs means that further updates will rely on data collected individually. CWEN's reports are therefore likely to be the only source of reliable data on women in economics. It is important, then, to know how this data compares to the Statistics Canada data.

In 2000 and again in 2013 and 2015, CWEN surveyed Canadian economics departments, as well as business schools with substantial numbers of economists. The response rates were reasonably good, at roughly 60%, and comparability across time is hindered by the fact that different institutions responded each time (see Appendix Table A1 for details). We also have data compiled from individual economics department websites for the academic years 2006-07, 2008-09 and 2014-15. Figure 3 shows data from these two sources, as well as the StatCan data, by academic rank. Although there are some differences between the data sets, the CWEN survey data (the circles) appears consistent with the Web data (the Xs) in the most recent year, and the Web data is fairly close to the Statistics Canada data set (the lines).

Figure 3. Proportion of women in tenured or tenure-track university positions, by rank



Source: University economics department websites, CWEN/RFÉ surveys, CAUT (using StatCan data), various years. Note: StatCan data for 2002-03 is missing. It is interpolated in the chart. Note 1998 refers to the academic year 1998-99. CWEN surveys were carried out in the winter of the academic year.

Table 2 shows the percentage of women by academic position for each of the two recent years' surveys by CWEN/RFÉ. The survey shows a jump in the proportion of women at the Associate and Professor levels, between the two years, while there has been a drop in the proportion of women at the Assistant level, as well as a drop in the absolute number of Assistant Professors. At the more precarious end of academic employment, our only source of data is the CWEN/RFÉ survey. Different universities report instructors and sessional lectures in different ways on their websites, making it difficult to collect consistent information on these positions without specialised departmental knowledge. The CWEN survey data in Table 2 also show a decline in the share of women at the Instructor level. Note that this group has considerably lower job tenure than the tenure/tenure track positions, and reporting on people in those positions may not be entirely consistent across departments and years, so that the results there are likely to be more volatile in general. These jobs had previously had a large share of women compared to other ranks, but the most recent data suggests this is not as much the case now.

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Table 2. Percentage female academic staff by rank -

data, in 2014-15, there were 44 women at the Assistant Professor level in Canada in 2015, down from 93 in 2008-09, while the number of female Associate Professors had risen from around 47 to 85, and female Professors from 38 to 48.

Table 3. Percentage female academic staff by rank - comparison of survey and website data

	Assistant		Ass	Associate		fessor
_	N	% female	N	% female	N	% female
CWEN/RFE Surv	/eys					
1999		31.3%		10.9%		5.4%
2012-13	149	32.9%	198	21.1%	247	10.1%
2014-15	126	27.1%	230	27.5%	235	14.1%
Data collected	from We	bsites				
2006-07	246	32.9%	246	19.1%	372	8.3%
2008-09	259	35.9%	238	19.7%	370	10.3%
2014-15	184	25.5%	328	25.9%	354	13.6%

Source: CWEN surveys, 2000, 2013, 2015; Data collected from departmental websites

	1999		20	112-13	20	14-15
	N	% female	N	% female	N	% female
Assistant		31.3%	149	32.9%	126	27.1%
Untenured			131	30.5%	116	25.1%
Tenured			18	50.0%	10	50.0%
Associate		10.9%	198	20.7%	230	27.5%
Untenured			4	0.0%	4	0.0%
Tenured			194	21.1%	226	27.9%
Professor		5.4%	247	10.1%	235	14.1%

267

24

17

7

243

27.3%

41.7%

41.2%

42.9%

25.9%

225

44

32

12

181

27.1%

29.5%

31.3%

25.0%

26.5%

Source: CWEN surveys, 2000, 2013, 2015

Untenured

Tenured Sessional lecturers

Instructors

CWEN/RFÉ survey

All Other

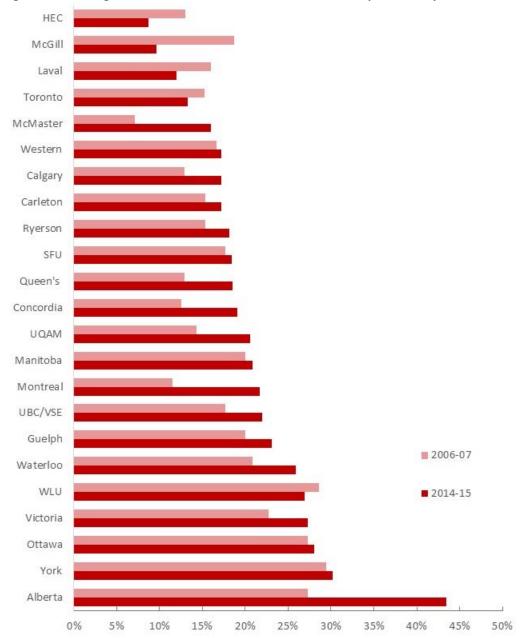
Table 3 compares the percentage of women and the total numbers of faculty members at the tenured / tenure track academic ranks from the CWEN/RFÉ survey data and from the Web data. They are relatively consistent in 2014-15 (after some cleaning of the survey data to remove obvious errors), although unsurprisingly the Web data has a larger sample size. Based on that

The number of Assistant Professors overall has also shrunk, likely reflecting a decline in hiring following the recent recession. There are now almost twice as many Associate Professors as there are Assistant Professors. Since women were an increasing proportion of hires during the boom years of 2001-2008, this has now led to a flow through to their proportions at the Associate

Professor Rank. Indeed, for perhaps the first time ever, women now comprise a larger proportion of faculty at the Associate Professor level than at the Assistant Professor level. While a part of this reflects growth at the Associate level, it also reflects a marked decline in the proportion of women being hired at the Assistant level. Although in the past, we have been able to be relatively optimistic that a growing number of women at the junior ranks will flow through to the more senior ranks, this is no longer quite the case.

There is considerable variation in the percentage of women by university. Figure 4 shows the percentage of women in tenure and tenure-track jobs by university. The University of Alberta has hired a large number of women in recent years, and that department is now roughly 43 percent female. HEC and McGill, on the other hand, have women in only 15% of their permanent faculty positions.

Figure 4. Percentage of women in tenure/tenure track economics positions, by Canadian economics department and year



Source: Data collected from Canadian economics department websites, Winter 2007 and 2015.

A comparison with the US

Figure 5 compares data from the US with data from Canada. The US data are taken from the CSWEP annual reports, which provide data from a survey of economics departments in the US. The Canadian data are from Statistics Canada through to 2009-10, and then are interpolated to the Web data for 2014-15, so that they show only overall trends in the past half decade. The two countries appear to track each other rather closely, which is perhaps not surprising given how integrated the academic job market is. The key

exception has been that the boom in hiring of women at the Assistant level t in Canada as compared to the US. Between 2006 and roughly 2010, Canada hired a much larger proportion of women at the entry level than the US did. If the pipeline effects are similar in the US and Canada, this would be expected to start showing up in an increasing proportion of women at the Associate level in Canada relative to the US in the next few years.

40% 35% 30% Assistant 25% 20% 15% Associate 10% 5% Professor 2015 2010 2012 2013 2014 1999 2002 2003 2005 2006 2001 2007

Figure 5. Percentage of women in full-time academic economics positions in Canada and the US, by rank

Source: US: CSWEP (US); Canada: CAUT from 2000-2009, then interpolated to Web figure for 2014-15

Women economists outside academia

We know relatively little about the status of women economists outside academia. It is widely thought that government jobs are relatively attractive to women, for a variety of reasons. The 2000 Report on the Status of Women in economics found that women were above a third of government economists across a range of departments. And there are many economists working in the private sector, who play a very important role in the economics profession. CWEN's recent surveys have not moved beyond outside academia at this point.

However, we should note that recent years have seen a number of women economists move into high profile positions. At the Bank of Canada, Carolyn Wilkins is the Senior Deputy Governor, and the highest-ranked woman in the Bank's history. Two of the four Deputy Governors are women — Agatha Coté and Lynn Patterson—and there are a number of other women are working at the Chief or Advisor levels. At the Department of Finance, Marta Morgan is Associate Deputy Minister, with Diane Lafleur Assistant Deputy Minister (Federal-Provincial Relations and Social Policy).

In the private sector, Beata Caranci was recently named Vice President and Chief Economist, at TD Bank. Sherry Cooper had been Chief Economist at BMO from 1994, and is now Chief Economist at Dominion Lending Centres, and TMX Industry Professor at DeGroote School of Business, McMaster University.

lin the world spanning academia and policy, France St Hilaire is Vice President of Research at the Institute for Research on Public Policy, Armine Yalnizyan is Senior Economist at the Canadian Centre for Policy Alternatives, and Milagros Palacios is Senior Research Economist, Fiscal Studies at the Fraser Institute.

Clearly, this information on non-academic economists is very incomplete, and based on a relatively quick scan of publicly available information. It nonetheless seems appropriate to mention it here.

Conclusion

Women remain a minority in economics departments in Canada, at roughly 25% of all permanent employees.

That is to say, for every woman faculty member, there are three men. The ratio is lower among senior women – one for every 8 men at the Professor level. Surprisingly, though, the ratio of women is also currently lower at the Assistant than at the Associate level. This is the first time that we have seen data in which that is true. This is a result both of growth in women at the Associate level, and of a decline in the percentage of women at the Assistant level. The growth in women at the Assistant level up until recently has clearly filtered through to the Associate level, and in turn growth at the Associate level has been reflected in an increased proportion of women at the level of Professor, but there appears to be some greater leakiness for women than for men at both promotion points.

The recent drop in the share of women at the Assistant level is a little surprising. It will be interesting to see whether they are a statistical blip, or whether it reflects a longer term change. If so, it is unclear what could be driving it, given that there does not appear to be a result of a decline in the supply of women (relative to men) graduating from PhD programs in Canada and the US.

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Appendix A: Responding Departments

Table A1. List of respondents to CWEN/RFÉ surveys

		1999	2013	2015
Economics				
University of Alberta	Alberta		У	У
University of Calgary	Alberta		У	
University of Lethbridge	Alberta			у
Simon Fraser University	BC		У	У
University of British Columbia	BC		У	у
University of the Fraser Valley	BC		У	
University of Northern British Columbia	BC		У	У
University of Victoria	ВС	у	У	
Brandon University	Manitoba		У	
University of Manitoba	Manitoba	у	У	
University of Winnipeg	Manitoba		У	У
Mount Allison University	New Brunswick	У	У	
Universite de Moncton	New Brunswick			
University of New Brunswick - Fredericton	New Brunswick		Υ	у
University of New Brunswick - Saint John	New Brunswick			
University of St. Thomas	New Brunswick	У		У
Memorial University	Newfoundland	у		у
Acadia University	Nova Scotia		Υ	
Dalhousie University	Nova Scotia	у	У	у
Mount Saint Vincent University	Nova Scotia			
Saint Francis Xavier University	Nova Scotia		У	у
Saint Mary's University	Nova Scotia			у
Brock University	Ontario			у
Carleton University	Ontario		У	У
Lakehead University	Ontario			
Laurentian University	Ontario	У	У	У
McMaster University	Ontario	у		У
Nippising University	Ontario			
Queen's University	Ontario	У	У	У
Ryerson University	Ontario	У		У
Trent University	Ontario		У	У
University of Guelph	Ontario	У		У
University of Ottawa	Ontario			У
University of Toronto	Ontario	у		
University of Waterloo	Ontario			
University of Western Ontario	Ontario	у	у	У
University of Windsor	Ontario			
Wilfrid Laurier University	Ontario	У	у	У
York University	Ontario	У		

Table A1. List of respondents to CWEN/RFÉ surveys (continued)

		1999	2013	2015
Economics				
University of Prince Edward Island	PEI		у	
Bishop's University	Quebec			
Concordia University	Quebec	у		У
HEC Montreal	Quebec	у	У	
McGill University	Quebec	у	У	
Universite de Montreal	Quebec	у	У	у
Universite de Sherbrooke	Quebec			
Universite du Quebec a Montreal	Quebec		У	У
Universite Laval	Quebec	у	У	у
University of Regina	Saskatchewan			У
University of Saskatchewan	Saskatchewan	У	У	У
Other				
Alberta, BusinessEconLaw	Alberta		У	
Augustana	Alberta	у		
Cariboo	ВС			
Malaspina	ВС			
Okanagan	ВС			
UBC, Ag Econ	ВС			
UBC, Business Economics	ВС	у		
Algoma U College	Ontario			
Huron University	Ontario		у	у
King's University College	Ontario		У	
RMC	Ontario		•	У
Toronto, Erindale campus	Ontario			У
University of Toronto, Rotman	Ontario		У	У
York University, Atkinson	Ontario	У	na	na
York University, Glendon	Ontario			
Universite du Quebec a Trois Rivieres	Quebec			
Number of Responses				
Economics departments		21	28	29
Other departments		3	4	4
Total		24	32	33

Source: CWEN/RFÉ surveys

Appendix B: Survey on the Status of Women in the Economics Profession in Canada

1) For the 2014-2015 academic year, indicate the number of regular faculty on the voting rights in your department who are:	ne tenure track with
Assistant Professors, Untenured, MALE	
Assistant Professors, Untenured, FEMALE	
Assistant Professors, Tenured, MALE	
Assistant Professors, Tenured, FEMALE	
Associate Professors, Untenured, MALE	
Associate Professors, Untenured, FEMALE	
Associate Professors, Tenured, MALE	
Associate Professors, Tenured, FEMALE	
Full Professors, Untenured, MALE	
Full Professors, Untenured, FEMALE	
Full Professors, Tenured, MALE	
Full Professors, Tenured, FEMALE	
2) For the 2014-2015 academic year, indicate the number of teaching faculty with your department who are:	hout voting rights in
Instructors (or other tenure track), Untenured, MALE	
Instructors (or other tenure track), Untenured, FEMALE	
Instructors (or other tenure track), Tenured, MALE	
Instructors (or other tenure track), Tenured, FEMALE	
Sessional lecturers (without tenure track), MALE	
Sessional lecturers (without tenure track), FEMALE	
3) Does your department offer a Ph.D program ?	
YesNo (skip to question 6)	
4) Thinking of the Ph.D. program offered by your department, indicate the numb	er of students who are:
First Year Ph.D. students (2014-15), MALE	
First Year Ph.D. students (2014-15), FEMALE	
Registered Ph.D. thesis writers (passed general exams, 2014-15), MALE	
Registered Ph.D. thesis writers (passed general exams, 2014-15), FEMALE	
Graduated in the previous year (2013-14), MALE	
Graduated in the previous year (2013-14) FFMALE	

5) Of your Ph.D. students on the job market (in the 2013-14 academic year), indicate the number	r of:
MALE students who obtained a Canadian/U.S. academic job in	
a Ph.D. granting department	
FEMALE students who obtained a Canadian/U.S. academic job in	
a Ph.D. granting department	
MALE students who obtained a Canadian/U.S. academic job in	
a non-Ph.D. granting department	
FEMALE students who obtained a Canadian/U.S. academic job in a non-Ph.D. granting department	
MALE students who obtained a Canadian/U.S. public sector job	
FEMALE students who obtained a Canadian/U.S. public sector job	
MALE students who obtained a Canadian/U.S. private sector job	
FEMALE students who obtained a Canadian/U.S. private sector job	
MALE students who obtained an academic job outside of North America	
FEMALE students who obtained an academic job outside of North America	
MALE students who obtained a non-academic job outside of North America	
FEMALE students who obtained a non-academic job outside of North America	
6) Does your department offer a Master's degree ?	
O Yes	
O No (skip to question 8)	
7) Thinking of the Masters' degree offered by your department, indicate the number of students are:	who
Current students (2014-15), MALE	
Current students (2014-15), FEMALE	
Graduated in the previous year (2013-14), MALE	
Graduated in the previous year (2013-14), FEMALE	
8) Thinking of senior undergraduate students (in their last year), indicate the number of student were in the following academic programmes:	s who
Undergraduate Degree, Major in Economics (2013-14), MALE	
Undergraduate Degree, Major in Economics (2013-14), FEMALE	
Undergraduate Degree, Honours in Economics (2013-14), MALE	
Undergraduate Degree, Honours in Economics (2013-14), FEMALE	

Appendix C: Comparison of pre-cleaned survey data and web data, 2015 survey only

Table A2. Percentage of women by rank in CWEN/RFÉ survey before cleaning and after cleaning, compared with Web collected data, 2014-15 academic year

	CWEN	Web data	
	Raw Edited		
Assistant Professor	28.5%	27.1%	25.5%
Associate Professor	34.7%	27.5%	25.9%
Professor	14.9%	14.1%	13.6%