

**YALE  
SOM**  
*Finance Club*

# Technical Session #2: Accounting Basics

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September 15, 2019



**Yale** SCHOOL OF MANAGEMENT  
*Student Organizations*

# Agenda

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- I. Recap: macro and market news; deals
- II. Introduction to three statements
  - I. Income Statement
  - II. Balance Sheet
  - III. Cash Flow Statement
- III. Links between the statements
- IV. Practice questions
- V. Q&A



# Income Statement

Revenue

① Less: Cost of Goods Sold

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Gross Profit

② Less: Operating Expense

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EBITDA

③ Less: D&A

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EBIT (Operating Income)

Less: Interest Expense

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EBT (Earnings Before Tax)

Less: Taxes

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Net Income

① Direct costs that go into the production of goods & services (e.g., raw material, labor, etc.)

② Costs that a firm incur through normal course of business, but not including production of goods  
– SG&A = Sales, Marketing, General & Administrative

③ Accounting costs that reflect the reduction in value of tangible & intangible assets over useful life  
– Non-cash expenses



# Balance Sheet

	Cash
1	Current Assets
2	Long-Term Assets
	<hr/> Total Assets
3	Current Liabilities
4	Long-Term Liabilities
	<hr/> Total Liabilities
5	Common Stock
6	Retained Earnings
	<hr/> Shareholders' Equity

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

- 1 Assets that can be converted to cash within 1 year (e.g., Accounts Receivable, ST Investments, Inventory)
- 2 Property, Plant, & Equipment (PP&E) and Intangibles (goodwill, patent, licenses, etc.)
- 3 Liabilities that must be paid off within 1 year (Accounts Payable, ST Debt)
- 4 Bonds, loans, or mortgages with maturity > 1 years
- 5 Stock of a company traded on the public markets
- 6 Profits that a company generates and does not redistribute to their shareholders in form of a dividend



# Cash Flow Statement

1	Net Income
2	Add: D&A (non-cash expenses)
2	Change in Working Capital
	Cash Flow from Operations (CFO)
3	Capital Expenditures
	Cash Flow from Investing (CFI)
4	Dividends
5	Cash Raised/Spent on Debt
6	Cash Raised/Spent on Equity
	Cash Flow from Financing (CFF)
	Beginning Cash
	Add: Change in Cash
	Ending Cash

- 1 Adding back any non-cash expenses, such as D&A to cash flow from operations
- 2 Keep track of changes in Current Assets & Liabilities
  - **Increase** in assets = **decrease** in cash flow
  - **Increase** in liabilities = **increase** in cash flow
- 3 Cash used to invest in Long-Term Assets (PP&E) or generated from sale of existing assets
- 4 Portion of net profits paid to shareholders at discretion of management
- 5 Keep track of changes in Long-Term Liabilities
- 6 Keep track of changes in Common Stock



# The Links Between Three Statements

Income Statement	Balance Sheet	Cash Flow Statement
Revenue	Cash	<b>Net Income</b> ←
Less: Cost of Goods Sold	Current Assets	Add: D&A (non-cash expenses)
Gross Profit	Long-Term Assets	Change in Working Capital
Less: Operating Expense	Total Assets	Cash Flow from Operations (CFO)
EBITDA	Current Liabilities	Capital Expenditures
Less: D&A	Long-Term Liabilities	Cash Flow from Investing (CFI)
EBIT (Operating Income)	Total Liabilities	<b>Dividends</b>
Less: Interest Expense	Common Stock	Cash Raised/Spent on Debt
EBT (Earnings Before Tax)	<b>Retained Earnings</b> ←	Cash Raised/Spent on Equity
Less: Taxes	Shareholders' Equity	Cash Flow from Financing (CFF)
<b>Net Income</b> →		Beginning Cash
		Add: Change in Cash
		Ending Cash

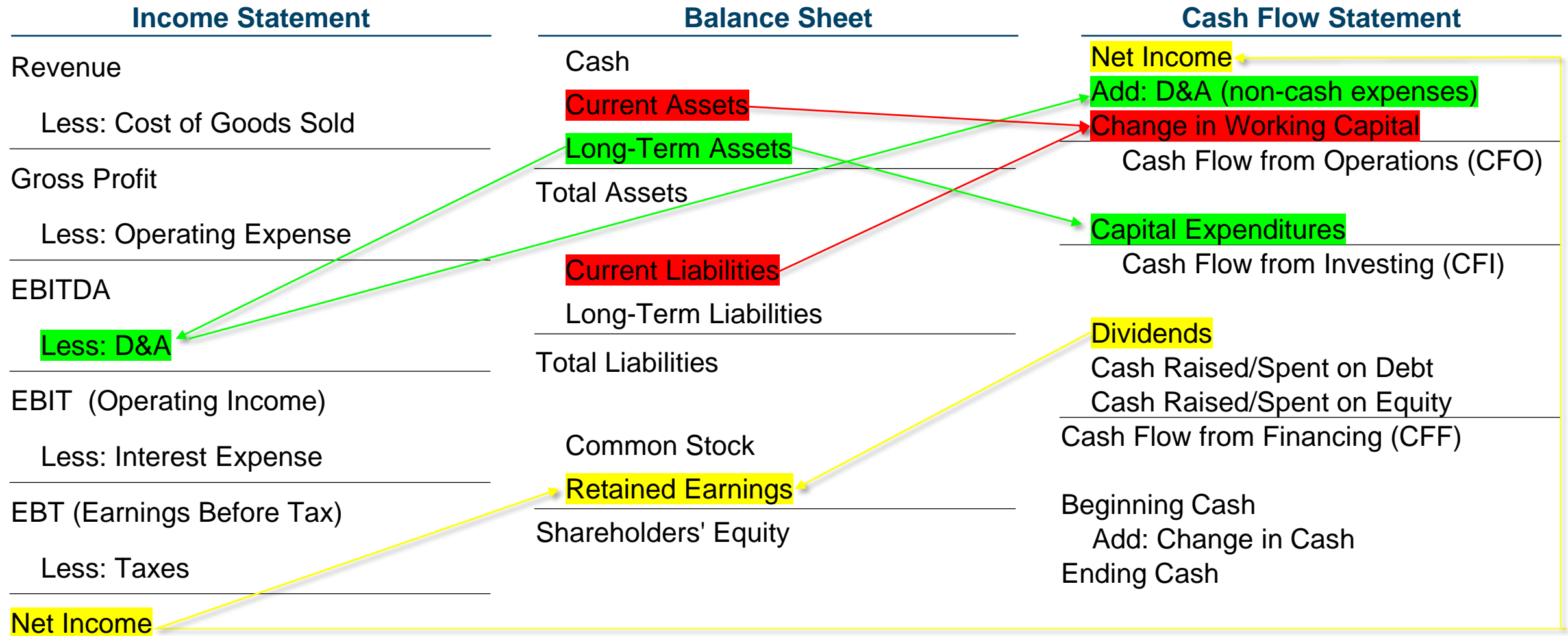


# The Links Between Three Statements (Cont'd)

Income Statement	Balance Sheet	Cash Flow Statement
Revenue	Cash	<b>Net Income</b>
Less: Cost of Goods Sold	Current Assets	<b>Add: D&amp;A (non-cash expenses)</b>
Gross Profit	<b>Long-Term Assets</b>	Change in Working Capital
Less: Operating Expense	Total Assets	Cash Flow from Operations (CFO)
EBITDA	Current Liabilities	<b>Capital Expenditures</b>
<b>Less: D&amp;A</b>	Long-Term Liabilities	Cash Flow from Investing (CFI)
EBIT (Operating Income)	Total Liabilities	<b>Dividends</b>
Less: Interest Expense	Common Stock	Cash Raised/Spent on Debt
EBT (Earnings Before Tax)	<b>Retained Earnings</b>	Cash Raised/Spent on Equity
Less: Taxes	Shareholders' Equity	Cash Flow from Financing (CFF)
<b>Net Income</b>		Beginning Cash
		Add: Change in Cash
		Ending Cash

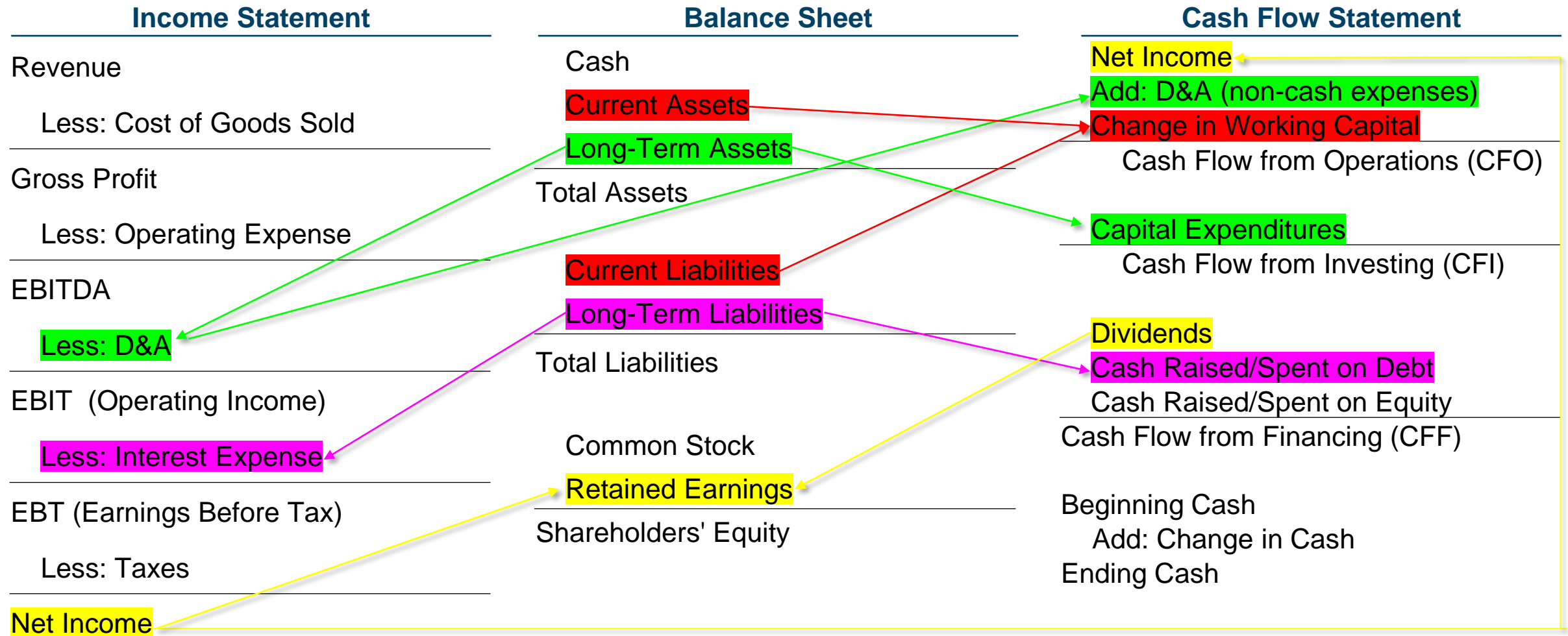


# The Links Between Three Statements (Cont'd)

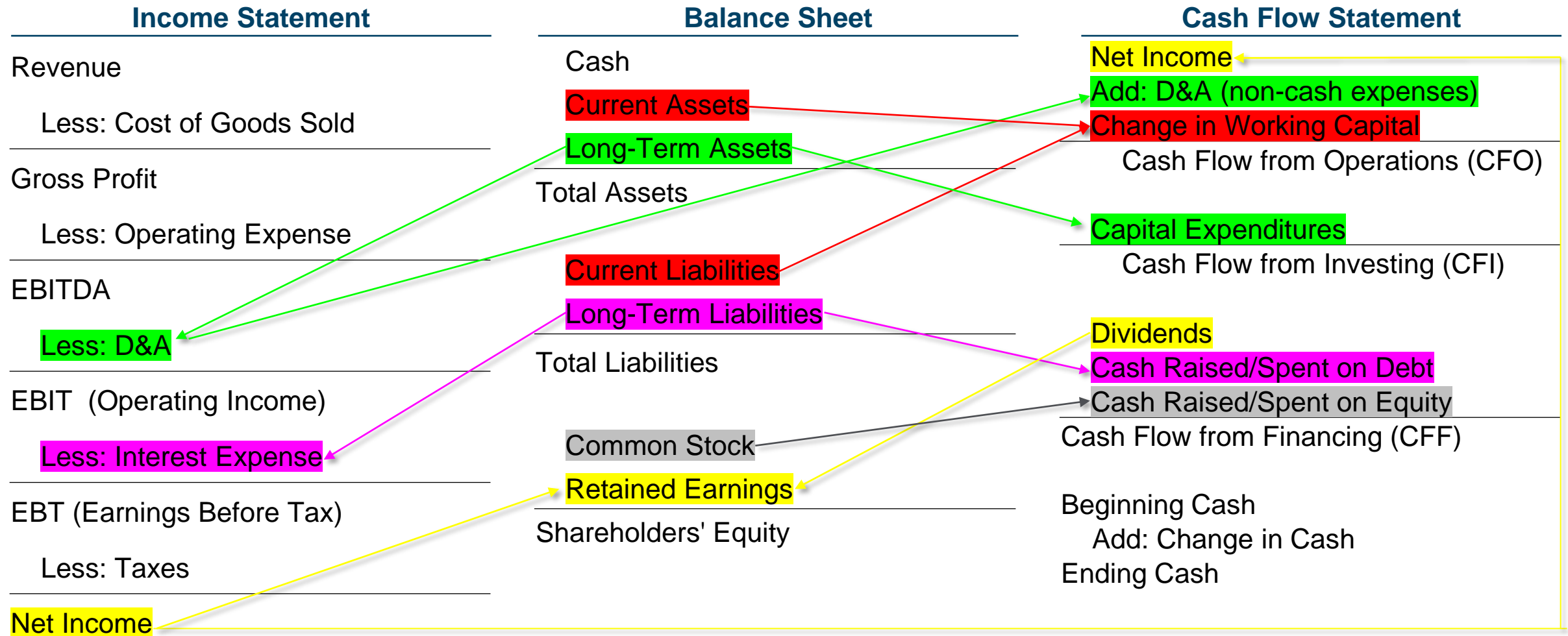




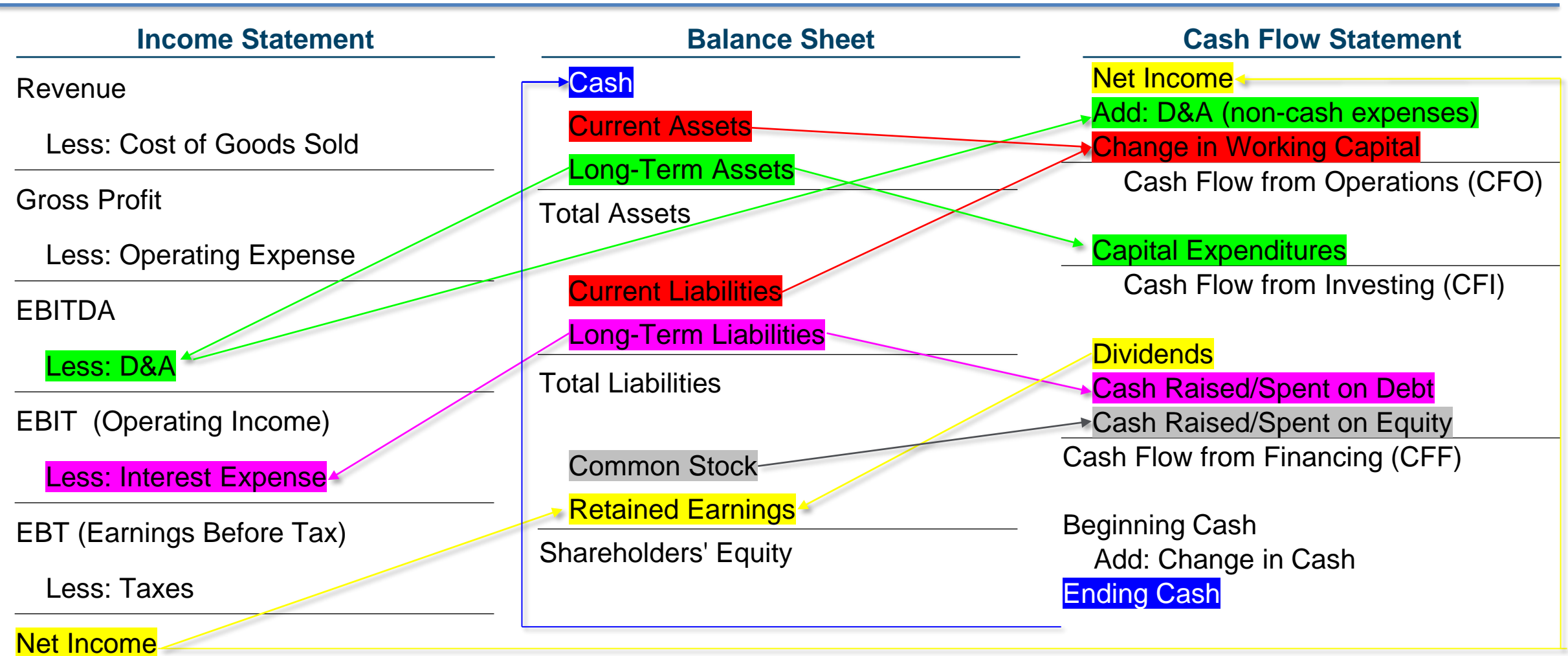
# The Links Between Three Statements (Cont'd)



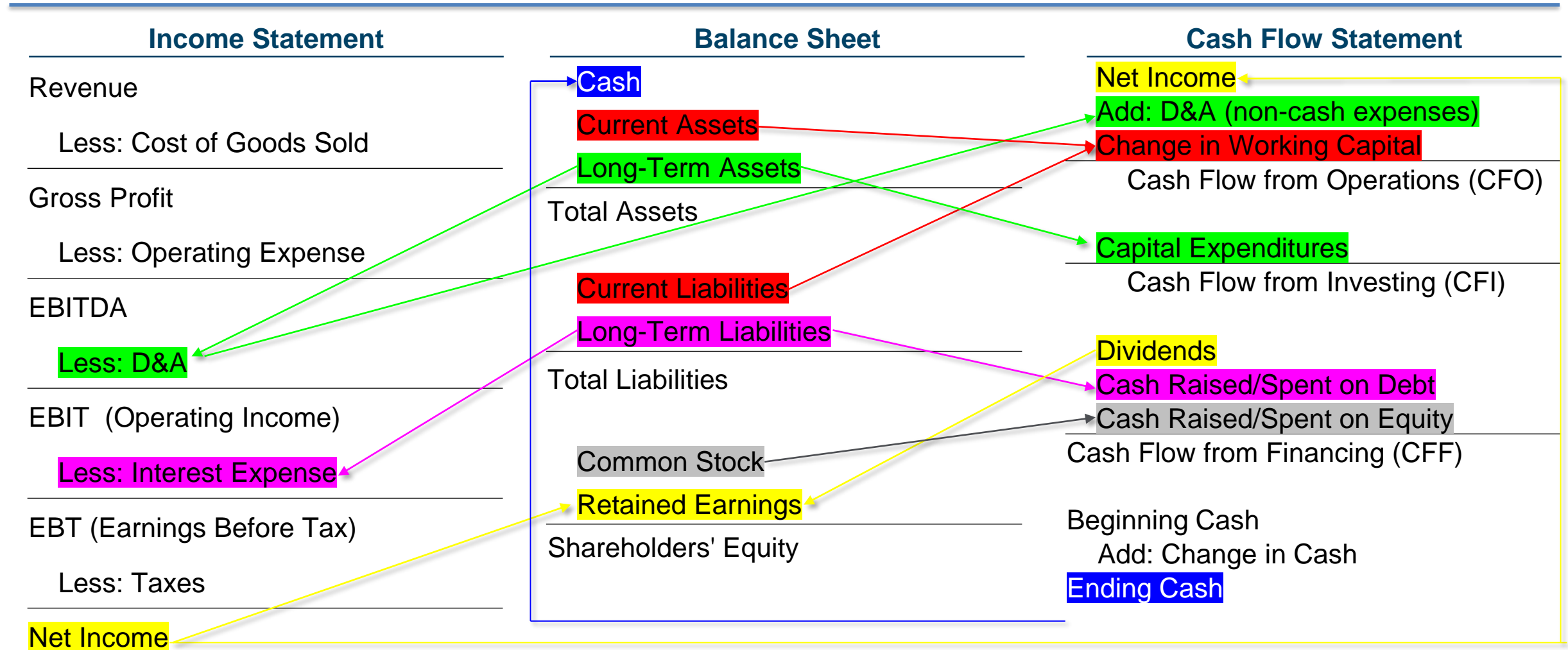
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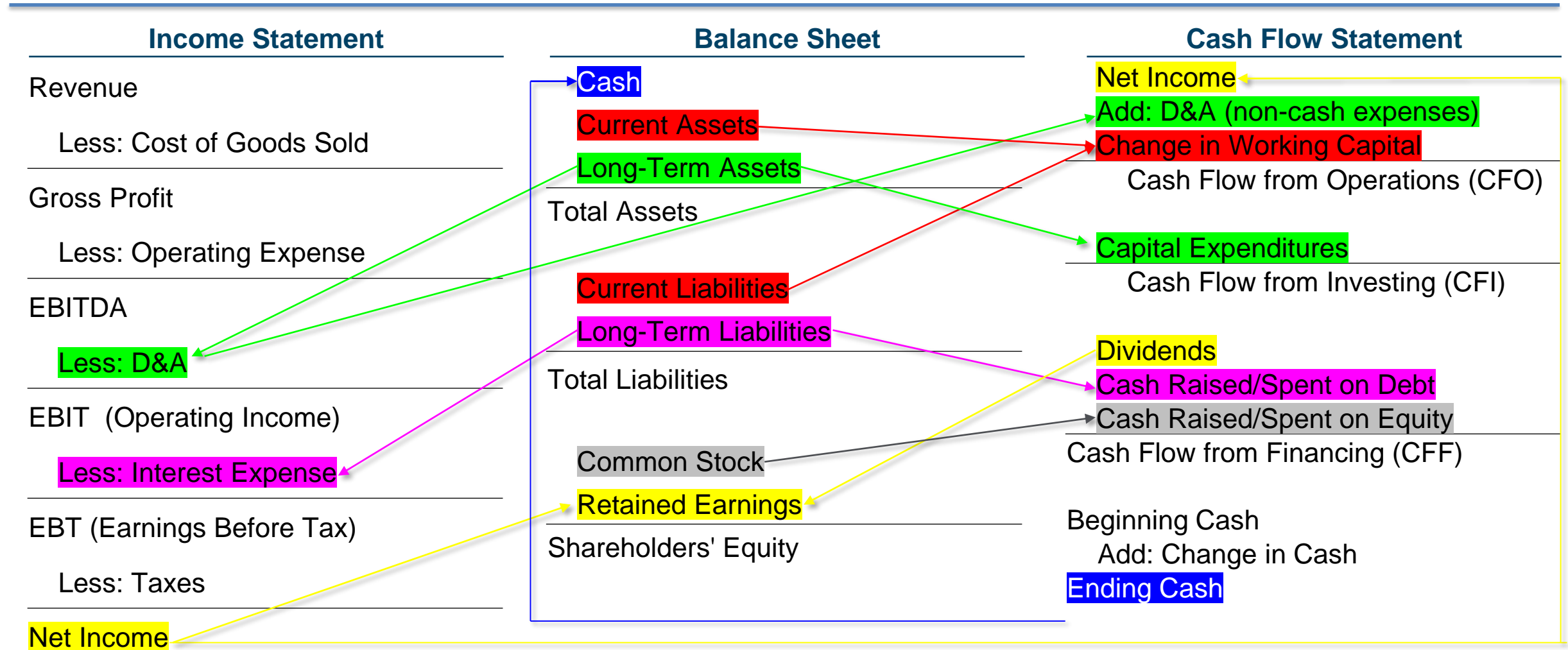
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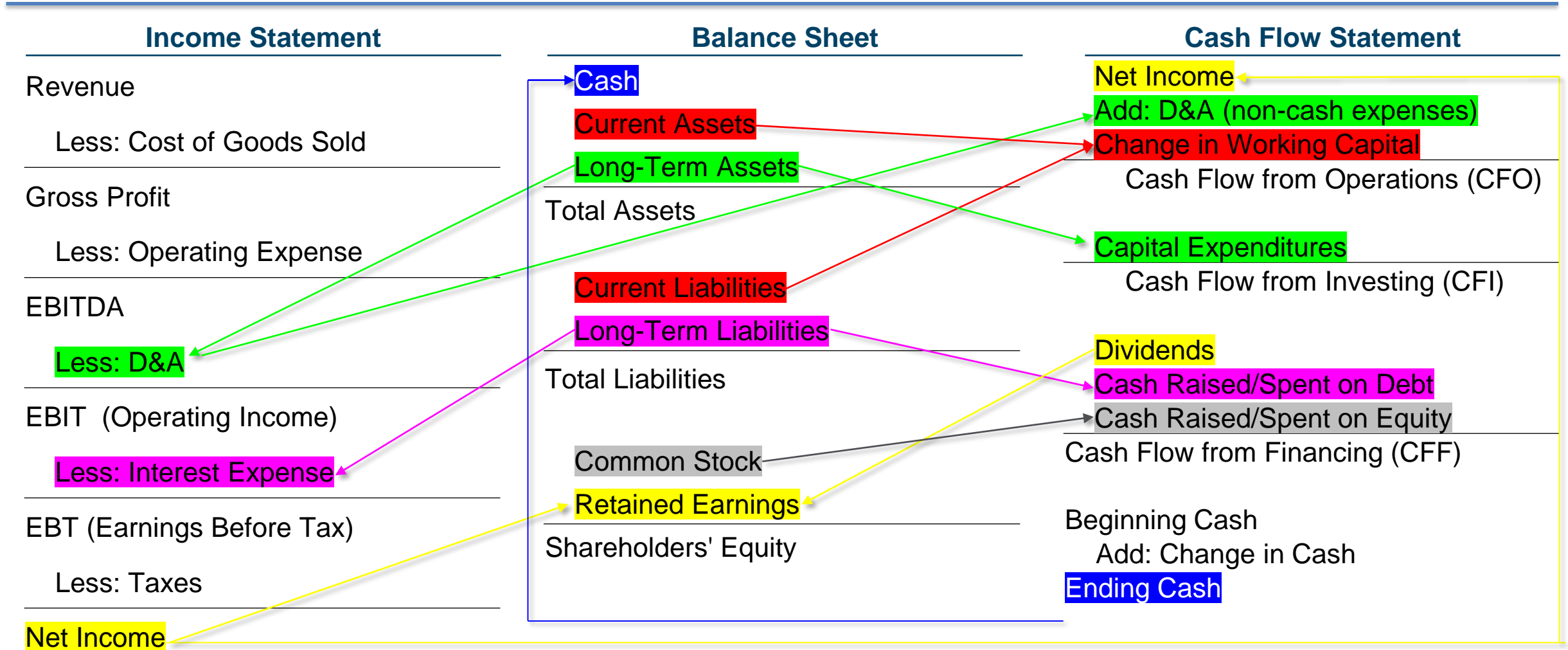
# Practice Question 1: What happens when Depreciation goes up by \$100?



## Practice Question 2: What happens when Inventory goes up by \$100?

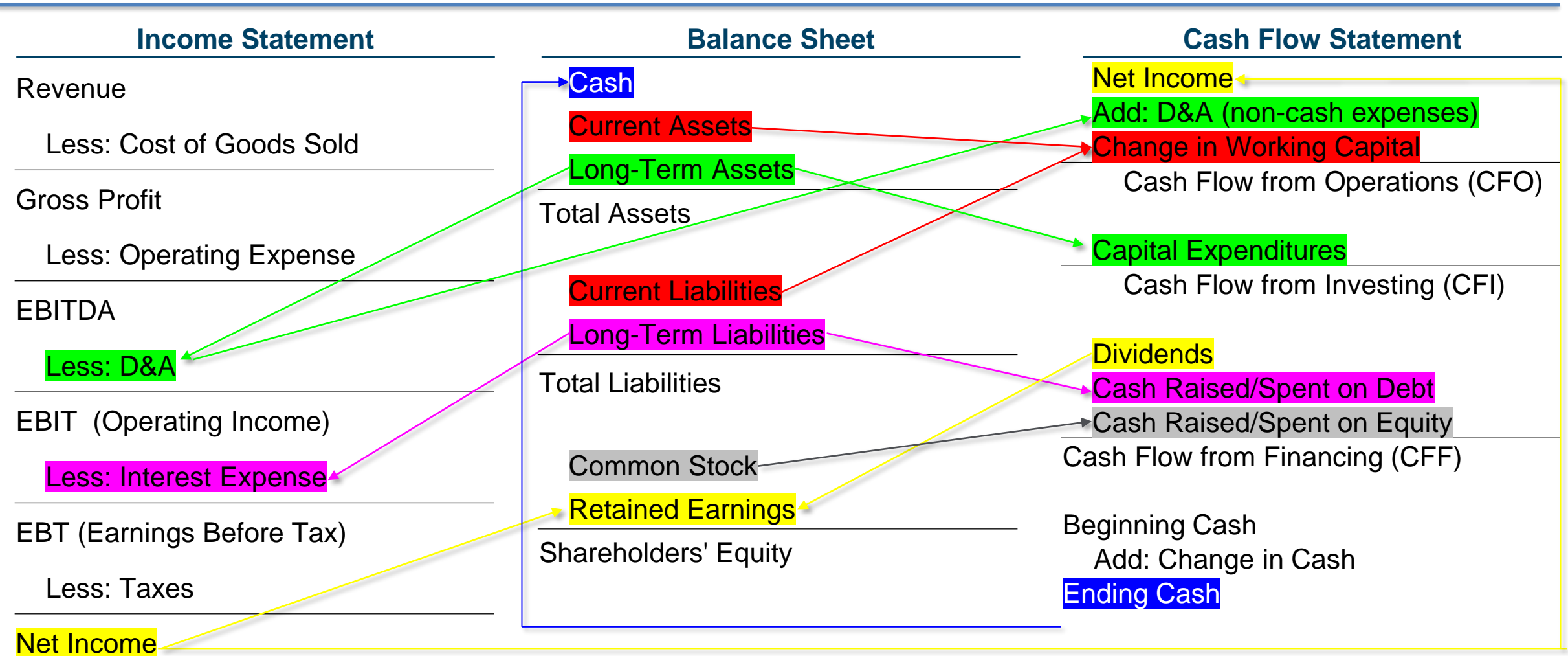


# Practice Question 3: What happens when a company raises \$100 in Debt?



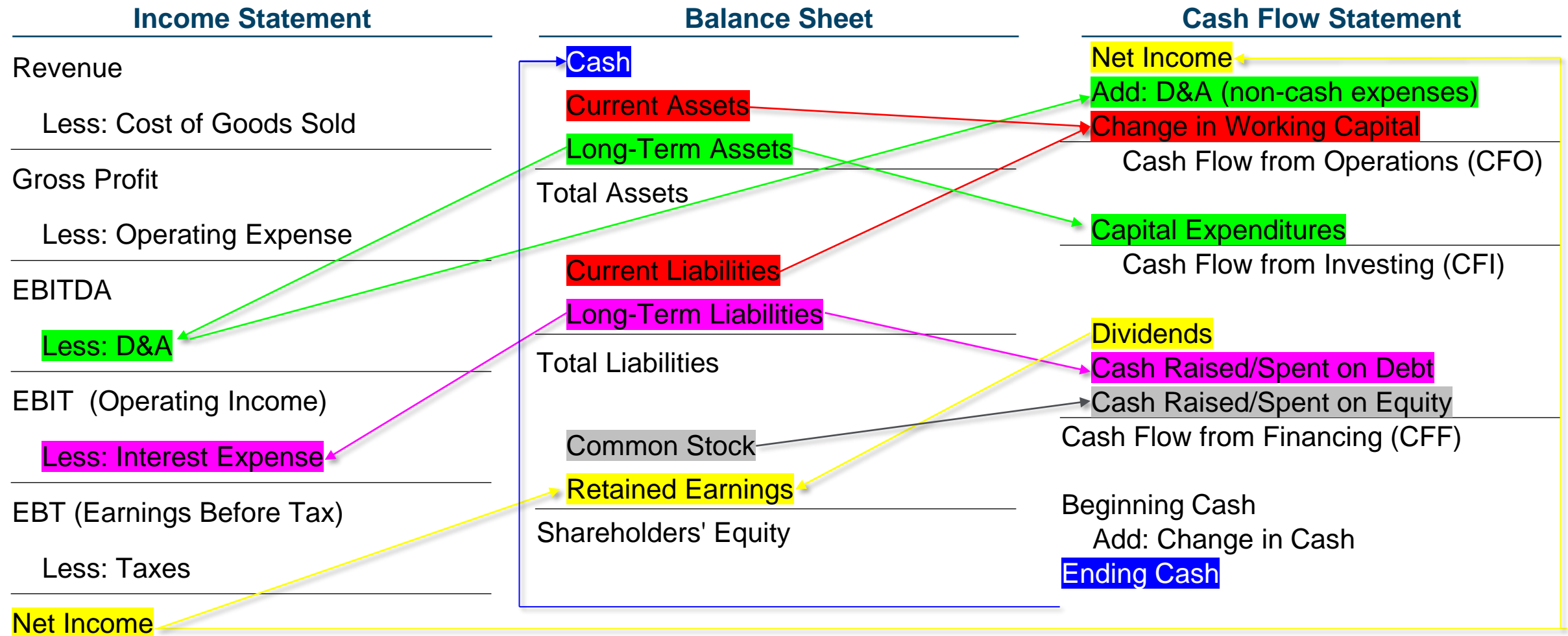
$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

# Practice Question 4: What happens in the beginning of Year 1 when a company buys \$100 equipment with cash?





# Practice Question 5: What happens in the end of Year 1 after 10% depreciation when a company buys \$100 equipment with cash?





# Q&A

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