ECON 133 – Securities Markets – FALL 2010, UCSC
HOMEWORK # 1 AK

1. **CH.1.5** Real assets are assets used to produce goods and services. Financial assets are claims on real assets or the income generated by them.
2. **CH. 1.9**
   a. The bank loan is a financial liability for Lanni. Lanni's IOU is the bank's financial asset. The cash Lanni receives is a financial asset. The new financial asset created is Lanni's promissory note held by the bank.
   b. The cash paid by Lanni is the transfer of a financial asset to the software developer. In return, Lanni gets a real asset, the completed software. No financial assets are created or destroyed. Cash is simply transferred from one firm to another.
   c. Lanni sells the software, which is a real asset, to Microsoft. In exchange Lanni receives a financial asset, 1,500 shares of Microsoft stock. If Microsoft issues new shares in order to pay Lanni, this would constitute the creation of new financial asset.
   d. In selling 1,500 shares of stock for $120,000, Lanni is exchanging one financial asset for another. In paying off the IOU with $50,000 Lanni is exchanging financial assets. The loan is "destroyed" in the transaction, since it is retired when paid.
3. **CH.1.10**
   a.

Assets		*Liabilities & Shareholders' equity*	
Cash	$70,000	Bank loan	$50,000
Computers	30,000	Shareholders' equity	50,000
Total	$100,000	Total	$100,000

Ratio of real to total assets = $30,000/$100,000 = 0.30

   b.

Assets		*Liabilities & Shareholders' equity*	
Software product*	$70,000	Bank loan	$50,000
Computers	30,000	Shareholders' equity	50,000
Total	$100,000	Total	$100,000

*Valued at cost
Ratio of real to total assets = $100,000/$100,000 = 1.0

c.

Assets		Liabilities & Shareholders' equity	
Microsoft shares	$125,000	Bank loan	$50,000
Computers	30,000	Shareholders' equity	105,000
Total	$155,000	Total	$155,000

Ratio of real to total assets = $30,000/$155,000 = 0.2

Conclusion: when the firm starts up and raises working capital, it will be characterized by a low ratio of real to total assets. When it is in full production, it will have a high ratio of real assets. When the project "shuts down" and the firm sells it

4. **CH.3.6**

A stop order is a trade is not to be executed unless stock hits a price limit. The stop-loss is used to limit losses when prices are falling. An order specifying a price at which an investor is willing to buy or sell a security is a limit order, while a market order directs the broker to buy or sell at whatever price is available in the market.

5. **CH.3.10**
   a. In principle, potential losses are unbounded, growing directly with increases in the price of IBM.

   b. If the stop-buy order can be filled at $128, the maximum possible loss per share is $8. If the price of IBM shares go above $128, then the stop-buy order would be executed, limiting the losses from the short sale.
6. **CH.3.17**
   a. Initial margin is 50% of $5,000 or $2,500.

   b. Total assets are $7,500 ($5,000 from the sale of the stock and $2,500 put up for margin). Liabilities are 100P. Therefore, net worth is ($7,500 – 100P). A margin call will be issued when:

   $$\frac{\$7{,}500 - 100P}{100P} = 0.30 \quad \text{when P = \$57.69 or higher}$$
7. **CH.3.21**
   a. You will not receive a margin call. You borrowed $20,000 and with another $20,000 of your own equity you bought 1,000 shares of Disney at $40 per share. At $35 per share, the market value of the stock is $35,000, your equity is $15,000, and the percentage margin is: $15,000/$35,000 = 42.9%. Your percentage margin exceeds the required maintenance margin.

b. You will receive a margin call when:

$$\frac{1{,}000P - \$20{,}000}{1{,}000P} = 0.35 \quad \text{when } P = \$30.77 \text{ or lower}$$

8. Trade consummated: 500 @ \$101.00
   750 @ \$101.50

   New Bid: 250 @ \$102.00

BID	OFFER/ASK
	1000 @ \$102.50
	1500 @ \$102.25
250 @ \$102.00	
1750 @ \$99.50	
2500 @ \$99.25	
1000 @ \$99.00	
500 @ 98.75	

New insider market: (250@ \$102.00, 1500 @ \$102.25)

9. What proposal did Irving Fisher make regarding the way stocks should be valued?

   Discounted present value of dividends with some adjustment to the total thus obtained for risk.

10. What findings did Edgar Smith report in his 1924 book regarding the long-term returns on stocks and bonds?

    Long term stock returns were well in excess of returns on bonds.