# Modifications

OMB Annual Credit Training

June 26, 2007

# Topics

- What is a modification?
- How do I estimate the modification subsidy cost or savings?
- What impact does the modification have on the Budget?
- What do I need to know about financing account transfers?
- What do I need to know about loan asset sales?

# Definition

- Modification is defined in FCRA
- A **modification** is a government action that

(1) Differs from actions assumed in the baseline estimate of cashflows in the budget, and

(2) Changes the estimated cost of an outstanding direct loan (or direct loan obligation) or an outstanding loan guarantee (or loan guarantee commitment).

# Modifications

- Require a Government action -- new legislation or administrative action.
- Apply to:
  - Outstanding direct loan or direct loan obligations.
  - Outstanding loan guarantee or loan guarantee commitments.
- May affect one or a group of direct loans or guarantees.
- Apply to pre-credit and post-credit reform credit.
- Have costs/savings reflected in dollars. (Not rates!)

# Direct vs. Indirect

- It is possible to modify directly, or indirectly.
- Direct:
  - Alters the terms of existing contracts (forgiveness, interest rate reduction, extension of maturity, prepayments without penalty)
  - Sale of loan assets
  - Purchase of undefaulted guaranteed loans
- Indirect:
  - Legislation alters administration of the portfolio (new debt collection tools, restrictions on debt collection)
  - Change in covenant requirements

# What is not a modification?

- Non-Government actions permitted within terms of existing contracts (e.g., prepayment without penalty)
- Administrative workouts:
  - Applies to troubled loans & loans in imminent default
  - Actions to maximize loan repayments or minimize guarantee claims
- Additional disbursements to borrowers under the same contract (these are treated as new loans)
- Changes before obligation or commitment

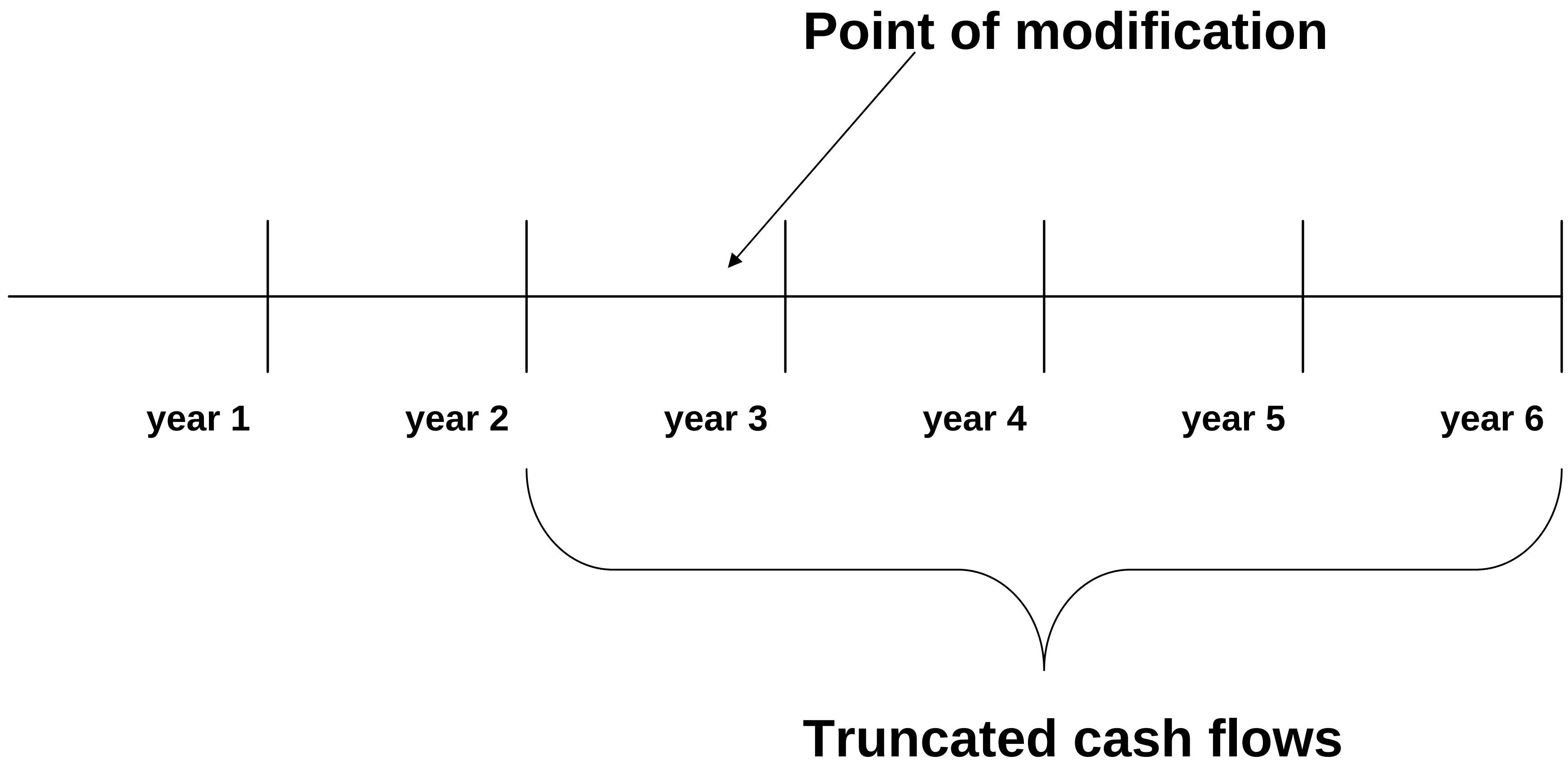
# Modification cost or savings

- Difference between the estimated PV of the remaining cash flows **before** and **after** the modification.
- If you don’t have the BA to cover the cost, you can't do a modification.
- If a law mandates a modification, it provides the BA.
- Modification costs are expressed in dollars.

# Estimating the modification subsidy cost—cashflows

- Before cashflows—truncated to ignore all activity prior to the point of modification
- After cashflows—the "before" cashflows altered ONLY for the effects of the modification
  - Cashflows to the Government have a positive sign
  - Cashflows from the Government have negative signs
  - *Note: If you are using cashflows formatted for the Credit Subsidy Calculator 2, you may have to change some of the signs*

# Truncated cashflows



# "Before" Cashflows—pre-modification

- Start with the baseline cashflow from the most recent President's Budget for the cohort truncated to point of modification

Simplified example baseline cashflow—Includes actual data

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** |
| Disbursements | 100,000 | | | | | |
| Up front fees | 1,000 | | | | | |
| Default claim payments | -1,950 | -2,050 | -2,000 | -2,000 | -2,000 | -2,000 |
| Recoveries | 900 | 1,100 | 1,000 | 1,000 | 1,000 | 1,000 |

Modification cashflow "Before"—Truncates activity prior to modification

| | Year 1 | Year 2 | Year 3 | Year 4 |
|---|---|---|---|---|
| | **2007** | **2008** | **2009** | **2010** |
| Disbursements | | | | |
| Up front fees | | | | |
| Default claim payments | -2,000 | -2,000 | -2,000 | -2,000 |
| Recoveries | 1,000 | 1,000 | 1,000 | 1,000 |

Note: cashflow timing for this example is annual, end

# "After Cashflows"—post-modification

- "Before" cashflow altered ONLY for effects of the modification

Modification cashflow "Before"—Truncates activity prior to modification

| | | | | |
|---|---|---|---|---|
| | Year 1 | Year 2 | Year 3 | Year 4 |
| | **2007** | **2008** | **2009** | **2010** |
| Disbursements | | | | |
| Up front fees | | | | |
| Default claim payments | -2,000 | -2,000 | -2,000 | -2,000 |
| Recoveries | 1,000 | 1,000 | 1,000 | 1,000 |

Modification cashflow "After"—modification reduces recoveries 25%

| | | | | |
|---|---|---|---|---|
| | Year 1 | Year 2 | Year 3 | Year 4 |
| | **2007** | **2008** | **2009** | **2010** |
| Disbursements | | | | |
| Up front fees | | | | |
| Default claim payments | -2,000 | -2,000 | -2,000 | -2,000 |
| Recoveries | 750 | 750 | 750 | 750 |

## Modification subsidy cost equals PV pre-mod minus PV post-mod

1. Calculate the net PV of “before” or pre-modification cash flows using current year budget assumption discount rate
2. Calculate the PV of “after” or post-modification cash flows using current year budget assumption discount rates
3. PV of “Before” cashflows minus the PV of “after” cashflows is the modification cost or savings

*Note: PV factors are from the Credit Subsidy Calculator 2*

# Present value factors

Microsoft Excel - PV factors.xls

File Edit View Insert Format Tools Data Window Help

A13 | Interest rate assumptions............................

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 | Credit Subsidy Calculator version............... | CSC2 version 1.0a | | | | | |
| 2 | Run date/time........................................ | Mon 11 Jun 2007 14:54:55 | | | | | |
| 3 | Display type........................................... | Present value factor display | | | | | |
| 4 | Program name........................................ | Any Program | | | | | |
| 5 | Description............................................ | 2007 President's Budget | | | | | |
| 6 | Program type.......................................... | loan guarantee | | | | | |
| 12 | Purpose of this calculation........................ | Budget formulation | | | | | |
| 13 | Interest rate assumptions.......................... | Budget forecast rates, Budget 2007 [2005-11-15] | | | | | |
| 14 | -- | -- | -- | -- | -- | -- | |
| 15 | | Beginning | Middle | End | | | |
| 16 | Annual factors | of year | of year | of year | | | |
| 17 | -- | -- | -- | -- | | | |
| 18 | Year 1................................. | 1.000 | 0.978 | 0.956 | | | |
| 19 | Year 2................................. | 0.956 | 0.933 | 0.911 | | | |
| 20 | Year 3................................. | 0.911 | 0.889 | 0.867 | | | |
| 21 | Year 4................................. | 0.867 | 0.845 | 0.824 | | | |
| 22 | Year 5................................. | 0.824 | 0.803 | 0.783 | | | |
| 23 | Year 6................................. | 0.783 | 0.763 | 0.743 | | | |
| 24 | Year 7................................. | 0.743 | 0.724 | 0.706 | | | |
| 25 | Year 8................................. | 0.706 | 0.687 | 0.669 | | | |
| 26 | Year 9................................. | 0.669 | 0.652 | 0.634 | | | |
| 27 | Year 10................................. | 0.634 | 0.617 | 0.600 | | | |

Cash flow data / Subsidy / **PV factors** / Disb pd data / PV calculation / Subsid

Ready NUM

PV factors from the CSC2 (PV tab).

Multiply each cashflow by the appropriate PV factor.

# Modification cost example

- Modification cost in this example is $889

| | | | Year | | | |
|---|---|---|---|---|---|---|
| | | | 2007 | 2008 | 2009 | 2010 |
| **Before Modification** | | | | | | |
| | Default claim payments | | -2,000 | -2,000 | -2,000 | -2,000 |
| | Recoveries | | 1,000 | 1,000 | 1,000 | 1,000 |
| | Total cashflow | | -1,000 | -1,000 | -1,000 | -1,000 |
| 2007 PV factor (annual, end) | | | 0.956 | 0.911 | 0.867 | 0.824 |
| | | | | | | |
| | ***PV of Pre-modification*** | | -956 | -911 | -867 | -824 |
| | | | | | | |
| **After Modification** | | | | | | |
| | Default claim payments | | -2,000 | -2,000 | -2,000 | -2,000 |
| | Recoveries | | 750 | 750 | 750 | 750 |
| | Total cashflow | | -1,250 | -1,250 | -1,250 | -1,250 |
| 2007 PV factor (annual, end) | | | 0.956 | 0.911 | 0.867 | 0.824 |
| | | | | | | |
| | ***PV of Post-modification*** | | -1194 | -1138 | -1083 | -1030 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | PV of Pre-modification | -3557 | | | | |
| | - PV of post-modification | -4446 | | | | |
| | **Modification Cost** | 889 | | | | |

# Budget treatment of the cost or savings

- **Cost** = obligate and outlay BA in the program account (paid to the financing account).
- **Savings** = obligate and disburse in the financing account (paid to a negative subsidy receipt account).

# Modification adjustment transfers (post-1991 only)

- Modification adjustment transfer adjusts for the difference between the Budget discount rates used to calculate the modification, and the actual cohort interest rate.

How to calculate:

- Calculate the PV of remaining pre-modification cash flows using cohort discount rates
- Calculate the PV of post-modification cash flows using cohort discount rates
- Compute the difference of PV cashflows at cohort rate
- MAT = this difference minus the cost of modification

# Loan guarantee example

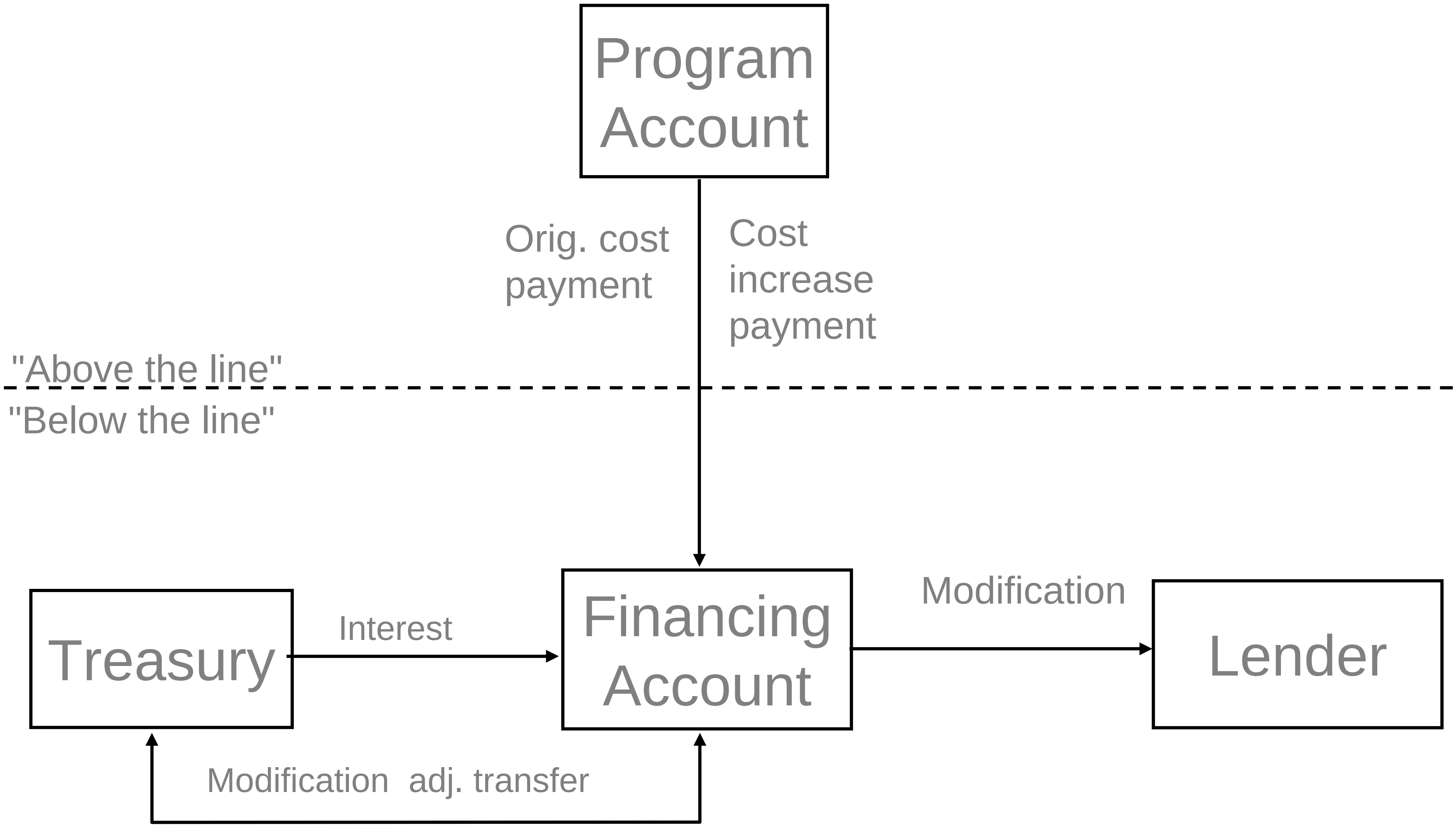
| | | | | |
|---|---|---|---|---|
| **Step 1** | | -3,557 | PV pre-mod cash flows | *Uses current* |
| **Step 2** | minus | -4,446 | PV post-mod cash flows | *discount rates* |
| **Step 3** | = | 889 | Cost of Modification | |
| | | | | |
| **Step 4** | | -3,546 | PV pre-mod cash flows | *Uses cohort* |
| **Step 5** | minus | -4,432 | PV post-mod cash flows | *discount rates* |
| **Step 6** | = | 886 | PV pre-mod minus PV post-mod | |
| | | | | |
| **Step 7** | | 886 | Result of step 6 | |
| | minus | 889 | Cost of Modification | |
| | = | -3 | Modification Adjustment Transfer | |
| | | | | |
| **Cost of Modification** | | | **889** | |
| **Mod. Adjustment Transfer** | | | **-3** | |

- Review: Steps of calculating a modification
- Same cashflows shown earlier
- Steps 4&5 using the cohort interest rate of 5%

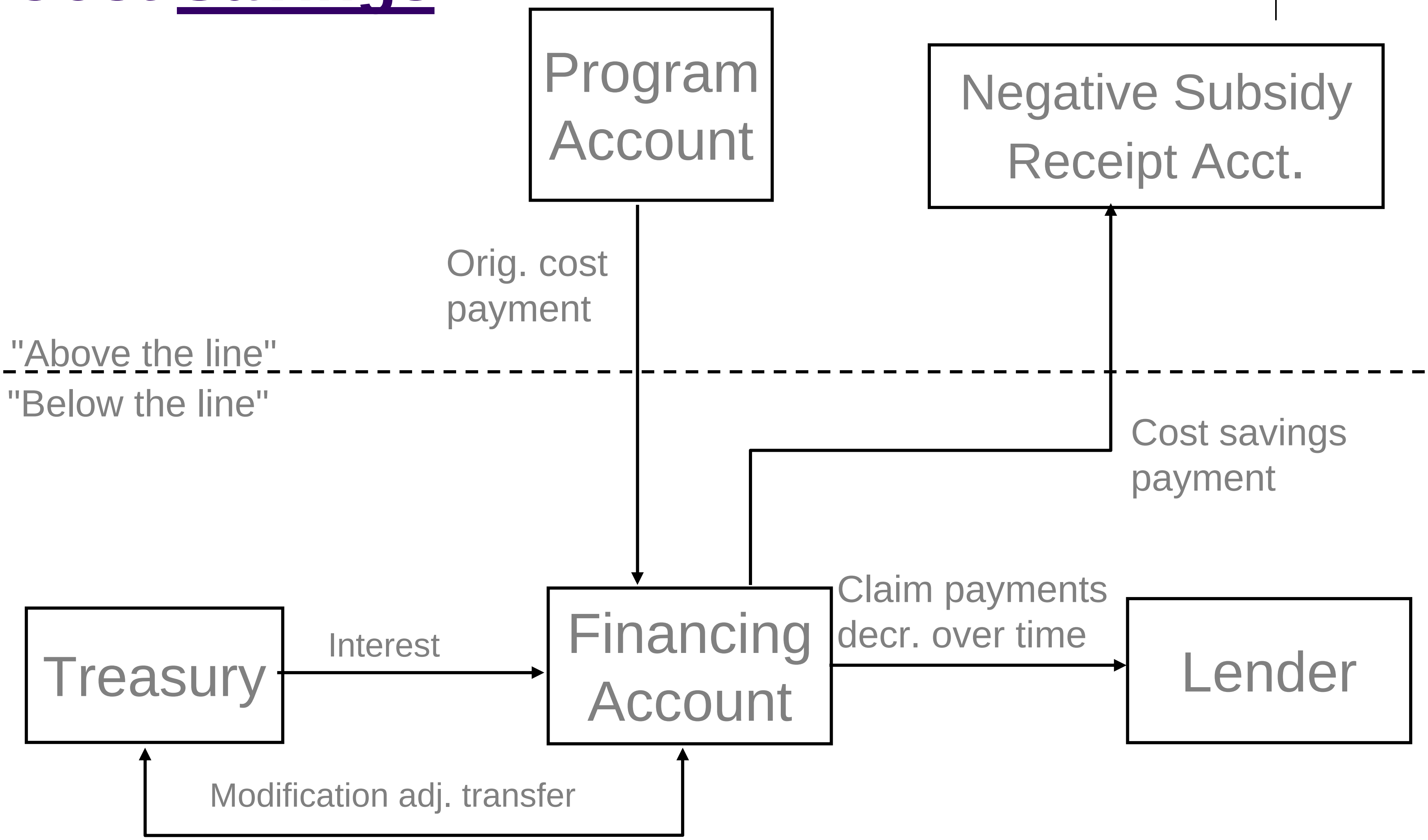
# Pre-1992 Modifications

- ***Asset or liability transfers* --**
  **First transfer assets or liabilities from liquidating account to financing account.**
- **Compute the cost of the modification**
- **All transactions done on one governing apportionment**
- **Modification adjustment transfer is not necessary**

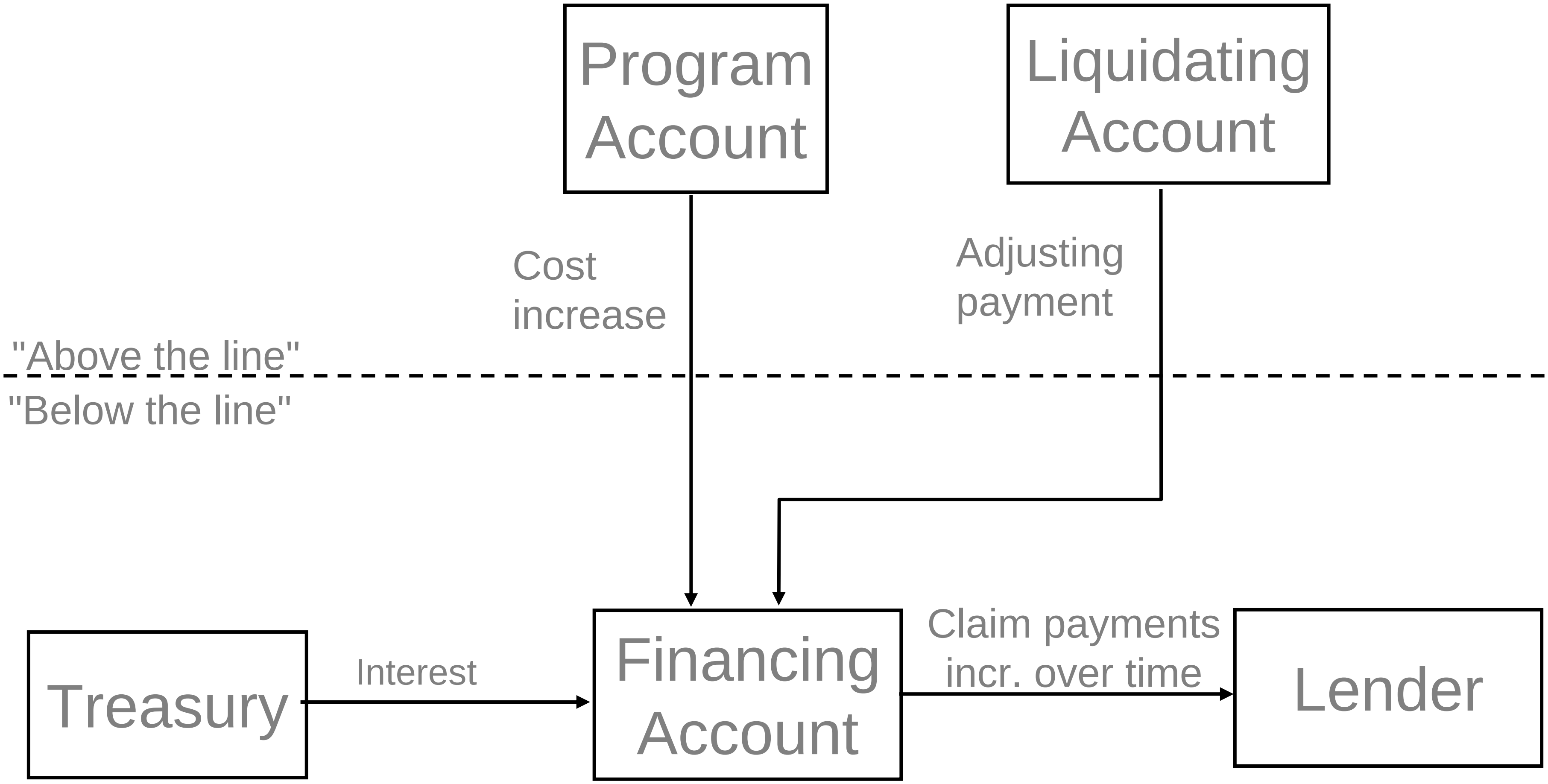
# Post-1991 Loan Guarantee Modification Cost Increase



# Post-1991 Loan Guarantee Modification Cost Savings



# Pre-1992 Loan Guarantee Modification Cost Increase



# Delinquent loan asset sales

- Requirement:
- Agencies with over $100 million in loan assets are expected to sell loans that are more than one year delinquent.
- OMB must approve sales -- and exceptions -- based on specific information submitted by the agency.

# Exceptions

- Loans to foreign countries or entities
- Loans in structured forbearance
- Loans written off as unenforceable
- Loans in adjudication or foreclosure
- Loans that have been submitted to Treasury for offset and are expected to be extinguished within 3 years
- Agency can demonstrate that PV of expected cash flows would exceed sales proceeds
- Sale would be inconsistent with Administration policy

# Cost of loan asset sales

- If the cash flows for existing loans don't explicitly assume a sale, the sale is a modification.
- The cost or savings is the difference between the net sales proceeds and the PV to the government of keeping the loan assets (hold value).
- Certain costs are netted from gross proceeds (e.g., underwriting, rating agency, due diligence,…see A-11).
- If the sale was assumed in the cash flows, the difference between the estimated and the actual proceeds from the sale is a <u>reestimate</u> (not a modification).

# Special Cases

- If asset are sold with recourse, treat as two separate transactions:
  - Sale without recourse (modification), and
  - New loan guarantee.
- If asset sales are sold with a government equity stake (or participation) in cash flows, count the:
  - Cash proceeds from the sale, plus
  - PV of the proceeds from the equity position, minus
  - Transaction costs.

# Summary

- Definition:
  - Government action
  - New legislation or administrative action
  - Affects one loan or a group
  - Applies to pre-1992 and post-1991 credit
  - Direct and indirect
  - Not:
    - Workouts
    - Actions permitted within terms of contract
    - Additional disbursements
    - Changes before obligation or commitment

# Summary (continued)

- Estimating the subsidy cost/savings - calculate pre- and post-modification subsidy cost

- Budget treatment of cost/savings:
  - Cost = obligation, outlay from program account to financing account.
  - Savings = obligation, disbursement from financing account to receipt account.

# Summary (still continued)

- Financing account transfers:
  - Post-1991:  modification adjustment transfer
  - Pre-1992:  direct loan asset or loan guarantee liability transfer from liquidating account to financing account and a one-time adjustment payment.
- Delinquent loan asset sales:  Required for agencies w/ $100 million in loan assets (some exceptions).

# You made it!

- Questions?