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# Homework 2

## Question 1:

| Example | Principal | Agent |
|---|---|---|
| Enron | Enron stockholders | Company's officers and board of directors |
| Goldman Sachs | Investors and homeowners | Goldman Sachs and other stock brokerage houses |
| Boeing | Boeing employees (shareholders) | Boeing executives |
| WorldCom | Personal Loans | WorldCom executives (CEO Bernard Ebbers) |

## Question 2:

a.

**BV Company 2014 Balance Sheet**

| **ASSETS** | | **LIABILITIES AND STOCKHOLDERS' EQUITY** | |
|---|---|---|---|
| **Current assets:** | | **Current liabilities:** | |
| Cash | $256 | Accounts payable | $82 |
| Accounts receivable | 122 | Notes Payable | $34 |
| Inventories | 76 | Total current liabilities | $116 |
| Total current assets | $454 | | |
| **Fixed assets:** | | **Long-term liabilities:** | |

| | | | |
|---|---|---|---|
| Fixed assets | $1,675 | Long-term debt | $345 |
| Total fixed assets | $1,675 | Total long-term liabilities | $345 |
| | | **Stockholders' equity:** | |
| | | Accumulated retained earnings | $1,293 |
| | | Common stock | $375 |
| | | Total equity | $1,668 |
| Total assets | $2,129 | Total liabilities and SHE | $2,129 |

## BV Company 2014 Income Statement

| | |
|---|---|
| Revenue | $850 |
| Cost of Goods Sold | $340 |
| Selling and administrative expenses | $170 |
| Interest | $22 |
| Pretax Income | $318 |
| Taxes (4.36%) | $13.86 |
| Net Income | $304.14 |

b.
5% annual increase Net Income
3% annual increase stock price
No dividends distributed or buyback or stock sells.
BV's 2014 Equity: $1,668

BV's 2019 Equity:
Net Income and Stock price are supposedly directly proportional to Equity.
For stock price, 375 * (1.03)^5 = $434.73 from initial $375 2014 stock. ($59.73 increase)
For Net Income, 304.14 * (1.05^5) = 388.16 from initial net income $304.14 in 2014 (84.03 increase)

(double check how net income affects equity)

$1,668 + $59.73 + $84.03
BV's 2019 Equity: $1811.76

# Question 3:

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**Explain why having access to low cost debt would encourage companies to keep their foreign earned income abroad.**

Having access to low cost debt would encourage companies to keep their foreign earned income abroad because there isn't the urgency of needing the earned income to be "in the US" in order to alleviate the debt. Given that a company has access to low cost debt means that the liabilities aren't as high or dangerous that would otherwise give a negative PR for the company or deter incoming investors. Consequently, the companies would abuse the accounting loopholes of keeping the profits under their foreign subsidiaries which will help them maximize their income by avoiding the otherwise taxed income.

# Question 4:

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Source: https://www.marketwatch.com/investing/stock/bhc/financials/balance-sheet

2016 Retained Earnings: -5.13B
2019 Retained Earnings: -7.45B
ΔRetained Earnings: -2.32B

Retained earnings is defined as the amount of money that the company puts back into itself. This is usually made up of net income minus any distributed dividends. Since the article doesn't mention dividend distribution, and the value of the company seems unstable, it's likely that BHC doesn't abide by an established dividend policy. That means that the source of this drop in retained earnings must come from a negative net income.

Net income is defined as the total revenue minus expenses. The article explicitly states that "In 2019, BHC earned an operating income of $1.33 billion, paid $1.61 billion as interest expense, and ended up with a loss of $1.78 billion from continuing operations". We can infer that BHS has been falling victim to this trend from 2016-2019, resulting in them operating at a loss due to severe interest payments, leading to a negative net income, and therefore, negative retained earnings.

# Question 5:

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Dividends paid to stockholders:

$$\text{Dividends} = \text{Net income} - (\Delta\text{Retained earnings})$$
$$\text{Dividends} = 119,500 - (36,300 - 27,100)$$
$$\text{Dividends} = 110,300$$

Cash flow from assets:

$$\text{CFA} = \text{OCF} - \Delta\text{NWC} - \text{Net capital spending}$$
$$\text{OCF} = \text{EBIT} + \text{Depreciation} - \text{Taxes}$$
$$\text{EBIT} = \text{Income before taxes}$$
$$\text{EBIT} = 164,400$$
$$\text{OCF} = 164,400 + 18,000 - 44,890$$
$$\text{OCF} = 137,510$$
$$\Delta\text{NWC} = \text{NWC}_f - \text{NWC}_i$$
$$\Delta\text{NWC} = (\text{CA}_f - \text{CL}_f) - (\text{CA}_i - \text{CL}_i)$$
$$\Delta\text{NWC} = (260,700 - 46,400) - (223,900 - 67,800)$$
$$\Delta\text{NWC} = 58,200$$
$$\text{Net capital spending} = \text{NFA}_f - \text{NFA}_i + \text{Depreciation}$$
$$\text{Net capital spending} = (\text{TA}_f - \text{CA}_f) - (\text{TA}_i - \text{CA}_i) + \text{Depreciation}$$
$$\text{Net capital spending} = 102,000 - 111,000 + 18,000$$
$$\text{Net capital spending} = 9,000$$
$$\text{CFA} = 137,510 - 58,200 - 9,000$$
$$\text{CFA} = 70,310$$

Cash flow to creditors:

$$\text{Cash flow to creditors} = \text{Interest} - \text{Net new LTD}$$
$$\text{Cash flow to creditors} = \text{Interest} - (\text{LTD}_i - \text{LTD}_f)$$
$$\text{Cash flow to creditors} = \text{Interest} - (40,000 - 70,000)$$
$$\text{Cash flow to creditors} = 30,000$$

Cash flow to stockholders:

$$\text{Cash flow to stockholders} = \text{Cash flow from assets} - \text{Cash flow to creditors}$$
$$\text{Cash flow to stockholders} = 70,310 - 30,000$$
$$\text{Cash flow to stockholders} = 40,310$$