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Default Frequencies and Costs of Claims: 1995-1998 SBLA Lending

**PREPARED ON BEHALF OF THE CSBFA ADMINISTRATION,
INDUSTRY CANADA**

BY

DR. ALLAN RIDING, EQUINOX MANAGEMENT CONSULTANTS LTD.

NOVEMBER 15, 2001

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EXECUTIVE SUMMARY

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BACKGROUND AND OBJECTIVES

This document reports on empirical assessments of two aspects of loans advanced between 1995 and 1998 under the terms of the Small Business Loans Act [SBLA]. This period was chosen to help guide Industry Canada with respect to what might reasonably be expected with respect to lending outcomes under the terms of the Canadian Small Business Financing Act, [CSBFA], the successor to the SBLA. This is because the parameters of loan guarantees under the SBLA during the 1995-1998 period are similar to those now in effect for the CSBFA. Moreover, loan outcomes for CSBFA lending are not yet known; however, most outcomes of loans advanced under the SBLA between 1995 and 1998 are largely documented.

The first aspect of this work is the measurement of the stability over time of the distribution of claim frequencies and losses for annual cohorts of CSBFA/SBLA loans since 1990.

The second aspect that this work addresses is the measurement of claim frequencies and associated losses for specific subsets of SBLA / CSBFA borrowers. Specifically, this work measures frequencies of claims and associated losses by:

- *Class of loan:* that is, according to the various purposes of the loan proceeds: purchases of real property (14.8 percent of lending volume), leasehold improvements (13.2 percent of lending), and equipment purchases (72.1 percent of lending).
- *Size of loan.* Previous analysis has suggested that larger loans may default earlier, more frequently, and involve higher losses than smaller loans. Accordingly, this study compared claims experience (including the costs of claims) of loans for more than \$100,000 with claims experience of loans for less than \$100,000.
- *Type of business.* The work also compares claims frequencies and losses between franchises, which account for 9.8 percent of borrowers, and non-franchises

For each of these analyses, the work also explored claim frequencies and losses across sectors. Following a preliminary presentation of these analyses, additional questions were prompted. Specifically, the project authority requested:

- An analysis of the extent to which fee revenues offset loan losses with particular reference to the analysis of defaults by loan size;
- Estimation of the cost, in terms of loan losses per additional job reported by borrowers by sector and by loan size; and,
- Particular assessment of defaults and loan losses for the sector that represents the combination into one sector (entitled Accommodation, Food and Beverages) of the following sub-categories: Accommodation Services, Food Services and Drinking Places, Accommodation, Food and Beverage Services. The resulting combination of these related sub-sectors into the Accommodation, Food and Beverages category accounted for 18.2 percent of loans and 13.1 percent of loan commitments.

FINDINGS

The majority (70.3 percent) of borrowers are limited companies, 22.1 percent are sole proprietorships and a small fraction is partnerships (7.6 percent). Borrowers tend to be young firms (39 percent are less than one year old and 23.6 percent are between one and three years old). Start-up borrowing comprises approximately 38.1 percent of borrower firms. Fifty-four percent of borrowers do so to finance expansion or improvements. Four sectors collectively account for approximately 60 percent of loan volume, namely "Other Services", "Accommodation Food and Beverages", "Retail Trade", and "Transportation and Warehousing".

Of the loans that ultimately default in any given cohort, and for which claims are approved, almost 40 percent of defaults occur within one year of the initial disbursement. Seventy-eight percent of defaults occur within two years of initial disbursement. On average, claims lag defaults by approximately 15 months. Therefore, outcome information takes at least four years until it is complete.

Because of this reporting lag, all subsequent analyses employ data from the 94,680 loans disbursed between April 1, 1995 and March 31, 1998. Salient data were extracted from the SBLA/CSBFA registration and claims databases and were matched according to their unique loan identification numbers. It was found that the quality of data from this database was extraordinarily high. Very few errors were encountered and data were current and accurate. The quality of these data greatly facilitated the analysis.

It is found that the loss ratio for the loan cohorts from 1990 through 1995 ranged from 3.34 percent to 7.96 percent. For the whole of the three-year cohort studied here, 1995-1998, the current level of the loss ratio is 7.05 percent. This is still likely to increase somewhat because there remains a number of loans from that three-year cohort still outstanding and it can reasonably be expected that claims on some of these are yet to materialize.

The loss ratio varies substantially by sector. Particularly high loss ratios were associated with two sectors: Real Estate, Rentals and Leasing (15.8 percent loss ratio for the 1995-1998 cohort), and Accommodation, Food, and Beverages (11.6 percent loss ratio).

Class of Loan. Overall, loans to firms for the purpose of leasehold improvements exhibited the highest average default rate (17.2 percent) and loss ratio (9.67 percent). Loans for acquisition of equipment exhibited displayed default rates of 11 percent and a loss ratio of 7.34 percent. The lowest default rate and loss ratio were associated with loans for the purchase of real property, 7.2 percent and 3.26 percent, respectively. Many loans were used for multiple purposes and the rates above reflect the purpose associated with the majority of the loan. These rates were reasonably robust to alternative cataloging of loan class; however, the results were found to vary substantially across sectors.

Size of Loan. Larger loans (loans in excess of \$100,000) were found to default more frequently and sustain higher loan losses than loans of less than \$100,000. Larger loans did not default any sooner than smaller loans, but they did default more frequently: 14.4 percent for loans in excess of \$100,000 as compared with 9.9 percent for loans of less than \$100,000. Consequently, loss ratios for larger loans averaged 8.02 percent while that for smaller loans averaged 5.88 percent. Default rates and loss ratios were higher for larger loans across most sectors.

Type of Operation. Franchises defaulted more frequently (15.3 percent) and exhibited higher loss ratios (9.58 percent) than did non-franchises (10.5 percent default rate and 6.69 percent loss ratio). On further examination, however, it was found that these differences were largely attributable to the high frequency of franchises in the Food Services and Drinking Places sub-sector. When this sub-sector is set aside from the analysis, the average loss ratio for franchises decreases to 7.30 percent, which compares more favourably with that of 6.08 percent for non-franchises.

Further analysis revealed that these differences persisted after allowing for estimated fee income. After allowing for estimated fee income, net loss ratios remained highest for the Accommodation Food and Beverage sector, loans used for leasehold improvements, franchises, and loans of more than \$100,000.

Finally, it was found that in spite of these variations across sectors, classes of loan, sizes of loan, and type of operation, the SBLA/CSBFA appears to be an extremely efficient means of enabling job creation. Based on estimates of new jobs borrowers expected, the average cost per job is estimated as being less than \$1,000. Even allowing for any reasonable margin of error for this estimate, the effectiveness of SBLA lending in terms of new job creation is enviable.

Default Frequencies and Costs of Claims: 1995-1998 SBLA Lending

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Default Frequencies and Costs of Claims: 1995-1998 SBLA Lending

BACKGROUND AND OBJECTIVES

OBJECTIVES OF THIS STUDY

The Canada Small Business Financing Act [CSBFA], and its predecessor the Small Business Loans Act [SBLA], have provided loan guarantees on behalf of small businesses since 1961. The purpose of this study is to outline empirical findings that assess patterns of defaults and losses associated with honoring claims on loans advanced under the CSBFA/SBLA since 1995. In particular, the work reports the results of the following analyses.

- 1) The work measures the time distribution of claim frequencies¹ and losses for annual cohorts of CSBFA/SBLA loans since 1990. For each cohort of loan, the work calculated the proportion of loans for which claims are received (and not rejected) in each year subsequent to the year of the cohort and calculates the associated costs to the program.
- 2) The work measures claim frequencies and associated losses for specific subsets of SBLA / CSBFA borrowers.
 - a) The work measures frequencies of claims and associated losses by *class of loan* (that is, according to the various purposes of the loan proceeds: purchase of real property, leasehold improvements, and equipment purchase).
 - b) The work measures frequencies and costs of claims by *size of loan*. Previous analysis suggested that larger loans may default earlier, more

¹ The terms "default rates" and "claim frequencies" are both used in this work and are almost interchangeable. There are, however, important differences. The term "claims frequency" is used to describe the rate with which claims are received (but not rejected) on SBLA / CSBFA loans. "Default rates" would be marginally higher than "claims frequencies" because many of the rejected claims would have arisen from defaults. Because claims may be rejected for a variety of reasons, this work focuses on claims that were not rejected.

frequently, and involve higher losses than smaller loans. Accordingly, this study compared claims experience (including the costs of claims) for loans of more than \$100,000 with claims experience of loans of less than \$100,000.

- c) The work compares claims frequencies and losses on loans by franchises against those of non-franchises.

Finally, the measurement of claims frequencies and losses were conducted by sector to allow for industry-related effects on the borrower businesses and to explore potential concerns related to particular sectors. Losses were expressed on a "per loan" basis as well as on a "per cohort" basis, when appropriate.

Following a preliminary presentation of these analyses, additional questions were prompted. Specifically, the project authority requested the following:

- an analysis of the extent to which fee revenues offset loan losses with particular reference to the analysis of defaults by loan size;
- estimation of the cost in terms of loan losses per additional job reported by borrowers by sector and by loan size; and,
- assessment of defaults and loan losses for the sector that represents the combination of the following sub categories: Accommodation Services, Food Services and Drinking Places, and the Beverage, Accommodation and Food sector into one sector, entitled Accommodation, Food and Beverages.

The data used for this work were extracted from the SBLA/CSBFA databases. A single database was constructed by combining relevant information from the loan registration database with information from the claims database. Each loan is uniquely identified in these databases so that claims data could be accurately related to registration data. It was found that the quality of these data was extremely high and that information was maintained in a consistent form from year to year. This greatly facilitated the analysis in ways that were not possible heretofore. The identities of borrowers were not needed for this analysis and were suppressed by Industry Canada prior to release to the contractor.

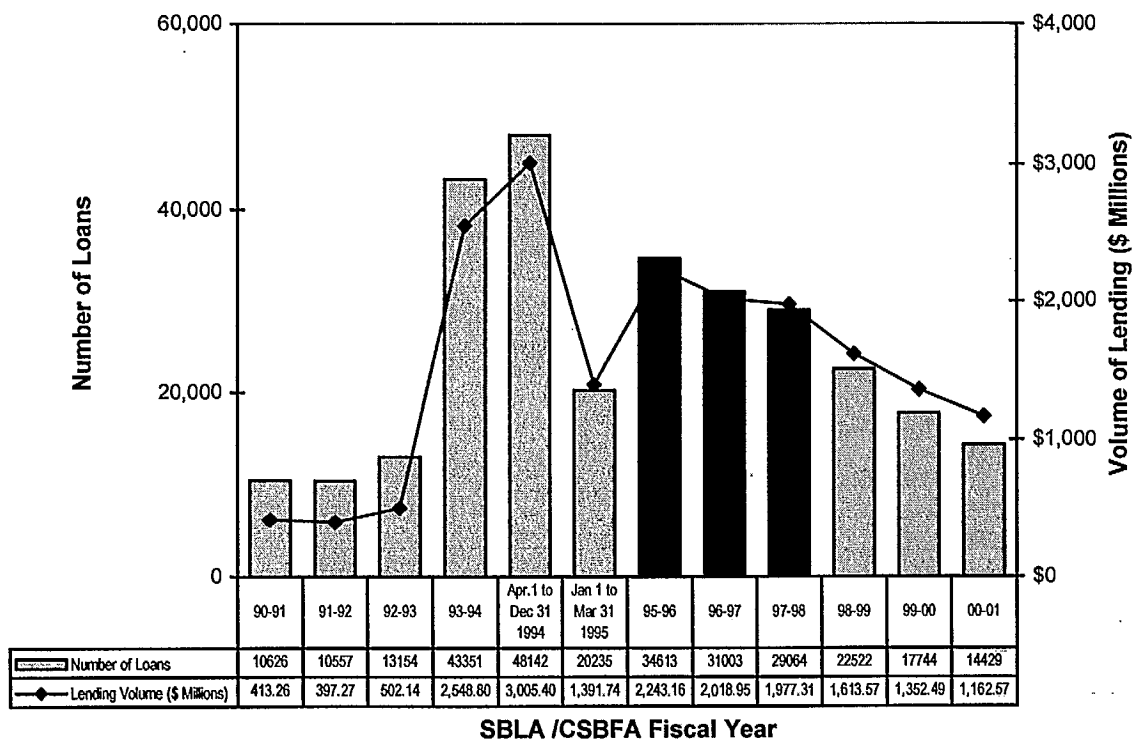
DATA SELECTION:

RECENT PROGRAM HISTORY & THE TIMING OF CLAIMS

Figure 1 shows historical lending activity under the SBLA/CSBFA. This chart illustrates the impact of changes to the SBLA that took effect April 1 1993 and April 1 1995. In the first instance, changes to the Act led to a tripling of the number of loans and a five-fold increase in value of lending, levels that persisted through the 1994-1995 fiscal year. Further changes to the parameters of the Act were announced during late 1994 and took effect with the fiscal year beginning April 1 1995. As Figure 1 shows, an even greater volume of lending characterized the final quarter of the 1994-1995 fiscal year. These two sets of substantial changes to the terms of the Act militated against arriving at reliable estimates of default patterns based on data that included the 1993-1995 time periods. Since then, however, the parameters of the SBLA, and latterly the CSBFA, have been relatively stable. Since April 1 1995, more than 152,000 loans have been extended under the terms of the SBLA/CSBFA.

Not all of the lending data since April 1 1995 were used in this analysis. This work focused on loans advanced between April 1, 1995 and March 31, 1998. Several reasons prompted this choice. First, the period beginning April 1 1995 was of primary importance to the project authority because this period also essentially reflects the current terms of the CSBFA. Second, analysis of data pertaining to loans advanced since 1998 must contend with two substantial lags. The first is period between advancing the loan and default. The second is between the date of default and when a claim is received.

Figure 1: SBLA / CSBFA Lending Activity by Fiscal Year



Time to Default. Defaults occur throughout the life of a loan. Figure 2 illustrates a chronology of defaults relative to when loans are first disbursed. It depicts the percentage of defaults that occur within each year following the year of disbursement. For example, Figure 2 illustrates that defaults tend to occur relatively soon after initial disbursement. The average period between initial disbursement and default averaged less than 24 months. Of all defaults, almost 40 percent occur during each of the first two years of the loan and very few defaults, approximately 1.2 percent of them, occur beyond the end of the fourth year.

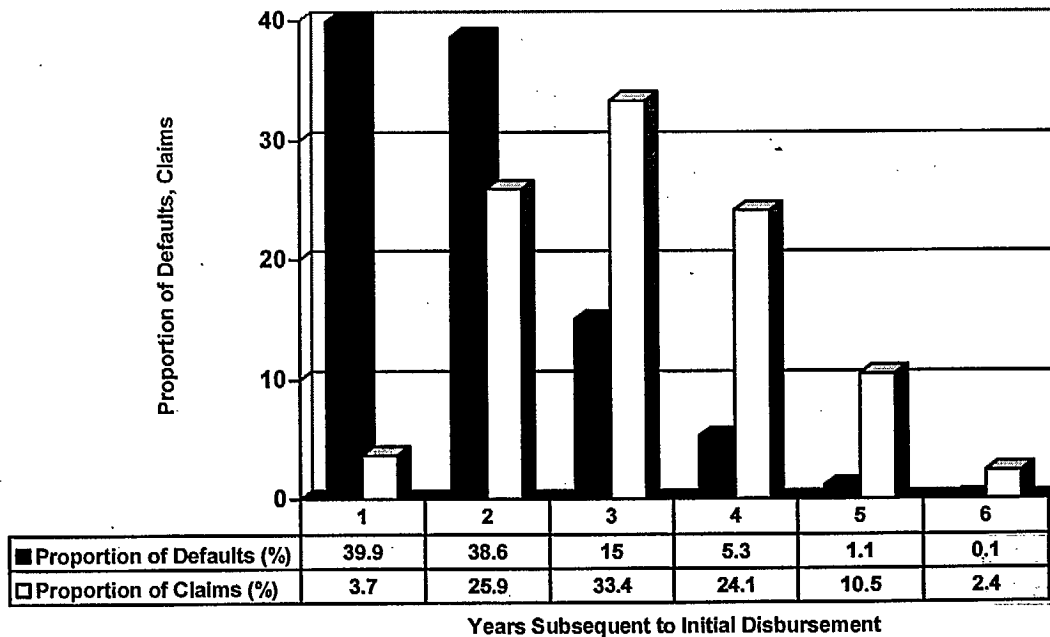
Table 1 further documents the chronology of defaults. It displays the year-by-year default rates experienced by each cohort of loan since 1990. For example, it reports that 1.97 percent of the loans disbursed as part of the 1990-91 cohort defaulted within the first year since disbursement, 2.18 percent survived one year but defaulted before the end of the second

year, and so on. Based on these data, Figure 3 uses the loan cohorts from 1990 to show that, over this period, defaults that occur within the initial year of lending average approximately 30 percent of the long-term default rate and that this proportion is relatively stable.

Reporting Lag. For much of this period, lenders had as long as 36 months to file a claim in respect of loan defaults. Analysis indicates that, from the date of default, it takes an average of almost 15 months for a claim to be received. The time-pattern of claim receipt is also illustrated in Figure 2. The chart shows that of all the claims received in respect of a given cohort, only 3.7 percent are received within a year of disbursement even though almost 40 percent of the defaults (see above) occur within that period. As can be seen from Figure 2, 37 percent of claims received are not received until at least four years after the initial loan disbursement.

Because of these lags, default and claims information on loans advanced since April 1 1998 remain incomplete and were therefore excluded from analysis. Nonetheless, the 1995-1998 data used here reflects 94,680 loans and more than \$6.2 billion in loan volume.

Figure 2: Default and Claims Chronology²



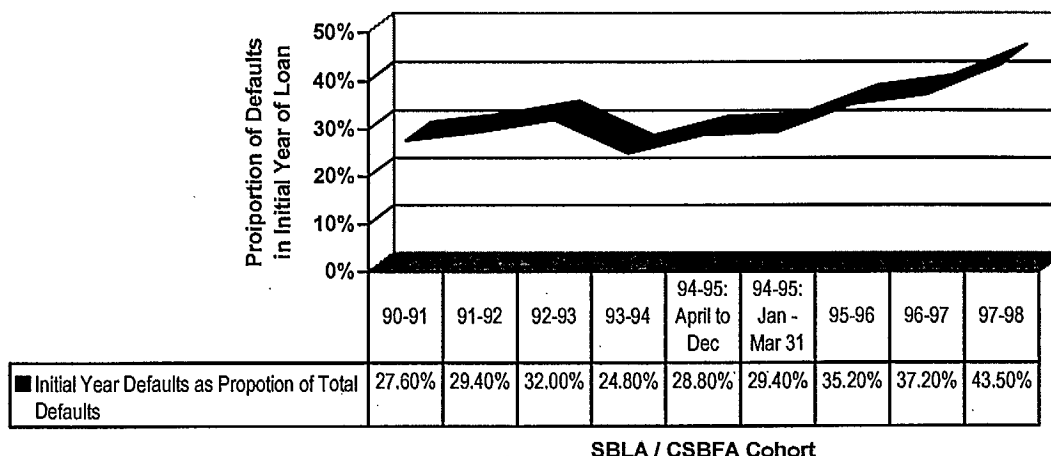
² Figure 2 is based on data from all loans advanced between April 1 1995 and March 31, 1998.

Table 1: Default Rates and Losses by Year.

Panel A: Claim Rates						
	Years from Initial Disbursement to Default					
SBLA / CSBFA Fiscal year	1	2	3	4	5 and later	Total
90-91	1.97%	2.18%	1.39%	0.66%	0.91%	7.11%
91-92	1.70%	1.87%	1.02%	0.51%	0.66%	5.76%
92-93	1.57%	1.35%	0.82%	0.49%	0.65%	4.89%
93-94	2.18%	3.08%	1.97%	0.97%	0.59%	8.80%
94-95: 4/1/94 - 12/31/94	2.94%	3.73%	2.09%	0.94%	0.51%	10.20%
94-95: 1/1/95 3/31/95	3.26%	4.15%	2.25%	0.95%	0.48%	11.08%
95-96	4.60%	4.79%	2.31%	1.03%	0.34%	13.06%
96-97	4.16%	4.28%	1.98%	0.70%	0.07%	11.18%
97-98	3.44%	3.38%	0.94%	0.15%	0.00%	7.91%
98-99	3.28%	2.30%	0.30%	0.00%	0.00%	5.88%
99-00	0.24%	0.14%	0.00%	0.00%	0.00%	0.38%
00-01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Panel B: Loss Data	Average Size of Loan	Average Claim Paid	Average Claim as Percent of Loan	Total Loan Volume (\$Millions)	Total Claims for Cohort (\$Millions)	Loss Ratio, Cohort
90-91	\$ 38,891	\$ 27,537	54.0%	\$ 413.3	\$ 32.9	7.96%
91-92	\$ 37,631	\$ 24,925	53.4%	\$ 397.3	\$ 20.2	5.09%
92-93	\$ 38,174	\$ 21,601	48.4%	\$ 502.1	\$ 16.8	3.34%
93-94	\$ 58,794	\$ 37,389	51.5%	\$ 2,548.8	\$ 160.8	6.31%
94-95: 4/1/94- 12/31/94	\$ 62,428	\$ 37,547	52.1%	\$ 3,005.4	\$ 205.6	6.84%
94-95: 1/1/95 3/31/95	\$ 68,779	\$ 41,280	52.9%	\$ 1,391.7	\$ 102.9	7.39%
95-96	\$ 64,807	\$ 38,583	54.6%	\$ 2,243.2	\$ 193.4	8.62%
96-97	\$ 65,121	\$ 38,656	52.6%	\$ 2,018.9	\$ 146.0	7.23%
97-98	\$ 68,033	\$ 39,559	55.6%	\$ 1,977.3	\$ 99.3	5.02%
98-99	\$ 71,644	\$ 43,814	58.1%	\$ 1,613.6	\$ 62.3	3.86%
99-00	\$ 76,222	\$ 43,548	60.1%	\$ 1,352.5	\$ 19.6	1.45%
00-01	\$ 80,572	\$ 30,473	65.0%	\$ 1,162.6	\$ 1.1	0.10%
Totals	\$ 63,193	\$ 37,540	53.3%	\$ 18,830.4	\$ 1,061.0	5.63%

Figure 3: Initial-Year Defaults as Proportion of all Defaults



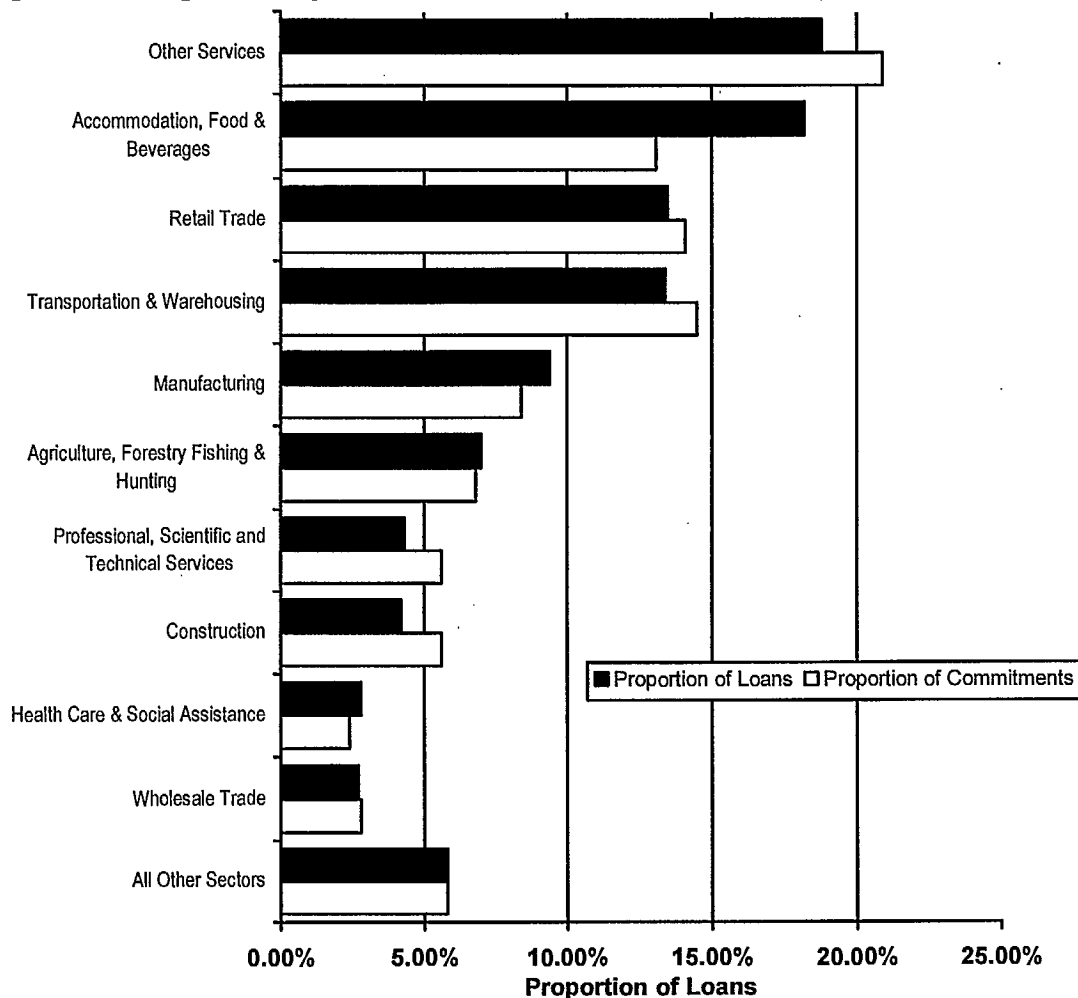
BORROWERS' ATTRIBUTES

The majority (70.3 percent) of borrowers are limited companies, with 22.1 percent being sole proprietorships and a small fraction is comprised of partnerships (7.6 percent). Borrowers tend to be young firms (39 percent are less than one year old and 23.6 percent are between one and three years old). Start-up borrowing therefore comprises approximately 38.1 percent of borrower firms. Fifty-four percent of borrowers do so to finance expansion or improvements. Figure 4 displays the sectoral breakdown of 1995-1998 borrower firms. Of particular note to this study are findings that:

- The Accommodation, Food, and Beverages Sector accounted for 18.2 percent of loans and 13.1 percent of loan commitments.
- Franchises account for 9.8 percent of borrowers.
- More than three fourths (78.4 percent) of all loans are for less than \$100,000.

Four sectors (Other Services, Accommodation, Food and Beverages, Retail Trade, and Transportation and Warehousing) collectively account for more than 60 percent of lending activity.

Figure 4: Proportion of Loans and Credit Commitments by Sector



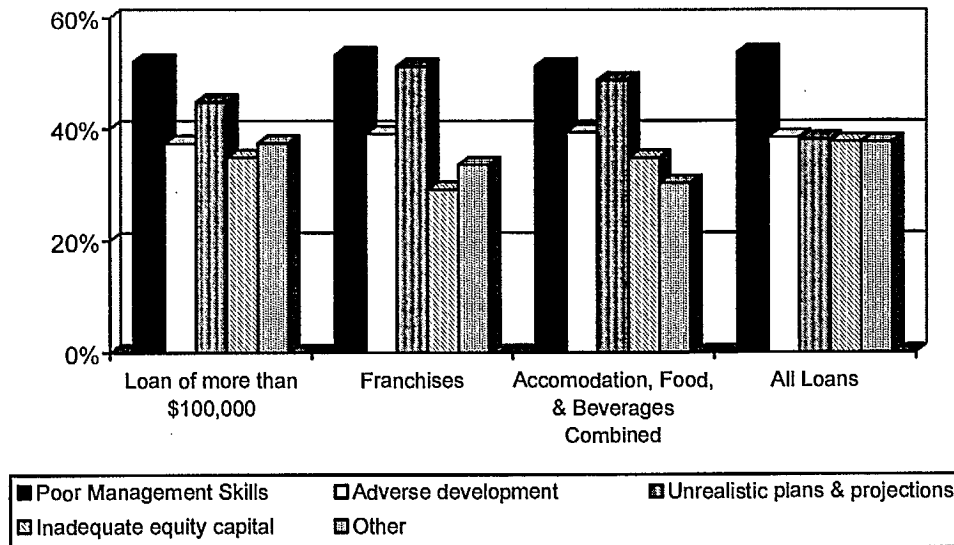
REASONS FOR DEFAULT

Claims forms, when completed by lenders, report lenders' perceptions of the reasons that borrowers fail to repay loans. When a claim is entered, the lender may specify up to two reasons from a pre-specified listing as to why the borrower defaulted. Given adequate due diligence, it would seem reasonable to expect that reasons for default would differ between loans that defaulted soon after initial disbursements compared with those that default in subsequent years. However, this did not prove to be the case.

Figure 5 provides a breakdown of the reasons that lenders have specified as the reasons for the defaults for five categories of defaulted loans: all loans, franchises, loans of more than \$100,000, and two sectors of particular interest. The chart shows that differences in the frequencies of cited reasons for default differ little among the various categories of defaulted loans. The most frequently-cited reason for default is "poor management skills" and is mentioned in more than half of all cases of default. The second most-frequently-cited reason

for default is “unrealistic plans and projections” for the particular groupings broken out here. Overall, however, this reason is mentioned in only 38 percent of the cases of default.

Figure 5: Reasons Listed for Defaults



CLAIMS HISTORY: ANALYSIS BY SECTOR

Table 2 summarizes the claim frequencies, by cohort and sector, for loans advanced during the period of interest. Table 3 reports the average claim per loan, again by sector and cohort and Table 4 summarizes the claims histories, by sector, for the 1995-1998 loans examined here. It is evident that while there is some variation from year to year, patterns persist.³

Most evident from this analysis is that claims frequencies in several sectors are consistently high. Several sectors consistently exhibit claims frequencies in excess of ten percent (Real Estate, Rental & Leasing, Retail Trade, Manufacturing, Information & Cultural Industries, Wholesale Trade, Educational Services, and Accommodation, Food & Beverage Services). Figure 6 plots loss ratios for the sectors for which losses are above average.

³ One should not, however, conclude that default rates are decreasing over time. Lower claims frequencies in 1996-97 and then 1997-98 may yet reflect that loans advanced during these years may yet default and that there is a reporting lag before claims are received. However, the majority of loans default within the first two years and that 85% of claims are received within four years of default.

Table 2: Claims Frequencies by Sector and Cohort

Sector	1995-96		1996-97		1997-98	
	Loans	Default Rate	Loans	Default Rate	Loans	Default Rate
Agriculture, Forestry Fishing etc.	2193	7.43%	2037	5.55%	2042	4.36%
Mining, Oil and Gas Extraction	286	6.99%	444	2.70%	539	1.86%
Utilities*	1		1		1	
Construction	1777	8.33%	1677	5.19%	1654	3.63%
Manufacturing	2909	14.75%	2531	13.71%	2275	10.73%
Wholesale Trade	1113	11.59%	827	14.39%	652	11.50%
Retail Trade	4437	16.20%	4397	15.06%	4040	10.45%
Transportation & Warehousing	4859	8.66%	4396	5.85%	4044	3.96%
Information & Cultural Industries	602	14.12%	571	14.54%	530	10.00%
Finance and Insurance	199	6.53%	131	9.92%	94	
Real Estate, Rental & Leasing	284	19.72%	260	17.31%	176	27.84%
Prof., Scientific, Tech. Services	2024	10.77%	1579	9.50%	1492	8.04%
Admin & Support, Waste ... *	44		52		37	
Educational Services	259	12.74%	284	12.32%	231	10.82%
Health Care & Social Assistance	784	9.57%	752	5.98%	679	5.60%
Arts, Entertainment, Recreation*	79		94		102	
Accommodation, Food, & Beverage	4166	22.56%	4098	20.25%	3693	14.92%
Other Services	5512	12.06%	6868	8.11%	6781	4.23%
Total	31528	13.34%	30999	11.18%	29062	7.92%

Data for sectors with fewer than 300 loans are excluded from analysis because of low number of observations.

Table 3: Average Claim per Loan by Sector and Cohort

Sector	Average Claim Paid for Loans Disbursed in Fiscal Year:		
	95-96	96-97	97-98
Agriculture, Forestry Fishing & Hunting	\$ 37,923	\$ 32,135	\$ 24,896
Mining, Oil and Gas Extraction	\$ 48,033	\$ 24,386	\$ 32,547
Utilities	\$ 26,755	\$ 34,076	\$ 20,596
Construction	\$ 31,767	\$ 21,492	\$ 27,456
Manufacturing	\$ 40,848	\$ 44,142	\$ 46,057
Wholesale Trade	\$ 40,962	\$ 40,477	\$ 51,535
Retail Trade	\$ 33,148	\$ 34,707	\$ 32,968
Transportation & Warehousing	\$ 25,368	\$ 21,729	\$ 21,198
Information & Cultural Industries	\$ 41,589	\$ 39,430	\$ 40,134
Finance and Insurance	\$ 58,103	\$ 51,680	\$ 37,355
Real Estate, Rental & Leasing	\$ 49,777	\$ 36,020	\$ 48,148
Professional, Scientific and Technical Services	\$ 29,701	\$ 31,723	\$ 37,957
Admin & Support, Waste Management etc.	\$ 30,015	\$ 35,305	\$ 39,324
Educational Services	\$ 24,622	\$ 21,041	\$ 18,803
Health Care & Social Assistance	\$ 51,629	\$ 28,639	\$ 37,625
Arts, Entertainment & Recreation	\$ 47,610	\$ 44,120	\$ 40,186
Accommodation, Food, & Beverage	\$ 49,986	\$ 50,754	\$ 50,584
Other Services	\$ 39,483	\$ 36,716	\$ 38,365
Total	\$ 39,204	\$ 38,656	\$ 39,559

Figure 6: Loss Ratios by Sector

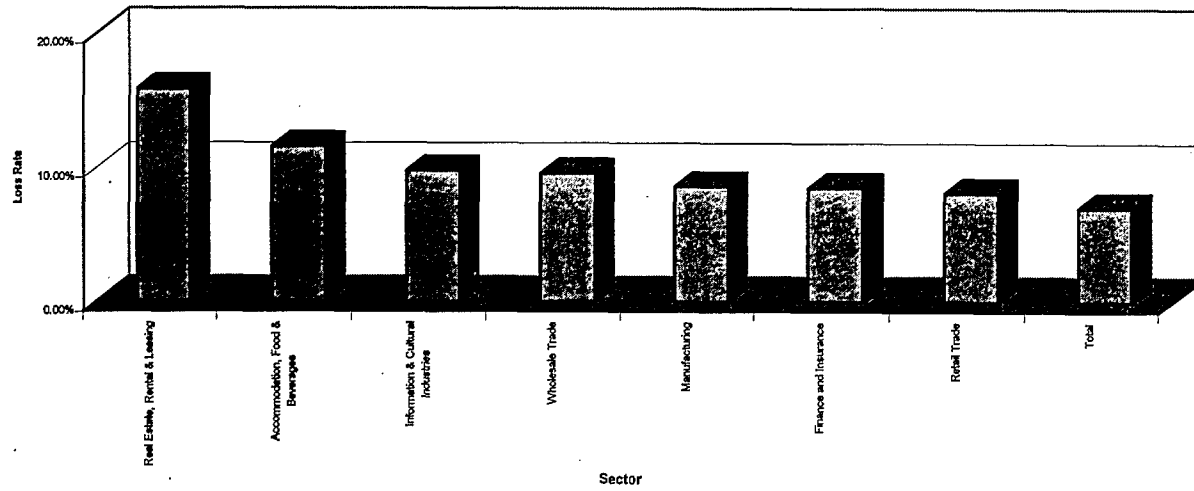


Table 4: Claims Data by Sector (All 1995-1998 Loans)

SECTOR	Loans	First-Year Claim Rate	Claim Incidence (to Date)	Average Claim Paid	Claims Paid as Proportion of Original Loans	Total of Claims Paid, Sector
Real Estate, Rental & Leasing	720	4.86%	20.83%	\$ 44,864	53.58%	\$ 7,402,628
Retail Trade	12,874	4.75%	14.00%	\$ 33,674	55.47%	\$ 66,540,062
Manufacturing	7,715	4.86%	13.22%	\$ 43,208	54.23%	\$ 48,954,793
Information & Cultural Industries	1,703	5.46%	12.98%	\$ 40,465	54.73%	\$ 10,035,416
Wholesale Trade	2,592	5.29%	12.46%	\$ 43,295	54.25%	\$ 15,715,956
Educational Services	774	3.49%	12.02%	\$ 21,708	45.85%	\$ 2,474,755
Professional, Scientific and Technical Services	5,095	3.59%	9.58%	\$ 32,260	53.07%	\$ 17,033,484
Other Services	19,161	3.16%	7.88%	\$ 38,270	56.63%	\$ 62,532,577
Health Care & Social Assistance	2,215	2.48%	7.13%	\$ 41,668	54.24%	\$ 7,791,983
Finance and Insurance	424	2.83%	6.60%	\$ 53,698	61.26%	\$ 1,933,124
Transportation & Warehousing	13,299	2.39%	6.30%	\$ 23,444	40.73%	\$ 21,239,889
Agriculture, Forestry Fishing & Hunting	6,272	2.18%	5.82%	\$ 33,060	48.40%	\$ 13,422,488
Construction	5,108	2.15%	5.78%	\$ 27,791	49.15%	\$ 8,865,330
Mining & Oil and Gas Extraction	1,269	1.18%	3.31%	\$ 36,891	48.09%	\$ 1,660,074
Accommodation Food & Beverages	11,857	7.95%	19.40%	\$ 50,400	54.57%	\$ 127,713,192
Total	97,589	4.07%	10.89%	\$ 39,096	54.06%	\$ 428,142,939

* Too few cases for reliability

CLAIMS HISTORY: SEGMENTS OF PARTICULAR INTEREST

CLASS OF LOAN

Table 5 presents claims incidence and losses for the three classes of loan provided in the electronic database for the 1995-1998 period. A fourth class, purchase of software, was added subsequently but there is as yet insufficient claims experience with this class to support analysis. In conducting this analysis, it was found (not surprisingly) that many loans were used for multiple purposes and could reasonably be associated with multiple classes. For the purposes of this analysis, a given loan was associated with a class if more than one-third of the proceeds was devoted to a specified purpose. Because loans used for the purchase of equipment are of particular interest, a second definition of "equipment loans" was also employed. According to this alternative definition, loans were designated equipment loans if more than 90 percent of the loan proceeds was used to purchase equipment.

Table 6 extends this analysis by reporting, by sector, loan volume, claims frequencies, and loss ratios. Overall, it is seen that loans used for leasehold improvements exhibited higher default ratios and loss ratios than did other classes of loans. However, this was not true across all sectors. Table 6 reveals that a substantial sectoral effect is also present in terms of the loss ratios for the various classes of loan. (Because of the small number of loans, loss data for the following sectors were not deemed reliable: Accommodation Services, Arts, Entertainment and Recreation, Admin & Support, Waste Management etc., and Mining and Oil and Gas Extraction).

In terms of equipment loans, Table 6 shows that loss ratios vary widely across industrial sectors. Loss ratios of less than five percent characterize the following sectors: Health Care & Social Assistance, Construction, Agriculture, Forestry Fishing & Hunting, and Transportation & Warehousing.

Table 5: Claims and Losses by Class of Loan

<i>Purpose (Class of Loan)</i>	<i>Default rate: first year of loan</i>	<i>Default Rate (overall to date)</i>	<i>Average Claim Paid</i>	<i>Claim as a proportion of original loan</i>	<i>Total Claims by Class of Loan: 1995-1998</i>	<i>Loss Ratio</i>
Equipment*	4.2%	11.0%	\$ 37,838	53.9%	\$ 361,697,514	7.34%
Leasehold Improvements*	6.2%	17.2%	\$ 50,929	58.1%	\$ 117,645,156	9.67%
Real property acquisition*	2.3%	7.2%	\$ 44,427	50.7%	\$ 32,298,654	3.26%
Equipment**	3.7%	9.5%	\$ 32,214	52.8%	\$ 231,361,162	

*More than 33 percent of loan proceeds were used for this purpose.

** More than 90 percent of loan used for purchase of equipment.

Table 6: Claims and Losses by Class of Loan and by Sector

Sector	Class of Loan	Number of Loans	Claim Incidence	Average loan	Average Claim Paid	Total Loan Volume (\$000)	Total Claims Paid (\$000)	Loss Ratio
Agriculture, Forestry Fishing & Hunting	Purchase of Real Property	304	4.61%	\$ 89,499	\$ 42,788	\$27,207.62	\$727.40	2.67%
	Leasehold Improvements	174	3.45%	\$ 99,997	\$ 23,178	\$17,399.50	\$162.25	0.93%
	Equipment Purchase	5,787	5.96%	\$ 65,720	\$ 32,808	\$380,319.41	\$12,532.84	3.30%
	Total	6,265	5.83%	\$ 67,825	\$ 33,060	\$424,926.53	\$13,422.49	3.16%
Mining & Oil and Gas Extraction	Purchase of Real Property	62	4.84%	\$ 99,504	\$ 53,132	\$6,169.28	\$159.40	2.58%
	Leasehold Improvements	10	0.00%	\$ 59,200		\$592.00	\$0.00	
	Equipment Purchase	1,196	3.26%	\$ 72,806	\$ 35,730	\$87,076.44	\$1,500.68	1.72%
	Total	1,268	3.31%	\$ 74,005	\$ 36,891	\$93,837.72	\$1,660.07	1.77%
Construction	Purchase of Real Property	359	2.79%	\$ 93,201	\$ 28,282	\$33,459.28	\$339.38	1.01%
	Leasehold Improvements	130	10.77%	\$ 79,761	\$ 35,849	\$10,368.96	\$609.44	5.88%
	Equipment Purchase	4,618	5.87%	\$ 45,149	\$ 27,298	\$208,499.98	\$7,916.50	3.80%
	Total	5,107	5.78%	\$ 49,408	\$ 27,791	\$252,328.21	\$8,865.33	3.51%
Manufacturing	Purchase of Real Property	496	7.46%	\$ 112,071	\$ 38,412	\$55,587.35	\$1,536.46	2.76%
	Leasehold Improvements	403	16.38%	\$ 82,113	\$ 44,656	\$33,091.38	\$3,081.23	9.31%
	Equipment Purchase	6,811	13.45%	\$ 70,335	\$ 43,347	\$479,050.32	\$44,301.02	9.25%
	Total	7,710	13.22%	\$ 73,635	\$ 43,253	\$567,729.06	\$48,918.72	8.62%
Wholesale Trade	Purchase of Real Property	253	5.53%	\$ 109,697	\$ 35,061	\$27,753.46	\$596.04	2.15%
	Leasehold Improvements	227	11.89%	\$ 83,691	\$ 40,288	\$18,997.94	\$1,410.10	7.42%
	Equipment Purchase	2,112	13.35%	\$ 55,550	\$ 44,083	\$117,321.45	\$13,709.82	11.69%
	Total	2,592	12.46%	\$ 63,300	\$ 43,295	\$164,072.86	\$15,715.96	9.58%
Retail Trade	Purchase of Real Property	2,079	7.02%	\$ 104,532	\$ 43,254	\$217,321.41	\$7,266.62	3.34%
	Leasehold Improvements	2,620	16.83%	\$ 73,730	\$ 37,751	\$193,173.14	\$18,346.75	9.50%
	Equipment Purchase	8,122	14.87%	\$ 49,575	\$ 30,886	\$402,646.40	\$40,553.48	10.07%
	Total	12,821	14.00%	\$ 63,423	\$ 33,638	\$813,140.95	\$66,166.85	8.14%
Transportation & Warehousing	Purchase of Real Property	279	1.43%	\$ 91,994	\$ 28,760	\$25,666.25	\$143.80	0.56%
	Leasehold Improvements	104	7.69%	\$ 77,008	\$ 70,058	\$8,008.86	\$630.52	7.87%
	Equipment Purchase	12,915	6.39%	\$ 60,435	\$ 22,964	\$780,517.90	\$20,460.83	2.62%
	Total	13,298	6.29%	\$ 61,227	\$ 23,464	\$814,193.01	\$21,235.15	2.61%
Information & Cultural Industries	Purchase of Real Property	62	8.06%	\$ 113,614	\$ 35,527	\$7,044.08	\$177.64	2.52%
	Leasehold Improvements	75	16.00%	\$ 74,929	\$ 41,520	\$5,619.69	\$581.28	10.34%
	Equipment Purchase	1,565	13.04%	\$ 57,532	\$ 40,509	\$90,038.05	\$9,276.50	10.30%
	Total	1,702	12.98%	\$ 60,342	\$ 40,465	\$102,701.82	\$10,035.42	9.77%
Finance and Insurance	Purchase of Real Property	46	0.00%	\$ 99,341		\$4,569.69	\$0.00	
	Leasehold Improvements	45	13.33%	\$ 75,118	\$ 40,648	\$3,380.33	\$325.18	9.62%
	Equipment Purchase	331	6.65%	\$ 44,546	\$ 57,426	\$14,744.81	\$1,607.94	10.91%
	Total	422	6.64%	\$ 53,779	\$ 53,698	\$22,694.83	\$1,933.12	8.52%
Real Estate, Rental & Leasing	Purchase of Real Property	87	8.05%	\$ 115,883	\$ 50,723	\$10,081.80	\$355.06	3.52%
	Leasehold Improvements	124	12.10%	\$ 76,881	\$ 65,080	\$9,533.28	\$1,236.52	12.97%
	Equipment Purchase	509	25.15%	\$ 53,266	\$ 41,806	\$27,112.33	\$5,811.05	21.43%
	Total	720	20.83%	\$ 64,899	\$ 44,864	\$46,727.40	\$7,402.63	15.84%

Table 6: Claims and Losses by Class of Loan and by Sector, continued

Sector	Class of Loan	Number of Loans	Claim Incidence	Average loan	Average Claim Paid	Total Loan Volume	Total Claims	Loss Ratio
Professional, Scientific and Technical Services	Purchase of Real Property	286	2.45%	\$ 101,241	\$ 74,457	\$28,954.85	\$521.20	1.80%
	Leasehold Improvements	348	10.92%	\$ 74,939	\$ 41,297	\$26,078.60	\$1,775.78	6.81%
	Equipment Purchase	4,455	9.94%	\$ 45,879	\$ 30,830	\$204,389.50	\$14,736.50	7.21%
	Total	5,089	9.59%	\$ 50,977	\$ 32,260	\$259,422.95	\$17,033.48	6.57%
Admin & Support, Waste Management etc.	Purchase of Real Property	4	25.00%	\$ 107,185	\$ 129,078	\$428.74	\$129.08	30.11%
	Leasehold Improvements	7	85.71%	\$ 54,526	\$ 41,010	\$381.68	\$246.06	64.47%
	Equipment Purchase	122	55.74%	\$ 74,048	\$ 33,412	\$9,033.81	\$2,539.30	28.11%
	Total	133	56.39%	\$ 74,017	\$ 35,114	\$9,844.23	\$2,914.44	29.61%
Educational Services	Purchase of Real Property	64	10.94%	\$ 118,377	\$ 15,068	\$7,576.13	\$180.82	2.39%
	Leasehold Improvements	84	13.10%	\$ 73,978	\$ 34,232	\$6,214.18	\$479.24	7.71%
	Equipment Purchase	626	11.98%	\$ 55,883	\$ 20,622	\$34,982.96	\$1,814.69	5.19%
	Total	774	12.02%	\$ 63,015	\$ 21,708	\$48,773.27	\$2,474.76	5.07%
Health Care & Social Assistance	Purchase of Real Property	349	4.58%	\$ 126,297	\$ 54,788	\$44,077.67	\$931.40	2.11%
	Leasehold Improvements	442	7.47%	\$ 84,215	\$ 47,413	\$37,222.95	\$1,754.29	4.71%
	Equipment Purchase	1,418	7.69%	\$ 62,747	\$ 38,393	\$88,975.40	\$5,106.29	5.74%
	Total	2,209	7.15%	\$ 77,083	\$ 41,668	\$170,276.01	\$7,791.98	4.58%
Arts, Entertainment & Recreation	Purchase of Real Property	19	68.42%	\$ 108,266	\$ 40,485	\$2,057.06	\$769.22	37.39%
	Leasehold Improvements	46	89.13%	\$ 99,882	\$ 48,107	\$4,594.56	\$2,212.91	48.16%
	Equipment Purchase	209	89.95%	\$ 100,076	\$ 43,167	\$20,915.81	\$8,849.19	42.31%
	Total	274	88.32%	\$ 100,611	\$ 43,820	\$27,567.44	\$11,831.32	42.92%
Accommodation, Food & Beverages	Purchase of Real Property	1701	12.58%	\$112,475	\$47,552	\$191,320	\$11,0792	5.79%
	Leasehold Improvements	2705	20.52%	\$108,518	\$59,190	\$293,541	\$35,869	12.22%
	Equipment Purchase	7439	20.58%	\$81,658	\$47,704	\$607,453	\$79,761	13.13%
	Total	11845	19.42%	\$92,217	\$50,462	\$1,092,315	\$126,710	11.60%
Other Services	Purchase of Real Property	1,959	4.08%	\$ 104,179	\$ 47,039	\$204,087.08	\$4,186.46	2.05%
	Leasehold Improvements	1,642	11.02%	\$ 78,412	\$ 42,104	\$128,752.80	\$8,294.40	6.44%
	Equipment Purchase	15,519	8.00%	\$ 52,039	\$ 37,138	\$807,597.22	\$49,764.68	6.16%
	Total	19,120	7.86%	\$ 59,646	\$ 38,281	\$1,140,437.10	\$62,245.54	5.46%
Total	Purchase of Real Property	8,409	6.87%	\$ 106,239	\$ 44,631	\$893,362.54	\$29,099.67	3.26%
	Leasehold Improvements	9,187	15.90%	\$ 86,753	\$ 47,738	\$797,001.04	\$77,049.41	9.67%
	Equipment Purchase	73,766	10.71%	\$ 59,125	\$ 37,066	\$4,360,790.23	\$320,290.17	7.34%
	Total	91,352	10.88%	\$ 66,240	\$ 39,098	\$6,051,153.80	\$426,439.24	7.05%

SIZE OF LOAN

Table 7 shows that loans of less than \$100,000 have exhibited loss ratios that average 5.9 percent; the loss ratio on loans of more than \$100,000 has averaged 8.02 percent. Table 8 extends this analysis and breaks down claims incidence and loss ratios by loan size category for each of the industrial sectors tracked in the SBLA/CSBFA database. Inspection of this table reveals that for selected industries, the difference in loss rates is substantially greater than for others. For almost all sectors, however, the loss ratios for larger loans exceeds those of smaller loans.

Table 7: Claims and Losses by Size of Loan

Purpose (Class of Loan)	Default rate: first year of loan	Default Rate (overall to date)	Average Claim Paid	Claim as a proportion of original loan	Total Claims by Size of Loan: 1995-1998	Loss Ratio
Loans of less than \$100,000	3.8%	9.9%	\$ 20,82	53.7%	\$167,554,301	5.88%
Loans of more than \$100,000	5.2%	14.4%	\$ 83,31	55.2%	\$271,032,469	8.02%
Total	4.1%	10.9%	\$ 38,82	54.1%	\$438,586,770	7.05%

In general, the loss ratio for a given category of loans may be a consequence of time to default (earlier defaults will tend to have a higher ratio of claim to original loan) and rate of default (high rates of default in a class would obviously lead to higher loss ratios. Analysis of the data show that loans of less than \$100,000 default, on average, 17.3 months after initial disbursement and that loans of more than \$100,000 default, on average, after 18 months. However, the default rates differ substantially, with a 14.4 percent default rate associated with the larger category of loans and a default rate of 9.9 percent associated with smaller loans. In this case, the higher loss ratio associated with larger loans (8.02 percent) is primarily a consequence of the higher frequency of default.

Table 8: Claims and Losses by Size of Loan and by Sector

Sector	Loan Size Category	Claim Incidence	Average loan	Average Claim Paid (\$000)	Total Loan Volume (\$000)	Total of Claims Paid	Loss Ratio
Agriculture, Forestry Fishing & Hunting	< \$100,000	5.34%	\$38,239	\$18,073	\$184,770	\$5,205	2.82%
	> \$100,000	7.43%	\$167,192	\$69,638	\$240,757	\$8,217	3.41%
	Total	5.82%	\$67,845	\$33,060	\$425,526	\$13,422	3.15%
Mining & Oil and Gas Extraction	< \$100,000	2.77%	\$42,299	\$24,924	\$39,761	\$723	1.82%
	> \$100,000	4.86%	\$164,368	\$58,580	\$54,077	\$937	1.73%
	Total	3.31%	\$73,946	\$36,891	\$93,838	\$1,660	1.77%
Construction	< \$100,000	5.40%	\$33,316	\$17,833	\$148,654	\$4,601	3.10%
	> \$100,000	8.36%	\$160,579	\$69,909	\$103,734	\$4,264	4.11%
	Total	5.78%	\$49,410	\$27,791	\$252,388	\$8,865	3.51%
Manufacturing	< \$100,000	11.98%	\$39,806	\$20,562	\$230,912	\$15,606	6.76%
	> \$100,000	16.98%	\$176,343	\$89,167	\$337,520	\$33,348	9.88%
	Total	13.22%	\$73,679	\$43,208	\$568,432	\$48,955	8.61%
Wholesale Trade	< \$100,000	10.27%	\$35,747	\$19,406	\$74,496	\$4,677	6.28%
	> \$100,000	21.46%	\$176,332	\$90,484	\$89,577	\$11,039	12.32%
	Total	12.46%	\$63,300	\$43,295	\$164,073	\$15,716	9.58%
Retail Trade	< \$100,000	13.66%	\$37,466	\$20,497	\$384,140	\$31,504	8.20%
	> \$100,000	15.31%	\$165,291	\$79,948	\$433,063	\$35,017	8.09%
	Total	14.00%	\$63,482	\$33,682	\$817,203	\$66,521	8.14%
Transportation & Warehousing	< \$100,000	5.82%	\$43,552	\$15,750	\$462,302	\$10,537	2.28%
	> \$100,000	8.20%	\$131,123	\$45,162	\$351,935	\$10,703	3.04%
	Total	6.30%	\$61,225	\$23,444	\$814,236	\$21,240	2.61%
Information & Cultural Industries	< \$100,000	11.17%	\$35,941	\$19,153	\$50,533	\$3,428	6.78%
	> \$100,000	21.55%	\$175,678	\$95,755	\$52,176	\$6,607	12.66%
	Total	12.98%	\$60,311	\$40,465	\$102,710	\$10,035	9.77%
Finance and Insurance	< \$100,000	4.47%	\$34,391	\$17,368	\$12,312	\$382	3.10%
	> \$100,000	18.18%	\$159,487	\$110,788	\$10,526	\$1,551	14.73%
	Total	6.60%	\$53,864	\$53,698	\$22,838	\$1,933	8.46%
Real Estate, Rental & Leasing	< \$100,000	17.57%	\$38,286	\$23,658	\$22,015	\$2,697	12.25%
	> \$100,000	33.79%	\$170,434	\$92,267	\$24,713	\$4,706	19.04%
	Total	20.83%	\$64,899	\$44,864	\$46,727	\$7,403	15.84%

Table 8: Claims and Losses by Size of Loan and by Sector, continued

Sector	Loan Size Category	Claim Incidence	Average loan	Average Claim Paid (\$000)	Total Loan Volume (\$000)	Total Claims Paid	Loss Ratio
Professional, Scientific and Technical Services	< \$100,000	8.87%	\$32,585	\$19,487	\$143,211	\$8,106	5.66%
	> \$100,000	14.00%	\$166,465	\$79,705	\$116,525	\$8,927	7.66%
	Total	9.58%	\$50,979	\$32,260	\$259,736	\$17,033	6.56%
Admin & Support, Waste Management etc.	< \$100,000	56.57%	\$35,103	\$16,412	\$3,475	\$1,001	28.81%
	> \$100,000	55.88%	\$187,323	\$86,968	\$6,369	\$1,913	30.04%
	Total	56.39%	\$74,017	\$35,114	\$9,844	\$2,914	29.61%
Educational Services	< \$100,000	12.46%	\$36,457	\$14,276	\$22,822	\$1,313	5.75%
	> \$100,000	10.14%	\$175,344	\$52,790	\$25,951	\$1,161	4.48%
	Total	12.02%	\$63,015	\$21,708	\$48,773	\$2,475	5.07%
Health Care & Social Assistance	< \$100,000	6.66%	\$38,522	\$19,586	\$61,327	\$2,409	3.93%
	> \$100,000	8.35%	\$175,650	\$84,107	\$109,430	\$5,383	4.92%
	Total	7.13%	\$77,091	\$41,668	\$170,756	\$7,792	4.56%
Arts, Entertainment & Recreation	< \$100,000	88.51%	\$46,968	\$20,449	\$8,172	\$3,517	43.04%
	> \$100,000	87.13%	\$192,723	\$83,980	\$19,465	\$8,314	42.71%
	Total	88.00%	\$100,500	\$43,658	\$27,637	\$11,831	42.81%
Accommodation, Food and Beverages	< \$100,000	18.75%	\$46,036	\$25,652	\$356,826	\$40,967	11.48%
	> \$100,000	20.61%	\$177,735	\$92,579	\$747,555	\$86,746	11.60%
	Total	19.41%	\$92,363	\$50,400	\$110,438	\$127,713	11.56%
Other Services	< \$100,000	7.19%	\$35,340	\$21,041	\$555,551	\$25,565	4.60%
	> \$100,000	10.93%	\$171,054	\$88,300	\$588,253	\$36,821	6.26%
	Total	7.87%	\$59,701	\$38,227	\$1,143,805	\$62,386	5.45%
Total	< \$100,000	9.90%	\$38,521	\$20,877	\$2,761,445	\$162,321	5.88%
	> \$100,000	14.43%	\$166,413	\$83,724	\$3,311,625	\$265,657	8.02%
	Total	10.89%	\$66,310	\$39,092	\$6,073,071	\$427,978	7.05%

TYPE OF OPERATION (FRANCHISES VS. NON-FRANCHISES)

Table 9 reports defaults and loss data according to whether the borrower is a franchise or not. The data reported in Tables 9 and 10 suggest that franchises default more frequently than non-franchises and exhibit higher loss rates (9.58 percent for franchises and 6.69 percent for non-franchises).

Table 9: Claims and Losses by Type of Operation

Purpose (Class of Loan)	Default rate: first year of loan	Default Rate (overall to date)	Average Claim Paid	Claim as a proportion of original loan	Total Claims by Type of Operation: 1995-1998	Loss Ratio
Franchise	5.1%	15.3%	\$ 54,276	57.8%	\$ 73,055,177	9.58%
Non-Franchises	4.0%	10.5%	\$ 36,700	53.0%	\$365,696,711	6.68%
Total	4.1%	11.0%	\$ 39,067	53.7%	\$438,751,889	7.05%

Before concluding that franchises, in general, default more frequently than non-franchises it should be recalled that size of loan was also found to influence loan losses and claims frequencies and may therefore be a factor that confounds the analysis of franchises. In addition, franchises account for 28 percent of borrower firms in the "Food Services and Drinking Places" sub-sector of the Accommodation, Food and Beverage Sector. These potentially confounding factors are broken down in the analyses reported in Table 11, which compares default rates across: loan size; sector (Food Services and Drinking Places sector vs others); and, type of operation (franchise or not). Table 11 shows that a substantial portion of what at first appeared to be a higher default rate for franchises is in large part a sectoral effect. While franchises in sectors other than "Food Services and Drinking Places" do exhibit somewhat higher default rates, the difference is not as large as had first appeared. Loan size does not appear to be a confounding factor.

Table 11: Claims Frequencies by Loan Size, Type of Operation, and Sector

Size of Loan (Based on 1995- 1998 Data)	Food & Drinking Places	Non- Franchises	Franchises	Total
Overall Claim Rate (% , to date)				
< \$100,000	Food Services & Drinking Places	91.73	90.73	91.52
	All Other Sectors	8.92	11.37	9.09
> \$100,000	Food Services & Drinking Places	92.76	92.02	92.47
	All Other Sectors	12.45	13.21	12.56

Table 12 and Figure 7 present loss ratio data broken down by franchise status and whether or not borrowers are part of the "Food Services and Drinking Places" sector. These breakdowns illustrate that most of the differences between franchises and non-franchises arises because of the relatively high frequency of franchises within the "Food Services and Drinking Places" sub-sector. Franchises within and beyond the "Food Services and Drinking Places" sub-sector exhibit higher loss ratios than do non-franchises. However, the difference in loss

ratios between franchises and non-franchises is lower outside the “Food Services and Drinking Places” sub-sector.

Table 12: Loss Ratios by Type of Operation, and Sector

	<i>Food Services and Drinking Places</i>	<i>Other Sectors</i>	<i>Total</i>
Franchises	48.02%	7.30%	9.58%
Non-Franchises	46.98%	6.08%	6.68%
Total	47.34%	6.23%	7.05%

Figure 7: Loss Ratios by Type of Operation, and Sector

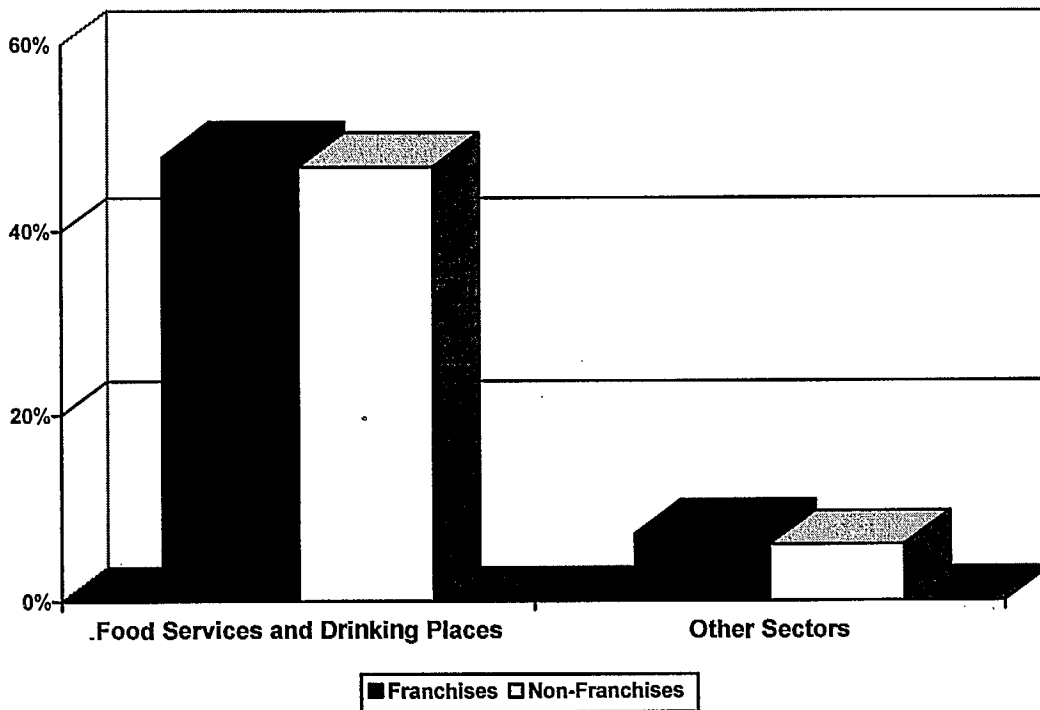


Table 10: Claims and Losses by Type of Operation and by Sector

Sector	Type of Operation	Claim Incidence	Average Loan	Average Claim Paid	Total loan amount (\$000)	Claims Paid Amount (\$000)	Loss Ratio
Retail Trade	Non-Franchises	13.68%	\$60,825	\$31,149	\$666,403	\$51,365	7.71%
	Franchises	15.85%	\$78,676	\$46,406	\$150,900	\$15,175	10.06%
	Total	14.00%	\$63,485	\$33,674	\$817,303	\$66,540	8.14%
Real Estate, Rental & Leasing	Non-Franchises	18.85%	\$63,980	\$42,642	\$37,684	\$5,202	13.81%
	Franchises	29.77%	\$69,032	\$51,170	\$9,043	\$2,200	24.33%
	Total	20.83%	\$64,899	\$44,864	\$46,727	\$7,403	15.84%
Professional, Scientific and Technical Services	Non-Franchises	9.35%	\$50,413	\$31,711	\$242,689	\$15,348	6.32%
	Franchises	13.52%	\$60,667	\$38,305	\$17,048	\$1,685	9.89%
	Total	9.58%	\$50,979	\$32,260	\$259,736	\$17,033	6.56%
Educational Services	Non-Franchises	10.65%	\$63,201	\$21,699	\$40,954	\$1,844	4.50%
	Franchises	19.05%	\$62,055	\$21,735	\$7,819	\$630	8.06%
	Total	12.02%	\$63,015	\$21,708	\$48,773	\$2,475	5.07%
Arts, Entertainment & Recreation	Non-Franchises	88.16%	\$98,196	\$43,421	\$24,058	\$10,464	43.50%
	Franchises	86.67%	\$119,317	\$45,561	\$3,580	\$1,367	38.18%
	Total	88.00%	\$100,500	\$43,658	\$27,637	\$11,831	42.81%
Other Services	Non-Franchises	7.66%	\$58,087	\$37,165	\$1,034,815	\$55,004	5.32%
	Franchises	10.77%	\$81,121	\$48,885	\$109,189	\$7,528	6.89%
	Total	7.88%	\$59,705	\$38,270	\$1,144,005	\$62,533	5.47%
Accommodation, Food & Beverages	Non-Franchises	20.31%	\$81,633	\$46,058	\$705,071	\$88,523	12.56%
	Franchises	17.08%	\$120,274	\$64,035	\$399,310	\$39,189	9.80%
	Total	19.41%	\$92,363	\$50,400	\$1,104,381	\$127,713	11.56%
Total	Non-Franchises	10.46%	\$63,615	\$36,969	\$5,311,106	\$365,696	6.69%
	Franchises	15.34%	\$94,095	\$54,276	\$762,264	\$73,055	9.58%
	Total	10.89%	\$66,311	\$39,096	\$6,073,371	\$438,752	7.05%

COSTS AND BENEFITS

Table 13 summarizes the findings of this report in the context of net (of fee income) estimated losses and the estimated net cost of job creation. This information is provided in aggregate and broken down by those factors that are of interest in this study.

Two important caveats should be noted.

First, fee incomes are based on estimations arrived at by simulation. Fee incomes were based on an initial fee of two percent of the total loan amount and 1.25 percent of the average annual outstanding balance of each loan, assuming an average term to maturity of five years and fixed payments at the current prime rate plus three percent margin. These assumptions reflect typical SBLA/CSBFA loan parameters, although individual loans differ idiosyncratically.

Second, job creation is based on the number of jobs that borrowers state that they plan to add as a result of the loan, as per the loan registration data. These estimates, therefore, reflect borrowers' stated *ex-ante* intentions. Actual *ex-post* job creation would have to be measured by means of survey techniques, work that is beyond the scope of this study.

In spite of these caveats, Table 13 reveals clearly that the program is an extraordinarily efficient means of job creation. Table 13 also shows that in spite of the income derived from fees, loans to the Accommodation, Food, and Beverages sector, loans for leasehold improvements, and large loans account for disproportionate fractions of the net costs of the program.

Table 13: Cost-Benefit Breakdown

	Total Lending (\$ 000)	Claim Paid Amount (\$000)	Estimated Fee Income (\$000)	Net Losses (\$000)	Loss per Dollar of Loan	Expected Job Creations	Cost per Job
Sectoral Breakdown							
Other Sectors	\$5,135,035	\$311,038	\$269,553	-\$41,485	-0.81%	161,534	\$256.82
Accommodation, Food, & Beverages	\$1,104,381	\$127,713	\$55,474	-\$72,238	-6.54%	71,537	\$1,009.80
Class of Loan							
Purchase of Real Property	\$900,008	\$29,377	\$48,290	\$18,912	2.10%	18,692	\$1,011.80
Leasehold Improvements	\$825,541	\$78,913	\$42,333	-\$36,580	-4.43%	45,125	\$810.65
Equipment Purchase	\$4,491,252	\$328,756	\$233,239	-\$95,517	-2.13%	168,210	\$567.84
Franchise Breakdown							
Non-Franchises	\$5,477,020	\$365,696	\$285,947	-\$79,749	-1.46%	191,656	\$416.11
Franchises	\$762,396	\$73,055	\$39,080	-\$33,974	-4.46%	41,415	\$820.34
Loan Size Breakdown							
Less than \$100,000 loan	\$2,851,460	\$167,554	\$149,918	-\$17,636	-0.62%	130,470	\$135.17
Loan of more than \$100,000	\$3,387,656	\$271,032	\$175,101	-\$95,930	-2.83%	102,593	\$935.06
Total	\$6,239,116	\$438,586	\$325,020	-\$113,567	-1.82%	233,063	\$487.28

