

Statement of Cash Flows

- ▶ Understand the purpose of SCF
- ▶ Distinguish between its three sections
- ▶ Understand the difference between the direct and indirect methods for the Operations section
- ▶ Understand Cash Flow from Operations and how it is derived from Net Income
- ▶ Practice these concepts

Statement of Cash Flows

Beginning Balance

Assets = **Liabilities** + **S.E.**

$$\boxed{\Delta\text{Cash}} + \Delta\text{OA} = \Delta\text{Liabilities} + \Delta\text{ACC} + \boxed{\text{NI}} - \text{Div}$$

Assets = **Liabilities** + **S.E.**

Ending Balance



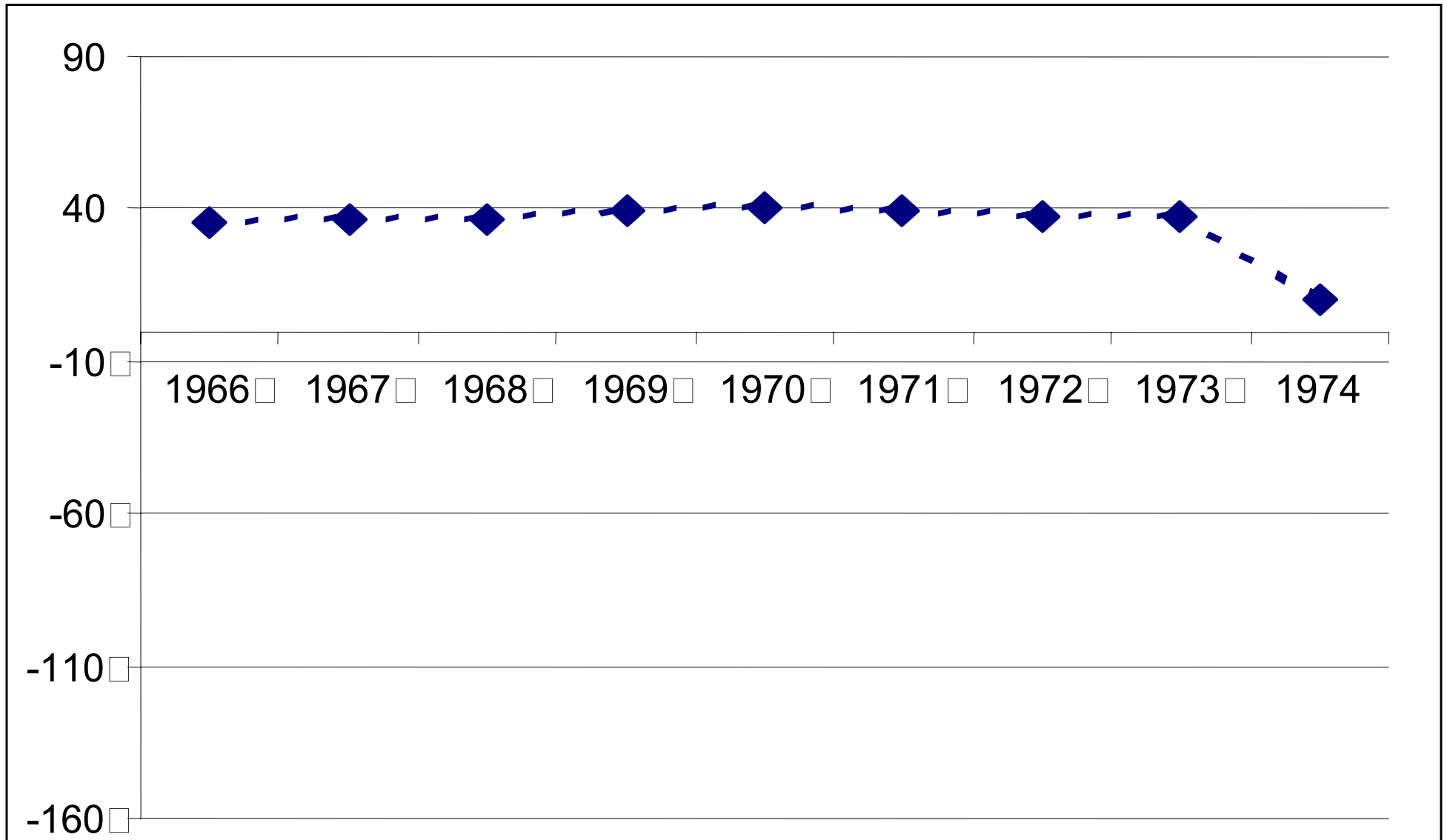
$$\Delta\text{Cash} \text{ +/- "other stuff"} = \text{NI}$$

Statement of Cash Flows

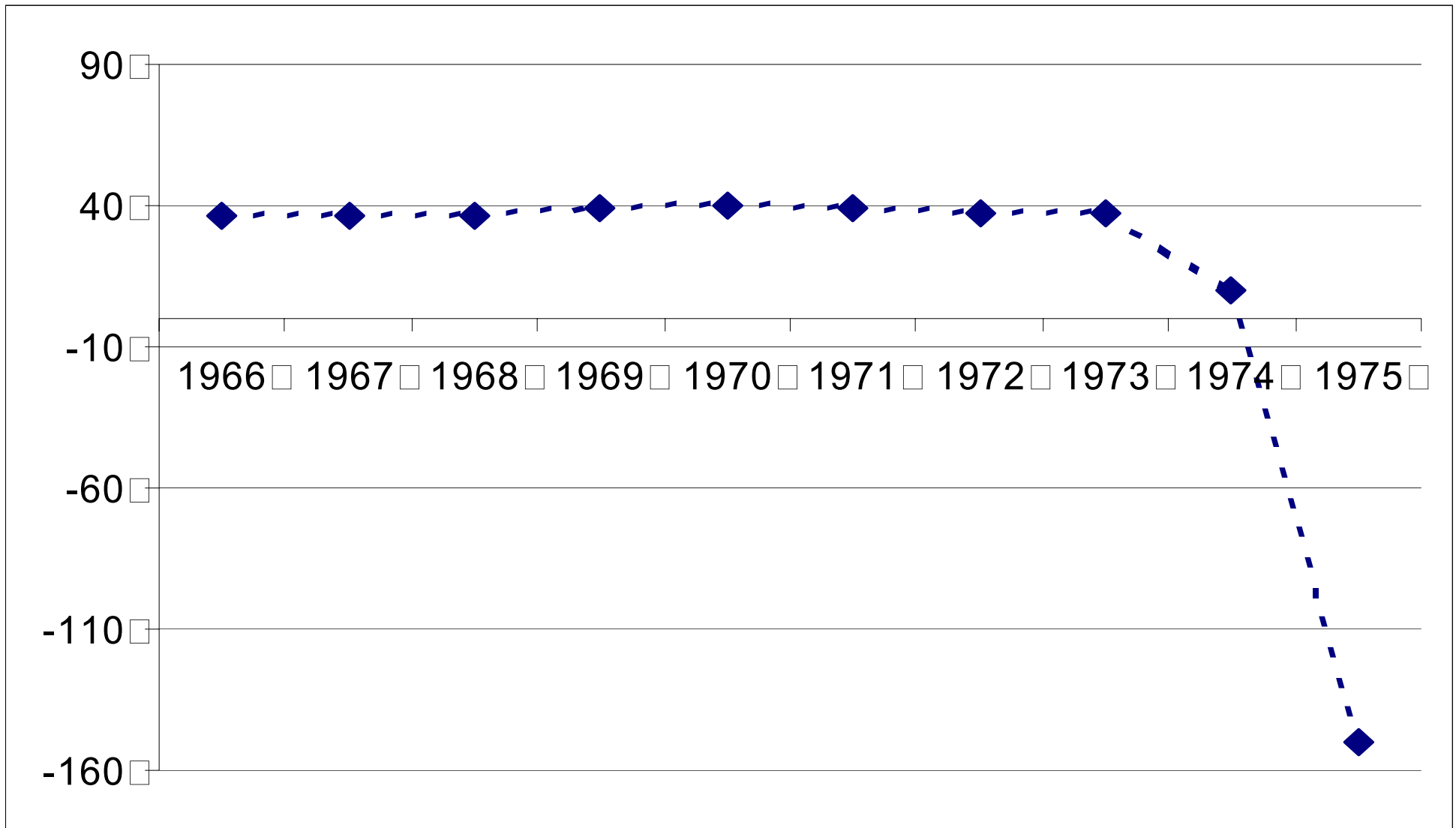
- ▶ Fixed claimants (lenders)
- ▶ Residual claimants (shareholders)
- ▶ Managers

Why do we need a separate financial statement?

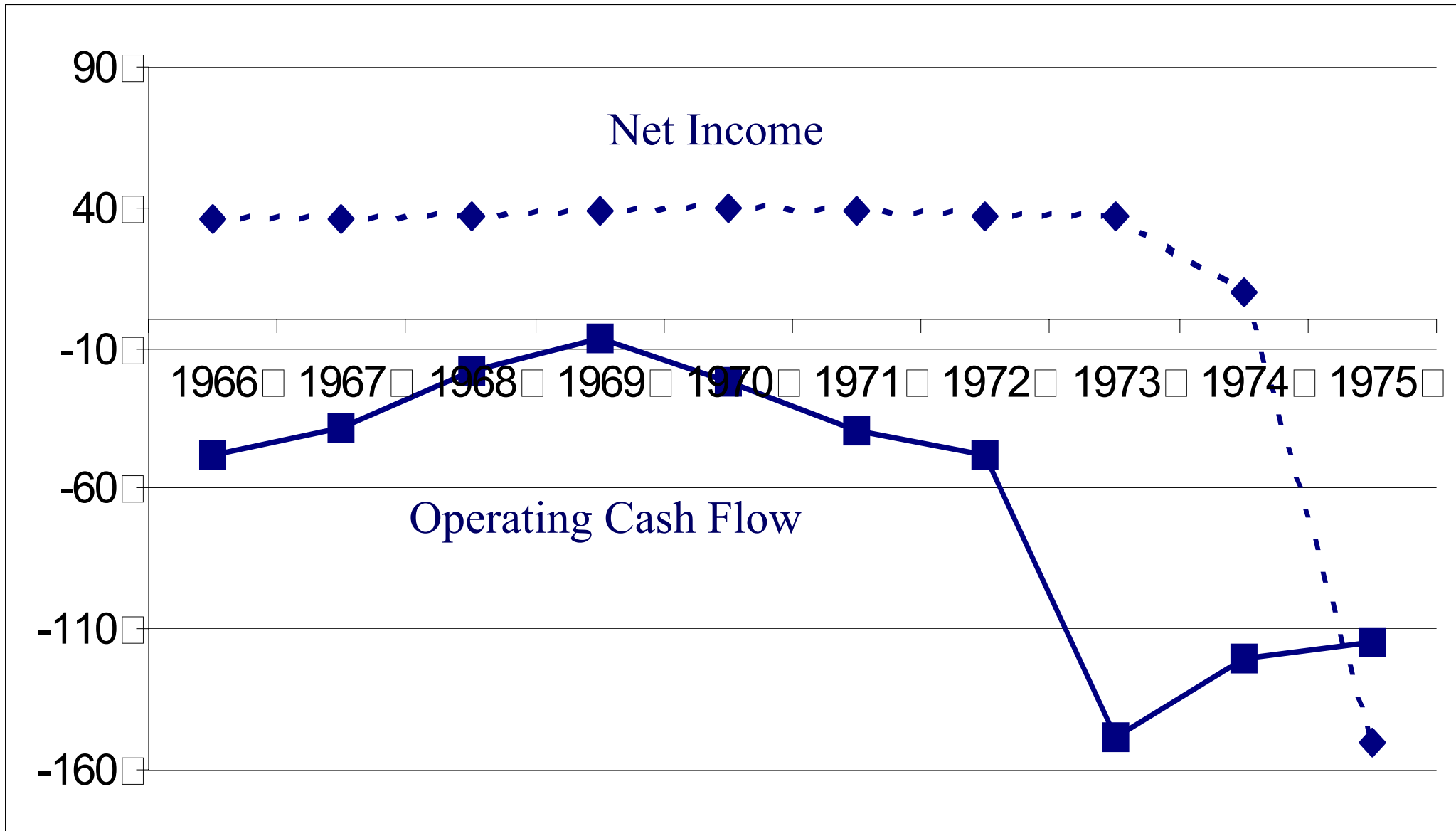
W. T. Grant Bankruptcy



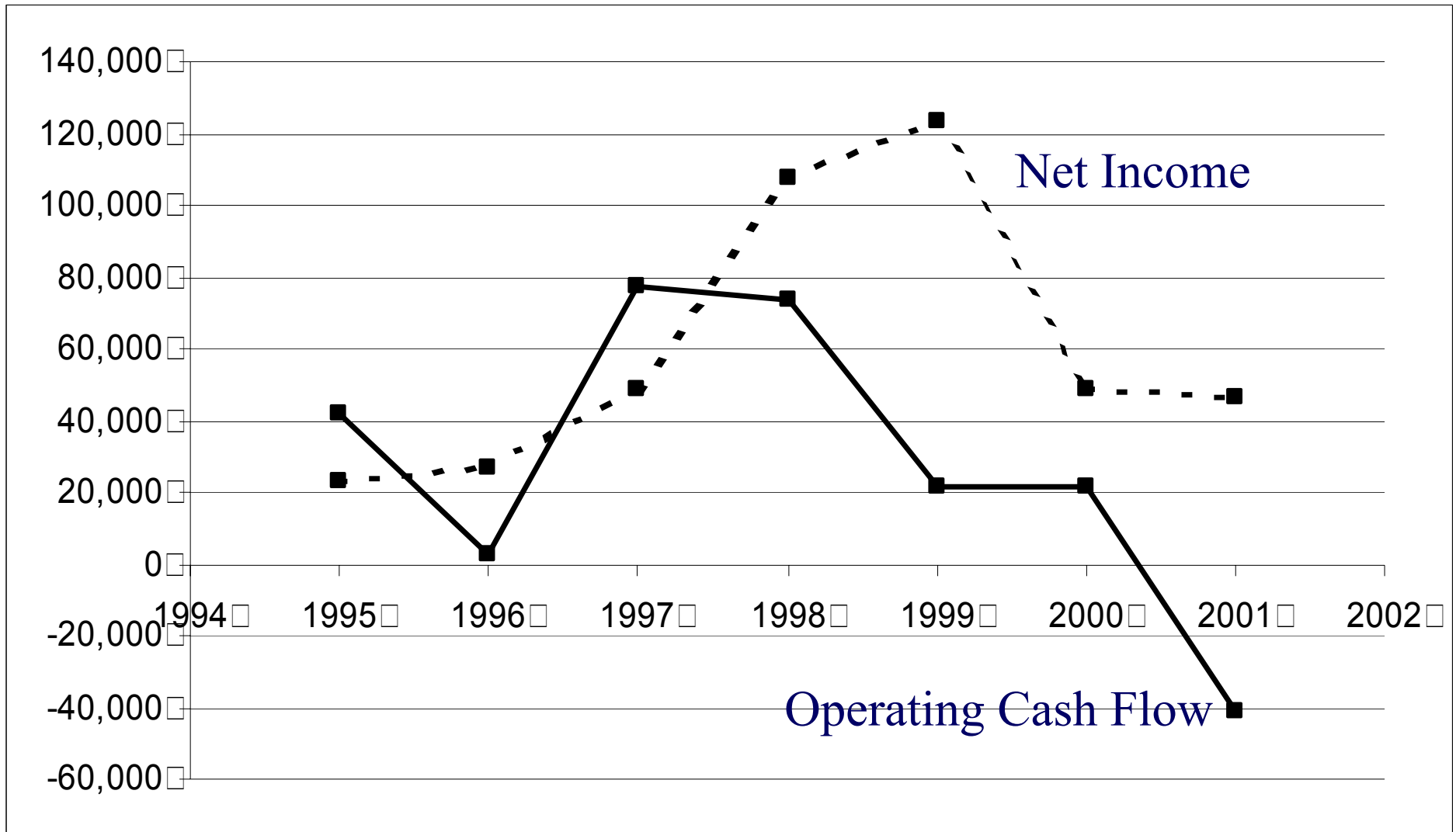
W. T. Grant Bankruptcy



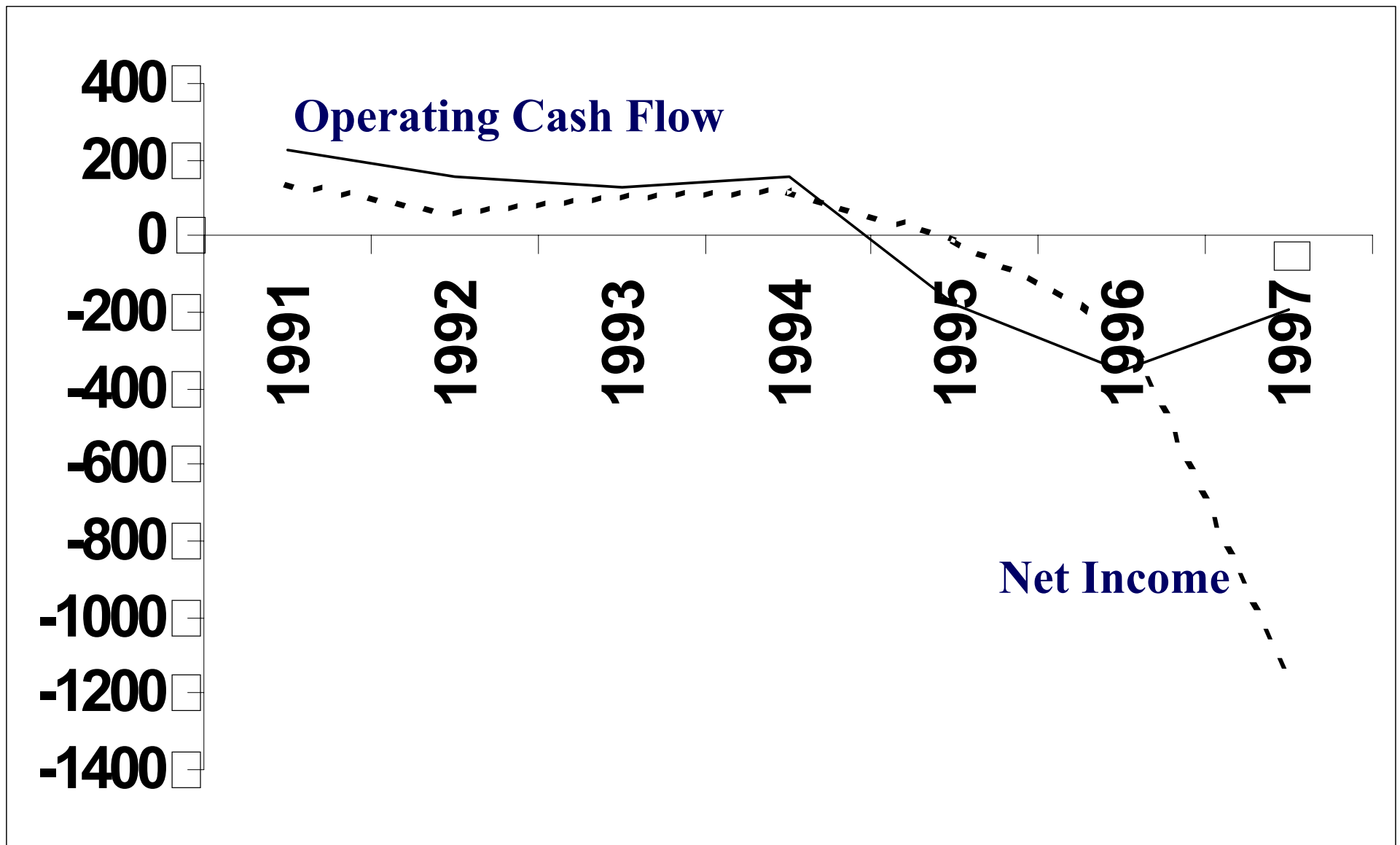
W. T. Grant Bankruptcy



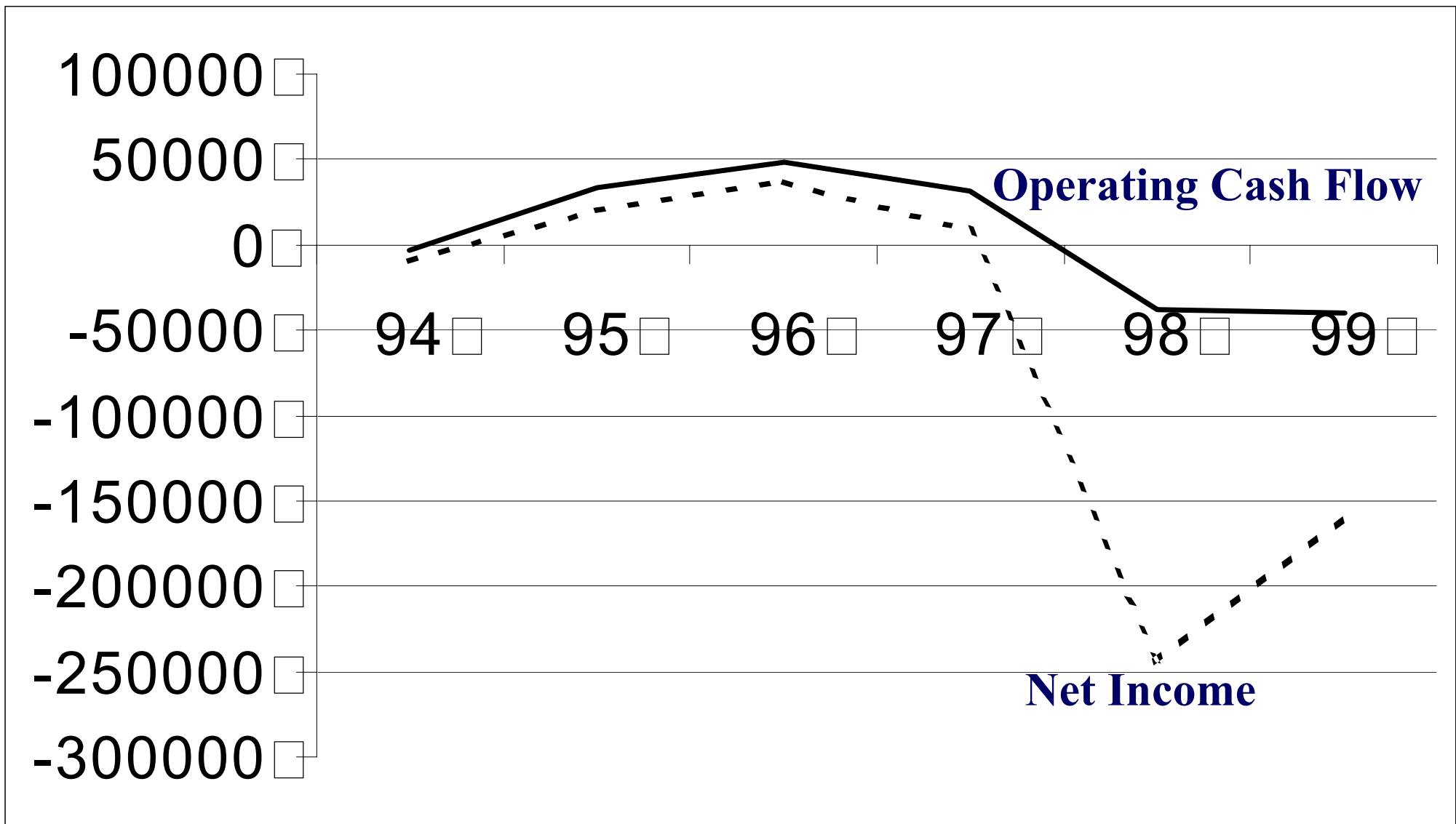
Consolidated Freightways



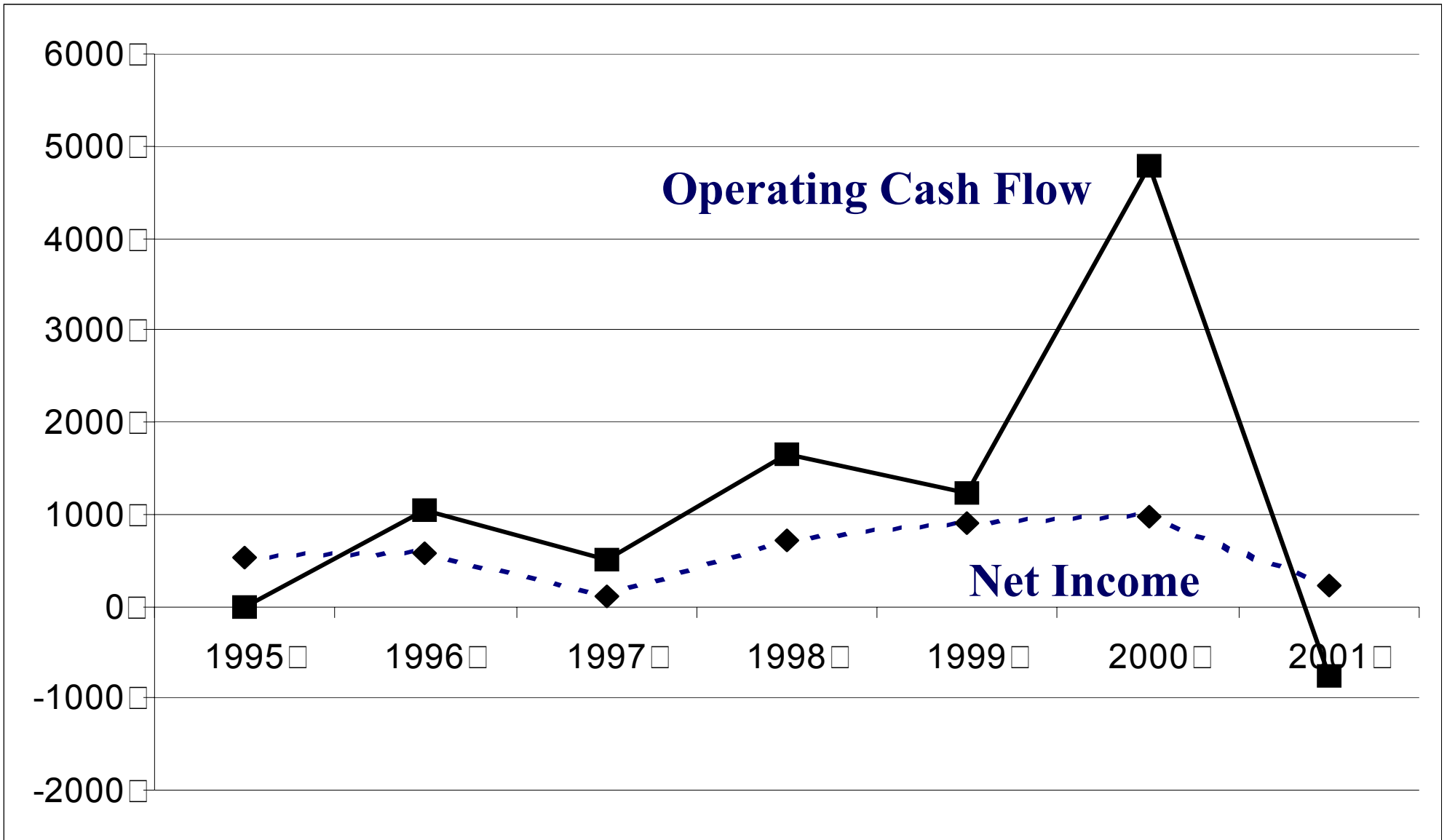
Montgomery Wards Bankruptcy



Planet Hollywood Bankruptcy



Enron



Statement of Cash Flows

Direct or indirect statements

Categorize transactions into one of the following:

▶ Operating Activities

- cash provided by the sale of goods or service, including interest and dividends received
- cash used to pay operating expenses, including interest expense

▶ Investing Activities

- cash used to buy long-term assets and investments
- cash obtained by selling long-term assets and investments

▶ Financing Activities

- cash provided by issuing stock or debt instruments
- cash used to repay debt principal and repurchase stock
- cash used to pay dividends, but **NOT** interest paid on debt

Statement of Cash Flows

▶ **Direct: start from cash transactions**

- **Investing and Financing sections ==> always direct**

▶ **Indirect: start from NI, back out accruals**

- **Cash flow *amount* from operations ==> same as direct**
- **Key difference: *Derivation* of cash flow from operations**

Statement of Cash Flows

- ▶ **What events affect cash flow from operations and net income equally?**

- ▶ **What events affect cash flow from operations but NOT net income?**

- ▶ **What events affect net income but NOT cash flow from operations?**

Statement of Cash Flows

Direct

Beginning Cash

+ Cash rcv'd from customers
+ Interest received
- Cash paid to suppliers
- Cash paid to employees
- Interest paid
+/- other adjustments
= Cash from Operations

+/- Cash from Investing
+/- Cash from Financing
= Ending Cash

Indirect

Beginning Cash

Net Income
+ Increase in payables
- Increase in receivables
+/- other adjustments
= Cash from Operations

+/- Cash from Investing
+/- Cash from Financing
= Ending Cash

Statement of Cash Flows

Balance sheet equation:

$$A(t) = L(t) + E(t) \quad \Rightarrow$$

Differences:

$$\Delta A = \Delta L + \Delta E$$

Decompose:

$$\Delta \text{Cash} + \Delta \text{CA} + \Delta \text{NCA} = \Delta \text{CL} + \Delta \text{NCL} + \Delta \text{CC} + \Delta \text{OE} + \Delta \text{RE}$$

Note that $\Delta \text{RE} = \text{NI} - \text{Div}$, thus after rearranging,

$$\Delta \text{Cash} = \text{NI} - \Delta \text{CA} + \Delta \text{CL} - \Delta \text{NCA} + \Delta \text{NCL} + \Delta \text{OE} + \Delta \text{CC} - \text{Div}$$

Accounts we know:

$$\begin{aligned} \Delta \text{Cash} = & \text{NI} - \Delta \text{netAR} - \Delta \text{Inventory} - \Delta \text{OCA} + \Delta \text{CL} - \Delta \text{netPPE} \\ & - \Delta \text{ONCA} + \Delta \text{NCL} + \Delta \text{OE} + \Delta \text{CC} - \text{Div} \end{aligned}$$

Statement of Cash Flows

$$\Delta\text{Cash} = \Delta\text{Cash}_{\text{operations}} + \Delta\text{Cash}_{\text{investing}} + \Delta\text{Cash}_{\text{financing}}$$

$$\begin{aligned}\Delta\text{Cash}_{\text{operations}} = & \text{NI} + \text{DepExp} - \Delta\text{netAR} - \Delta\text{Inventory} - \Delta\text{OCA} \\ & + \Delta\text{CL} - \text{Gain(Loss)}\end{aligned}$$

$$\begin{aligned}\Delta\text{Cash}_{\text{investing}} = & -\Delta\text{netPPE} + \underline{\text{Gain(Loss)} - \text{DepExp}} - \Delta\text{ONCA} + \Delta\text{OE} \\ = & - \text{Acquisitions} + \text{Disposals} - \Delta\text{ONCA} + \Delta\text{OE}\end{aligned}$$

$$\Delta\text{Cash}_{\text{financing}} = + \Delta\text{NCL} + \Delta\text{CC} - \text{Div}$$

Rules of Significant Noncash Transactions

Some transactions are omitted from the SCF but disclosed elsewhere (such as at the bottom of the SCF) so long as they are material:

- Acquisition of assets by assuming liabilities (including capital lease obligations) or by issuing equity securities
- Exchanges of non-monetary assets
- Refinancing of long-term debt
- Conversion of debt or preferred stock to common stock
- Issuance of equity securities to retire debt