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How to compare the subsidy results
with the previous release

The new release of the credit subsidy calculator will produce subsidy estimates that differ from the previous release (r9). Though such differences are generally fairly small, initial estimates of differences could be quite large if there are uncorrected differences in the interest rate assumptions used for discounting. This paper describes how the interest rate assumptions used in the previous release should be adjusted to make them consistent with the current methods.

Before the 1999 Budget, the interest rate assumptions used in credit accounts were directly tied to the interest rates in the budget assumptions for each year. As a result, the rates for credit accounts often had a downward trend, which were not borne out. A comparison of assumptions with actual data showed that the consistent downward trend could be replaced by straight-lined estimates, which would be simpler and at least as accurate as the assumptions they replaced. Beginning with the 1999 Budget, the interest rate assumptions used for credit accounts were changed as follows:

> The rates were those assumed to prevail on the first day of the fiscal year. (For example, the rates for the 1999 Budget would be those assumed to prevail on October 1, 1998). Previously, the rates for credit accounts were estimated annual averages.

> Rates would be straight-lined to all future periods for the purpose of estimating subsidies for the budget. Previously, a downward trend was generally assumed.

> These rates would continue to be used until replaced by actual rates. Previously, the budget assumptions were replaced by revised estimates, which were, at best, only a marginal improvement over the budget assumptions.

How to make a consistent comparison

If you wish to compare the results obtained with the CSC with any previous budget assumptions, the following changes are needed:

> Find the "similar maturity" rate from the table below for the budget year and maturity category

> Place that rate in all columns of the "discount rate" line in your cash flow spreadsheet.

Adjust any other values in your spreadsheet that depend on the interest rate assumptions. For example, if the borrower's rate in a direct loan program is tied to the Treasury rate, and adjustment in the cash flows for interest payments and, perhaps for defaults and recoveries, would be necessary.

Compute the subsidy using the previous release and the revised spreadsheet.

Compute the subsidy using the CSC, the revised spreadsheet, and with the rates for the budget year you selected in the first step, above. (Rates are selected using the Actions-Select Rates menu.)

These results will be comparable except for the changes in discounting methods. Such differences should be less than 1 percentage point.

If you do NOT make the changes above, you may find that there are very large differences between the CSC and the previous release, because of the difference in interest rate assumptions.

Rate assumptions

The following table presents the "similar maturity" rate assumptions for the 1992-2000 Budgets, recalculated to be consistent with current methods.

Budget year	1 year	1-5 years	5-10 years	10-20 years	20 years or more
2000…………...	4.55	4.77	4.91	5.01	5.06
1999…………...	5.38	5.66	5.87	6.03	6.11
1998…………...	5.42	5.82	6.10	6.23	6.28
1997…………...	5.21	5.42	5.57	5.67	5.71
1996…………...	6.56	7.34	7.84	8.07	8.13
1995…………...	4.07	5.09	5.69	5.93	5.98
1994…………...	3.94	5.54	6.47	6.82	6.87
1993…………...	5.14	6.24	6.91	7.18	7.23
1992…………...	7.06	7.38	7.54	7.63	7.68

The exact definitions of the intervals are:

1 year:	1 year or less
1-5 years:	More than 1 year and less than 5 years
5-10 years:	5 years or more, but less than 10 years
10-20 years:	10 years or more, but less than 20 years
20 years or more:	20 years or more