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“Hour (Period)”	Your Discussion Section number – see below	101, 102, ...

Section	Day/time	GSI Name
101	Tu 1-2P	Ignacio Errazuriz
102	Tu 2-3P	Rajasi Desai
103	Tu 3-4P	Rajasi Desai
104	Tu 5-6P	Maria Antolinez
105	W 9-10A	Jonathan Heyne
106	W 10-11A	Adriana Bonifaz
107	W 11-12P	Vincenzo Elifani
108	W 12-1P	Cristina Paulsen
109	W 1-2P	Ignacio Errazuriz
110	W 2-3P	Jose Becerra
111	W 3-4P	Jose Becerra

Section	Day / Time	GSI Name
112	W 4-5P	Luis Arnaboldi
113	W 5-6P	Luis Arnaboldi
114	Th 1-2P	Stan Cataldo
115	Th 2-3P	Azat Sembayev
116	Th 3-4P	Adriana Bonifaz
117	Th 5-6P	Azat Sembayev
119	Th 9-10A	Vincenzo Elifani
120	Th 10-11A	Stan Cataldo
121	Th 11-12P	Maria Antolinez
122	Th 12-1P	Cristina Paulsen

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UGBA 10 – Principles of Business

MODULE 3 EXAM – Spring 2019 4/12/2019

SOLUTION

FINANCE & ACCOUNTING

Instructor: Professor Briginshaw

1. What is the meaning of “bank run” (sometimes called “run on the bank”), in the context of finance and economics?
 - a. Regular messenger or courier traffic between bank branches, because some legal documents can’t be emailed
 - b. The process of traveling to the bank to withdraw money
 - c. A phenomenon where erosion of confidence in a bank causes many depositors to panic and try and withdraw their money from the bank all at once
 - d. An increase in lending by a bank, often caused by healthy GDP growth

Answer: C

Reference: Discussed in Lecture 5 slide 21

2. During our discussion of Netflix in lectures 4-5, four issues were identified. Which of the four can be seen as positive for Netflix?
 - a. Business viability: Contribution margin of Netflix
 - b. Possible limits to growth for Netflix
 - c. Threat of new entrants
 - d. Competitor behavior and possible strategic behavior of suppliers

Answer: A

Explanation: Netflix’s contribution margin per subscriber is relatively high, as there is very small additional cost when one new subscriber is added. This is a signal of good business viability and is positive for Netflix. The other three issues are limitations or threats. Reference: lecture 5 discussion.

3. Mark Carney is the governor of the Bank of England. The Bank of England is the central bank of the UK (Britain) which manages the UK currency, the pound sterling. The Bank and Carney have publicly warned about the negative consequences of “Brexit”. What is “Brexit”?
 - a. Brexit is Britain leaving the European Union (EU)
 - b. Brexit is Britain leaving the European Currency (The Euro)
 - c. Brexit is Britain leaving the Transatlantic Union (TU)
 - d. Brexit is the breakup of the UK into a federation of states such as Scotland and London

Answer: A (as noted in the question, Britain is not in the Euro, as it uses the pound as currency).

- 4) Which of the following is the most important tool of **fiscal** policy?
 - a) Federal Funds Rate
 - b) Open market operations
 - c) Control of the Reserve Requirement
 - d) Spending and Taxation decisions by Congress
 - e) All of the above are tools of fiscal policy

Answer: d

Explanation: Tax and spending decisions by Congress is how **fiscal** policy operates. All of the other items are tools of **monetary** policy.

5) Which of the following is the name for a portion of the ownership of a corporation?

- A) Schedule C
- B) Share of stock
- C) Partnership
- D) LLC
- E) Dividend

Answer: B

Explanation: B) A corporation will sell stocks, portions of ownership, in order to raise capital. Stock represents a portion of ownership in a corporation.

6) Which of the following terms refers to a bundling of stocks, bonds, and other securities?

- A) Blue-chips
- B) Mutual funds
- C) Exchanges
- D) Commodities

Answer: B

Explanation: B) Mutual funds are created by companies such as T. Rowe Price and Vanguard that pool cash investments from individuals and organizations to purchase bundles of stocks, bonds, and other securities. Ref: custom textbook page 115.

7) Which of the following BEST describes the *portability* characteristic of money?

- A) If it wears out, it can be replaced.
- B) Units of money can be matched with the value of goods.
- C) It can be exchanged across national borders.
- D) It allows people to measure the relative value of goods and services.
- E) It is light and easy to handle.

Answer: E

Explanation: E) Money is easy to carry, which makes it convenient to use as a medium of exchange. Ref: custom textbook page 77 and lecture 5 slide 6

8) Determine which one of the following expressions are accurate:

- A) $\text{Income} = \text{Revenue} - \text{expenses}$
- B) $\text{Revenue} = \text{cash flow} - \text{cash expenditures}$
- C) $\text{Expenses} = \text{Costs} - \text{other income}$
- D) $\text{Income} = \text{Profit} - \text{dividends}$

Answer: A

Explanation: A) A correctly describes the calculation of income. B and C are not correct. D describes the calculation of retained earnings not income.

9) Which of the following refers to the rules and procedures governing the content and form of financial reports?

- A) National bookkeeping standards
- B) Core competencies for accounting
- C) Accounting and financial rules
- D) National guidelines of accounting principles
- E) Generally accepted accounting principles

Answer: E

Explanation: E) GAAP is formulated by the Financial Accounting Standards Board (FASB) and

should be used to determine whether a firm has controls to prevent errors and fraud. Ref Lecture 3 slide 11 and custom textbook pages 42 and 54.

10) Those accountants who are hired by firms as salaried employees to carry out day-to-day financial activities (including bookkeeping) are called

- A) forensic accountants.
- B) personal tax accountants.
- C) private accountants.
- D) independent certified public accountants.
- E) fraud examiners.

Answer: C

Explanation: C) Large businesses employ specialized private accountants in such areas as budgeting, financial planning, internal auditing, payroll, and taxation. In small businesses, a single person may handle all accounting tasks. Ref Lecture 3 slide 10

11) An individual invests \$100 (present value) in a project that returns 20% per year, what is the future value after two years?

- A) \$69.44
- B) \$100
- C) \$140
- D) \$144

Answer: D

Conceptual: $100 \times 1.2^2 = \$144$

Paper calculation: Year 1 returns: \$20 on \$100 giving \$120 to invest for year 2.

Year 2 returns: \$20 on \$100 plus \$4 on \$20 for total return of \$24. $\$120 + \$24 = \$144$

12) Which of the following exists when an industry or market has only one producer?

- A) competition
- B) oligopoly
- C) monopoly
- D) communism
- E) socialism

Answer: C

Explanation: C) A monopoly is a market or industry in which there is only one producer that supplies a certain product. Monopolies in the United States economy are either discouraged or regulated so that prices are not too high.

13) Bonds are an example of a **fixed income** security. The concept of the **inverse relation** between bond prices and market interest rates means that...

- a) A rise in market interest rates leads to a rise in bond prices
- b) The fluctuations in bond prices limit the ability of bonds to provide a fixed income to people who hold the bonds to maturity
- c) A rise in market interest rates leads to a fall in bond prices
- d) A fall in bond prices is indicative of a fall in market interest rates

Answer: c

Explanation: A rise in interest rates make existing fixed income securities less valuable, as better rates are now available.

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14) A customer has a bond fund which returns 2% before fees, and the fees/charges for the fund are 1.5% of the investment per year. In 2009, the customer invests \$10,000 in the fund. After three years, the customer's funds would be closest to:-

- a) \$9550
- b) \$9700
- c) \$9850
- d) \$10,150

answer: d

Explanation: Net return = 2% - fees = 0.5% or about \$50 gained per year

15) What type of economy is the United States reflective of?

- A) Planned
- B) Mixed
- C) Market
- D) Private
- E) Socialist

Answer: B

Explanation: B) There are very few pure market economies today. The United States has features of both planned and market economies and is therefore considered to be a mixed market economy. Ref: custom textbook page 15 and lecture 1 discussion.

16) At the start of 2019 a company had stockholders equity of \$80,000. It received new investments in stockholders equity of \$40,000 during the year and paid \$20,000 of dividends. If stockholders equity at the end of the year was \$150,000, what was the net income? (there were no stock repurchases)

- A) \$50,000
- B) \$70,000
- C) \$150,000
- D) \$230,000

Answer: A

Explanation: A) Excluding net income the company had \$100,000 of equity (80+40-20).

Alternatively calculate ending equity as

$$SE_1 = SE_0 + \text{new investments} + \text{net income} - \text{dividends}$$

And write X as the unknown, net income

$$\$150,000 = \$80,000 + \$40,000 + X - \$20,000$$

$$X = \$150,000 - \$80,000 - \$40,000 + \$20,000 = \$50,000$$

See lecture 3 slide 22 and page 49.

17) If the US dollar buys a low and decreasing number of Euros (weak dollar), what is the effect on the business competitiveness of US importers and exporters?

- | | US importers of Euro-zone Goods | US exporters to Euro-zone buyers |
|----|---------------------------------|----------------------------------|
| A) | positive effect on business | positive effect |
| B) | positive effect | negative effect |
| C) | negative effect | positive effect |
| D) | negative effect | negative effect on business |

Answer: C

Explanation: C) When the value of a country's currency such as USA is weak, there is usually a stronger international demand, because US items costs less when their price is converted into

Euros or other foreign money. However, imports seem pricey because one dollar buys less foreign goods.

18) In the field of personal financial planning, **asset allocation** refers to an investor's decision on what proportion of their total portfolio (funds) is invested in different alternatives, for example stocks vs bonds. In saving for retirement, which of the following asset allocation guidelines are true for a 60 year old investor as compared to a 30 year old investor?

- a) The 60 year old investor should hold a higher proportion of her total portfolio in **stocks** than the 30 year old
- b) The 60 year old investor should hold a **lower \$ value** of bonds in her portfolio than the 30 year old
- c) The 60 year old investor should have a lower total \$ value total portfolio than the 30 year old
- d) The 60 year old investor should hold a higher proportion of her total portfolio in **bonds** than the 30 year old

Answer: D

Explanation: As an investor approaches retirement, they should shift from equities into less risky securities, as they have less time to recover from the damage to their portfolio caused by an equity market fall. See lecture 7 notes and page 311.

19) What type of retirement scheme provides a known and more stable income in retirement, with less reliance on the employee's savings and investment choices?

- A) Defined benefit pension
- B) 401K scheme
- C) IRA
- D) Independent contractor model such as driving for Uber

Answer: A

Explanation: As discussed in lecture 8, defined benefit schemes give employees a pension depending on how long they work. All of the other schemes require the employee to make savings and investment decisions to get any decent income in retirement.

20. Cheeseman Inc finds some excellent cheese from Italy called Pecorino. In January 2020 it buys and receives \$2000 of the cheese and will pay the suppliers in February (30 day credit terms). In each month of February and March it sells half of the cheese to customers for cash. The markup in February is 100%. In March, to ensure to sell all the cheese, Cheeseman decreases the markup to 75%. What is the Revenue, Income and Cash flow for Cheeseman Inc for the **1st quarter** of 2020 (i.e. January to March)?

	Revenue	Income	Cash flow
a)	3750	1750	1750
b)	3750	1750	0
c)	4000	2000	250
d)	1750	1500	0

Answer: a

Calculation: Costs in February and March are both \$1000 (half of \$2000 total inventory cost). Revenue in February is \$2000 (100% markup) and in March it's \$1750 (75% markup). Profit for the quarter is therefore \$3750 - \$1750 = \$1750. Cash flow is the same as income for the quarter, as all revenues were received in cash when the cheese was sold, and the suppliers were paid in full (\$2000) in February.

Contribution Margin

21) Martha's Pizza pays \$1000 fixed rent per month and each pizza costs \$5 in ingredients and hourly paid labor. Pizzas sell for \$10 per pizza - what is the break even number of pizzas for Martha's pizza?

- a) 100 pizzas
- b) 200 pizzas
- c) 300 pizzas
- d) 400 pizzas

Answer: B

Calculation: Profit = $(10-5) \cdot Q - 1000$

For break-even set Profit = 0

$$0 = 5Q_{\text{Breakeven}} - 1000 \Rightarrow Q_{\text{Breakeven}} = 200$$

22) Martha's Pizza pays \$1000 fixed rent per month and each pizza costs \$5 in ingredients and hourly paid labor. Pizzas sell for \$10 per pizza. If Martha's sells 500 pizzas, what is the total contribution margin and what is the profit (ignore taxes)?

	Contribution margin	Profit
a)	\$5000	\$2500
b)	\$5000	\$4000
c)	\$1500	\$2500
d)	\$2500	\$1500

Answer: D

Calculation: Unit Contribution margin = $10 - 5 = \$5$

Total Contribution margin for $Q = 500 = 5 \times 500 = \2500

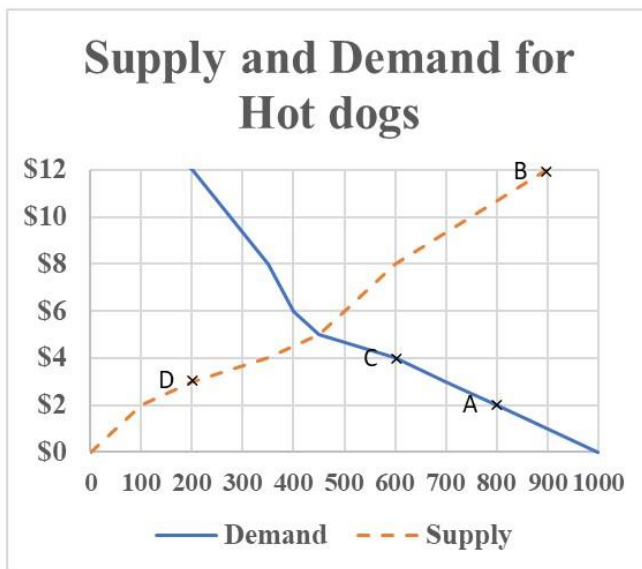
Profit = $(10-5) \cdot Q - 1000$; for $Q = 500 \Rightarrow$ Profit = $5 \times 500 - 1000 = \$1500$

23. A farmer trades 600 eggs for one cow. This is an example of what?
- a. Medium of exchange
 - b. Durability
 - c. Barter
 - d. Debt or duty based transaction

Answer: C

Explanation: Barter is the simultaneous swapping of one good for another without using a medium of exchange.

The following chart shows supply and demand for standard hot dogs in an isolated town at 8pm on March 31st. The vertical axis shows the number of hot dogs and the horizontal axis shows the price per hot dog. The market clears and 450 hot dogs are traded. Use the chart to answer the next two questions:-



24) Which is the market or equilibrium price for hot dogs in the town?

- A) \$3
- B) \$5
- C) \$6
- D) \$12

Answer: B

Explanation: The market or equilibrium price is the price where the supply and demand curves intersect: \$5

25) Which of the following statements are true?

- A) Persons who demand hot dogs at \$2 (point A on the chart) will derive additional benefit from the operation of the market, as they will be able to buy hot dogs more cheaply than the market
- B) Hot dog producers who would supply hot dogs at \$12 (point B) gain additional revenue by selling 900 hot dogs above the market price
- C) Persons who demand hot dogs at \$4 (point C) are compelled to pay market price for the hot dogs, rather than conserving their money to buy something else
- D) Hot dog producers who would supply hot dogs at \$3 (point D) gain additional revenue over and above \$3 per hot dog, by selling at the market price

Answer: D

Explanation: See lecture 1, slide 23. For both points A and C, persons who don't want to pay the market price for hot dogs simply conserve their money, and buy something else such as I can has cheeseburger. Market systems do not compel trading either by producers or consumers, doubly excluding Point C. Point B depicts a supplier who wishes to supply hot dogs at \$12, but no one will buy such a hot dog, because the market price is \$5. Low cost producers ready to supply hot dogs at \$3 (point D) do not have to disclose their \$3 reservation price, but take advantage of the market price.

26. M-1 money supply includes all of the below forms of money except...
- a. Coins
 - b. Notes
 - c. Checking account deposits
 - d. Time deposits

Answer: D

Explanation: M-1 is immediately available cash and near cash such as checking accounts. You can get money out of checking accounts immediately (“on demand”) such as by using an ATM. M-2 adds time deposits that are not immediately available such as overnight accounts such as money market, or longer term such as 1 year certificates of deposit.

27. One purpose of tracking money supply is...
- a. As an indicator of inflation risk, as rapid growth in the money supply may erode the value of money
 - b. Because high money supply always causes unemployment
 - c. As an indicator of government spending (fiscal policy)
 - d. Because excessive money supply causes deflation

Answer: a

28. According to the chart shown in class in lectures 6 and 7, what type of investment has shown the highest return over the last 100 years?
- a. Equities (Common stocks)
 - b. Bonds (Treasury bonds)
 - c. Bills (Treasury bills)
 - d. Real Estate

Answer: a

Explanation: Common stocks have performed better than the other investments averaging about 9% per year (Ref: lecture 7 slide 8). Real Estate was not shown on the chart in class – so it is ruled out for that reason. Also, it is estimated by Case Shiller to have returned about 4% per year.

- 29) The most recent estimate of the US inflation rate is closest to....

- A) -2% (deflation)
- B) 0%
- C) 2%
- D) 4%

Answer: C Lecture 1 homework

30. The study.net article “Take Netflix's Earnings With a Grain of Salt” discusses how Netflix amortizes its investments in content, such as licenses to stream TV programs. Amortization allows Netflix to spread out the upfront cost on an accounting basis over multiple years, because people want to watch the programs then. However, the management chooses the number of years, which can directly affect earnings. The article makes all of the following points about Netflix’s earnings **except**

- A. Netflix doesn't disclose the amortization schedules for its various types of content
- B. Netflix’s amortization schedules are a black box

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- C. Netflix earnings are fuzzy because Netflix has low revenue growth
- D. When Netflix reports earnings, that number is a function of choices management has made

Answer: C

Reference: The Motley Fool article discusses the “opaqueness” of Netflix’s amortization schedules. However, it does not discuss Netflix’s revenue growth, which is anyway not low.

Financial Statement and ratio analysis: Use the following information on Skywalker Company to answer the next **three** questions. Assume that these numbers are both average and year-end, as needed.

Average stockholders' equity	\$50,000	Net income	\$10,000
Average total assets	\$100,000	Net sales	\$100,000
Current assets	\$30,000		
Current liabilities	\$10,000		

31. What is the return on equity of Skywalker?
A. 10% B. 20% C. 50% D. 200%

Answer: B

Calculation: $\text{RoE} = \text{Net income} / \text{Stockholders equity} = \$10,000 / \$50,000 = 20\%$ ref HBS reading

32. What is the financial leverage or equity multiplier of Skywalker?
A. 10% B. 20% C. 50% D. 200%

Answer: $\text{RoE} = \text{Net income} / \text{Stockholders equity} = \$10,000 / \$50,000 = 20\%$ ref HBS reading

Answer: D

Calculation: $\text{Financial Leverage} = \text{Stockholders equity} / \text{Assets} = \$100,000 / \$50,000 = 200\%$ or 2

33. Darthvader Inc is a competitor of Skywalker Inc. Darthvader Inc reports Current Assets of \$50,000 and current liabilities of \$20,000. Which of the two companies have the **best liquidity** as measured by the current ratio?

- A. Darthvader Inc
- B. Skywalker Inc
- C. Their liquidity is equal
- D. Neither have acceptable liquidity as they both fall below the rule of thumb of 2

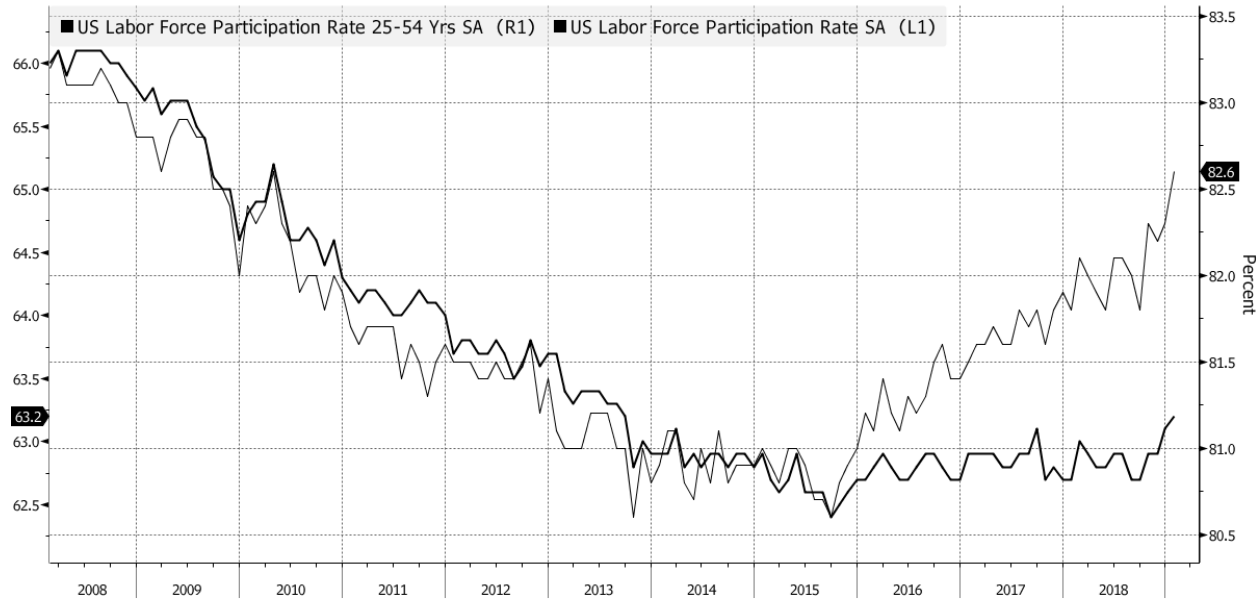
Answer: B

Explanation: Current ratio (current assets divided by current liabilities, as noted in lecture 3 slide 22) is a measure of liquidity, because it is short term liabilities relative to the short term assets that can be used to pay them off. For Skywalker it is 3 ($30000/10000$), for Darthvader only 2.5 ($50,000/20,000$). Thus Skywalker has superior liquidity as measured by its current ratio.

Use the following chart and text to answer the next two questions

Participation Bounce

America's labor force participation is staging a turnaround



Source: Bureau of Labor Statistics

By Jeanna Smialek and Matthew Boesler (Bloomberg)
February 26, 2019

Federal Reserve Chair Jerome Powell said the U.S. labor market still has room to pull in workers. That space for improvement could be a factor bolstering the central bank's case for patience on future interest-rate increases... Pointing toward a recent move higher in labor force participation, the share of people working or looking for jobs, he said "that tells us that there is more room to grow, and that certainly has implications for monetary policy." Powell noted that the unemployment rate would be lower if the labor force participation rate hadn't ticked higher.

34. The comments of Powell are most descriptive of what?
- A. Low taxes
 - B. Rapidly increasing prime rate
 - C. Labor market slack
 - D. Decreasing labor force participation

Answer: C

Explanation: In the first sentence, Powell says that "the labor market still has room to pull in workers", which describes slack in the labor market.

35. The darker line shows labor force participation rate for all adults (>16 years of age) and refers to the left hand axis (final value is labeled at left as 63.2%). The lighter line shows the labor force participation rate for adults only aged 25-54 and corresponds to the right hand axis (final value labeled at right as 82.6%). Which of the following statements is **true**?

- A. Labor force participation 25-54 is lower in percentage terms than overall labor force participation until 2015
- B. Both of the lines had approximately the same low point of 62.5%

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- C. Labor force participation (all adults) fell between 2008 and 2018, whereas labor force participation (25-54 years) rose over the same time period
- D. Labor force participation (25-54 years) rises more rapidly after the low point in 2015 than does labor force participation (all adults)

Answer: D

Explanation: This question requires extracting data from a tricky chart that was posted online on Bloomberg. It was posted **without** the detailed notes on the lines and axes contained in the question stem.

Although it appears A is true from looking at the chart, labor force participation 25-54 is scaled on the right hand axis, which is a higher percentage than the left hand axis by approximately 18%. Also, it should be intuitively unlikely that prime working age adults of age 25-54, participate less in the workforce than all adults. For these two reasons A is untrue.

B is also not true due to the different scales, the low point of the two charts has to be read off their corresponding axis. The low point of 25-54 participation corresponds to approximately 80.7% on the right hand scale.

C is untrue: participation for both groups fell for the sample period. 25-54 year old participation is closer to regaining its 2008 level, but has not recaptured it, and certainly has not increased.

D is true: 25-54 year old participation in the labor market is showing recovery, as this age range (prime working age adults) is being drawn back into the market. In this age range, adults are old enough (>24) that they are less likely to be in school or college. They are young enough (<55 years) that they are less likely to have taken early retirement, and less likely to have debilitating medical conditions that preclude their participation in the labor market. In economic terms, we might say there are less “frictions” that prevent the 25-54 year olds from joining or rejoining the workforce. Overall participation (all adults >16) has not shown clear movement since 2013.

36. Martin Bobson has a total of \$1m of financial assets. He has common stock in Tesla of \$400,000 and savings accounts at Wells Fargo of \$300,000 and \$150,000 at Citibank. He also has a checking account of \$150,000 at Wells Fargo. He owns an apartment which is worth \$800,000 (non financial asset). How much of the assets are insured by the FDIC, if the FDIC insurance limitations are \$250,000 per account owner, per bank?

- A. \$250,000
- B. \$400,000
- C. \$550,000
- D. \$650,000
- E. \$900,000

Answer: B

Explanation: Mr Bobson should be more careful! He has total investments at Wells of \$450,000, **but** only \$250,000 is insured by FDIC, as only which bank matters, not which account. His \$150,000 at Citibank is fully covered by FDIC. FDIC insurance does not cover real estate or stocks.

37. I have carefully checked my Scantron. My section number and name are correctly shown
- a. Yes

Answer: A

38. Fill in the version bubble for this question
[Answer: depends on version]