



Appendix A: List of schedule I and schedule II chartered banks

Schedule I

Bank of Montreal	National Bank of Canada
Canadian Imperial Bank of Commerce	Royal Bank of Canada
Canadian Western Bank	The Bank of Nova Scotia
Laurentian Bank of Canada	The Toronto-Dominion Bank

Schedule II

ABN AMRO Bank Canada	Hanil Bank Canada
Amex Bank of Canada	Hongkong Bank of Canada
BT Bank of Canada	The Industrial Bank of Japan (Canada)
Banca Commerciale Italiana of Canada	ING Bank of Canada
* Banco Central Hispano-Canada	International Commercial Bank of Cathay (Canada)
Bank of America Canada	J.P. Morgan Canada
* Bank of Boston Canada	Korea Exchange Bank of Canada
Bank of China (Canada)	MBNA Canada Bank
Bank of East Asia (Canada)	Manulife Bank of Canada
Bank of Tokyo-Mitsubishi (Canada)	Mellon Bank Canada
Banque Nationale de Paris (Canada)	National Bank of Greece (Canada)
The Chase Manhattan Bank of Canada	National Westminster Bank of Canada
Cho Hung Bank of Canada	Paribas Bank of Canada
Citibank Canada	Rabobank Canada
Citizens Bank of Canada	Republic National Bank of New York (Canada)
** Comerica Bank - Canada	Sakura Bank (Canada)
Crédit Lyonnais Canada	Sanwa Bank Canada
Credit Suisse First Boston Canada	Société Générale (Canada)
Dai-Ichi Kangyo Bank (Canada)	Sottomayor Bank Canada
* Daiwa Bank Canada	State Bank of India (Canada)
Deutsche Bank Canada	The Sumitomo Bank of Canada
Dresdner Bank Canada	Swiss Bank Corporation (Canada)
First Chicago NBD Bank, Canada	Tokai Bank Canada
First Nations Bank of Canada	Union Bank of Switzerland (Canada)
Fuji Bank Canada	United Overseas Bank (Canada)

* in process of liquidation; ** awaiting order to commence business

Source: Office of the Superintendent of Financial Institutions. Information available on the Internet at www.osfi-bsif.ca.

Appendix B: Bank consolidations in the United States

Introduction

There has been a great deal of discussion in Canada concerning the research findings on the economic effects of bank consolidation in the United States. The United States, because of its geographic proximity and the similarity of its consumer market to that of Canada, appears to be a natural choice for comparison. Contrary to this assumption, however, the American banking sector is significantly different from the Canadian banking sector both in regional and national structure. Appendix B details the structural differences that exist between the American and Canadian banking systems and critiques a series of research papers published by various Federal Reserve Bank Boards in the United States.

Structural differences

The American market is characterized by a “pillar” regulatory system wherein each pillar of the system (commercial banking, securities, insurance, etc.) is separately regulated; one company is not permitted to perform dual functions. This type of pillar regulatory system dates back to the Great Depression when the stability of the financial sector was best thought to occur under strict regulation by the federal government. Since then, most nations, including Canada, have significantly relaxed the level of regulation regarding cross-functionality (i.e. operating in more than one pillar of the market).

The American system has historically had strict limitations on multi-state banking. Unlike Canada, there are no national banks in the United States (i.e. banks with branches in each of the 50 states). The largest commercial bank in the United States, the recently merged firms of BankAmerica and NationsBank, will have branches in only 22 states. As a result, the American banking system maintains significantly more banks per capita than the Canadian system. This type of artificial geographic restriction substantially limits the ability of merging banks to gain economies of scale.

Finally, the consumer preferences for alternative provision of services are materially different between the two countries: Canadians, perhaps because of the lower density of our market, have a higher demand for, and use of, alternative banking services than Americans. This effectively results in a higher American demand for in-branch services, particularly since there are fewer alternative delivery systems such as ABMs, Internet access, and direct payment services.

These three major differences between the banking sectors in each country provide a sound basis for discrediting any unqualified inferences drawn from the American experience. In order to apply the American case to the current Canadian context, several qualifications would be required to account for the structural differences between the two systems.

Recent economic literature

The recent literature on the American experience of bank mergers presents conflicting evidence for and against the benefits of consolidation. Depending on which variables are included in the regression equations—which correlations are examined, the length of the time series, the breadth of observations, the type of markets in which the mergers take place, and the prices examined—widely different results are achieved. As a result, there are good reasons to interpret any outcome of these studies cautiously, aside from the structural differences between the two markets.

The generally acknowledged effect of mergers in any market is two-fold: to increase the efficiency of the merged banks' service provision, and to raise their market share and hence market concentration. Theoretically, then, the implication of increased efficiency from merging would be to lower prices, e.g., raise deposit rates, lower loan rates, and decrease service fees. To the extent that mergers increase the efficiency of the merged banks we should observe these lower prices in the market first for the merged banks themselves and then, to a lesser extent, for their rivals who need to remain competitive in that market.

The second effect of merging, however, is to increase market power of the merged banks, which theoretically implies the ability, to the extent that the merged bank captures a sufficiently large segment of the market, to raise these same prices and collect economic profits. Moreover, according to this argument, in the particular region the merged bank belongs to, corresponding prices should rise as well, although to a lesser degree.

The predominant difficulty with testing for the implications of bank mergers, whether positive or negative (in terms of their effects on a set of defined prices), results from the counter-balancing nature of these two effects. Therefore, any study that examines market concentration as the underlying cause of economic rents, excluding economic efficiency as a contributing factor to higher profitability, is incomplete and the results must be viewed cautiously. For example, Gilbert (1984) in a literature survey found empirical evidence largely supporting the existence of a positive relationship between concentration and profits. When efficiency was accounted for by Smirlock (1985) and Berger (1995), the relationship between concentration and profits disappears. However, Evanoff and Fortier (1988) include other mitigating factors in their analysis and the relationship is reasserted. Jayaratne and Strahan (1998) look exclusively at efficiency with the conclusion that allowing bank expansion results in increased efficiency, where most of the reductions in costs were passed along to consumers in the form of lower loan rates.

Prager and Hannan (1998)

Two papers have recently analyzed the effect of bank mergers by using changes in deposit pricing, in pre-merger and post-merger markets, as evidence for or against the market concentration hypothesis. The first, Prager and Hannan (1998), uses survey data on deposit rates on three different account types to examine which effect dominates the merger result.²⁵ The study makes the assumption that these particular banking products are homogeneous and therefore should be priced identically (which assumes the market is perfectly competitive and that there is no scope for price setting on the part of banks). To the extent that prices vary across firms between the pre-merger and post-merger markets, these are assumed to be the result of the merger and not some other either region-specific factor or exogenous variable.

There are a number of limitations in the statistical results of this survey. First, the equation used for estimation neglects effects from other economic variables such as mac-

roeconomic effects, entry restrictions, assets (as a measure of potential economies of scale) changes in other interest rates, pre-existing market concentration ratios,²⁶ availability of substitutes, and specific regional effects. Inclusion of these variables could reduce the significance (and explanatory power) of the already included variables further.²⁷

Second, the cumulative results of the mergers are analyzed based on only 12 months of observations from the time of merger. A one-year period does not constitute a sufficient length of time to determine whether the existence of positive economic rents (profits) would cause entry to the market, thus diluting the merged banks market power and hence ability to lower deposit rates.²⁸

Third, the statistical results provide at best a weak acceptance of the null hypothesis (that market concentration affects bank profitability); at worst, they are insignificant.²⁹ There may also be problems with small sample size and the restriction of analysis to a particular geographic region. While we may observe these price differences across regions, on a national basis, if the assumption of perfectly competitive markets holds true (and with it the implied "law of one price"), then deposit rates should equalize, given sufficient time for the market to adjust to the new structure.

The results of Prager and Hannan 1998 are inconclusive. The findings of the study are not statistically significant and they demonstrate both positive and negative effects, i.e. both increases and decreases in deposit rates. Furthermore, the analysis includes only 12 months of post-merger observations, a serious limitation in determining the long-term effect of the mergers.

Simons and Stavins (1998)

The second paper, Simons and Stavins (1998), hypothesizes that bank mergers raise market power, which by implication results in lower deposit rates. It is assumed that a merger between rival banks located in the same market will result in lower rates on deposits. If this assumption holds, then it is evident that bank mergers have anticompetitive effects that extend to more than the merged banks themselves. On the other hand, if a rival's merger results in higher deposit interest rates being offered by other banks, then competition from other banks is a mitigating factor and this should be considered when merger approval decisions are made (Simons and Stavins 1998).

To test the hypothesis that bank mergers raise market power, Simons and Stavins (1998) use the interest rate on deposits, specifically on money market deposit accounts (MMDAs) and certificates of deposit (CDs). The analysis



- included whether the merger occurred in a bank's main or secondary market. They found that year-to-year changes in market concentration (increases) were not correlated with changes in deposit interest rates within individual markets (correlation coefficients were near zero) (Simons and Stavins 1998). Thus they concluded: "These patterns [declining deposit rates in markets where the HHI index increased by 200 or more points] indicate that a significant increase in concentration in a given market was typically associated with worse terms on consumer deposits in that market, although of course it shows nothing about causality" (Simons and Stavins 1998: 21).

More importantly, they discovered that the cumulative three-year effect of a bank merger in both its main and secondary market is negligible, not significantly different from zero. Interestingly, the first year following a merger shows a drop of 0.9 percent in the deposit rate, the second, a drop of 0.6 percent, and the third, paradoxically, an increase of 1.7 percent—obviously making up for the decreases (t-statistic is close to zero here). For the MMDA funds, the effect of the merger is negative only in the first year, reversed in the second and third years, resulting in a negligible three year cumulative effect (very small t-statistics). This is the case both for participation in mergers in a bank's main

market as well as in its secondary market for CDs; for MMDAs, the combined three-year effect is a reduction of 1.2 percent significant at the 10 percent level. Conflicting results also occur in the analysis of rival mergers: the combined three-year effect being negative—a lowering of deposit rates—and significant at the 1 percent level. A longer term analysis is not given.

Conclusions from the literature

This brief overview of several studies of American bank mergers generates two conclusions: first, the results presented in each of these studies are ambiguous as to the effects of bank mergers and, second, any result obtained must be interpreted cautiously given the set of difficulties both in the framework for the tests and in the test statistics themselves. Moreover, test results aside, the banking sectors in Canada and the United States are sufficiently different that to compare them and to draw any conclusions from American experiences would be similar in statistical significance to comparing the Canadian banking sector with any other unrelated market—they are just too different to draw any conclusions.



Appendix C: Internet websites for Mutual Fund providers

Banks

Royal Bank of Canada	royalbank.com/english/rmf/index/html
Bank of Montreal	bmo.com
Canadian Imperial Bank of Commerce	cibc.com
Toronto-Dominion Bank	tdbank.ca
Scotiabank	scotiabank.ca
Hongkong Bank Securities Inc.	hksi.com
Laurentian Bank of Canada	laurentianbank.com

Other companies

AGF Management Ltd.	agf.com
AIC Group of Funds	aicfunds.com
Atlas Funds (Owned by Midland-Walwyn Ltd.)	atlasfunds.com
Canada Trust	canadatrust.com
C.I. Mutual Funds	cifunds.com
Dynamic Mutual Funds	dynamic.ca
Fidelity Investments	fidelity.ca
Global Strategy Investment Funds	globalstrategyfunds.com
G.T. Global Canada Inc.	gtglobal.ca
Guardian Mutual Funds	guardianfunds.com
Investors Group	investorsgroup.com/english/index.html
Mackenzie Financial Corporation	mackenziefinancial.com
Sagit Investments (Cambridge Funds)	sagit.com
Scudder Investor Services Inc.	scudder.ca
Spectrum United	spectrumunited.ca
Talvest	talvest.com
Templeton Management Ltd.	templeton.ca
Trimark Mutual Funds	trimark.com
Mutual Fund Marketplace Directory	bmo.com/fcfunds/e/ec.html

Appendix D: Methodology used in the analysis of the Mutual Fund sector

Appendix D provides additional information pertaining to the precise methodology employed in the analysis of the mutual funds sector. A total of 22 mutual fund providers with over 532 individual mutual funds were included in the sample. The sample encompasses the 15 largest mutual funds in Canada, including the five largest Schedule I banks. Any individual fund that did not have a full year of performance data was eliminated from the sample. Finally, all of the companies in the sample have an extensive Internet presence and the results generated herein can be independently verified using the data available on the Internet (see Appendix C).

The report categorizes the sample mutual funds according to two factors, geographic focus and the nature of the investment. Normally geographic definitions would have been limited to domestic and international classifications. However, as most Canadian mutual fund companies offer a variety of mutual funds specific to the United States, we thought it appropriate to delineate the mutual funds further using an additional geographic definition, the United States.

The second classification pertains to the type of investment product included within each particular fund. Four

separate categories generally accepted for the purposes of portfolio management were included: cash (and cash equivalents), fixed-income, equity, and balanced.

Based on the three geographic definitions and four investment product classifications, 12 separate categories of mutual funds were developed: Canadian Cash, US Cash, Canadian Fixed Income, US Fixed Income, Global Fixed Income, Canadian Equity, US Equity, Global Equity, Specialized Regional Equity, Canadian Balanced, Global Balanced, and Specialty Funds.

Specialty funds were created as a separate category since their focus was deemed to exist outside the parameters established by the two criteria for classification. This category includes funds that focus on particular segments of the economy such as technology, health care, real estate, precious metals, resources, and financial services.

It is important to recognize that the figures for market shares provided in each of the appendices and the tables in the main report are indicative of the sample market share only; they do not represent a total mutual fund market share.



Appendix E: Assets and market share of various mutual funds

The data on market share in the these appendices refers exclusively to those companies and funds included in the sample. There are over 125 separate companies offering non-segregated mutual funds. The sample was selected by including only those companies that maintain internet web-

sites in order to facilitate both the data-collection process and to allow for replication. Company and specific mutual fund information was collected both from the respective internet sites of each firm and directly from annual reports and prospectuses.

Appendix E(1) : Canadian Cash and Cash Equivalent Mutual Funds

	Company		Name of Fund	Total Asset Value (\$millions)	Market Share
1	AIM GT Mutual Funds	1	Canada Money Market Fund	\$41	0.17%
2	Altamira Investment Services Inc.	2	Canadian T-Bill Fund	\$51	0.21%
		3	Short Term Canadian Income Fund	\$26	0.11%
3	Atlas Mutual Funds	4	Canadian Money Market Fund	\$305	1.25%
		5	Canadian T-Bill Fund	\$316	1.30%
4	Bank of Montreal	6	Money Market Fund	\$1,041	4.28%
		7	T-Bill Fund	\$743	3.05%
5	Canada Trust	8	Money Market Fund	\$1,052	4.32%
		9	Premium Money Market Fund	\$451	1.85%
6	C.I. Funds	10	Money Market Fund	\$290	1.19%
7	C.I.B.C.	11	Canadian T-Bill Fund	\$519	2.13%
		12	Money Market Fund	\$1,911	7.85%
		13	Premium Canadian T-Bill Fund	\$1,903	7.82%
8	Dynamic Mutual Funds	14	Money Market Fund	\$165	0.68%
9	Ethical Funds Inc.	15	Ethical Money Market Fund	\$108	0.44%
10	Fidelity Funds	16	Canadian Short Term Asset Fund	\$306	1.26%
11	Global Strategy Investment Funds	17	Money Market Fund	\$104	0.43%
12	Guardian Mutual Funds	18	Canadian Money Market	\$58	0.24%
13	Hongkong Bank of Canada	19	Money Market Fund	\$385	1.58%
14	Investors Group	20	Investors Canadian Money Market Fund	\$577	2.37%
15	Mackenzie Financial Corp.	21	Industrial Cash Management Fund	\$412	1.69%
		22	Industrial Short-Term Fund	\$256	1.05%
16	Royal Bank of Canada	23	Canadian Money Market Fund	\$1,527	6.27%
		24	Canadian T-Bill Fund	\$3,170	13.02%
		25	Premium Money Market Fund	\$1,332	5.47%

Appendix E(1)(continued): Canadian Cash and Cash Equivalent Mutual Funds

Company	Name of Fund	Total Asset Value (\$millions)	Market Share
17 Sagit Investment Management Ltd. 26	Trans-Canada Money Market Fund	\$11	0.05%
18 Scotiabank - Excelsior Funds	27 Money Market Fund	\$537	2.21%
	28 Premium T-Bill Fund	\$802	3.29%
	29 T-Bill Fund	\$341	1.40%
19 Spectrum United 30	Canadian Money Market Fund	\$183	0.75%
20 TD Greenline	31 Canadian Money Market Fund	\$4,005	16.45%
	32 Canadian T-Bill Fund	\$395	1.62%
	33 Premium Money Market Fund	\$1,018	4.18%
Total / Mean		\$24,341	
High Value			16.45%
Low Value			0.05%
Range			16.41%

Appendix E(2) : Global Fixed Income Mutual Funds

Company		Name of Fund		Total Asset Value (\$millions)	Market Share
1	AGF Group of Funds	1	Global Government Bond Fund	\$152	4.47%
		2	RSP Global Bond Fund	\$80	2.35%
2	AIM GT Mutual Funds	3	Global Bond Fund	\$6	0.18%
3	Altamira Investment Services Inc.	4	Global Bond Fund	\$28	0.82%
		5	High Yield Bond Fund	\$19	0.56%
		6	Short Term Global Income Fund	\$23	0.68%
4	Atlas Mutual Funds	7	World Bond Fund	\$26	0.76%
5	Bank of Montreal	8	International Bond Fund	\$239	7.03%
6	Canada Trust	9	International Bond Fund	\$76	2.23%
7	C.I. Funds	10	Global Bond RSP Fund	\$83	2.44%
		11	Global High Yield Fund	\$15	0.44%
		12	World Bond Fund	\$76	2.23%
8	C.I.B.C.	13	Global Bond Fund	\$73	2.15%
9	Dynamic Mutual Funds	14	Global Bond Fund	\$280	8.23%
		15	Global Income & Growth Fund	\$62	1.82%
10	Ethical Funds Inc.	16	Ethical Global Bond Fund	\$17.0	0.50%
11	Fidelity Funds	17	Emerging Markets Bond Fund	\$59	1.73%
12	Global Strategy Investment Funds	18	Diversified Bond Fund	\$271	7.97%
		19	Diversified Foreign Bond Fund	\$6	0.18%
		20	World Bond Fund	\$197	5.79%
13	Hongkong Bank of Canada	21	Global Bond Fund	\$8	0.24%
14	Investors Group	22	GS International Bond Fund	\$9	0.26%
		23	Investors Global Bond Fund	\$245	7.20%
15	Mackenzie Financial Corp.	24	Universal World Income RRSP Fund	\$557	16.38%
		25	Universal World Tactical Bond Fund	\$41	1.21%
16	Royal Bank of Canada	26	Global Bond Fund	\$243	7.14%
17	Scotiabank - Excelsior Funds	27	Global Bond Fund	\$15	0.44%
18	Spectrum United	28	Global Bond Fund	\$17	0.49%
		29	RRSP International Bond Fund	\$80	2.35%
19	TD Greenline	30	Global Government Bond Fund	\$106	3.12%
		31	Global RSP Bond Fund	\$244	7.17%
20	Templeton	32	Global Bond Fund	\$49	1.44%
		Total / Mean*		\$3,401	
		High Value			16.38%
		Low Value			0.18%
		Range			16.20%

* Total may not add up due to rounding.

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Appendix E(3) : Canadian Equity Mutual Funds

Company		Name of Fund	Total Asset Value (\$millions)	Market Share
1	AGF Group of Funds	1 20/20 RSP Aggressive Equity Fund	\$384	0.58%
		2 20/20 RSP Aggressive Smaller Companies Fund	\$499	0.75%
		3 Canada Class	\$9	0.01%
		4 Canadian Equity Fund	\$689	1.04%
		5 Canadian Growth Fund	\$415	0.62%
		6 Dividend Fund	\$2,174	3.27%
		7 Growth Equity Fund	\$1,015	1.53%
2	AIM GT Mutual Funds	8 Canada Growth Class	\$807	1.21%
		9 Canada Income Class	\$890	1.34%
3	Altamira Investment Services Inc.	10 AltaFund	\$150	0.23%
		11 Capital Growth Fund	\$146	0.22%
		12 Equity Fund	\$1,559	2.35%
		13 Special Growth Fund	\$256	0.39%
4	Atlas Mutual Funds	14 Canadian Emerging Growth Fund	\$73	0.11%
		15 Canadian Large Cap Growth Fund	\$569	0.86%
		16 Canadian Large Cap Value Fund	\$52	0.08%
		17 Canadian Small Cap Growth Fund	\$138	0.21%
		18 Canadian Small Cap Value Fund	\$47	0.07%
5	Bank of Montreal	19 Equity Index Fund	\$414	0.62%
		20 Growth Fund	\$1,237	1.86%
		21 Special Growth Fund	\$441	0.66%
6	Canada Trust	22 Stock Fund	\$758	1.14%
		23 Special Equity Fund	\$348	0.52%
7	C.I. Funds	24 Canadian Growth Fund	\$898	1.35%
		25 Covington Fund	\$135	0.20%
		26 Monarch Canadian Fund	\$83	0.12%
8	C.I.B.C.	27 Canadian Equity Fund	\$1,193	1.79%
		28 Canadian Index Fund	\$378	0.57%
		29 Capital Appreciation Fund	\$552	0.83%
9	Dynamic Mutual Funds	30 Canadian Growth Fund	\$806	1.21%
		31 Dividend Growth Fund	\$482	0.73%
		32 Dynamic Fund of Canada	\$282	0.42%
10	Ethical Funds Inc.	33 Ethical Growth Fund	\$805	1.21%
		34 Ethical Special Equity Fund	\$90	0.14%
11	Fidelity Funds	35 Canadian Growth Company Fund	\$1,478	2.22%
		36 Capital Builder Fund	\$451	0.68%
		37 True North Fund	\$1,280	1.93%

Appendix E(3)(continued): Canadian Equity Mutual Funds

Company		Name of Fund	Total Asset Value (\$millions)	Market Share	
12	Global Strategy Investment Funds	38	Canada Growth Fund	\$663	1.00%
		39	Canadian Opportunities Fund	\$152	0.23%
		40	Canadian Small Cap Fund	\$435	0.65%
13	Guardian Mutual Funds	41	Enterprise	\$332	0.50%
		42	Growth Equity	\$332	0.50%
14	Hongkong Bank of Canada	43	Equity Fund	\$197	0.30%
		44	Small Cap Growth Fund	\$59	0.09%
15	Investors Group	45	GS Canadian Equity Fund	\$276	0.42%
		46	IG Beutel Goodman Canadian Equity Fund	\$46	0.07%
		47	IG Beutel Goodman Canadian Small Cap Fund	\$144	0.22%
		48	IG Sceptre Canadian Equity Fund	\$250	0.38%
		49	Investors Canadian Equity Fund	\$3,759	5.66%
		50	Investors Canadian Small Cap Fund	\$703	1.06%
		51	Investors Growth Portfolio	\$698	1.05%
		52	Investors Retirement Growth Portfolio	\$2,437	3.67%
		53	Investors World Growth Portfolio	\$914	1.38%
16	Mackenzie Financial Corp.	54	Industrial Equity Fund	\$91	0.14%
		55	Industrial Growth Fund	\$897	1.35%
		56	Industrial Horizon Fund	\$1,097	1.65%
		57	Ivy Canadian Fund	\$5,675	8.54%
		58	Ivy Enterprise Fund	\$380	0.57%
		59	Universal Canadian Growth Fund	\$1,924	2.89%
17	Royal Bank of Canada	60	Canadian Equity Fund	\$3,617	5.44%
		61	Canadian Growth Fund	\$790	1.19%
		62	Canadian Small Cap Fund	\$225	0.34%
18	Sagit Investment Management Ltd	63	Cambridge Growth Fund	\$12	0.02%
		64	Cambridge Special Equity Fund	\$4	0.01%
		65	Trans-Canada Value Fund	\$2	0.00%
19	Scotiabank - Excelsior Funds	66	Canadian Blue Chip Fund	\$431	0.65%
		67	Canadian Growth Fund	\$1,032	1.55%
20	Spectrum United	68	Canadian Equity Fund	\$1,825	2.75%
		69	Canadian Growth Fund	\$988	1.49%
		70	Canadian Investment Fund	\$316	0.48%
		71	Canadian Stock Fund	\$192	0.29%
21	TD Greenline	72	Blue Chip Equity Fund	\$456	0.69%
		73	Canadian Equity Fund	\$983	1.48%
		74	Canadian Index Fund	\$430	0.65%

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Appendix E(3)(continued): Canadian Equity Mutual Funds

Company		Name of Fund	Total Asset Value (\$millions)	Market Share
	75	Canadian Small-Cap Equity Fund	\$42	0.06%
	76	Value Fund	\$591	0.89%
22 Templeton	77	Canadian Stock Fund	\$305	0.46%
23 Trimark Mutual Funds	78	Canadian Fund	\$2,380	3.58%
	79	RSP Equity Fund	\$3,060	4.60%
	80	Select Canadian Growth Fund	\$5,340	8.03%
		Total / Mean*	\$66,465	
		High Value		8.54%
		Low Value		0.00%
		Range		8.54%

* Total may not add up due to rounding.

Appendix E(4) : Canadian Balanced Mutual Funds

Company		Name of Fund		Total Asset Value (\$millions)	Market Share
1	AGF Group of Funds	1	Canadian Tactical Asset Allocation Fund	\$967	2.01%
		2	Growth & Income Fund	\$764	1.59%
2	Altamira Investment Services Inc.	3	Balanced Fund	\$78	0.16%
3	Atlas Mutual Funds	4	Canadian Balanced Fund	\$283	0.59%
4	Bank of Montreal	5	Asset Allocation Fund	\$443	0.92%
5	Canada Trust	6	Balanced Fund	\$1,354	2.82%
6	C.I. Funds	7	Canadian Balanced Fund	\$366	0.76%
7	C.I.B.C.	8	Balanced Fund	\$1,238	2.57%
8	Dynamic Mutual Funds	9	Partners Fund	\$2,000	4.16%
		10	Team Fund	\$243	0.51%
9	Ethical Funds Inc.	11	Ethical Balanced Fund	\$714	1.48%
10	Fidelity Funds	12	Canadian Asset Allocation Fund	\$2,281	4.74%
11	Guardian Mutual Funds	13	Canadian Balanced	\$396	0.82%
		14	Growth & Income	\$22	0.05%
12	Hongkong Bank of Canada	15	Balanced Fund	\$381	0.79%
		16	Dividend Income Fund	\$238	0.49%
13	Investors Group	17	GS Canadian Balanced Fund	\$584	1.21%
		18	IG Beutel Goodman Canadian Balanced Fund	\$102	0.21%
		19	IG Sceptre Canadian Balanced Fund	\$220	0.46%
		20	Investors Asset Allocation Fund	\$1,664	3.46%
		21	Investors Dividend Fund	\$4,253	8.84%
		22	Investors Growth Plus Portfolio	\$357	0.74%
		23	Investors Income Plus Portfolio	\$1,421	2.95%
		24	Investors Mutual of Canada	\$1,042	2.17%
		25	Investors Retirement Mutual Fund	\$3,027	6.29%
		26	Investors Retirement Plus Portfolio	\$1,882	3.91%
14	Mackenzie Financial Corp.	27	Industrial Balanced Fund	\$360	0.75%
		28	Industrial Pension Fund	\$310	0.64%
		29	Ivy Growth and Income Fund	\$2,394	4.98%
		30	Universal Canadian Balanced	\$403	0.84%
15	Royal Bank of Canada	31	Balanced Fund	\$7,779	16.17%
		32	Royal Trust Advantage Balanced Fund	\$508	1.06%
		33	Royal Trust Advantage Growth Fund	\$197	0.41%
16	Sagit Investment Management Ltd.	34	Cambridge Balanced Fund	\$5	0.01%
17	Scotiabank - Excelsior Funds	35	Balanced Fund	\$742	1.54%
		36	Total Return Fund	\$945	1.96%

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Appendix E(4)(continued): Canadian Balanced Mutual Funds

Company		Name of Fund	Total Asset Value (\$millions)	Market Share
18 Spectrum United	37	Asset Allocation Fund	\$548	1.14%
	38	Canadian Balanced Portfolio	\$542	1.13%
	39	Diversified Fund	\$232	0.48%
19 TD Greenline	40	Balanced Growth Fund	\$545	1.13%
	41	Balanced Income Fund	\$267	0.56%
20 Templeton	42	Canadian Asset Allocation Fund	\$84	0.17%
	43	Balanced Fund	\$53	0.11%
21 Trimark Mutual Funds	44	Income Growth Fund	\$915	1.90%
	45	Select Balanced Fund	\$4,950	10.29%
		Total / Mean	\$48,099	
		High Value		16.17%
		Low Value		0.01%
		Range		16.16%



Notes

- 1 Calculated by the authors from data in Canada, Department of Finance, Office of the Superintendent of Financial Institutions 1998.
- 2 For a discussion of the effects of the financial services industry on economic growth see McCallum 1989; Levine 1996; Binhammer 1977.
- 3 Several areas of the financial services industry are either jointly regulated with the provincial governments (credit unions) or regulated exclusively by the provincial governments (securities).
- 4 Calculated by the authors from data in Canada, Department of Finance, Office of the Superintendent of Financial Institutions 1998.
- 5 Under the Canada-United States Free Trade Agreement, residents of the United States are exempt from this rule.
- 6 See Feldman 1980 for a good discussion about markets and efficiency. Law and Clemens 1998 provides a non-technical discussion of how market power causes market failure.
- 7 Mergers between banks require the approval of the Minister of Finance, to whom the Competition Tribunal makes non-binding recommendations. For further information, see Stanbury 1998.
- 8 It is important to note that the Competition Bureau is not obliged to accept or reject a proposed merger outright. It can approve a merger subject to certain conditions.
- 9 Conversely, any market can be defined as competitive if the definition of the market is sufficiently broad.
- 10 Law and Clemens 1998 provides a non-technical discussion of some of these issues.
- 11 In fact, many empirical studies show that despite their large domestic market shares, Canadian banks do not have a substantive amount of market power. Industry-level studies suggest that revenues in the banking industry are generated in contestable markets. See Nathan and Neave 1989 and Shaffer 1993.
- 12 Of the 1997 annual reports from the Big 5 banks, only the Royal Bank of Canada segregated the international and domestic branches. Data on the number of overseas branches for the remaining Big 5 banks was obtained by specific request from the banks.
- 13 For instance, the Bank of Nova Scotia announced that it plans to “amalgamate” 40 of the 175 branches acquired as part of its purchase of National Trust in 1997. Further, 10 Scotiabank branches will also be “amalgamated” with branches acquired from National Trust.
- 14 For instance, a CIBC customer making an in-branch withdrawal faces a service charge of \$0.60 while the same customer, performing the same transaction at an ABM will be charged only \$0.45, a reduction in fees of 25 percent. Paying a bill offers an even more dramatic example of reduced service fees. In-branch service fees for the payment of a bill total \$1.50 while fees for electronic payment via an ABM, a telephone transfer, or an Internet payment total \$0.45, a reduction in fees of 70 percent.
- 15 This analysis is limited by the fact that much of the technology is a relatively recent development: telephone banking has appeared within the last five years and internet banking has been available for less than two years.
- 16 The figures refer to registered customers, not actual users. The figures therefore indicate the capacity for usage by current customers as opposed to actual usage. Since the banks view specific usage data as proprietary, capacity for usage, i.e. registered customers was the closest proxy available for alternative delivery systems to ABMs.
- 17 For a technical discussion of recent papers on the effect of bank mergers in the United States and a broad overview of the American banking system by J.L. Francis, please see Appendix B.
- 18 Note that the Federal Department of Justice in the United States includes all competing financial and non-financial institutions in its analysis of market power when assessing mergers.
- 19 The Investment Funds Institute of Canada, *Monthly Statistics* (May 1998). Available on the internet at www.mutfunds.com/ific/mf-stats.html.

- 20 For a list of all mutual fund companies included in the study and their website addresses, see Appendix C.
- 21 For a detailed discussion of the methodology employed in classifying the mutual funds, see Appendix D.
- 22 The broadening of the product definition implicit in table 18 moves from near substitutes to less similar substitutes.
- 23 It is important not to oversimplify an extremely complex process; the importance of portfolio management for this study exists in competing and complementary products.
- 24 For further information on the cost of regulation in Canada, see Mihlar 1996.
- 25 Each of the mergers examined in this study has survived American anti-trust investigation. The implication of this is that the sample may be downwardly biased in terms of efficiency gains from merging as it does not include banks that may have had even greater efficiency gains from merging, due to economies of scale, but were either prevented from merging outright or investigated and required to divest of certain branches or segments.
- 26 The Herfindhal-Hirshman Index (HHI)— a measure of market concentration defined as the sum of the squared market share (in terms of deposits) for each bank in the particular market under consideration—is often included in such equations to account for the effect of differences in pre-existing market concentration on markets where the merger occurs. For example, if a merger occurs in a market with a low HHI index, its effects may be much smaller on deposit rates, say, than if the merger occurs in an already highly concentrated market.
- 27 R square is fairly small for their equation; inclusion of these other independent variables would increase the explanatory power of the equation for changes in deposit rates (dependent variable).
- 28 Simons, Katerina and Stavins (1998) make the point: “The full effect of a bank merger on pricing can take some time to manifest itself.” This is the case because a period of time (a year or more) may be necessary for a bank’s operations to be consolidated and secondly, because, after the merged bank has set its pricing strategy, there is a time lag before rivals can react to it and that reaction itself can change over time. Simons et al. observe deposit pricing over three years following each merger.
- 29 The t-statistics for pre-merger, post-merger, and total effects are significantly less than the absolute value of two, both for participants in the merger and for their rivals, which implies that the results (a decline in deposit rates as both a total effect and post-merger effect) are insignificant; that is, they do not provide any support for the hypothesis.

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