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# Calculating Reestimates: Concepts

OMB Annual Training

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June 25, 2007

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# Agenda

- The requirements for calculating reestimates
  - Why are reestimates needed
  - Concepts and data underlying reestimates
    - Interest rate reestimate
    - Technical reestimates
      - Balances Approach Reestimates
      - Traditional Approach Reestimates
  - Reestimates with the CSC2 (concepts)
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# Review: Subsidy Estimation

Subsidy estimate:

- Cost to the Government on a net present value (NPV) basis of direct loans or loan guarantees
  - Subsidy rate = subsidy cost/total disbursements
  - Subsidy estimates by cohort and risk category
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# Review: Subsidy Estimation

Subsidy estimate:

- Rate is expressed in terms of percentage
    - Program X has a 20% subsidy estimate
  - Applied to the estimated face value of direct loans or loan guarantees
    - 20% subsidy rate
    - \$10 million in loan volume
    - \$2 million of subsidy budget authority required
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# Review: Subsidy Estimation

- Agency develops models to generate expected program cash inflows and outflows between the Government and the public
  - Agency formats cash flows to be read by the OMB Credit Subsidy Calculator 2 (CSC2)
  - CSC2 discounts cash flows to disbursement and generates the subsidy rate
    - Interest rates used for discounting are provided by OMB through CSC2
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## Reestimate

- Reestimate—a revision of the subsidy cost estimate of a cohort (or risk category) based on information about the actual performance and/or estimated changes.
  - Comparison **for each cohort** of:
    - prior subsidy estimates for each disbursed loan/guarantee cohort
      - to -
    - actual loan/guarantee cash flows and updated assumptions about expected performance
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# Credit Subsidy Reestimates (cont.)

Two types of reestimates are required for each cohort/risk category

- **Interest rate reestimate**

- Update for change in the discount rate between time of loan obligation (or guarantee commitment) and disbursement.
- Performed at substantial disbursement (i.e. 90 percent)

- **Technical reestimate**

- Update for actual cash flows and changes in technical/default assumptions (e.g., forecast technical assumptions)
  - Performed annually
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# Interest Rate Reestimate

- Trues up the financing account for the difference between estimated and actual discount rates
    - Replace OMB-issued economic assumption Treasury rates with actual Treasury rates
    - Recalculate the subsidy estimate
    - Some agencies update borrower's interest rate
    - Interest rate reestimate output is a subsidy rate
    - Federal credit supplement shows the percent change due to interest
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# When should agencies perform interest rate reestimates?

- Once after a cohort becomes at least 90% disbursed (“use 90 percent” method).
  - Some agencies are required by auditors to calculate each year during disbursement unless the interest rate reestimate is not material to the financial statements (“use all” method).
  - OMB does not require “use all” method for budget formulation and execution
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# Interest rate reestimate example

Credit Subsidy Calculator 2 - [Cashflows\_directloan.xls]

File Edit View Actions Window Tips Help

CFs SUB PWFs DDP NPV Calc CSC SUM Msg

Pro-rata method.....Construction model  
All content displayed.....See Tips-Views-Limitations menu for potentia  
Purpose of this calculation.....Budget formulation  
Interest rate assumptions.....Budget forecast rates, Budget 2005 [2003-12-

Year	Subsidy components					Single effective Discount rate
	Total Subsidy	Financing Subsidy	Default Subsidy	Subsidy Reduction for Fees	All Other components	
2005	6.23	-4.19	10.42	0.00	0.00	3.2540 (C)

Ready NUM

- Direct loan with a Budget subsidy rate of 6.23% using the 2005 budget assumption discount rates

# Interest rate reestimate CSC2 Output

Credit Subsidy Calculator 2 - [Cashflows\_directloan.xls]

File Edit View Actions Window Tips Help

CFs SUB PVFs DDP NPV Calc CSC<sub>2</sub> SUM Msg

Pro-rata method.....Construction model  
All content displayed.....See Tips-Views-Limitations menu for potentia  
Purpose of this calculation..... Reestimate  
Interest rate assumptions..... Reestimate rates may vary by cohort. See PL

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Subsidy components

Year	Total Subsidy	Financing Subsidy	Default Subsidy	Subsidy Reduction for Fees	All Other components	Reestimate Discount rate	
2005	6.99	-3.34	10.33	0.00	0.00	3.60	Single Effective Rate

Ready NUM

- Interest rate reestimated subsidy rate of 6.99% using the actual discount rates

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# Technical Reestimate

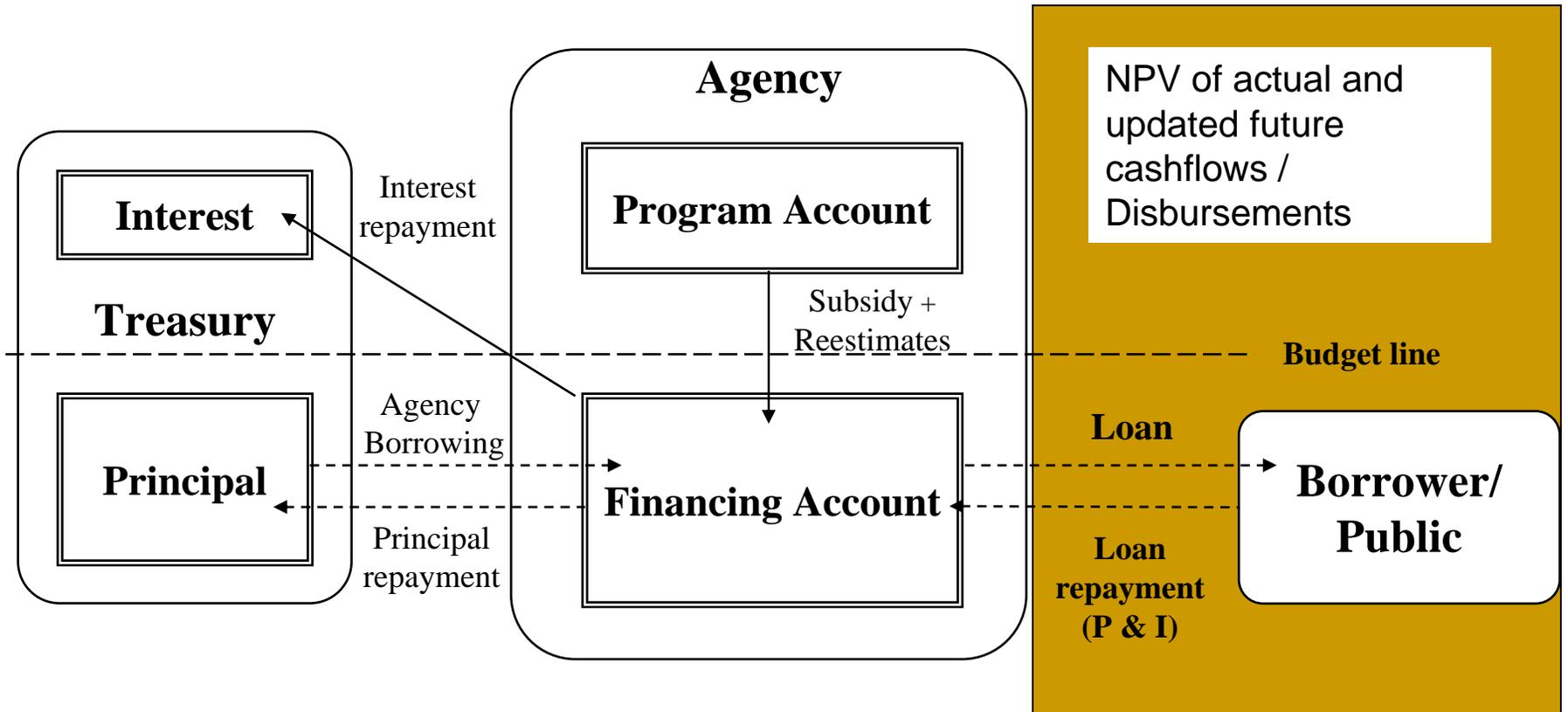
- Corrects for changes in actual loan performance from the latest subsidy estimate.
  - Example:
    - A loan guarantee program fully guarantees a \$10 million loan.
    - Original subsidy estimate is 20%, based on the default risk of the borrower. Agency sets aside \$2 million in a financing account in anticipation of future default.
    - Loan defaults on first payment. Bank places a claim of \$10 million.
    - The reestimate gives the agency permanent indefinite authority to cover the \$8 million shortfall between the claim and the balance of the financing account.
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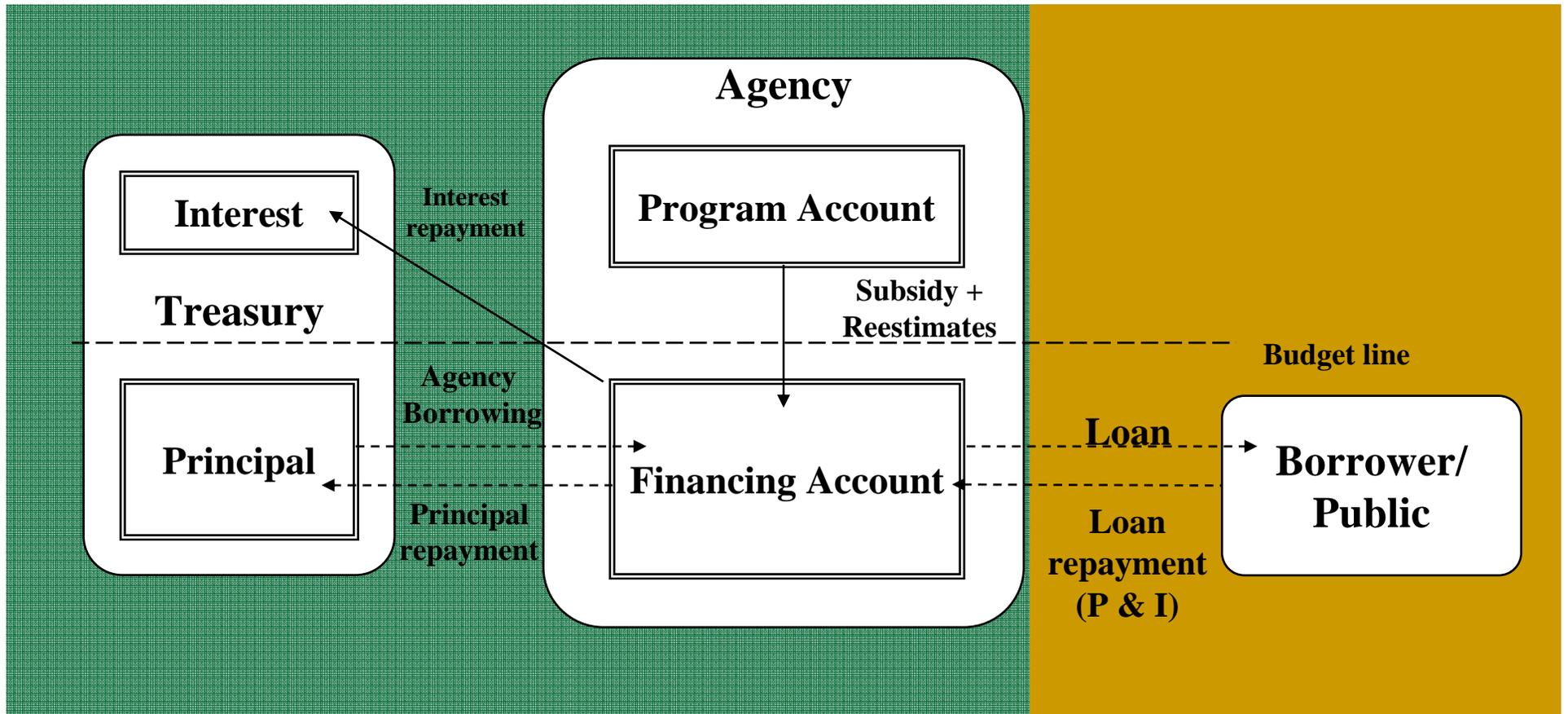
# When should agencies perform technical reestimates?

- Required to be calculated and executed annually, unless one of the following four conditions is met:
    - based upon periodic schedules established with OMB;
    - a major change in actual versus projected activity is detected,
    - a material difference is detected through monitoring “triggers” developed in coordination with OMB, or
    - a cohort is being closed out.
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# The Basic Concept: Traditional Approach



# Balances approach reestimate



Transactions with Treasury exactly match transactions with the public.

Or: Liabilities (debt to Treasury) equal assets (loan to public)

Or: Net position is zero

Or: The financing account has no debt or cash at the end of the life of the loan.

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# Calculating Balances Approach

## Reestimates

### *Assets*

- ❑ Direct loans—present value of remaining cash flows from the public
- ❑ Balance of funds on deposit with Treasury

### *Liabilities*

- ❑ Balances owed to Treasury
  - ❑ For loan guarantees, the present value of remaining cash flows, including undisbursed loans
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# Shortfalls of previous reestimate tools

- Traditional approach reestimates:
    - Reestimate based on cashflows with the public
    - Traditional approach had no check on accounting errors
    - Unexplained balances in financing accounts
  - Balances approach reestimates:
    - Took the end of year financing account balance as given
    - Could not distinguish between reestimates resulting from borrower performance and accounting errors—subsidy rates that did not reflect borrower performance
  - Financing account interest:
    - Simplified interest and no method for correcting interest earned at budget assumptions
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# CSC2 Reestimate

- Balances approach reestimates
    - Calculated financing account balance with interest
    - Agencies reconcile calculated vs. reported balance
    - Future cashflows discounted to the end of the fiscal year
  - Traditional approach reestimate
    - Check against Balances approach reestimated rate
  - Financing account interest adjustment
  - Historical cohort data is required for Traditional approach reestimate check and financing account interest adjustment
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## CSC2 Reestimates

- Consistent data for credit calculations
  - Disconnects in financing account balances are transparent
  - Accounting differences are transparent
  - Cost accurately reflects long term cost to government
    - Transactions to and from public +  
Intragovernmental transactions = Financing  
account balance
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# Calculating a Technical Reestimate

## To perform technical reestimates using the CSC2:

### DATA

- Update borrower cashflows (to or from the public) for actual performance
- Updated estimated future borrower cashflows
- Financing account balances
  - End of year Debt/Cash balance in the financing account
- Intragovernmental transactions
  - Includes borrowing, repayments, subsidy, financing account interest, modifications, and prior reestimates

### ANALYSIS

- Source of any differences between what should be in the financing account (sum of transactions) and what was reported.
  - Why are costs changing?
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## Reestimate Requirements

- Required to be calculated at the close of each fiscal year
  - With OMB approval, agencies may use actual data through either March 31 or June 30 and estimate remainder of year
  - Discount rates for calculating the cohort interest rate are released about 10 days before the end of the fiscal year.
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# Reestimate execution

- Upward reestimate
    - Liabilities exceed assets
    - The subsidy cost is higher than previously estimated
    - Permanent indefinite authority cover the upward reestimate
  
  - Downward reestimate
    - Assets exceed liabilities
    - The subsidy cost is lower than previously estimated
    - The downward reestimate must be returned to the general fund via the downward reestimate receipt account
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## Interest on the Reestimate

- The amount of interest that would have been paid or earned by the financing account if loan had originally been executed at the reestimated subsidy rate
  - Interest on the reestimate is calculated at the disbursement-weighted average discount rate or single effective rate
  - Financing account interest adjustment is executed as interest on reestimate.
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# What rate should agencies use to discount reestimate cashflows?

- For basket of zeros cohorts (cohorts 2001 and forward), only two single effective rates will be calculated.
    - Budget formulation single effective rate
    - Final single effective rate
  - For technical reestimates, enter the numeric single effective rate as the “reestimate discount rate” in CSC2 input cashflows for each cohort
  - Exceptions:
    - Interest rate reestimate
    - First technical reestimate after 90% disbursement
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## For More Information

- Guidance on Reestimates:
  - OMB Circular A-11, Ch. 185, especially Section 185.6
  - Federal Credit Support Page:
    - <http://www.whitehouse.gov/omb/credit>
    - OMB Credit Subsidy Calculator 2 User guide
  - Reference tools for previous software
    - Consolidated Credit Tool instructions (Utilities page)
    - Balances Approach Reestimate guidance
    - Working Paper, “Performing reestimates with the revised credit subsidy calculator” (CSC page)
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