Accounting Research by Canadian Higher Education Institutions:

A Retrospective Assessment

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Received: September 25, 2012	Accepted: October 9, 2012	Online Published: December 7, 2012
doi:10.5539/ibr.v6n1p12	URL: http://dx.doi.org/10.5539/ibr.v	v6n1p12

Abstract

This study examines the accounting research among Canadian higher education institutions over the last two decades (1991-2010). Overall, thirty-eight Canadian universities contribute 4.1% of all publications in 28 leading accounting journals. The five most productive universities are the University of Alberta, the University of Toronto, the University of British Columbia, the University of Waterloo, and Simon Fraser University. Compared with their counterparts in Australia and the U.K., leading Canadian universities are not as productive concerning overall publication in accounting journals. However, when examining only the top six premium accounting journals, leading Canadian universities clearly outperform their counterparts in Australia and the U.K.

Keywords: accounting research, journal publications, research productivity, Canadian

1. Introduction

The assessment of academic research productivity is a research subject that has received continuous attention over time. As suggested in Chan, Chang, and Chen (2011), the results of assessment are useful to national governments, administrators, employers, faculty, students, and donors in making assorted decisions. For instance, the United Kingdom regularly conducts research assessment exercises to gauge the performance of its higher education institutions and uses the findings to help research funding allocation. Australia, Hong Kong, and New Zealand, applying the U.K. model, conduct their own research assessment exercises as well. Evidently, higher education institutions use the results of assessment to promote their programs; faculty members, needless to say, leverage good assessment outcomes to advance their careers.

Typically, research assessment exercises are conducted in short intervals (such as every five years) across academic disciplines. The lack of specific disciplinary focus makes the results overly general and less informative to various constituents; the short-interval conduct, on the other hand, limits the generalizability of the results. Richardson and Williams (1990) and McConomy and Mathieu (2003) analyze research productivity of Canadian accounting researchers using articles published in the top-ten accounting journals. Their studies are conducted in medium intervals between ten to fifteen years. Be that as it may, existing literature has been limited in long-ranged study based on a comprehensive list of journals that is dedicated to the assessment of Canadian accounting research.

Our study provides a long-term assessment of accounting research among Canadian higher education institutions. Based on the publication records in a set of 28 leading accounting journals during 1991-2010, we present several interesting findings. Overall, 38 Canadian universities published in the 28 leading accounting journals over the 20-year study period and contributed 4.1% of the total publications. Though Canada's productivity in accounting research is ranked behind the U.S., the U.K., and Australia in terms of research productivity in the 28 accounting journals, leading Canadian universities outperform their counterparts in Australia and the U.K. concerning research productivity in the top six accounting journals.

2. Literature Review

2.1 Literature in Accounting Program Assessment

The literature in accounting program assessment has three principal clusters. The first cluster studies the performance of North American higher education institutions. Among them are Hasselback and Reinstein (1995), Brown (1996), and Stammerjohan and Hall (2002), which examine accounting program rankings using the number of published articles by current accounting faculty, citations, and doctoral candidates' placement, respectively.

The second cluster of literature expands the North American studies to a global context. For instance, Chan, Chen, and Cheng (2007) examine publication records of 24 accounting journals during 1991-2005 and provide a global ranking of higher education institutions in accounting. Coyne et al. (2010) conduct an analysis of 11 highly regarded accounting journals and provide a ranking of accounting programs with respect to different sub-areas of accounting and research methods. Stephens et al. (2010) produce a ranking similar to Coyne et al. (2010), but use the research productivity of doctoral graduates from the accounting programs. Coyne et al. (2010) and Stephen et al. (2010), however, subjectively classify articles into the accounting sub-areas and research methods. In addition, both Coyne et al. (2010) and Stephen et al. (2010) do not provide ranking statistics, making it difficult to determine the progress of a specific accounting program over the years in terms of the level of research output.

The third cluster of literature focuses on a specific geographical region other than North America. Over the last two decades, competition for government funding among European and Asian higher education institutions has intensified. An objective assessment study within the region can signify higher education institutions' research performance and thus aid them in funding decisions. Chan, Chen, and Cheng (2005) offer such an assessment among the Asia-Pacific higher education institutions; they later provide a similar study in the European region (Chan, Chen, & Cheng, 2006).

2.2 Literature of Research Productivity in Canada

Several studies have examined Canadian research productivity in a choice of business disciplines. On the subject of financial research, Booth and Heath (1990) offer an early study on the research productivity of Canadian finance departments. Due to the use of current faculty composition, Booth and Heath limit their scope to the 1988-1989 academic years. In a more recent study, Chan, Chang, and Chen (2011) present a long-term assessment of financial research productivity among Canadian scholars and institutions. Concerning economic research in Canada, Lucas (1995) and Davies, Kocher, and Sutter (2008) provide detailed analyses and find that Canadian university research output was ranked third in the world in the top ten economics journals during 1980-2000. Nevertheless, the relative scholarly output share of Canadian universities in economic research declined in the 1990s.In the disciplines of international business and information systems, Rugman (2008) offers a thorough qualitative discussion on the development of international business research in Canada since the 1970s, while Serenko, Cocosila, and Turel (2008) examine the citations of information system research articles collected in the conference proceedings of Administrative Sciences Association of Canada during 1974-2007.

Concerning accounting research in Canada, Richardson and Williams (1990) examine the productivity of Canadian academic accountants through analyses of articles published in ten refereed journals between 1976 and 1989. In a later study, McConomy and Mathieu (2003) examine the research productivity of academic accountants at Canadian universities for the eleven-year period from 1990-2000. Their analyses, like those in Richardson and Williams'(1990) study, were based on the top ten ranked refereed journals in accounting, auditing and taxation. As an extension of this line of studies, we use a broader set of journals to provide an up-to-date review of the accounting research productivity among Canadian higher education institutions.

3. Data and Method

We collect the information on authors and their affiliations from 28 accounting journals during 1991 to 2010. The full list of the journals is shown in Table 1. These journals were consistently ranked by prior studies, e.g., Hasselback, Reinstain, and Schwan (2003), Ballas and Theoharakis (2003), Herren and Hall (2005), Lowe and Locke (2005), Beattie and Goodacre (2006), Bonner, Hesford, and Young (2006), and Cook, Raviv, and Richardson (2010), as high quality accounting journals. In addition to the literature, we consider lists of credible journals from authoritative organizations such as the Australian Business Deans Council (ABDC). These 28 journals include journals with a general scope (e.g. *Accounting Review*) as well as specialized journals, such as *Auditing: A Journal of Practice and Theory* and *Behavioral Research in Accounting*. The inclusion of journals with general scope and journals with specialty takes into account the research productivity of faculty with

respect to their different research interests and expertise. Although many of the 28 journals are US-edited journals, we watchfully include 14 journals that are edited outside the USA to reduce any perceived US bias.

Table 1. By-Journal	Accounting Research	Productivity among	Canadian Universities	(1991-2010)
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Journal	Abbr. Name	Total Wt- Articles Published	Canadian HEIWt-	Canadian HEI Share of Total (%)
Accounting, Auditing, and Accountability Journal	AAAJ	628	26.79	4.3%
Australian Accounting Review	AAR	432	2.17	0.5%
Abacus	AB	345	6.67	1.9%
Accounting and Business Research	ABR	430	8.33	1.9%
Accounting and Finance	AF	416	7.17	1.7%
Accounting Horizons	AH	532	11.58	2.2%
Accounting, Organizations, and Society*	AOS	675	62.21	9.2%
The Accounting Review*	AR	809	27.96	3.5%
Auditing: A Journal of Practice and Theory	AJPT	375	16.58	4.4%
British Accounting Review	BAR	355	3.83	1.1%
Behavioral Research in Accounting	BRA	241	16.83	7.0%
Contemporary Accounting Research*	CAR	570	97.83	17.2%
European Accounting Review	EAR	601	12.28	2.0%
Issues in Accounting Education	IAE	599	25.78	4.3%
International Journal of Accounting	IJA	439	19.67	4.5%
Journal of Accounting, Auditing, and Finance	JAAF	454	20.33	4.5%
Journal of Accounting and Economics*	JAE	533	13.67	2.6%
Journal of Accounting Literature	JAL	89	6.67	7.5%
Journal of Accounting and Public Policy	JAPP	383	16.75	4.4%
Journal of Accounting Research*	JAR	566	16.08	2.8%
Journal of American Taxation Association	JATA	256	4.50	1.8%
Journal of Business, Finance, and Accounting	JBFA	1149	48.92	4.1%
Journal of International Financial Management and Accounting	JIFMA	212	11.50	5.3%
Journal of Management Accounting Research	JMAR	200	10.08	5.0%
Management Accounting Research	MAR	383	5.83	1.5%
National Tax Journal	NTJ	854	12.17	1.4%
Review of Accounting Studies*	RAST	272	10.00	3.7%
Review of Quantitative Finance and Accounting	RQFA	695	29.50	4.2%
Total		13,493	551.68	4.1%

Note: *denote premier accounting journals.

In terms of making weighting adjustment to the data, we follow Chan, Chen, and Cheng (2007) to weight each article by the number of coauthors (N) and co-affiliations (M). For instance, if Authors A and B coauthor an article and A is affiliated with Institution X and B is affiliated with Institutions Y and Z, then Author A and Author B each receives 0.5 individual credit, Institution X receives 0.5 institutional credit, and Institutions Y and Z each receives 0.25 institutional credit. We apply the weighting scheme and use the weighted number of articles as the primary measurement of research productivity. To address the apprehension that not all journals are equal in quality, we provide an alternative assessment by using six premier accounting journals (*Accounting and Economics, Journal of Accounting Research,* and *Review of Accounting Studies*). These premier accounting journals are the journals commonly classified as "A*" journals. For example, the Australian Business Deans Council (ABDC) ranked these journals as premium A* journals. Cook, Riviv, and Richardson (2010) also identified these journals as being consistently ranked as the top six accounting journals by prior ranking studies.

We carefully proofread the data and correct for errors and anomalies. We also pay attention to some institutions having similar names (such as the University of Victoria and Victoria University of Wellington) and distinguish their authors and affiliations. Similar to the literature, this study has two caveats. First of all, we did not include authors' pre-1991 research. Secondly, we did not include the articles that accounting faculty published in journals of other disciplines, although it is unlikely that they consistently publish a majority of their research in

non-accounting journals. In addition, articles published in accounting journals by non-accounting faculty members are included in our data set. These articles, while not authored by accounting staff members, also enhance the general reputation of the accounting programs in their institutions. As a result, the overall bias, if any, should be nominal.

4. Results

Table 1 presents the by-journal accounting research productivity among Canadian higher education institutions during 1991-2010. Overall, the 28 accounting journals publish a total of 13,493 weighted articles during the period. Among them, 551.68 weighted articles or 4.1% of the total are contributed by Canadian institutions. In terms of the by-journal percentage share (percentage of total weighted articles published by Canadian institutions within each journal), Canadian institutions are most successful in publishing in the *Contemporary Accounting Research* (17.2%), the *Accounting Organizations and Society* (9.2%), the *Journal of Accounting Literature* (7.5%), and the *Behavioral Research in Accounting* (7.0%).

Table 2 presents the yearly trend of the Canadian accounting research productivity measured by weighted articles. For benchmarking, we also include the weighted articles of Australia, the U.K., and the U.S. in the table. Across the 20 year study period, Canada published a total 551.68 weighted articles, falling behind the U.S., U.K., and Australia. Comparing the average weighted articles per academic institution, Canadian higher education institutions are less productive than their Australian and U.K. counterparts, yet are more productive than the U.S. institutions. Concerning the trend over time, Canadian institutions' research productivity starts from 16.67 weighted articles in 1991 and ends at 40.58 weighted articles in 2010.Noteworthy is that growth is more steady and obvious in the most recent 10 years. Australia also showed a steady increase in publications over the study period. On the contrary, while the U.S. and the U.K. institutions publish a large number of weighted articles, they do not show noticeable growth in yearly weighted articles over the study period except for a few upwellings in the last few years. We plot the results of Table 2 in Figure 1. Worth mentioning is that the progress of accounting research among Canadian institutions is broadly consistent with the findings of Chan, Chang, and Chen (2011) regarding the financial research in Canada.

V	Canada(N=38)		Australia (N=41)		UK(N=108)		US(N=555)	
Year	Total	Avg.	Total	Avg.	Total	Avg.	Total	Avg.
1991	16.67	0.44	41.92	1.02	77.58	0.72	361.97	0.65
1992	33.45	0.88	35.83	0.87	90.52	0.84	337.17	0.61
1993	28.42	0.75	49.92	1.22	80.75	0.75	362.08	0.65
1994	38.58	1.02	49.17	1.20	71.25	0.66	392.25	0.71
1995	18.92	0.50	54.00	1.32	84.00	0.78	348.50	0.63
1996	22.33	0.59	55.43	1.35	101.73	0.94	378.26	0.68
1997	21.50	0.57	52.17	1.27	86.35	0.80	331.49	0.60
1998	22.03	0.58	58.87	1.44	99.00	0.92	341.11	0.61
1999	21.50	0.57	64.83	1.58	85.22	0.79	326.00	0.59
2000	19.67	0.52	69.11	1.69	86.97	0.81	324.00	0.58
2001	26.42	0.70	53.57	1.31	77.58	0.72	303.31	0.55
2002	19.17	0.50	57.36	1.40	76.42	0.71	348.00	0.63
2003	20.92	0.55	76.33	1.86	73.33	0.68	358.63	0.65
2004	26.17	0.69	70.38	1.72	84.17	0.78	321.25	0.58
2005	29.36	0.77	77.10	1.88	75.92	0.70	287.54	0.52
2006	46.08	1.21	83.17	2.03	84.54	0.78	335.76	0.60
2007	31.58	0.83	90.92	2.22	102.07	0.95	346.63	0.62
2008	32.03	0.84	90.84	2.22	93.33	0.86	411.53	0.74
2009	35.29	0.93	97.30	2.37	98.25	0.91	366.32	0.66
2010	40.58	1.07	75.58	1.84	85.04	0.79	393.08	0.71
Total	551.68 (4.1%)	14.49	1,303.78 (9.7%)	31.80	1,714.02 (12.7%)	15.87	6,974.84 (51.69%)	12.57

Table 2. By-Year Canadian Accounting Research Productivity in Total Weighted Number of Articles



Figure 1. A Trend of Canadian Accounting Research Output in Total Weighted Number of Articles

In Table 3, we provide a closer look at the research performance of contributing Canadian universities. The ranking is based on the total weighted number of articles for the full sample period, though the un-weighted total appearances are also disclosed in the table as a reference. The top-five Canadian universities are the University of Alberta, the University of Toronto, the University of British Columbia, the University of Waterloo, and Simon Fraser University. Table 3 also presents an alternative ranking based on the six premier accounting journals. Ranked by the weighted numbers of articles published in the six premier accounting journals, the five most productive Canadian universities are the University of Alberta, the University of British Columbia, the University of Waterloo, the University of Toronto, and the University of Calgary. Different universities have different faculty sizes which may impact the accounting research productivity. Hence, we report the size of the accounting faculty in Table 3 and calculate the weighted-articles per faculty in the last column (Note 1). The University of Alberta and Simon Fraser University are close behind with 3.50 and 3.14 weighted articles per faculty, respectively. Overall, the top 10 universities in total weighted number of articles are also the leading universities in terms of weighted number of articles per faculty with only slight changes in relative ranking.

The comprehensive database offers us an opportunity to examine the change in research output over different periods. We partition the periods into two sub-periods (1991-2000 and 2001-2010) and calculate the percentage change in the weighted number of articles. The percentage change between the two sub-periods is shown in column 5 of Table 4. Among all contributing universities, a number of them prove sizable increase in publications from the first to the second sub-period. Examples are the University of Toronto (+151.5%), York University (+176.1%), Queen's University (+175.3%), and Laval University (+180.0%). Others, like the University of Quebec, McGill University, the University of Ottawa, the University of Windsor, Memorial University Newfoundland, and the University of Lethbridge, have also more than doubled their accounting research publications.

Table 5 compares the leading universities in Canada, Australia, and the U.K. in accounting research. Using 28 journals, the top two Canadian universities would have been ranked seventh and eighth in Australia and sixth and seventh in the U.K. When we use only the six premier journals, however, the top two Canadian universities would have been ranked the first and second in Australia. When compared with the U.K., the top four universities in Canada would have been first through fourth in the U.K as well. These results suggest that though top-ranked Canadian universities may not be as productive as their counterparts in Australia and the U.K. in overall accounting publications, they are equally or more successful in publishing in the premium accounting journals.

Table 3. A Ranking of Canadian Universities in Accounting Re	esearch (1991-2010)
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Deule Institution		Wt-Articles in	Total Appearances	Wt-Articles in Six	Ranking by Six	Faculty	Wt-articles per
Kan	Institution	28 Journals	in 28 Journals	Premier Journals	Premier Journals	Size*	faculty
1	U Alberta	63.03	134	41.42	1	18	3.50
2	U Toronto	56.83	120	21.83	4	21	2.71
3	U British Columbia	39.67	74	30.42	2	16	2.48
4	U Waterloo	39.33	77	26.33	3	19	2.07
5	Simon Fraser U	34.54	70	8.96	9	11	3.14
6	U Calgary	34.50	64	17.17	5	8	4.31
7	York U	32.28	57	9.45	8	11	2.93
8	U Saskatchewan	29.00	51	6.83	11	15	1.93
9	Queen's U	27.83	56	14.25	6	14	1.99
10	Wilfrid Laurier U	27.33	55	6.17	12	16	1.71
11	McMaster U	23.08	58	8.25	10	14	1.65
12t	Concordia U	19.00	31	5.17	13	17	1.12
12t	Laval U	19.00	47	13.67	7	17	1.12
14	U Quebec	11.75	30	1.33	17	36	0.33
15	McGill U	11.62	23	3.83	14	11	1.06
16	U Ottawa	11.25	22	0.67	22	9	1.25
17	U W Ontario	9.83	25	2.58	16	12	0.82
18	U Manitoba	8.92	17	0.50	23t	15	0.59
19	Brock U	8.75	23	1.00	18t	24	0.36
20	U Windsor	6.17	15	0.33	26t	11	0.56
21	Memorial U Newfoundland	5.25	11	2.92	15	5	1.05
22	HEC-Montreal	5.00	10	0.83	20t	35	0.14
23	St Mary U	4.70	10	0.83	20t	5	0.94
24	Carleton U	3.50	5	1.00	18t	4	0.88
25	U Regina	3.42	8	0.50	23t	6	0.57
26	U Lethbridge	3.00	7	0.33	26t	11	0.27
27	Ryerson U	2.08	4	0.00	n/a	23	0.09
28t	Dalhousie U	2.00	4	0.00	n/a	6	0.33
28t	U New Brunswick	2.00	5	0.00	n/a	9	0.22
30	U Victoria	1.50	2	0.00	n/a	2	0.75
31	Laurentian U	1.33	3	0.00	n/a	7	0.19
32t	U British Columbia-Okanagan	1.00	1	0.50	23t	1	1.00
32t	U Prince Edward Island	1.00	2	0.00	n/a	4	0.25
34	U Moncton	0.67	2	0.00	n/a	13	0.05
35	U Montreal	0.50	2	0.00	n/a	n/a	n/a
36t	Athabasca U	0.33	1	0.33	26t	6	0.06
36t	U N British Columbia	0.33	1	0.33	26t	12	0.03
36t	U Sherbrooke	0.33	1	0.00	n/a	15	0.02

Description: Table 3 presents the accounting research productivity among Canadian universities as of June 1, 2011. The ranking metric is weighted number of articles (total number of articles weighted by number of coauthors and co-affiliations).

(1)	(2)	(3)	(4)	(5) = [(4) - (3)]/(3)
Rank	Institution	Wt- Articles(1991-2000)	Wt- Articles (2001-2010)	% Change
1	U Alberta	32.78	30.25	-7.7%
2	U Toronto	16.17	40.67	151.5%
3	U British Columbia	20.00	19.67	-1.7%
4	U Waterloo	18.08	21.25	17.5%
5	Simon Fraser U	19.50	15.04	-22.9%
6	U Calgary	19.50	15.00	-23.1%
7	York U	8.58	23.70	176.1%
8	U Saskatchewan	16.83	12.17	-27.7%
9	Queen's U	7.42	20.42	175.3%
10	Wilfrid Laurier U	12.50	14.83	18.7%
11	McMaster U	17.25	5.83	-66.2%
12t	Concordia U	8.42	10.58	25.7%
12t	Laval U	5.00	14.00	180.0%
14	U Quebec	3.83	7.92	106.5%
15	McGill U	3.58	8.03	124.2%
16	U Ottawa	3.33	7.92	137.5%
17	U W Ontario	5.75	4.08	-29.0%
18	U Manitoba	3.75	5.17	37.8%
19	Brock U	3.33	5.42	62.5%
20	U Windsor	2.00	4.17	108.3%
21	Memorial U Newfoundland	0.33	4.92	1375.0%
22	HEC-Montreal	2.00	3.00	50.0%
23	St Mary U	1.70	3.00	76.5%
24	Carleton U	3.00	0.50	-83.3%
25	U Regina	1.50	1.92	27.8%
26	U Lethbridge	0.83	2.17	160.0%
27	Ryerson U	0.00	2.08	n/a
28t	Dalhousie U	2.00	0.00	-100.0%
28t	U New Brunswick	2.00	0.00	-100.0%
30	U Victoria	0.50	1.00	100.0%
31	Laurentian U	1.00	0.33	-66.7%
32t	U Prince Edward Island	1.00	0.00	-100.0%
32t	U British Columbia-Okanagan	0.00	1.00	n/a
34	U Moncton	0.33	0.33	0.0%
35	U Montreal	0.25	0.25	0.0%
36t	Athabasca U	0.00	0.33	n/a
36t	U N British Columbia	0.00	0.33	n/a
36t	U Sherbrooke	0.00	0.33	n/a

Table 4. The Progress	of Canadian Universities	' Accounting Research I	Productivity

Table 5. Comparative Accounting Research Productivity (1991-2010) of Leading Universities in Canada, U.K., and Australia

Panel	Panel A: 28 journals							
Rank	Canadian Institutions	Wt. No. of Articles	Australian Institutions	Wt. No. of Articles	U.K. Institutions	Wt. No. of Articles		
1	U Alberta	63.03	UNSW	170.12	U Manchester	153.30		
2	U Toronto	56.83	U Sydney	145.21	Cardiff U	118.53		
3	U British Columbia	39.67	Monash U	105.89	LSE	101.08		
4	U Waterloo	39.33	U Melbourne	89.47	U Edinburgh	82.12		
5	Simon Fraser U	34.54	U Queensland	67.00	Lancaster U	76.70		
6	U Calgary	34.50	Australian National U	64.08	U Exeter	58.17		
7	York U	32.28	Macquarie U	61.00	U Glasgow	52.28		
8	U Saskatchewan	29.00	U W Australia	56.80	U Dundee	51.13		
9	Queen's U	27.83	Griffith U	48.67	U Essex	48.73		
10	Wilfrid Laurier U	27.33	U Tech Sydney	47.44	U Strathclyde	48.62		
	Average	38.43	Average	85.57	Average	79.07		

Rank	Canadian Institutions	Wt. No. of Articles	Australian Institutions	Wt. No. of Articles	U.K. Institutions	Wt. No. of Articles
1	U Alberta	41.42	UNSW	27.25	LSE	36.08
2	U British Columbia	30.42	U Melbourne	16.96	Oxford U	20.58
3	U Waterloo	26.33	Monash U	10.75	U Manchester	20.42
4	U Toronto	21.83	Macquarie U	9.42	LBS	15.92
5	U Calgary	17.17	U Queensland	5.38	U Edinburgh	13.67
6	Queen's U	14.25	U Sydney	5.17	Cardiff U	12.42
7	Laval U	13.67	U Tech Sydney	5.00	U Warwick	11.42
8	York U	9.45	Griffith U	3.50	Lancaster U	10.50
9	Simon Fraser U	8.96	U W Sydney	3.50	U Cambridge	6.17
10	McMaster U	8.25	U Tasmania	2.00	U Essex	5.67
	Average	19.18	Average	8.89	Average	15.29

Panel B: six premier journals

5. Discussion and Conclusion

Using the publication records in 28 leading accounting journals during 1991-2010, we provide a general assessment of accounting research performance among Canadian universities. As a group, Canadian universities perform very well in terms of the percentage share of research output. Specifically, Canadian universities account for 4.1% of all research output and the weighted number of articles increases from 16.67 in 1991 to 40.58 in 2010.Benchmarking the performance of leading Canadian universities with their counterparts in Australia and the U.K., we find that leading Canadian universities, such as the University of Alberta, the University of Toronto, and the University of British Columbia, are less productive concerning the overall publications in accounting journals; they, nonetheless, are more productive in publishing in the top six accounting journals. Concerning the contributing factors, our complementary analysis suggests that the sufficiency of research funding and the assembly of a cohort of research-active faculty can positively contribute to the research productivity of accounting programs in Canada. (Note 2)

Across the 20 year study period, the overall percentage of articles contributed by Canadian universities is 4.1%. Though the average weighted number of articles increases from 16.67 in 1991 to 40.58 in 2010, it remained in the low twenties for the majority of the years in the late 1990s and early 2000s. The genuine growth did not materialize until 2004 and after. In fact, the static inclination in research productivity began in 1995 and the rebound does not occur until 2003 and after. One possible reason for the lethargy in research productivity is the shrinkage of research funding in the late 1990s, which coincides with the general funding decline dilemma discussed in Davies, Kocher, and Sutter (2008) (Note 3) and Chan, Chang, and Chen (2011). Another possible reason is the unfavorable Canadian to U.S. dollar exchange rate during the late 1990s and early 2000s, which made it difficult for Canadian schools to recruit new/competitive faculty. (Note 4)

An interesting finding of this study is that leading Canadian universities, while less productive than leading universities in Australia and the U.K. in accounting research productivity on the whole, publish more articles in the top six accounting journals. This may be driven by the tenure and promotion policies of leading Canadian universities, which reflect the current prominence of an exclusive focus on the top journals. Whereas the emphasis on academic research publications are under increasing scrutiny, prior studies have documented that publication requirements for promotion and tenure have been not only increased, but also more constrained over time (Cargile & Bublitz, 1986; Campbell & Morgan, 1987; Milne & Vent, 1987; Englebrech et al., 1994; Read et al., 1998). The reward structure for promotion and tenure, being the most important driver of faculty research productivity, can be effectively employed by Canadian institutions and accounting programs to influence faculty research behavior (Fox, 1985).

Our study has two limitations. First, we examine Canadian researchers' output in a set of accounting journals. Some researchers may publish their work in leading journals in other disciplines. We, nevertheless, do not account for these research works. Second, using a top six accounting journals approach to capture the publication quality assumes the remaining 22 journals carry a zero weight. A better approach may be to develop a scale to weigh all journals together. Although weighting journals is almost always subject to arbitration and subjectivity, future research can be dedicated to overcoming this limitation.

In conclusion, this study offers information on research productivity assessment that can be used to gauge research performance of accounting programs in Canadian institutions. Various constituents may find this assessment useful in making or adjusting their promotion, tenure, merit, enrollment, employment, and resource

allocation decisions. Overall, Canadian universities have been successful in producing accounting research over the past two decades. While many exhibit positive growth, a few prove sizable increase in research productivity. By actively creating a positive institutional environment (e.g., adequate financial support, longer probationary periods, reduced teaching loads, and augmented time allocated to research related activities), accounting departments of Canadian institutions can advance intellectual activities and improve research productivity, hence make further contributions to the accounting literature.

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Notes

Note 1. Accounting faculty size data is obtained from the 2011 Hasselback Accounting Faculty Directory and substantiated with the faculty lists posted on the accounting department websites. We count only the tenure-tracked faculty and exclude adjunct faculty, instructors and teaching fellows.

Note 2. We conduct a regression analysis to examine the relationship between possible contributing factors and research productivity. Using both the total weighted number of articles in all journals as well in the top six journals as the dependent variable, the regression results indicate that the Social Sciences and Humanities Research Council (SSHRC) research funding has a significant positive contribution to the research of Canadian institutions. Those institutions awarded more research funding are more productive in accounting research. On the contrary, the concentration of research productivity (measured by the percentage of publications made by the top three researchers) has a significant negative effect on the research productivity, implying that the Canadian accounting programs that have research activities highly concentrated in a few faculty members are less productive in publishing accounting research.

Note 3. Davies, Kocher, and Sutter (2008) report that the general funding of Canadian universities has been declining since 1980, with a low point in 1997. The funding, however, was steady during 2000-2004. It appears that the downward trend of accounting research productivity among Canadian universities reflects the general funding trend with a one- to two-year lag.

Note 4. The correlation between the by-year weighted number of articles and the one year lag of Canadian to U.S. dollar exchange rate is 0.539 with a significant level of 0.016.