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different from here.*

Research Productivity of Globally Accredited Canadian Business Schools in 2005-2009: A Report by Gustavson School of Business@ UVic

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Executive Summary

Note: This report has been revised as of May 2012 to incorporate new data on school faculty size and to focus entirely on AACSB and EQUIS accredited Schools. On the faculty size, the report's calculations are now made using the number of faculty members reported annually by each school to the CFBSD (Canadian Federation of Business School Deans), rather than full time equivalent (FTE) figures reported annually by the schools to AACSB (The Association to Advance Collegiate Schools of Business). Relevant sections of the report have been revised in light of the new data.

This report outlines the results of a survey that was conducted by the Gustavson School of Business, University of Victoria in the fall of 2010 and spring of 2011. The main purpose of the survey was to report the research productivity of AACSB and/or EQUIS accredited Canadian business schools during 2005-09 using the publication of peer reviewed journal articles in 40 top journals listed by The Financial Times (FT 40 journals). Forty eight Canadian schools who were members of Canadian Federation of Business School Deans (CFBSD) were approached. The data were collected from 26 of the schools and the data from the accredited schools were analyzed by examining publications in FT 40 journals and the rate of publications per FTE faculty member.

The results were compared with previous studies (e.g. Beamish, 2000) as well as other similar surveys done by organizations such as University of Texas. The results in terms of top 10 schools and their productivity were comparable to these other studies. The results also showed that research productivity (as measured by FT 40 publications) among 26 Canadian business schools studied rose by 34% over the five-year period while FTE faculty size grew only 4%, suggesting an increase in research intensity by the schools which is perhaps related to business school accreditation.

1. Introduction

1.1 Background

This project was initiated by the Dean of the Peter B. Gustavson School of Business, Professor Ali Dastmalchian, in 2010. Data collection took place between summer 2010 and March 2011. By February 2011, the data was still incomplete (not all schools provided the data), but the decision was made to wrap up data collection so that analysis of the data could begin.¹

Note: In May 2012, the report was revised to include data on faculty size from a different source than was used in the original analysis. The changes, and the rationale for them, are discussed in the Methodology section of the report.

1.2 Purpose

There are several purposes of this data collection project. One is to quantify research productivity among Canadian business schools (as measured by publications in Financial Times 40, or FT 40, journal) as a way of assessing the business research landscape during the period 2005-2009. A second objective is to use the data to compare the absolute and per capita FT 40 research output across business schools, and to compare those results with the results of other rankings that include data on Canadian business school research. A third objective is to assess whether the business research landscape, either in absolute output measures or in rankings, has changed since data was collected more than 10 years ago (Beamish, 2000 and Erkut, 2002).

A final purpose of the project, of interest to us at the Gustavson School of Business, is to use the information to measure one of our key goals as a school, as stated in our strategy and planning process for 2007-12².

1.3 Previous studies

Two studies were done around ten years ago assessing Canadian business school research. Beamish (2000) did an analysis of the Canadian contributions to 32 top business journals (32 of the 35 FT journals) during the years 1997-1999. It is also important to note that he used a weighted analysis of Canadian business schools contributions to FT 32 journal by collecting data directly from the 32 journals. He used the data to rank the various Canadian business schools

¹ The research and data collection work of Shari Wierenga and Nikisa Dastmalchian is greatly acknowledged.

² Please see: http://www.uvic.ca/gustavson/assets/docs/Home/BUSI_01994_StrategyandPlanningSheet_OUT_web2010.pdf

based on their contribution to the research landscape during that time, and also based the net change in their productivity over the decade. He did not, however, factor the size of the school into his analysis to ascertain relative or per capita contributions.

Erkut (2002) undertook a large-scale study of the Canadian business research landscape between 1990 and 1999, using the publication database of the Institute of Scientific Information (ISI) to tally both paper-credits and citation-credits to ascertain:

- the number of papers published by Canadian business academics (which he defined as faculty members with full time, continuing university appointments at 60 Canadian business schools)
- the publication outlets for their articles
- the impact, in terms of citation counts, of the research
- comparative information about the individual Canadian business schools
- the output and impact measures for individual researchers at each school

Erkut's data also resulted in rankings of business schools, this time based on both overall and per capita output, incorporating publications in all journals where business research appears, not just those in top journals.

More recently, in 2007, SSHRC asked the Council of Canadian Academies to convene an expert panel to assess management, business and finance (MBF) research in Canada. The panel gathered data on the number of peer-reviewed articles, conference papers, notes and reviews by Canadian university-affiliated researchers between 1996 and 2007, using the Scopus database maintained by Elsevier. While the report did not produce a ranking of business schools, it does provide some interesting information about contributions by province³.

In terms of current information on Canadian business school research output, the University of Texas at Dallas' School of Management has maintained a database to track all research publications in 24 leading research journals since 1990. It is fully searchable by year, country of origin and journal. Other sources of comparative information on research activity are business school rankings such as the *Financial Times*, where five or six Canadian business schools regularly rank in the top 100 worldwide, and *Businessweek*, which lists several Canadian business schools in its top tier of non-U.S. schools.

2. Methodology

This report examines the number of peer reviewed journal (PRJ) articles produced by faculty members of Canadian business schools and published in FT 40 journals from 2005-2009. It does not look at the production of other types of publications (books, chapters, case studies, etc.),

³ The report also noted that a significant proportion of what would be defined as MBF research comes from sources other than business schools and faculties --almost a fifth of the research is produced by academics in economics, psychology, computer science, engineering and other departments.

does not count other methods of research dissemination (such as papers presented at conferences), and does not assess the impact factor of the journal articles through a citation-count analysis.

One reason for looking at PRJs published in FT 40 journals is that, while there are many other indicators of research activity at business schools (i.e. a broader tally of research output [books, chapters, papers presented at conferences, etc.], citation analysis, impact factor of publications, annual ranking systems published by newspapers and magazines (which use research output, or “intellectual capital”, as one weighted factor), research grants awarded to institutions, and doctoral program size, the production of peer-reviewed articles is generally accepted as a good measure of research activity and tends to correlate with other measures⁴.

Another reason to focus on journal articles is that the relatively recent spread of business school accreditation in Canada (AACSB and EQUIS) has put a spotlight on the production of peer reviewed journal (PRJ) articles as a measure of the currency and relevance of knowledge brought to the classroom. And finally, PRJ counts are one of the more objective and available forms of data, and thus worked well for our purposes. In our case, we focused on FT 40 publications for 2005-2009 (we realize that the equivalent list from 2010 has become FT 45 with a slightly different journal list. Our analysis focuses on the FT 40 as defined in 2009.

For the most part, the parameters of the project were determined by its small scale. We devoted fairly limited resources to the data collection, and were thus modest in our objective. The initial thought, to simply ask the administration of 20 or so business schools to provide a list of their school’s journal publications over the five-year period and a count of their full-time equivalent (FTE) faculty, seemed much less labour-intensive than conducting a literature database search. The project became more complex as we progressed, however. The number of schools included grew, and for those schools that couldn’t assemble the lists or numbers, we spent time searching the faculty and research sections of their web sites to gather the information, and conducted database and web searches to confirm or clarify the data being collected in many cases.

2.1 Data collection process

Schools were contacted in fall 2010 and invited to participate by submitting information to us. Initially, the 20 schools with accreditation by AACSB and/or EQUIS were contacted, along with three other schools that were similar in size to Gustavson but were not accredited. As the Gustavson School of Business at the University of Victoria is the smallest accredited business school in Canada, it was valuable to us to include two peer groups to assess our school’s research output -- that is, we wanted to know how we were doing compared to other accredited schools, and also compared to other schools our size.

Schools were asked, via an email sent from Dr. Ali Dastmalchian, Dean of the Gustavson School of Business to the dean, associate dean or director in charge of research at each school, to

⁴ For example, the *Financial Times* considers a number of correlating factors in its rating of a school’s “idea generation”, one of which is journal article production (Connelly and Gallagher, 2007). See also Martin’s (1996) discussion of the idea of “converging partial indicators”.

provide a complete list of the school's peer reviewed journal publications from 2005-2009, and their faculty FTE for each of those five years. From these lists, we identified which publications were in Financial Times top 40 (FT 40) journals and conducted our analysis on this basis.

As a result of our request, eleven schools provided most or all of the data requested, and we collected data ourselves from another ten schools. One school declined to participate, one had insufficient data available for us to include in the project, and one did not respond at all. After an initial report on the project to the deans attending the December 2010 meeting of the Canadian Federation of Business School Deans in Toronto, Dr. Dastmalchian invited all member schools to participate and followed up with an email requesting data. As a result of that request, six additional schools provided data, one declined, five indicated their intention to participate but did not send data by the deadline indicated, and thirteen did not respond or indicated they thought it unlikely they would participate. A list of the schools and their participation in the survey is in Appendix I.

2.2 Limitations of the methodology

Limitation #1: Data Collection

In a great number of cases, schools were willing and able to provide the data we sought. In some cases, though, schools did not respond to our request, or directed us to their web sites for publication lists. In those cases, we created lists from the school's web site to the best of our ability, and identified which of those articles were in FT40 journals. We acknowledge that this method of collection creates incomplete data. For example, some schools list "key publications" from faculty members, which may or may not reflect the entirety of that person's research output. Also, we could not take the category of "forthcoming" at face value. Many publications were listed as "forthcoming", but a basic web search indicated that the paper had been published, sometimes years earlier or later.⁵

Limitation #2: Definitions

One serious issue with the design of our project was that we left schools to interpret how to define full time equivalency (FTE) in reporting of the size of their faculty, a parameter we considered important and necessary to undertake a per capita analysis of the data. We requested that schools provide "*your faculty FTE for 2005-2009*", by which we intended to capture all faculty, whether part-time or full time, tenure track or not, who were primarily affiliated with that school. Many schools, however, don't count that way, and reported the number of tenured or tenure track faculty. It also seemed in some cases that a school counted only faculty they expected to be research active. Others again directed us to their web sites, where we had to make inferences as to status (for example, whether someone listed as a "director" was a faculty member or not. Also, in many cases, lecturers and/or adjuncts were

⁵ In one case, information retrieved from a school's web site in February 2011 showed 53 publications listed as "forthcoming" on their list of 2008 publications. Further web searching found that, of those, 18 had in fact been published in 2008, another dozen or so were published in either 2009 or 2010, and the rest do not show up as yet in the public record.

listed on web sites and it was not clear from the nomenclature whether they would be considered part of the full time staff.)

Because of this ambiguity, we opted instead to use the FTE number that AACSB member schools reported in their annual Business Schools Questionnaire (BSQ) survey, where available, and to use information directly from the school or its web site for schools not reporting to AACSB.

Note: These methods proved to be every bit as problematic. In revising this paper in May 2012, we have decided to resolve the issues described above by using a different set of figures on faculty size. We made a request to the CFBSD to supply us with 2005-09 full-time faculty counts for the schools belonging to the federation, counting all tenured and tenure-track faculty members, but not counting faculty members appointed as senior instructors or lecturers, nor those with limited term appointments. The CFBSD was able to provide the information for the years in question for all but three schools (as noted in Appendix II, we used 2010 data from the CFBSD for those schools), and we feel that this number more accurately reflects those faculty members who are research active at a given school.

Another major issue with our data collection method is that we left schools to interpret what we meant by “a full list of all your school’s peer reviewed journal publications from 2005-2009”. For the purposes of this project, we counted “author-credits”: the number of times a faculty member’s name appears as a paper author in a given year. So, a paper co-authored by two researchers from the same school would count as two author-credits for that school, and a paper authored by two researchers from different schools would count as one author-credit for each school. Some schools sent a tally rather than a list, so we didn’t know whether co-authored papers were counted once or multiple times -- or, for that matter, what publications were used to generate the count. Some schools sent a five year total, in which case we divided it evenly across the five years. Some schools had tallied slightly different five (or six) year periods, and we had difficulty separating out the five years we were interested in.

Some schools sent lists organized by faculty member; some sent lists organized by year, which introduced the potential for counting a publication once even if co-authored by two scholars affiliated with that school (on lists organized by faculty member, such a publication would appear twice, and that’s the method we used when tallying.) These variations introduced room for human error on our side also as we tallied the data.

Limitation #3: Participation

The project’s findings would be more meaningful had we received data from all the schools invited to participate. Some schools declined to participate or were unable to provide detailed enough information to include them in the results. This affects the results, particularly the rankings, significantly.

Another issue regarding the utility of the data is that some schools could only produce a list of their FT40 publications, but not a comprehensive list, which meant we could not include them in all the analyses. On the other hand, others who provided only the total publication numbers

could not be included in the comparison of FT40 output. The inability to compare all the schools across all the categories means that some key Canadian business schools are absent in the rankings we were able to generate.

The data collected is thus subject to some limitations, and the conclusions we draw should be considered with caution.

3. Findings/Discussion

We collected information on 2660 FTE faculty members at 26 schools. Their names appeared as authors of peer reviewed journal articles some 6554 times during the five-year period and as authors of FT40 publication articles 1000 times⁶.

Even though it was not the focus of our analysis, we looked at the total number of overall publications from each school over the five-year period (we had data for 24 out of the 26 schools from whom we requested data.) The greatest number of publications from 2005-2009 came from HEC-Montreal and UQAM, followed at some distance by SFU, Concordia, Ottawa, UBC, and Laval. This is perhaps not surprising, as these are some of the biggest schools (UQAM and HEC are the largest with 250 and 216 FTE respectively; Ottawa and SFU are the smallest of this group with 61 and 51 FTE faculty members respectively).

3.1 Publication in FT40 journals

Our main focus was the production of articles published in FT40 journals during the period 2005-09. We considered both total production and output per capita. The results are shown below in Table 1. Of the 26 schools participating, one (UQAM) was not able to provide information on FT40 publications, so is not included in this list.

Here, the schools with the highest total number of author-credits are Toronto, UBC, and Alberta, which together account for 42% of all the FT40 author-credits from the period. The other schools in the top eight are SFU, Western Ontario, McGill, Queen's, and Calgary (with these eight producing 78% of the output), after which the numbers drop off significantly. Again, not surprisingly, the larger schools tend to produce the most, with a few exceptions -- including the three schools with a higher proportion of French-language publications.

Adjusting the data to account for faculty size, Toronto and UBC hold their places in the top three, joined by SFU. Alberta, McGill, Western Ontario, Queen's, and Victoria comprise the rest of the top eight producers. Only the top six schools averaged more than one FT40 author-credit per faculty member over the five-year period. When their per capita output is considered,

⁶ All these aggregate numbers are approximate, reflecting omissions and inaccuracies in the data. FTE number reflects the 2009 FTE counts of reporting schools.

smaller schools like Waterloo (rising 6 places on the list) and Victoria (up 4 places) improve their rankings. Concordia and HEC lose ground, however, moving down 6 and 7 places respectively.

Table 1: FT40 Publication Counts (2005-9)

Total FT40 Articles			Total FT40 Articles/FTE		
1.	University of Toronto	186	1.	University of Toronto	1.71
2.	University of British Columbia	135	2.	Simon Fraser University	1.69
3.	University of Alberta	103	3.	University of British Columbia	1.67
4.	Simon Fraser University	86	4.	University of Alberta	1.47
5.	University of Western Ontario	73	5.	McGill University	1.20
6.	McGill University	71	6.	University of Western Ontario	1.04
7.	Queen's University	64	7.	University of Victoria	0.91
8.	University of Calgary	62	7.	Queen's University	0.91
9.	Concordia	36	9.	University of Calgary	0.75
9.	HEC - Montreal	36	10.	Brock University	0.60
11.	Brock University	25	11.	University of Waterloo	0.45
12.	University of Victoria	21	12.	Memorial University	0.39
13.	University of Ottawa	19	13.	University of Ottawa	0.29
14.	Memorial University	16	14.	University of Manitoba*	0.28
15.	University of Manitoba*	13	15.	Concordia University	0.24
16.	Université Laval	12	16.	Carleton University	0.23
17.	University of Waterloo	11	17.	HEC - Montreal	0.17
18.	Carleton University	8	18.	Université Laval	0.14
18.	Wilfrid Laurier University	8	19.	University of Saskatchewan	0.13
20.	University of Saskatchewan	7	20.	University of Regina	0.12
21.	University of Regina	4	21.	Wilfrid Laurier University	0.12
22.	University of Windsor	2	22.	Royal Roads University	0.09
23.	Royal Roads University	1	23.	St. Francis Xavier University	0.05
23.	St. Francis Xavier University	1	24.	University of Windsor	0.04
25.	Laurentian University	0	25.	Laurentian University	0.00

* 2005 data for Manitoba were not available; this number is based on publications from 2006-09 only.

3.2 FT40 Publication as a proportion of the total

Another way to look at the data is to consider the percentage of a school's author-credits that are due to FT40 publications. Table 2 ranks the schools in this way. Because of incomplete data on three participating schools (Toronto, UQAM, and Manitoba), they are not included in the ranking.

Table 2: FT40 Publications as % of Total Publications (2005-9)

	School	%
1.	University of Alberta	37.2%
2.	Queen's University	37.2%
3.	University of British Columbia	35.2%
4.	University of Western Ontario	30.3%
5.	McGill University	26.0%
6.	University of Victoria	25.0%
7.	University of Calgary	24.8%
8.	Simon Fraser University	16.7%
9.	University of Waterloo	16.2%
10.	Memorial University	10.7%
11.	Brock University	9.3%
12.	Concordia	7.9%
13.	Wilfrid Laurier University	7.6%
14.	University of Saskatchewan	7.2%
15.	Royal Roads University	4.8%
16.	University of Ottawa	4.4%
17.	HEC - Montreal	4.0%
18.	University of Regina	4.0%
19.	Carleton University	3.4%
20.	Université Laval	3.2%
21.	St. Francis Xavier University	2.3%
22.	University of Windsor	0.8%
23.	Laurentian University	--

3.3 Trend over time

In their earlier studies looking at research output rates in the 1990s, both Beamish and Erkut noted a peak in publication rates around 1996, followed by a decrease towards the end of that decade; each flagged it as an area of concern. The Council of Canadian Academies, looking specifically at a subset of Canadian MBF research in four areas targeted by the federal

government for increased funding⁷, also found a dip in output in the late 1990s, followed by a rapid increase in the next decade.

The data collected in this project are incomplete and cannot be compared with these earlier studies, which used database searches to collect comprehensive data on total research output. We can, however, look at the trend indicated over the five-year period 2005-09 in this data.

Table 3: Publication Rate Trend in Canadian Business Schools (2005-09)

	2005	2006	2007	2008	2009	% change
All PRJ author-credits	1265	1307	1401	1487	1251	14.5%*
FT40 author- credits	171	187	208	205	229	34%
Total FTE	2043	2056	2066	2093	2125	4%

* 2005-08; see discussion

Table 3 shows that there were increases in total publications and FT40 publications during the five-year period. The exception is the reported number of PRJ's in 2009, which we believe may be underrepresented due to less-than-current information on some schools' web sites or in the information they submitted. Disregarding the 2009 number, the rate of PRJ authorship rose 14.5% between 2005 and 2008. Over the same four years, the rate of FT40 authorship rose 20%, jumping to 34% over the full five year period.

Between 2005 and 2009, the total number full time faculty (FTE) of the participating schools rose just 4%. In other words, authorship rates have increased at a much higher rate than have the number of FTE faculty at the schools we studied, particularly FT40 authorship. This indicates higher intensity of top tier research productivity of the schools studied in this period.

3.5 Comparison to other studies

Table 4 compares the results of our survey with recent business school rankings that include Canadian schools and that rank on the basis of research contributions. The rankings shown indicate the schools' order of appearance in the rankings (rather than their specific ranking in the longer list).

⁷ Environmental science and technologies; natural resources and energy; health and related life sciences and technologies; and information and communications technologies.

Table 4: Business School Ranking Comparison

	<u>Businessweek 2010 Intellectual Capital Rankings¹</u>	<u>Financial Times 2010 Research Rankings²</u>	<u>University of Texas Rankings, 2005-09 research contributions³</u>	<u>UVic survey, 2005-09⁴</u>
1.	Toronto	Toronto	UBC	Toronto
2.	York	York	Toronto	SFU
3.	McGill	UBC	McGill	UBC
4.	Queen's	Alberta	W. Ontario	Alberta
5.	HEC	W. Ontario	Alberta	McGill
6.	W. Ontario	McGill	SFU	W. Ontario
7.			York	UVic (7)
8.			UVic	Queen's (7)
9.			Calgary	Calgary
10.			Queen's	Brock

¹ contributions to 20 top journals + selected book reviews, adjusted for faculty size

² contributions to FT40/45, adjusted for faculty size

³ contributions to 24 top journals, adjusted for faculty size ([using our FTE data](#))

⁴ contributions reported by [participating schools](#) to FT40 publications, adjusted for faculty size.

Toronto, McGill, and W. Ontario appear in the top six on all four lists. Toronto tops three of the lists, York is in the top seven of all but the UVic survey (in which it did not participate), and UBC is in the top three of all but the Businessweek ranking. SFU ranks surprisingly high on our list at second, given it does not figure in the top five of the other 3 lists. Overall, the general alignment of our survey with these other ranking systems lends validity to our process and results.

The above table shows the rankings based on research activity over the five years 2005-09, except for the Financial Times listing, which looks at the previous three years only. To explore differences in the rankings based on a smaller subset of years, Tables 4 compare the 2005-07 and 2007-09 time periods to the full five-year period for two of the datasets.

Table 4: Ranking Comparison, different year subsets

University of Texas Rankings			UVic Survey Rankings				
	2005-2009 research contributions ¹	2005-07 research contributions ¹	2007-09 research contributions ¹		2005-2009 rankings ²	2005-07 rankings ²	2007-09 rankings ²
1.	UBC	UBC	UBC	1.	Toronto	UBC	Toronto
2.	Toronto	Toronto	Toronto	2.	SFU	Toronto	SFU
3.	McGill	W. Ontario	McGill	3.	UBC	SFU	UBC
4.	W. Ontario	McGill	W. Ontario	4.	Alberta	Alberta	Alberta
5.	Alberta	Alberta	Alberta	5.	McGill	UVic	McGill
6.	SFU	UVic	SFU	6.	W. Ontario	McGill	W. Ontario
7.	York	SFU	York	7.	UVic (7)	W. Ontario	Queen's
8.	UVic	Calgary	Queen's	8.	Queen's (7)	Queen's	UVic
9.	Calgary	York	Calgary	9.	Calgary	Calgary	Brock
10.	Queen's	McMaster	Waterloo	10.	Brock	Waterloo	Calgary

¹contributions to 24 top journals, adjusted for faculty size (using our FTE data)

²contributions reported by participating schools to FT40 publications, adjusted for faculty size.

4. Conclusions and Recommendations

Despite issues with the data collection process used in this survey and a lack of participation from a number of schools, the results we have gathered are interesting and paint a picture of the Canadian business school landscape that is more current than earlier reports and includes more schools than other published rankings. One of the greater benefits of this data collection project is to provide information to those schools that do not regularly appear on the “top schools” lists. These schools can use the information for benchmarking, planning, and other purposes.

There are many more ways to examine the data we have collected, and many more possibilities for further data to be collected. Were we to continue collecting these kinds of data in future years, a few of the issues around data collection could be rectified. Others are more problematic:

1. Providing a clearer definition of FTE would be enormously helpful, and would standardize the data across schools. To limit the ambiguity, we would count only tenured and tenure-track faculty members in the counts as in other studies. ***(Note: May 2012 revisions to the study have helped somewhat in this respect)***

2. Providing a clearer request for information on publications would lessen any effects of miscounting co-authored papers. Similarly, we would need to require that publication lists, rather than tallies, be submitted, and we would not use web site listings of publications, which are not guaranteed to be complete or up to date.
3. Requesting the data annually, rather than every five years, would increase the chances that the data is available and accurate.
4. As long as we collect information from the schools via request and submission, the data will not be as comprehensive or as objective as if we used a database search technique. This would require more of our resources for data collection but would result in much cleaner data.

A final Note: Another study on this topic was undertaken in 2011-12 by the Gustavson School of Business at UVic, with methodology which has resolved the methodological issues of this paper.

Bibliography

Beamish, P.W. (2000). Knowledge creators or knowledge retailers? Business school research in Canada. *ASAC 2000 Conference Proceedings*, 21 (10), 1–9.

CCA (2009). Better research for better business. Report by the expert panel on management, business, and finance research, Council of Canadian Academies.

Connelly, C. E., & Gallagher, D. G. (2007, summer). Making “The List”: Business school ranking and the commodification of business research. *Journal of Curriculum Theorizing*, pp. 103-116.

Erkut, E. (2002). Measuring Canadian business school research output and impact. *Canadian Journal of Administrative Sciences* 19(2), 97-123.

Martin, B. (1996). The use of multiple indicators in the assessment of basic research. *Scientometrics*, 36 (3), 343–362.

Appendix I: Participation in the Project

Participating Schools:	Avg. FTE (2005-09)*	Notes on Data/ Participation
Faculty of Business, Brock University	42	
Sprott School of Business, Carleton University	34.4	
John Molson School of Business, Concordia University	149	FTE figure is from 2010 CFBSD data
École des Hautes Études Commerciales, Université de Montréal	215.8	
School of Commerce and Administration, Laurentian University	29.4	2009 publications data not provided
Desautels Faculty of Management, McGill University	59.4	
Faculty of Business Administration, Memorial University of Newfoundland	41	
School of Business, Queen's University	70	
Faculty of Management, Royal Roads University	11	
Beedie School of Business, Simon Fraser University	51	
Gerald Schwartz School of Business, St. Francis Xavier University	19.4	
Faculty of Business Administration, Université Laval	87	
École des sciences de la gestion, Université du Québec à Montréal	250	FT40 information not provided; FTE figure is from 2010 CFBSD data
School of Business, University of Alberta	70	
Sauder School of Business, University of British Columbia	81	
Haskayne School of Business, University of Calgary	83	No data from May/June 2007
I. H. Asper School of Business, University of Manitoba	47	Total publication lists for 2005-07 not provided; No 2005 data
Telfer School of Management, University of Ottawa	65	
Faculty of Business Administration, University of Regina	33	
Edwards School of Business, University of Saskatchewan	56	
Rotman School of Management, University of Toronto	109	Total publications info not provided; FTE figure is from 2010 CFBSD data
Peter B. Gustavson School of Business, University of Victoria	23	
School of Accounting and Finance, University of Waterloo	24.5	
The Richard Ivey School of Business, University of Western Ontario	70	
Odette School of Business, University of Windsor	50	
School of Business & Economics, Wilfrid Laurier University	68	2009 data represents only marketing faculty's publications

*data provided by Canadian Federation of Business School Deans

Other schools invited to participate:

Acadia University, Athabasca University, Bishop's University, Dalhousie University, Kwantlen Polytechnic University, McMaster University, Nipissing University, Saint Mary's University, Thompson Rivers University, Trent University, Trinity Western University, University of New Brunswick (St. John), University of Northern B.C., University of Guelph, University of Lethbridge, University of Moncton, University of New Brunswick (Fredericton), University of Ontario, Institute of Technology, University of P.E.I., University of Sherbrooke, University of the Fraser Valley

Appendix II: FT Publications from Beamish's (2000) Study

	Institution	Total** Articles	%
1	University of Western Ontario: Ivey	23.07	14.34
2	University of Toronto	18.84	11.71
3	University of British Columbia	18.65	11.59
4	McGill University	12.49	7.76
5	University of Waterloo	8.08	5.02
6	University of Calgary	7.99	4.97
7	Ecole des Hautes Etudes Commerciales	7.41	4.61
8	York University	6.63	4.12
9	University of Victoria	5.49	3.41
10	University of Alberta	5.17	3.21
11	Queen's University at Kingston	5.08	3.16
12	Simon Fraser University	4.70	2.92
13	University of Manitoba	4.33	2.69
14	Concordia University	4.25	2.64
15	Memorial University of Newfoundland	4.03	2.50
16	McMaster University	3.83	2.38
17	Wilfrid Laurier University	3.34	2.08
18	University of Windsor	2.50	1.55
19	University of New Brunswick	2.00	1.24
20	University of Lethbridge	2.00	1.24
21	Saint Mary's University	1.50	.93
22	Université Laval	1.33	.83
23	Carleton University	1.00	.62
24	University of Saskatchewan	1.00	.62
25	Laurentian University of Sudbury	1.00	.62
26	Université de Sherbrooke	1.00	.62
		160.88	100.00%

* These journals were the same as those used in the research component of the Financial Times 2000 ranking of the Top 75 MBA programs worldwide.

** Weighted according to the actual proportion of the article written by a faculty member at the designated institution.