II

Methodology

A. Overview

We were requested to perform a study of the existing U.S. and Canadian Federal Financial Guarantee Programs, as well as of the programs in one American state and one Canadian province. To gather the information necessary to conduct a thorough investigation of aspects of each of these programs, we consulted literature such as *The Budget of the United States*, *The Federal Credit Supplement*, the *Canadian Guide to Federal Programs and Services*, various publications released by the agencies, and other relevant material. When these sources were inadequate, we spoke directly with officials at these agencies. In general, we included direct lending programs in addition to guaranteed lending programs, when they were part of a program that involved guaranteed loans as well, or when there was a direct program that mirrored a guaranteed program.

B. Explanation of the Template Categories

We have separated the data for the federal agencies into two tables. The first table provides descriptions and background information for the programs, while the second table contains primarily numerical data regarding program performance. Below is a listing of each category and a brief explanation of the rationale behind some of the years we selected for these categories.

The descriptive table categories are as follows:

- *Objective* discusses the goal of the program.
- *Eligibility Requirements* provides information on who can receive direct or guaranteed loans.
- *Security Requirements* provides details on the types of protection for the agency in the case of a default.
- *How Funds Are Utilized* explains how recipients of guaranteed or direct loans are permitted to use their funds.
- *Determinants of Borrower Interest Rate* discusses the factors that determine the borrowers' interest rate; any interest subsidies financed by the government is discussed in this section.
- *Factors Contributing to Defaults* describes some of the conditions that influence the default rates that agencies face.
- *Loans Made in FY 1994* provides the number of loans that were made or guaranteed in FY 1994; we have used FY 1994 data because they are the most recent actual data that are available.

For the U.S. federal programs, the information above was obtained from the *Catalog of Federal Domestic Assistance*, from information pamphlets released by the agency, and/or by telephone interviews. For the programs in Canada and Wisconsin, this information was obtained by conducting telephone interviews and by requesting information pamphlets.

The numerical table categories are as follows:

- *Loan Limits* are the actual limits on the dollar value per loan that can be made or guaranteed for the current fiscal year.
- *Interest Rate*, for the majority of the U.S. federal programs, was obtained from the *Federal Credit Supplement*, produced by the Office of Management and Budget (OMB), and is the projected interest rate that participants in the program will have to pay for loans originated in FY 1996. For the programs that have fixed, institutional interest rates, this value was provided to OMB by the various agencies. When the program's interest rates were the market rate or tied to the market rate, OMB made interest rate predictions based on the same economic assumptions that are in *The Budget of the United States*. For the programs in Canada and in Wisconsin, this information was obtained from agency representatives.
- *Fees*, upfront and, when applicable, annual fees, were included. For many of the U.S. federal programs, this figure was obtained from the *Federal Credit Supplement* and is the projected upfront and

annual fee that participants in the program will pay for loans originated in FY 1996. To obtain the up-front and annual fees for the Canadian and Wisconsin programs, inquiries were made at the relevant agencies.

- *Baseline Subsidy Rate* is a projection of the agency's cost of guaranteeing or issuing directly $100. It is calculated independently within each agency by estimating the net present value of the long-term cost to the government of issuing or guaranteeing a loan in that fiscal year given the fee structure, expected default behavior and borrower characteristics. Therefore, it can also be considered a measure of the risk that the agency incurs when it issues or guarantees these loans. The OMB provides guidance to the federal agencies in the calculation of their baseline subsidy rates by, among other things, providing them with the interest rate to use in their calculations. In some instances, the baseline subsidy rates are negative, indicating that the particular agency earns positive net revenue. The 1995 adjusted figures, which were released in the *1996 Budget of the United States, were used.* These data are available only for U.S. federal programs.
- *Average Loan Size* was obtained directly from the agency and is the actual figure for loans that were originated in FY 1994.
- *Projected Dollar Value of Loans*, for many of the U.S. federal programs, was obtained from the 1995 lines in the *Budget of the United States* titled, "Guaranteed loan levels supportable by subsidy budget authority" or "Direct loan levels supportable by subsidy budget authority." This value represents an estimate of the dollar value of loans that will be made or guaranteed given the amount appropriated by Congress, and the level of risk to the agency associated with the loans or loan guarantees. For Canada and Wisconsin, relevant agency personnel were asked for their departments' projections of future loan activity.
- *Assumed Default Rate* was obtained from the *Federal Credit Supplement* for many of the U.S. federal programs and is the lifetime anticipated default rate for loans guaranteed or issued in FY 1996. This default figure is examined every year and is adjusted if defaults were unusually high or low in the last fiscal year, or if significant program changes are instituted that are expected to affect the default rate. For Canada and Wisconsin, representatives at each of the agencies were contacted to obtain this figure. This figure is not the same as the claim rate, as not all defaults will lead to claims on the government.
- *Percentage Guaranteed* was also obtained from the *Federal Credit Supplement* for most of the U.S. federal programs, and is the estimated percent of the loan that the agency will guarantee in FY 1996. This figure does not apply, therefore, to direct loans. Other sources were used to obtain this figure for Canada and Wisconsin.
- *Losses* were defined as claims paid net of recoveries in FY 1994. This category was the most difficult category for which to obtain figures. Written sources that provided this figure could not be found, and instead agency contacts were relied upon. Some agency contacts were able to provide this figure. In other cases, however, representatives were extremely reluctant to provide information on losses. Other contacts, like those at the U.S. Department of Education, stated that their departments decided not to write off any loans in FY 1994, and claimed that they were still actively pursuing all of the delinquent loans. When the loss information was available, it was frequently an approximation. In addition, the values obtained may be somewhat misleading, as loss and recovery may not have originated from the same loans due to timing differences. Given these conditions, and the fact that it may be in the best interests of the agencies to use as small a figure as possible for its actual losses, this information may not directly represent the losses incurred as a result of these programs.
- *Total Value of Loans Outstanding* was also obtained directly from the agencies. Data for the end of FY 1994 were used because they were the most recent that the agencies made available.

C. Researching the State Programs

After conducting some preliminary research, we selected the state of Wisconsin as the representative state not only because it is a somewhat "typical" state in terms of size and complexity, but also because it has a single organization, the Wisconsin Housing and Economic Development Authority (WHEDA), that governs loan guarantee programs.

Much of the same information for the ten loan guarantee programs that WHEDA offers was collected for the U.S. federal programs. The largest exception is the baseline subsidy rate, which is not calculated by Wisconsin for its loan guarantee programs, because the states are not bound by the U.S. Credit Reform Act of 1990. In addition, the representative from WHEDA was not able to provide information on losses.

D. Researching Federal and Provincial Canadian Programs

The Canadian federal loan guarantee programs were identified both by using the *Guide to Federal Programs*, a publication of the Department of Finance on loan guarantees, and by conducting interviews with federal government officials. Canadian loan guarantees are extended under government loan guarantee programs or on an individual ad hoc basis.

Ad hoc guarantees differ from loan guarantee programs in that there are few borrowers, the value of each loan is large, and the loan guarantees are usually part of a package which includes other government financing, such as equity, contributions, or direct loans. Ad hoc guarantees entail negotiating financial terms on a case-by-case basis.

This study focused on loan guarantee programs rather than on individual cases of ad hoc loans. A total of eight loan guarantee programs are listed in the Canadian Department of Finance's publication on guarantee programs. However, information on the Air Carriers Insurance Program and the Atlantic Enterprise program was unavailable. Although these programs were listed in the Department of Finance's paper on loan guarantees, they were not listed in the Federal Directory. After further investigation, which included contacting people in the Department of Finance, the Atlantic Canada Opportunities Agency, various Canadian aviation departments, and Air Canada, no information regarding these programs was found available.

Much of the same information for the six federal loan guarantee programs that the Canadian government offers was collected for the U.S. federal loan guarantee programs as well. The exception again was the baseline subsidy rates, as Canada does not have legislation requiring agencies to calculate these rates.

The guarantee programs of Ontario were studied for the provincial segment of the study. The loan guarantees of Ontario were identified both in the Government of Ontario's KWIC 1993/1994, Index to Services and by conducting interviews with provincial government officials. Much of the same information was collected for the two loan guarantee programs that Ontario offers and for the other loan guarantee programs. The exceptions to this are the baseline subsidy rate and projected dollar value of loans, both of which Ontario does not calculate for its programs.

For both the federal and provincial loan guarantee programs the dollar values in the numerical tables are in Canadian dollars. During the categorization process, however, the Canadian dollars were converted to U.S. dollars based on the current exchange rate, so that meaningful comparisons could be made between the U.S. and Canadian programs.[1]

E. Categorizing the Programs

After the data collection was completed, the programs were ordered within several relevant categories in an attempt to classify the programs. The categories chosen reflect efforts to rank the size, risk and objective of each program relative to other programs. These categories are:

- *Dollar Value of Loans Outstanding as of the End of FY 1994*, in some cases, was not available as of the end of fiscal year 1994 but was available as of some other date. We have noted these cases in the tables.
- *Origination Date*, or when the program began guaranteeing or issuing loans, was used to categorize the programs to capture some sense of the significance of the dollar value of loans outstanding. When this table is used in conjunction with the table on Dollar Value of Loans Outstanding, the dollar value of activity relative to the age of the program is observed.
- *Projected Dollar Value of Loans To Be Originated in FY 1995.*
- *Maximum Liability* was calculated as a product of the dollar value of loans outstanding and the percentage of the loan that is guaranteed for guaranteed loans. In the case of direct loans, the maximum liability is the entire amount of the loan outstanding.
- *Default Rate*, as recorded in the *Federal Credit Supplement* for the U.S. federal programs and as provided by agency personnel for the Canadian and Wisconsin programs, was used to rank the programs. Although we might have preferred to use loss rates as an approximation of past and future risk, we found that the loss figures are not always accurate or well recorded. Instead, we ranked the programs by default rates.
- *Objective* demonstrates the distribution of the financial guarantee programs among various national and local objectives.

In cases for which inadequate data made it impossible to rank a program within one of these categories, a note is provided at the bottom of the table.

END NOTE

1. We used the rate of 1.3685 American dollars per Canadian dollar, which was the effective rate on 6/1/95 as listed in the *Washington Post.*