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Research Productivity of Globally Accredited Canadian Business Schools 2005-2009:

An FT40 Publications Report by
the Gustavson School of
Business@UVic

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Executive Summary

Authors' Note: This report, which was first presented at the Canadian Federation of Business School Deans (CFBSD) meetings in December 2010 and May 2011, was first produced in June 2011 has been finalized as of August 2012. The revisions are based on the feedback received from the schools and the deans¹. In particular, the revisions were made to: (i) incorporate new and more accurate data on faculty size; and (ii) to focus on AACSB and/or 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, rather than full time equivalent (FTE) figures reported annually by the schools to AACSB. 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 for the period 2005-09 using the publication of peer reviewed journal articles in 40 top journals listed by The Financial Times (FT 40 journals). The report also provides comparative information on other non-accredited schools that participated in the survey. Originally, forty-eight Canadian schools that were members of Canadian Federation of Business School Deans (CFBSD) were approached. The data were collected from 26 of the schools, of whom 16 (out of a total of 20 accredited Canadian schools) were AACSB and/or EQUIS accredited. The main part of this report will show only the results for the 16 accredited schools that participated. The data from the entire 26 schools were also analyzed and the results are presented in the Appendices.

The results were compared with previous studies (e.g. Beamish, 2000; Erkut, 2002) 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 the 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 AACSB/EQUIS accreditation efforts, pressures and requirements.

¹ In particular, we wish to thank James Barnett from University of Waterloo, Jean-Claude Cosset from HEC Montreal, Jeff Parsons from Memorial University and Danny Shapiro from Simon Fraser University for their valuable feedback; and Tim Daus from CFBSD for his valuable assistance in providing the FTE data.

1. Introduction

1.1 Background

This project was initiated by the former 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.²

Note: In August 2012, the report was revised to include data on faculty size from a different source than was used in the original analysis. The revision also focused more clearly on AACSB/EQUIS accredited schools. 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 project. One is to examine the research productivity of Canadian business schools –with a particular focus on AACSB/EQUIS accredited schools (as measured by publications in Financial Times 40, or FT 40 journals) as a way of assessing the business research landscape during the period 2005-2009. A second objective is to use the data (both from accredited schools and the overall data) to compare the 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 2007-123.

1.3 Previous studies

Two studies were done over 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 journals by collecting data directly from the 32 journals. He used the data to rank the various Canadian business schools based on their contribution to the research landscape during that time, and he also based the net change in their productivity over the decade. He did not, however, factor the size of the school into his

² The research, data collection work and editorial assistance of of Shari Wierenga, Nikisa Dastmalchian and Shannon Perdigao is greatly acknowledged.

³ Please see <http://www.uvic.ca/gustavson/home/home/about/strategy/index.php>

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: based on their contribution to

- 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, the Council of Canadian Academies was asked, in collaboration with SSHRC, 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 province⁴.

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 include the production of other types of publications (books, chapters, case studies, etc.), does not count other methods of research dissemination (such as papers presented at

⁴ 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. Also see Dastmalchian (2009) and Toulouse and Bordeleau (2010).

conferences), and does not assess the impact factor of the journal articles through a citation-count analysis.

Clearly, there are many other indicators of research activity at business schools. These may include: a broader tally of research output (e.g. books, chapters, papers presented at conferences); 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. However, the production of peer-reviewed articles is generally accepted as a reasonable indicator of research activity and tends to correlate with other measures⁵. Therefore, we chose PRJ’s in FT 40 journals as our main indicator for research productivity.

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 AACSB/EQUIS accredited 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, however, became more complex as we progressed. The number of schools included grew, and for those schools that could not provide 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 the Gustavson School 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 2 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 of our size.

⁵ 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 (Connelley and Gallagher, 2007). See also Martin’s (1996) discussion of the idea of “converging partial indicators”.

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 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 publications (FT 40 journals) and conducted our analysis on this basis. As a result of our request, 11 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 (CFBSD) 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 13 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 FT 40 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.⁶

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

⁶ In one case, information retrieved from a school's web site in February 2011 showed 53 publications listed as "forthcoming" on their list of 2998 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.

adjuncts were 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.

These methods proved to be every bit as problematic! The AACSB data and the way in which they are calculated does not accurately reflect the research capacity of each school for the purposes of our project. The feedback we received from the deans and schools confirmed this. In revising this paper in August 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 FT 40 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 are thus subject to some limitations, and the conclusions we draw should be considered with caution.

3. Findings and Discussion

We collected information on 2660 FTE faculty members at 26 schools (16 of which were AACSB/EQUIS accredited). Approximately, their names appeared as authors of peer reviewed journal articles some 6554 times during the five-year period and as authors of FT 40 publication articles 1000 times⁷. Even though it was not the main 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 over 200 FTEs; Ottawa and SFU are the smallest of this group with 65 and 51 FTE faculty members, respectively).

3.1 Publication in FT40 journals

Our main focus was the output in terms of the articles published in FT 40 journals per capita during the period 2005-09 for the accredited business schools. The results for the 16 Canadian accredited schools are shown below in Table 1 (total number of Canadian accredited business schools in 2012 was 20). We also considered: total number of research articles as well as analysis of the data for all 26 schools who responded to our request. These latter analyses are shown in Appendices III, IV and V. Of the 26 schools participating, one (UQAM) was not able to provide information on FT 40 publications, thus it is not included in this list.

Taking into account the overall analysis of 26 schools (Appendices III and V), the results show that the schools with the highest total number of author-credits per capita are Toronto, UBC and Alberta (all accredited), which together account for 42% of all the FT 40 author-credits from the period. The other schools in the top eight are SFU, Western Ontario, McGill (the only non-accredited school here), 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.

⁷ The FTE number reflects the 2009 FTE counts of reporting schools.

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 FT 40 author-credit per FTE over the five-year period. When their per capita output is considered, smaller schools like Waterloo (rising 6 places on the list and Victoria (up four places) improve their rankings. Concordia and HEC lose ground, however, moving down six and seven places, respectively (see Appendix III).

Table 1: FT40 Publications per FTE for AACSB/EQUIS Accredited Canadian Schools* (2005-09)

	Schools	FT40 Pubs/FTE
1.	University of Toronto	1.71
2.	Simon Fraser University	1.69
3.	University of British Columbia	1.67
4.	University of Alberta	1.47
5.	University of Western Ontario	1.04
6.	Queen's University	0.91
7.	University of Victoria	0.91
8.	University of Calgary	0.75
9.	Brock University	0.60
10.	Memorial University	0.39
11.	University of Ottawa	0.29
12.	University of Manitoba**	0.28
13.	Concordia University	0.24
14.	HEC - Montreal	0.17
15.	Université Laval	0.14
16.	Wilfred Laurier University	0.12

*Total AACSB/EQUIS accredited schools in 2010 in Canada were 20. (18 AACSB accredited of which 7 were EQUIS accredited, plus two EQUIS accredited schools. The four accredited schools in 2010 that did not participate or did not have the appropriate data to participate are: Dalhousie, St. Mary's, McMaster (all AACSB accredited) and UQAM (EQUIS accredited).

** 2005 data for the University of Manitoba was not available.

Looking at the per capital FT 40 output for accredited schools, as shown in Table 1, the same pattern of results are noticed. That is, Toronto, SFU, UBC, Alberta, Western Ontario, Queen's, Victoria and Calgary are the top eight. Here again, the per capita consideration has allowed smaller accredited schools such as Victoria to move up from 12th to 6th place. McGill was not included here as it is not a school accredited by AACSB or EQUIS.

3.2 FT40 Publication as a proportion of the total

Another way to look at the data was to consider the percentage of a school's author-credits that are due to FT 40 publications. The total number of author-credits (publication counts) for the entire sample is provided in Appendix IV (24 schools as the data for Toronto and Manitoba were not available). Table 2 ranks the 14 accredited schools in this way (and Appendix V includes the entire available sample: 23 schools). Because of incomplete data on three participating schools (Toronto, Manitoba and UQAM –see note in Table 1 and Appendix I), they are not included in the analysis. As can be seen from Table 2, by and large the same 7 schools from Table 1 (with the exception of Toronto due to unavailable data) are among the top with some interesting changes in the ranking. The analysis of the 23 schools in the Appendix shows the same results with more information on the wider range of schools. Schools such as Alberta and Queen's, and perhaps Victoria, appear to have a larger share of their total publications directed towards FT 40 publications than others and hence their improved rankings in the analysis compared with Table 1 (or Appendix III).

Table 2: FT40 Publications as % of Total PRJs for AACSB/EQUIS Accredited Canadian Business Schools*(2005-09)

	Schools	%
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.	University of Victoria	25.0%
6.	University of Calgary	24.8%
7.	Simon Fraser University	16.7%
8.	Memorial University	10.7%
9.	Brock University	9.3%
10.	Concordia University	7.9%
11.	Wilfred Laurier University	7.6%
12.	University of Ottawa	4.4%
13.	HEC - Montreal	4.0%
14.	Université Laval	3.2%

*Data for total PRJ's were not available for U of Manitoba, EQUAM and U of Toronto.

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 funding⁸, also found a dip in output at Canadian business schools (mostly the accredited subsample) in the late 1990s, followed by a rapid increase in the next decade.

The data collected in this project are not suitable for comparison with earlier studies, which used database searches to collect comprehensive data on total research output. We are able, however, look at the trend indicated over the five-year period 2005-09 in this data. This is shown in Table 3.

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 FT 40 journals 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 FT 40 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 FT 40 authorship. This indicates higher intensity of top tier research productivity of the schools studied in this period.

⁸ Environmental science; natural resources and energy; health and life sciences and technologies; and information/communications.

3.4 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).

Table 4: Business School Ranking Comparison

	<u>Businessweek 2010 Intellectual Capital Rankings</u> ¹	<u>Financial Times 2010 Research Rankings</u> ²	<u>University of Texas Rankings, 2005-09 research contributions</u> ³	<u>UVic survey, 2005- 09</u> ⁴
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 (it did not participate in this project) and UBC is in the top three of all but the Businessweek ranking. SFU, which ranks fairly high on our list, does not figure in the top five of the other 3 lists. Overall, however, the general alignment of our survey with these other ranking systems lends validity to our process and results.

The above table (Table 4) 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, Table 5 compares the 2005-07 and 2007-09 time periods to the full five-year period for two of the datasets.

Table 5: 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

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

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

Table 5 shows that UBC and Toronto are in the top position according to the Texas as well as our rankings. Others (McGill, Alberta, Western Ontario, SFU, York and Victoria) seem to be moving between second and eighth positions fairly similarly across the two sets of reports (Texas and our report). We take this as evidence that the results of our survey, with all its limitations as explained before, seem to yield results quite comparable with other major research ranking exercises from Financial Times and Business Week to Texas University's rankings of business Canadian schools.

4. Closing Comments

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 addressed and 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: the current revisions made to this report 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 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 further study on this topic has been undertaken in 2011-12 by a team of researchers Gustavson School of Business at UVic (see Zietsma, Dastmalchian and Tehranchi, 2012). It covers the decade of 2000 (2000-2009) and attempts to overcome the method issues of this report. The results will be published and made available in due course.

References

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

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

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

Dastmalchian, A. (2009) “State of Management Research in Canada” Forum on Research on Business, Management and Finance—a SSHRC funded conference analyzing the future direction of Canadian Business School research, attended HEC, Montreal, Canada (October).

Dastmalchian, A. (2010). Research Productivity among Canadian Business Schools. Presented at the Bi-Annual meeting Canadian Federation of Business School Deans (CFBSD), Toronto (December).

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.

Zietsma, C., Dastmalchian, A. and Tehranchi, A. (2012). “When Rich Gets Richer: Assessing Research Output at Canadian Business School”, Paper presented at Administrative Association of Canada’s (ASAC) Conference, Management Education Division, St. John’s, Newfoundland (June).

Toulouse, J.M. and Bordeleau. J. (2010). National Forum on Management: Summary, analyses and lines of action. A Report produced for SSHRC and CFBSD. HEC Montreal, (February).

Appendix I: Participation in the Project

#	Participating Schools*	Accreditation in 2010	FTE Avg (2005-09)**	Notes
1.	Faculty of Business, Brock University	AACSB	42	
2.	Sprott School of Business, Carleton University	-----	34.4	
3.	John Molson School of Business, Concordia University	AACSB	149	FTE=CFBSD 2010 only
4.	École des Hautes Études Commerciales, Université de Montréal	AACSB/EQUIS/AMBA	215.8	
5.	School of Commerce and Administration, Laurentian University	-----	29.4	2009 pubs missing
6.	Desautels Faculty of Management, McGill University	-----	59.4	
7.	Faculty of Business Administration, Memorial University of Newfoundland	AACSB	41	
8.	School of Business, Queen's University	AACSB/EQUIS/AMBA	70	
9.	Faculty of Management, Royal Roads University	-----	11	
10.	Beedie School of Business, Simon Fraser University	AACSB/EQUIS	51	
11.	Gerald Schwartz School of Business, St. Francis Xavier University	-----	19.4	
12.	Faculty of Business Administration, Université Laval	AACSB/EQUIS	87	
13.	School of Business, University of Alberta	AACSB	70	
14.	Sauder School of Business, University of British Columbia	AACSB/EQUIS	81	
15.	Haskayne School of Business, University of Calgary	AACSB	83	Some 2007 data missing
16.	I. H. Asper School of Business, University of Manitoba	AACSB	47	2005-7 data incomplete
17.	Telfer School of Management, University of Ottawa	AACSB/EQUIS/AMBA	65	
18.	Faculty of Business Administration, University of Regina	-----	33	
19.	Edwards School of Business, University of Saskatchewan	-----	56	
20.	Rotman School of Management, University of Toronto	AACSB	109	Total pubs missing; FTE=CFBSD 2010 only
21.	Peter B. Gustavson School of Business, University of Victoria	AACSB/EQUIS	23	
22.	School of Accounting and Finance, University of Waterloo	-----	24.5	Accounting/Finance faculty data only reported
23.	The Richard Ivey School of Business, University of Western Ontario	EQUIS	70	
24.	Odette School of Business, University of Windsor	-----	50	
25.	School of Business & Economics, Wilfrid Laurier University	AACSB	68	2009 data represents only marketing faculty's publications

*Université du Québec à Montréal (UQAM) was unable to provide FT40 data thus was excluded from analysis.

**data provided by Canadian Federation of Business School Deans (CFBSD)

Other AACSB/EQUIS Accredited Schools (in 2010) invited to participate but for a variety of reasons were not able to participate: Dalhousie University., McMaster University (DeGroot School of Business), Saint Mary's University (Sobey School of Business), and UQAM.

Other Schools invited to participate but for a variety of reasons were not able to participate:

Acadia University, Athabasca University, Bishop's University, Kwantlen Polytechnic University, Nipissing 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, and University of the Fraser Valley. York University (Schulich School of Business) and Ryerson University (Ted Rogers School of Business) who have since become accredited (York with EQUIS and Ryerson with AACSB) did not participate also.

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

Canadian Contributions to 32 Major* Business Journals from 1997-1999

	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
		<u>160.88</u>	<u>100.00%</u>

*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.

***Source: Based on Table 2 from Beamish, P.W. (2000). "Knowledge creators or knowledge retailers?: Business school research in Canada". ASAC 2000 Conference Proceedings, 21 (10), page 8 (the first 26 schools with at least a score of 1 in FT40 are reported here)

Appendix III: FT40 Publications per FTE for all Canadian Business Schools in our Survey*(2005-09)

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	8.	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

* UQAM is not included due to missing FT40 Publications

**2005 data unavailable for U of Manitoba.

Appendix IV: Total Publications Counts for all Canadian Business Schools in our Survey* (2005-09)

Ranked by total articles**, 2005-09

	<u>Total Articles</u>
1. HEC - Montreal	889
2. UQAM	815
3. Simon Fraser University	515
4. Concordia	457
5. University of Ottawa	435
6. University of British Columbia	384
7. Université Laval	372
8. University of Alberta	277
9. McGill University	273
10. Brock University	270
11. University of Windsor	251
12. University of Calgary	250
13. University of Western Ontario	241
14. Carleton University	232
15. Queen's University	172
16. Memorial University	149
17. Wilfrid Laurier University	105
18. University of Regina	99
19. University of Saskatchewan	97
20. University of Victoria	84
21. University of Waterloo	68
22. Laurentian University	44
22. St. Francis Xavier University	44
24. Royal Roads University	21

*Missing cases: U of Toronto and U of Manitoba

** All articles include FT 40 and non-FT 40 publications (PRJs only)

Appendix V: FT40 Publications as % of Total Publication Counts for all Canadian Business Schools in our Survey* (2005-09)

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	----

*Missing cases; U of Manitoba, U of Toronto and UQAM.