Report of the Special Committee on the Status of Women Economists in Canada

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Submitted to: Executive Members of Canadian Women Economists Network & Canadian Economics Association

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I. Executive Summary

There is a significant and pronounced gender imbalance in university economics. In 1999, women comprised 12.7 per cent of all full-time, tenured or tenure stream, economics faculty.

Representation of women is higher the lower the rank. Women at the full professor rank comprise 5.4 per cent of all senior economics faculty, 10.9 per cent of associate professors, and 31.3 per cent of junior, tenure-track, assistant professors.

The proportion of junior appointments held by women is 4.4 per cent of the total full-time permanent appointments. This suggests that near to medium term improvements in the gender balance may be negligible without more total net hires.

The highest proportion of women appears in the temporary full-time and part-time contractual positions. Women held 33.9 per cent of the full-time limited or definite term contracts, 30.4 per cent of the course directorships, and 40.5 per cent of the teaching assistantships.

The percentage of women pursuing graduate studies part-time exceeds those pursuing graduate studies full-time. The absolute numbers are, however, small with total part-time students comprising only 5.3 per cent of all graduate students. Whether this is the result of a choice or the limited availability of part-time programs is unknown.

The proportion of graduate students who are women declines the more advanced the program and stage in a program. Women comprise 38.9 per cent of the full-time Masters students, 32.1 per cent of full-time Ph.D. students at the pre-comprehensive stage, and 26.9 per cent of the full-time Ph.D. students at the post-comprehensive stage.

Women economists earned on average 81 – 91 per cent of the salaries of men at the same rank, though the average years at the current rank were lower for women than for men.

23 per cent of both men and women in the small sample of Ph.D. students identified non-academic barriers to career progress.

Women full-time faculty are three times as likely as men to be the primary care giver to a child, elderly parent or chronically ill family member/friend.

Men were much more likely than women to strongly agree with the statement that gender does not affect current salary or career progress.

Junior women are publishing more actively then are junior men. The opposite holds for senior women—senior women are publishing less actively than are senior men.

Research area or focus may be related to the gender of the researcher. Of the top 6 research areas defined by total papers presented at the Vancouver 2000 meetings of the Canadian Economics Association, 4 (Microeconomics, International, Agricultural, and Labour) are found in the top 6 research areas defined by highest participation of women.

The combined grant applications to the1999/2000 and 2000/2001 competitions of the SSHRC Standard Grant (Economics Committee) suggest that the top two areas of research for both male and female are the same. By total number of grants requested, Economic Development and Labour account for 44 per cent of all grants requested by females and 48 per cent of all grants requested by males.

Women comprised 33 per cent of the total 49 "editor years" (one editor year defined by each editor each year) for the *Canadian Public Policy* between 1990-

1999. This was a pronounced and dramatic increase over the previous decade where women held only 4.8 per cent of the editorships.

Women comprised 19 per cent of the total 32 "editor years" for the *Canadian Journal of Economics* between 1990-1999. This is a significant increase over the previous decade where women held no editorships.

The number of female authors, as a percentage of authors of known gender, in the past decade is estimated to be 19.5 per cent of authors of articles in *Canadian Public Policy* and 13.2 per cent of authors of articles in the *Canadian Journal of Economics*. This is an increase over the previous decade where comparable percentages are 8.0 per cent and 7.3 per cent, respectively.

For both the 1999/2000 and 2000/2001 competitions of the SSHRC Standard Grant (Economics Committee), the success rate of women was substantially below the success rate of men, as measured by both number of grants awarded and dollar amounts of the awards granted. In the most recent competition and in only those areas of research where both women and men applied, 18.2 per cent of the female applications were successful by number and 15.2 per cent by dollar value. This is well below the comparable success rates of men, at 55.6 per cent and 39.1 per cent respectively.

The proportion of women economists in Canadian universities is approximately the same as that of women economists in universities in the United States, United Kingdom, and Australia, across rank.

The 12.7 per cent women economists in Canadian universities is lower than the 22.7 per cent women faculty members in all Canadian universities and lower than the 34.6 per cent women economists in the Canadian federal government.

II. Recommendations

Promoting Women Economists

The noticeable decline in enrolment from undergraduate to Masters and on to Ph.D. programs should be examined. Exit polls of female undergraduate economics majors and Masters students to determine their career plans and reasons for terminating their post-graduate education might be considered.

The availability and desirability (from the students' perspective) of part-time graduate economics programs should be examined further. The potentially higher appeal of part-time education for women would, with greater availability, promote women economists.

The CEA Executive could consider formulating an Equity Statement for the purpose of formalising and publicising a national policy on gender equity. Examples of Equity Statements and initiatives by the American Economics Association and the Royal Economics Society are contained in Appendix H.

With the termination of the Special Committee this past December there exists no group within the CEA responsible for monitoring the status of women

economists. Last year, the CEA recognised formally CWEN and agreed to appoint one of the members of the CEA Executive as CWEN liaison, but this assumes a passive or reactive position. The CEA might revisit this question of institutionally supporting CWEN's objective of promoting women economists and more proactively support the need to monitor the relative progress of women economists in Canada.

The CEA Executive could consider raising the profile of gendered economic research by creating possibly an annual scholarship or an award for best CEA conference paper on a topic with a clear gender component, for example.

Promoting Gender-Balanced Research

Economics research—as currently defined by research area emphasis, hierarchy of fields and methods valued—may possibly be the result of the current gender imbalance in the profession. It is important for identifying and assessing such potential systemic discrimination that the gender of researchers be tracked. Tracking the gender of author submissions and acceptances to the *Canadian Journal of Economics* and *Canadian Public Policy* may be two possible means for gathering further evidence.

Hiring Women Economists

Many economics departments retain the long-standing practice of short impressionistic pre-screening interviews conducted in hotel rooms. This location of the interview creates an extremely chilly climate for women candidates. These interviews should be moved out of the hotel room and into boardrooms or some alternative impersonal publicly accessible venue. Government agencies and a small number of Canadian university departments are already successfully pursuing this practice.

An Affirmative Action plan for hiring by each department should be carefully constructed. All members of the hiring committee should be well informed of acceptable and unacceptable hiring practices. The Affirmative Action Plan proposed by the University of Saskatchewan (Appendix I) is offered as a model of a well-constructed process designed to avoid unintended discrimination.

Standardised questions in advance of any interview are a widely recognised means of promoting fairness in evaluating all candidates. A sample of the questions recommended by Queen's University is included in Appendix L.

Ultimately to see significant improvements in the gender balance in academic economics, we will have to have more total academic appointments. In the medium term, this may be forthcoming as the ageing Canadian professoriate retires. Support for appointment bids of individual academic economics departments may well be enhanced if the CEA declares this need nationally along with a formal equity statement.

If further examination and tracking of research area by gender support the hypothesis that research focus is related to gender, the implications for hiring are clear. Addressing the gender imbalance in Canadian university economics departments will have to include consideration for fields advertised.

III. Background and Rationale

Heightened awareness of the social and economic importance of valuing and promoting diversity forms the wider context of a study undertaken to examine the status of women economists in Canadian university economics. There is a well-recognised social need to "incorporate women's specificity, priorities and values into all major social institutions." (*Setting the Stage for the Next Century: The Federal Plan for Gender Equality"* Status of Women Canada, 1995.)

Institutions in which employment is under represented by identifiable groups of people have been seeking to proactively promote employment equity. Employment Equity is an action-oriented approach that identifies under-representation or concentration of, and employment barriers to, certain groups of people, and provides a number of practical and creative remedies. (See *Employment Equity* HRDC 2000.) The federal legislation targets groups of people who are women, visible minorities, aboriginals, and the disabled.

In the past few years, Canada has implemented significant national initiatives designed to promote employment equity. Federal and federally regulated employers are now subject to employment equity legislation. Federal agencies are subject to that which is contained in the Employment Equity Act, while contractors bidding for goods and services contracts with the federal government are subject to the criteria set out under the Federal Contractors Program. The Government of Canada introduced these two programs in the mid-1990s to ensure equal access to employment opportunities for all Canadians by directly obligating and assisting employers in the implementation of employment equity.

As contractors with the federal government, many universities are subject to the employment equity guidelines as mandated in the Federal Contractors Program. More important, the Canadian university is the institution in which many economists receive the necessary education and credentials. As such it is appropriate to begin any examination of the equity questions with a study of the diversity in Canadian university economics departments and programs.

The following report is the culmination of a first and preliminary attempt to broadly examine the employment status of women economists, raise awareness of gender equity in the economics profession, and to seek constructive solutions to the challenges we face. This report summarises a study of women only; it does not extend to members of the other three targeted groups. While these other three groups warrant examination, a resource constraint prevented us from extending the scope of the current project in this way.

IV. Introduction

In the fall of 1999, the Canadian Women Economists Network/Réseau de Femmes Économistes (CWEN/RFÉ) sought, in co-operation with the Canadian Economics Association (CEA) to examine the Status of Women Economists in Canada. A special committee, joint CWEN/RFÉ and CEA, was struck to undertake the exercise. The composition of the Special Committee and its original terms of reference are contained in Appendix A. This report is the final report of that Committee.

The principal objectives of the exercise were to (1) update and expand the Directory of Women Economists and (2) examine the status of women economists in Canada and to make

recommendations that might assist in meeting the objective of achieving gender equity within the Canadian economics profession.

To meet these objectives, the Committee undertook in 1999-2000 the following primary tasks:

- Survey Chairs and Heads of Economics units at Canadian universities to establish first-hand the gender composition of economics faculty in Canadian universities, by rank.
- Survey individual academic economists to ascertain individual compensation, the level and focus of professional activity, obstacles to career development, and subjective impressions of the impact of gender on primary career development indicators.
- To compile a Directory of academic women economists.
- In addition, CWEN/RFÉ held a panel session at the Vancouver 2000 annual meetings of the CEA exploring preliminarily the question of gender equity in Canadian academic economics.

This report summarises the results of these primary activities.

To obtain a more complete sense of the "pipe line" data and to identify the local pool of economists, this report includes information on the gender balance of Canadian undergraduate and graduate economics degrees that were awarded in 1999 as well as the results of a small survey of current graduate student issues.

With the intention of placing the survey data in context, this report provides information on:

- Comparisons of the Canadian gender balance of academic economics with those of the United Kingdom, United States, and Australia.
- Comparisons of the gender balance in academic economics with that of all full-time permanent faculty in Canadian universities.
- Comparisons of the gender balance in academic economics with those in the primary agencies of the Canadian federal government.

For the purpose of examining professional research support and focus, this report provides information—some of it tentative—on:

- Gender composition of research funding from the Social Science and Humanities Research Council, by research area.
- Gender composition of the editorial boards and authorship of three primary academic research outlets: Canadian Public Policy, the Canadian Journal of Economics, and the Vancouver 2000 conference of the Canadian Economics Association. (Conference papers only are disaggregated by research area as well as gender.)

V. Results of the CWEN/RFÉ-CEA 1999 Survey of Heads of Departments of Units on the Status of Women Economists in Canadian Universities.

Method:

The Survey was posted on the CEA web site (http://economics.ca) February of 2000. Data were requested as at November 30, 1999. (For a copy of the survey questions as well as the aggregated data, see Appendix B). An announcement and request for responses was sent via electronic mail to the heads of 54 of the 65 departments and units listed on the CEA List of Economics Departments. We received 24 total responses—a response rate of 45 per cent. Of the 27 largest university departments contacted, 18 supplied data—a response rate of 67 per cent. (For a list of departments contacted and a list of those responding, see Appendix C).

Results—Full-time Faculty:

Full-time faculty appointments include full-time contractually limited or definite term appointments, tenured and untenured assistant, associate and full professor appointments, and retirees still teaching. Of the 510.45 full-time faculty appointments, there were 65 women or 12.73 per cent of the full-time faculty. This percentage is noticeably skewed toward the more junior and temporary contracts, with 31 women of the total 96.5 faculty, or 32.1 per cent, holding limited term and untenured junior appointments. Graph 1 provides a visual summary of the 1999 Gender Balance of Academic Economics, by rank.

Results—Part-time Faculty:

Part-time faculty includes course directors (instructors hired to teach a single course with no obligation on the part of the employer to consider further employment of that instructor), teaching assistants, including those hired to grade only. A further distinction was made between those part-time faculty members who were currently enrolled as graduate students and those who were not. The gender balance of part-time course directors varied little across student status. The gender balance of course directors who were also graduate students was 31.8 per cent women, where for course directors, excluding graduate students, it was 30 per cent. The majority of the teaching assistants were, as expected, also graduate students. The gender balance here is noticeably higher. Of the 356 teaching assistants, 40.5 per cent were women.

Results—Full-time Graduate Students

The graduate student category was disaggregated by program (Masters and Ph.D.) and disaggregated by stage in the Ph.D. program (pre- and post-comprehensive exams). Of the total 692 graduate students, 243 or 35.1 per cent were women. The balance across programs again indicates a noticeable decline in that balance the more advanced the stage, suggesting a significant attrition rate of women out of economics graduate studies. Where 39 per cent of the full-time Masters students are women, only 26.9 per cent of the post-comprehensive Ph.D. students are women.

Results—Part-time Graduate Students

The number of part-time students in graduate economics is low, with only 37 students in total. As the availability of a part-time graduate economics degree was not surveyed, we do not know whether the low total enrolment is the result of the unavailability of such a degree or the result of a choice that the majority of students have made to enrol in full-time studies. Of those few students who are enrolled in a part-time Masters degree program, 44.7 per cent are women (versus 39 per cent in the full-time Masters degree program). A similarly higher ratio appears in the part-time, post-comprehensive Ph.D. program, with 35 per cent women enrolled in the Ph.D. program part-time versus 26.9 per cent full-time. Graph 2 provides a visual description of the 1999 Gender Balance of Canadian Economics Graduate Students.

Comments

The snapshot of the gender balance across university economics faculty ranks indicates a serious gender deficit. Across all full-time contracts, men clearly dominate academic economics, comprising 87.3 per cent of the full-time economics faculty. The few women who do hold a university contract are disproportionately represented in temporary jobs—course directorships and contractually limited appointments—and junior tenure-stream appointments. The fact that the gender balance in junior permanent appointments is higher than for senior, tenured appointments begs questions related to the flow of women into economics and the rate at which this flow will affect the gender balance of the stock. Without any time series data, we cannot distinguish between a relatively new phenomenon of hiring more women (suggesting the future could see an improvement in the gender balance) and a persistent problem of a high attrition rate out of academic economics as junior women refuse or are denied tenure. Assuming the more optimistic interpretation of the data as reflecting a new phenomenon, we still encounter significant challenges for any near-term improvements. Given we did not inquire after the number of new hires in 1999, we cannot be any more precise about the length of time it may take to significantly alter the gender balance in the stock of full-time permanent academic economics faculty, assuming. Yet, any optimism must be critically constrained by the absolutely low numbers of women in junior appointments. Clearly, the total number (20) of women junior faculty out of a total 452 full-time permanent appointments is too small to make a significant impact on the gender balance in academic economics in the near to medium term.

(Graph1: 1999 Gender Balance of Academic Economics, by rank and Graph 2: 1999 Gender Balance of Canadian Economics Graduate Students omitted)

VI. Results of the CWEN/RFÉ-CEA 1999 Survey of individuals on the Status of Women Economists in Canadian Universities.

Method:

The Survey was posted on the CEA web site (http://economics.ca) February of 2000. Data were requested as at November 30, 1999. (For a copy of the survey questions, see Appendix D). An announcement was sent via electronic mail to the heads of 54 of the 65 departments and units listed on the CEA List of Economics Departments with a request that they forward the announcement to all full-time faculty, part-time faculty, and Ph.D. students. The rate of compliance with this request is unknown, hence the total number of those ultimately contacted is unknown. Survey responses are anonymous.

We received a total of 80 individual responses: including 63 full time, permanent faculty; 2 limited-term faculty; 5 PhDs currently seeking employment; and 8 PhDs not yet seeking employment. The gender breakdown by rank is provided in the Tables below.

Table 1. Individuals Survey—Responses by Rank, by Gender

Primary Employment Function Individual Survey Response	Female	Male	Total	% Female Individual Responses	% Female Dept Survey
All Faculty: full-time, permanent					
Professor	5	21	26	19.2%	5.4%
Associate	8	10	18	44.4%	10.9%

Assistant	10	8	18	55.5%	31.3%
Lecturer	1	0	1	100%	
Total	24	39	63	38.1%	12.7%

Primary Employment Function **Individual Survey Response**	**Female**	**Male**	**Total**	**% Female Individual** **Responses**	**% Female Dept Survey**
Faculty: full-time, limited term	1	1	2	50%	33.9%

Primary Employment Function **Individual Survey Response**	**Female**	**Male**	**Total**	**% Female Individual** **Responses**	**% Female Dept Survey**
Ph.D. students					
--seeking employment	2	3	5	40.0%	
--not yet seeking employment	5	3	8	62.5%	
--post comprehensive exams					26.9%
--pre-comprehensive exams					32.1%

The significantly higher representation of women in the responses, over the estimated proportion of women nationally, is notable.

VI.1. Salaries and Career Progress

Salaries at each of the three permanent full-time ranks differ markedly between men and women. Women's salaries for women at the Assistant and Full Professor ranks are approximately 91 per cent of men's salaries. Women at the Associate Professor rank earn on average 81 per cent of men at the same rank.

Progress through the ranks, as estimated by the length of time between obtaining the Ph.D. and the first year of obtaining the current rank, differs across ranks. Whereas this interval is approximately equal for the most senior faculty, junior women appear to have obtained their current rank faster than junior men.

Table 2. Individual Survey—Average Length of Time to Progress through Ranks, by Gender Source : CWEN-CEA Survey of Individual Economists, 2000

		Average Year of PhD	Year of First Academic Appt.	Duration: PhD to First Appt.	First Year Current Appt.	Duration: PhD to Current Appt.	Duration: First Appt. to Current Appt.
Assistant	**Female**	1996.4	1995.3	-1.1	1997.3	0.9	2
	Male	1992.7	1991.9	-0.8	1995.8	3.06	3.9
Associate	**Female**	1989	1987.8	-1.2	1995.4	6.4	7.6
	Male	1986	1985.3	-0.7	1993.1	7.1	7.8
Full	**Female**	1980.6	1977	-3.6	1993.8	13.2	16.8
	Male	1975.5	1974.2	-1.3	1988.6	13.1	14.4

Table 3. Individuals Survey--Average Salary by Rank, by Gender

Source : CWEN-CEA Survey of Individual Economists, 2000

Rank		Average Salary	Avg Years @ Current Rank	Total # Responses
Assistant	Female	$62,000	2	10
	Male	$67,500	3	8
Associate	Female	$66,430	4	7
	Male	$82,000	6	10
Professor	Female	$93,000	5	5
	Male	$102,140	10	21

Comments on Salaries and Progress

Women responding to the survey earned less than men in 1999 on average. This result coincides with individual cases at specific institutions, where women economists are pursuing pay equity grievances under provincial Employment Standards legislation. Whether a salary disparity holds for women economists nationally remains, however, an open question. While women surveyed earned less than men, they have held their current rank for fewer years on average. Moreover, the sample is small and the variety of other factors that may influence salary were not surveyed thus prohibiting a fuller analysis of the disparity.

The data suggest that junior women are progressing through the ranks faster than their male colleagues. This may be explained, in part, by the apparent fact that junior women are considerably more active professionally—as measured by research activity alone—than are junior men. Results on research activity by rank and by gender is reported below.

VI.2. Job Search and Graduate Student Experience

There were only a few graduate students responding to the survey : 4 men and 1 woman currently seeking a job; 3 men and 5 women currently enrolled full-time in a Ph.D. program but not yet seeking employment.

Of the 5 currently in the market for full-time employment as an economist, all believed themselves to be well informed of academic job opportunities and all the men believed themselves to be fairly ill-informed of the non-academic job opportinities for economists. The single woman believed herself to be well informed of all job opportunities. Four out of the five job seekers stated they faced no non-academic barriers throughout their studies. One male respondent identified working more than 10 hours a week to support his family.

Of the 8 Ph.D. students not yet on the job market, 3 of the 5 women and 2 of the 3 men identified non-academic barriers to completion of their studies. All 3 women postponed or planned to postpone their studies for family reasons: one to have a child, one to care for a critically ill family member, and one to change universities/program to accommodate the career of her partner. Both men identified working more than 10 hours a week to support their families and one of these men has postponed his studies to accommodate his partner's career.

Comments

Even in this admittedly small sample, we see a hint of the traditional gender divisions of family responsibilities—men working to support the family and women as primary caregivers. Family responsibilities are, for men and women alike, non-academic barriers to career progress. Full recognition and accounting for the non-traditional (in the sense of slower progress) career path will level the playing field for well-qualified women and men striving to maintain a balance between family and career.

VI.3. Publication of Research

Table 4. Individuals Survey—Conference Participation, by Rank, by Gender

Source : CWEN-CEA Survey of Individual Economists, 2000

Average Conference Attendance 1998/1999 by Rank, by Gender		
	Female	**Male**
Assistant	3.4	2.8
Associate	3.0	4.1
Professor	3.8	4.0

Average	**3.3**	**3.7**
Average Conference Papers 1998/1999 by Rank, by Gender		
	Female	**Male**
Assistant	2.6	1.4
Associate	2.5	2.7
Professor	1.6	2.2
Average	**2.3**	**2.2**

Table 5. Individuals Survey—Publications by Rank, by Gender

Source : CWEN-CEA Survey of Individual Economists, 2000

Average Publication in Lifetime by Rank, by Gender		
	Female	**Male**
Assistant	16.8	9.4
Associate	19.0	29.0
Professor	24.6	65.0
Average	**18.8**	**44.4**
Average Publication 1998/1999 by Rank, by Gender		
	Female	**Male**
Assistant	4.4	1.5
Associate	4.8	4.0
Professor	1.8	4.9
Average	**3.8**	**4.0**

Comments

Junior women have an average lifetime publication total that is higher than junior men by a factor of 1.8. Men at the tenured associate level have an average number of lifetime publications that exceeds that of women at the same level by a factor of 1.5. Men at the full professor rank have an average lifetime publication total exceeding that of their female colleagues by a factor of 2.6. Restricting the comparison to articles in economics journals and chapters in scholarly books yields the same "more than/less than" conclusions but the factor differences are smaller. For example, senior men have published in their lifetime more articles in economics journals and

chapters in books than senior women, but the factor difference is smaller at 2.2. (Not reported here.)

VI.4. Personal Factors and Subjective Impressions of Career Development

Questions designed to assess personal factors affecting career development yielded interesting, if conventional, results. Women full-time faculty are three times as likely as men to be the primary care giver to a child, elderly parent or chronically ill family member/friend. Over half (54 per cent) of the women responding stated they have held or are holding primary caregiver responsiblities versus 18 per cent of the men. More than one third (37 per cent) of women have taken time out of their career to undertake this responsibility versus 10 per cent of men.

Men are slightly more likely to forego a job or promotion because of a spouse's career commitments, but only 2 per cent have left a job and moved to another city/region to accommodate a spouse's career versus 17 per cent of women who have left a job and 12 per cent who have moved.

Subjective impressions of the impact of gender on career status, salary, and progression reveal a noticeable gender difference. Men were much more likely than women to strongly agree with the statements that gender does not affect current salary nor career progress.

Table 6. Individuals Survey—Personal Factors Affecting Career Development

Source : CWEN-CEA Survey of Individual Economists, 2000

Have you ever been a primary care giver?			
	Yes	**No**	**% Yes**
Male	7	32	17.95%
Female	13	11	54.17%
Have you ever taken time away from career to be a primary care giver?			
	Yes	**No**	**%Yes**
Male	4	35	10.26%
Female	9	15	37.50%
Have you ever foregone a job/promotion?			
	Yes	**No**	**% Yes**
Male	8	31	20.51%
Female	4	20	16.67%
Have you ever left a job to accommodate spouse's career?			

	Yes	No	% Yes
Male	1	38	2.56%
Female	4	20	16.67%
Have you ever relocated to accommodate a spouse's career?			
	Yes	**No**	**% Yes**
Male	1	38	2.56%
Female	3	21	12.50%

Table 7. Individuals Survey—Subjective Impressions of the Impact of Gender

Source : CWEN-CEA Survey of Individual Economists, 2000

Male			**Female**		
Agreement	**Frequency**	**Value**	**Agreement**	**Frequency**	**Value**
Strongly disagree	1	1	Strongly disagree	4	1
	13	2		4	2
	2	3		5	3
	9	4		6	4
Strongly agree	12	5	Strongly agree	5	5
Mean:	3.49		Mean:	3.17	
Median:	4		Median:	3	
Number of male:	37		Number of female:	24	
Male			**Female**		
Agreement	**Frequency**	**Value**	**Agreement**	**Frequency**	**Value**
Strongly disagree	1	1	Strongly disagree	1	1
	4	2		6	2
	4	3		2	3
	3	4		6	4
Strongly agree	26	5	Strongly agree	9	5

Mean:	4.29		Mean:	3.67	
Median:	5		Median:	4	
Male			**Female**		
Agreement	**Frequency**	**Value**	**Agreement**	**Frequency**	**Value**
Strongly disagree	2	1	Strongly disagree	3	1
	3	2		5	2
	3	3		2	3
	8	4		8	4
Strongly agree	22	5	Strongly agree	6	5
Mean:	4.18		Mean:	3.38	
Median:	5		Median:	4	

VII.1. Publication and Support of Research—34th CEA Conference Participation

We examined research publication in the form of participation in the Vancouver 2000 annual meetings of the Canadian Economics Association and publications in the two CEA-sponsored journals (Canadian Public Policy and the Canadian Journal of Economics).

Appendix E provides details of conference participation, by type of participation, by gender, and by JEL classification of research area. Identification of gender and assignment of JEL classification were estimated on the part of the research team. Only those researchers known to be women, or by first name gender identification, were included in the female category. JEL classification was assigned on the basis of the paper and session titles. Of the total 897 participations by economists of known gender (where an individual presenting two papers would count for two participations, for example), 16.4 per cent were women. Slightly less than two-thirds of these total participations were papers presented, with women delivering 17.2 per cent of the papers by authors of known gender. Women formed 16.8 per cent of the total discussants, 14.6 per cent of the chairs, 11.1 per cent of the panellists, and 11.1 per cent of the plenary speakers.

An attempt to discern the research areas (as defined by papers presented) in which women most frequently focus, suggests that research area may be related to gender. Of the top 6 research areas defined by total papers presented, four (Microeconomics, International, Agricultural, and Labour) are found in the top 6 research areas defined by highest participation of women. Notably, within Microeconomics, almost all the papers by known female authors were by title categorised in D1. Household and Family Economics.

Table 8. Top 6 research areas of all conference participants defined by total number of papers presented.

JEL-Classification	Total Papers	% Female

D. Microeconomics	135	29.1%
E. Macroeconomics and Monetary Economics	114	8.3%
F. International Economics	86	19.2%
J. Labour and Demographic Economics	74	16.1%
Q Agriculture and Natural Resources	82	18.5%
G. Financial Economics	53	11.1%

Table 9. Top 6 research areas of women defined by total number of papers presented by females.

JEL-Classification	Total Papers	% Female
K. Law and Economics	15	30.0%
D. Microeconomics	135	29.1%
C. Mathematical and Quantitative Methods	24	27.8%
F. International Economics	86	19.2%
Q Agriculture and Natural Resources	82	18.5%
J. Labour and Demographic Economics	74	16.1%

VII.2. Publication and Support of Research—Canadian Public Policy and the Canadian Journal of Economics

Consideration of the representation of women in the primary Canadian research outlets includes as well representation in editorship and authorship of articles published in the two journals sponsored by the Canadian Economics Association: the *Canadian Journal of Economics* and the journal of *Canadian Public Policy*. Representation is an important indicator of opportunity. Editors influence participation in a number of ways, some of which may impact on the participation of women. The importance of encouraging the high visibility of members from under represented groups alone is widely recognised. Further, if research emphasis is, as we suspect, endogenous to the gender of the researcher, representation of women in these gateway positions is critical to any effort to reduce the inherent gender bias in published economics research.

Editorial Boards

Managing and Associate Editors of the *Canadian Public Policy*, by year, by gender for the period of 1980 – 1999 are provided in Appendix F. Managing and Associate Editors of the *Canadian Journal of Economics*, by year, by gender, for the same period are provided in Appendix G. For the purpose of examining the gender balance, editorships are counted in units of "editor-years" that is, each year, each editor counts as one editor year.

Women accounted for only 2 editor years or 4.8 per cent of the total 42 editor years between 1981 and 1989 *Canadian Public Policy*. The *Canadian Journal of Economics* had no women editors during this same time period.

In the subsequent decade, the representation of women editors of *Canadian Public Policy* increases significantly, to 16 editor years or 33 per cent of the total 49 editor years. This increased representation reflects increased representation in both managing and associate editorships.

The *Canadian Journal of Economics* saw a more moderate increase, but with no woman holding the position of Managing Editor of regular issues. (The only woman president of the Canadian Economics Association did, in one year, act as Managing Editor of a Special Issue of the *Canadian Journal of Economics*). Between 1990 and 1999, representation of women editors increased to 6 editor years or 19% of the total 32 editor years, including the Special Issue.

Authorship

Only authors known to be women or assumed to be women on the basis of first name gender identification were counted. Multiple authors are counted individually, that is, no adjustment in weighting is made for the presence of 2 or more authors on a single article. On the basis of this crude counting, we estimate a moderate increase in 1990-1999 in the participation and representation of women in both journals over the previous decade. Average gender representation is summarised below. A breakdown by year, by gender for the *Canadian Public Policy* is included in Appendix F. Comparable data for the *Canadian Journal of Economics* are included in Appendix G.

The question whether the gender of either the author or the reviewer influences acceptance rates is another dimension for consideration but one that was unexplored by this Committee. Blank (1991:1042) finds that "the data are consistent with an argument that women fare better under a double-blind reviewing system" but that the estimated effects are "small and show no statistical significance." Gender differences in the review process are, however, significant. "Female referees tend to give lower ratings to nonblind papers than do men and tend to give higher ratings to blind papers, while male referees show the opposite pattern." (1991:1064).

Table 10. Average Percentage of Female Authors in CPP and CJE, 1980-1999

Years	Canadian Public Policy	Canadian Journal of Economics
1980 – 1989	8.0%	7.3%
1990 – 1999	19.5%	13.2%

VII.3. Publications and Support of Research—SSHRC Standard Grant Applications and Awards: Economics Committee, by Gender and Research Area.

For both the 1999/2000 and 2000/2001 competitions, the success rate of women was substantially below the success rate of men, as measured by both number of grants awarded and dollar amounts of awards granted. In the most recent competition and in only those areas of research where both women and men applied, 18.2 per cent of the female applications were successful by number and 15.2 per cent by dollar value. This is well below the comparable success rates of men, at 55.6 per cent and 39.1 per cent respectively. See Table 11 below for a summary of these success rates.

When the total number of applications are considered, the difference between the success rates becomes slightly less dramatic, but remains significantly lower for women overall. For details of the success rates by area of research, by gender for the two competitions, see Appendix K.

Table 11. Success Rates of SSHRC Standard Grant Competition—Economics Committee, by Gender, 1999/2000 & 2000/2001

Areas of Research in which Female + Male Apply	Total Number of Grants Requested	Total Dollars Requested	Total Number of Grants Awarded	Total Dollars Awarded	Total # Awarded/ Total Requested	Total $ Awarded/ Total Requested
1999/00 Female	17	$921,482	5	$229,019	**29.4%**	**24.9%**
1999/00 Male	78	$4,250,159	38	$1,635,636	**48.7%**	**38.5%**
1999/00 Sub-Total*	95	$5,171,641	43	$1,864,655		
2000/01 Female	11	$623,857	2	$94,557	**18.2%**	**15.2%**
2000/01 Male	36	$2,206,614	20	$863,594	**55.6%**	**39.1%**
2000/01 Sub-Total*	47	$2,830,471	22	$958,151		

**Excludes grant applications/awards in areas of research with only female or only male applications.*

In this forum, the top two areas of research for both male and female are the same. By the combined 1999/2000, 2000/2001 total number of grants requested, Economic Development and Labour account for 44 per cent of all grants requested by females and 48 per cent of all grants requested by males. The same percentage (44 per cent) of grants in these two areas was awarded female applicants whereas a greater percentage of grants (56 per cent) was awarded the male applicants. (See Appendix K for details.)

VII.4. Publication and Support of Research—Summary and Comments

Junior women appear to be considerably more active—as measured by publications and conference participation—than junior men, whereas the opposite appears to hold at the most senior rank.

An attempt to discern the research areas (as defined by CEA conference papers presented) in which women most frequently focus, suggests that research area is related to gender. Of the top 6 research areas defined by papers presented at the 34th annual meetings of the Canadian Economics Association, four of these research areas apparently coincide with the top 6 research areas preferred by women. These results coincide with the anecdotal evidence reported by participants in the CWEN panel session on the Status of Women Economics in Canadian Universities (June 2000). Appendix J provides a brief summary of this session. If further examination and tracking of research area by gender support these findings, the implications for hiring are clear. Addressing the gender imbalance in Canadian university economics departments will have to include consideration for fields advertised.

Two years of data on grant applications to the SSHRC Standard Grant (Economics Committee) competition suggest a different picture. The top two areas of research by number of applications are the same for men and women and the success rates are much higher than average. What is disturbing is the relatively low overall success rate of women as compared to men in both years.

Editorships and authorships reflect a low participation of women. We do not know, however, the gender balance of the authors of submitted but rejected papers, nor do we know the gender balance of the pool of researchers potentially publishing in these journals. We do not have earlier data on the gender balance in Canadian universities nor do we know the gender balance of the pool of potential authors outside of Canadian university economics departments. Consequently, relative rejection rates as well as broader relative participation rates remain unknown. Tracking these data in the future will serve to enhance our understanding of any selection biases that may be stemming from gender differences.

VIII. Comparisons

The final question for this study was how does the status of women economists in Canadian universities compare with the status of women economists elsewhere—in other Canadian employment areas and academic employment in other countries—and all women full-time faculty in Canadian universities.

From these data, it appears that the status of women economists in Canadian universities is approximately the same as the status of women economists in other English speaking countries, but much worse than the average status of women faculty members in Canadian universities, with the exception of those women at the most senior rank.

Table 12. Comparisons of the Gender Balance of Women Economists in UK, USA, Australia and All Academic Full-time Faculty in Canadian Universities.

Full-time Faculty	% Female U.S. Econ. 1998	% Female U.K. Econ. 1998	% Female Australia Econ. 1999	% Female all faculty Cdn. Univ. 1994	% Female Economist Canada 1999
Professor or equivalent	6.5%	4.1%	2.9%	1.2%	**5.4%**
Associate or equivalent	13.4%	11.24%	4.5%	24.3%	**10.9%**
Assistant or equivalent	26.0%	28.1%	30.9%	38.6%	**31.3%**
Lower Ranks	38.0%		38.7%	52.5%	
Average				22.7%	**12.7%**

Sources: Mumford 1999; Ornstein et al, 1998; CWEN-CEA Department Survey.

Table 13. Comparisons of the Gender Balance of Women Economists in Canadian Federal Government and Bank of Canada: Total Female Economists to Total Economists

1999 Employment	Total Number of Female Economists	Total Number of Economists	% Female Economists to Total
Bank of Canada	35	136	25.7%
Department of Finance	102	293	34.8%
Statistics Canada	341	902	37.8%
Industry Canada	124	407	30.5%
Total/Average All Units	802	1738	34.6%

IX. Directory of Women Economists

An electronic Directory of Women Economists in Canadian universities has been created. The database contains approximately 160 names of women economists in Canadian universities as well as their rank, highest degree, research interests, and contact information. There are outstanding issues with respect to distribution, controlled usage, and maintenance that must be

addressed before the database is made available. CWEN and the CEA will have to agree on a policy for distributing the database, for use of the information, and arrange for maintenance of the database before it will be released.

X. Final Comments

The results of this study suggest there is a significant and pronounced gender deficit in economics in Canadian universities. The principle conclusions of this study have been summarised above in the Executive Summary. In many important ways, this study is preliminary and the results strongly suggestive of issues that warrant a more detailed examination. Pay equity and gender-specific research foci are the two most pressing issues that if examined more closely could provide critical insight into the most important implications for individuals and for the profession of this gender imbalance. Additional information about these two issues may, as well, yield important suggestions for more effectively addressing the current gender imbalance.

Conference papers, research grant applications, and anecdotal evidence suggest that the gender of the economics researcher may influence his or her research focus. This conclusion follows as well from the wider consideration of gender-specific priorities and values reflected in the Federal Plan for Gender Equality (Status of Women Canada, 1995). For economics, it suggests that economics as currently defined by method, hierarchy of fields valued, domination of certain fields in currently accepted research outlets, and the like are in fact an outcome of the current gender imbalance in the profession. Put differently, it appears that economics research may be endogenous to the gender balance of its constituent researchers. Further examination is important. If further evidence supports this suspicion, all means of promoting a gender balanced profession and research agenda—from editorial policies, grant allocations, and field preferences for hiring—will have to account for these gender differences in research.

Other important issues that warrant further research include the availability of part-time graduate education opportunities. It appears from our small sample that the proportion of women preferring part-time graduate studies is higher. This result coincides with recognition that professional women value highly a balance between career aspirations and family obligations. If this reflects the preferences of many women considering a career in economics, then seeking to expand the opportunities to pursue part-time graduate studies will increase the pool of qualified women economists.

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