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# Constructing Cash Flows

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## What are cash flows?

- Cash flows to and from government that result from credit programs.
  - They must be presented in either an Excel or Lotus spreadsheet.
  - They must be specifically formatted to be read by OMB's Credit Subsidy Calculator 2 (CSC2).
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# Basic Cash Flow Components

## **Direct Loans**

- Disbursements
- Scheduled principal payments
- Scheduled interest payments
- Defaults (P&I that never arrives)
- Recoveries

## **Loan Guarantees**

- Disbursements (private lender)
  - Fees to government
  - Default claim payments to private lenders
  - Recoveries on default claim payments
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# Basic Direct Loan Cash Flow

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Obligations</b>	<b>300,000</b>					
<b>Disbursements</b>	<b>300,000</b>					
<b>Scheduled Principal Payments</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>
<b>Scheduled Interest Payments</b>	<b>12,000</b>	<b>10,000</b>	<b>8,000</b>	<b>6,000</b>	<b>4,000</b>	<b>2,000</b>
<b>Defaults</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(56,000)</b>	<b>(54,000)</b>	<b>(52,000)</b>
<b>Recoveries</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75,000</b>	<b>0</b>

# Basic Guaranteed Cash Flow

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<b>Commitments (Full Face Amount)</b>	<b>300,000</b>					
<b>Disbursements (Private Lenders)</b>	<b>300,000</b>					
<b>Annual Fees Received</b>	<b>2,400</b>	<b>2,000</b>	<b>1,600</b>	<b>1,200</b>	<b>800</b>	<b>400</b>
<b>Default Payments</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120,000</b>	<b>0</b>	<b>0</b>
<b>Lost Fees</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(1,200)</b>	<b>(800)</b>	<b>(400)</b>

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# Developing Cash Flow Expectations

- Requires historical program data, a suitable proxy, or, in their absence, expert opinion
  - New programs usually use proxies
  - Established programs build upon historical data
  - Goal for all programs: a model and database of historic or proxy data—information store
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# Two Types of Cash Flow Modeling

## ■ Loan by Loan

- ❑ One loan: payments, defaults and recoveries are all attributable to one borrower
- ❑ Default rates are usually cumulative and expressed as a percentage, multiplied by the sum of the principal and interest payment for any given year

## ■ Portfolio

- ❑ More than one loan: payments, defaults and recoveries are attributable to many borrowers
  - ❑ Default and recovery rates may fluctuate with various maturities within the portfolio
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# Formatting budget cashflows for the CSC2

- CSC2 has specific formatting requirements
    - Named Range
      - CSC2 only reads data within the named range
    - Keywords
      - 4 required for ALL cash flows
      - Many more for DL and GL
      - New CSC2 keywords for reestimate and interest calculations
    - Timing
      - Frequency and Timing of Payment
    - Organized by cohort
    - Commenting Out
      - 3 ways to comment out a line of data
  - Examples
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