

Problem set 2
266: Fi. Markets and Institutions
Spring 2015
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Directions. You are to do this problem set alone.

Due Date/time. Your work is due by beginning of class (10:30am) March 26. You can hand the work in to me at the beginning of class. If you put the work under my office door, it must be in before I leave for lecture at about 10:20 am.

Questions. If you have questions, email me or one of the TAs, raise them in class, or come to office hours.

Grading. All parts have equal value.

Note: Be sure to note the proper units (e.g., millions, billions, etc.) in the following answers.

1 Reading a 10-k report.

Obtain the latest 10-k report for JPMorgan Chase (covering 2014). Directions: i) go to <http://www.sec.gov/>, ii) Under 'filings' in the top bar, choose 'Company Filings Search', iii) In the Fast Search box, put JPM and search; iv) in the Filing Type box put 10-k and hit search.)

Hint: If the question has a phrase in 'single quotes,' searching for this phrase, perhaps repeatedly, in the 10-k will generally get you to the answer.)

- 1.1 Other than the 'Board of Governors of the Federal Reserve System', name three additional regulatory authorities JPM lists when discussing its standing as a 'bank holding company' and financial holding company?

Answer/comment

The following are all acceptable: Office of the Comptroller of the Currency (OCC), Federal Deposit Insurance Corporation (the FDIC), Securities and Exchange Commission (SEC), Commodity Futures Trading Commission (CFTC), and Consumer Financial Protection Bureau (CFPB).

- 1.2 What is the 'Bank Secrecy Act' and what did JPM establish to comply with the requirements?

Answer/comment

The Bank Secrecy Act requires all financial institutions, including banks and securities broker-dealers, to, among other things, establish a risk-based system of internal controls reasonably designed to prevent money laundering and the financing of terrorism. In response to the BSA, JPM established a global anti-money laundering program in order to comply with BSA requirements.

- 1.3 How has JPM performed relative to the indices examined in the 'FIVE-YEAR STOCK PERFORMANCE' table and chart (not looking for values, just relative position)?

Answer/comment

The order (from best to worst performance): S&P 500, KBW Bank, S&P Financial, JPMorgan.

- 1.4 What event happened on September 10, 2014, that JPM discusses in the document?

Answer/comment

JPMorgan disclosed that a cyberattack against the Firm had occurred.

- 1.5 What does JPM report as the value of 'High quality liquid assets' for each of the last 5 years?

Answer/comment

In billions the answers are as follows

2014: \$600

2013: \$522

2012: \$341

In both 2011 and 2010 they did not report HQLA

- 1.6 What does JPM report as the value of ‘Total capital ratio’ for each of the last 5 years?

Answer/comment

2014: 13.1

2013: 14.4

2012: 15.3

2011: 15.4

2010: 15.5

- 2 Value at Risk (VaR). (Hint: read the VaR, ‘value-at-risk,’ discussion in the JPM 10-k.)

- 2.1 If a firm says that its 1-day 95 percent value at risk is \$100 million, what does this mean?

Answer/comment

Maximum one-day loss that a financial institution could incur with probability of 5%.

- 2.2 According to the JPM 10-k examined above, on how many trading days in 2014 did trading losses exceed the 95 percent one-day VaR computed by the firm? (Hint: Search for ‘value-at-risk’ and/or ‘band break’ repeatedly until you find the info.)

Answer/comment

5

- 2.3 Of the 260 trading days reported for 2014 on how many did JPM report trading gains?

Answer/comment

157

- 3 Running a *fair* and *competitive* market is hard.

- 3.1 What is a bucket shop? Why were they made illegal about a century ago?

Answer/comment

This term is used many ways these days to describe securities selling practices that tend to be fraudulent. Any of the answers you

could find on the web were accepted. As to why they were made illegal, the answer is always to prevent the swindling, usually of less sophisticated stock buyers.

A bucket shop as defined in the laws of many states making the practice illegal was roughly as follows. The shop sell a claim to an existing security (or the cash flows from an existing security) such as a share of IBM stock. The shop does not make any offsetting transaction, such as buying a share of IBM, that would allow it to pay off the initial claim. Thus, the person who bought the claim is really gambling that the shop will have the funds to payoff when the moment comes. The moment often came that the shop could not payoff and folks who bought claims at the shop lost their money.

The bucket shop concept returned to the fore during the financial crisis as analysts asserted that AIG was essentially running a bucket shop in its credit default swap business. It sold claims based on the value of existing securities and (apparently) inadequate provision to pay those claims. The claims in question were essentially insurance against the default of securities backed by subprime mortgages. If you google **AIG bucket shop** you can read a bit about this.

- 3.2 Briefly explain the NASDAQ collusion case of the mid-1990s. (Hint: google NASDAQ collusion) What was the settlement?

Answer/comment

The market makers were allegedly colluding to maintain larger spreads than what a fair market would have shown. These allegations came after economists noticed that the market makers were not quoting prices in odd eighths as often as one should expect. The case ended up being settled with the securities firms paying nearly \$1B.

- 3.3 What is the LIBOR rate? Briefly explain the LIBOR fixing scandal. Name 3 firms involved. (Hint: google LIBOR scandal)

Answer/comment

LIBOR is the London Interbank Offered Rate. It reflects the rate that major banks pay to borrow from each other on the London interbank market. The published interest rate comes from a survey taken of a panel of banks and is used as a reference rate for many other contracts. It was discovered that many banks were manipulating their answers to the survey in order to favor

their positions. Banks that were involved include: Barclays, UBS, Rabobank, and the Royal Bank of Scotland.

- 3.4 Explain the foreign exchange price fixing scandal? Name 3 firms involved. (Hint: google FOREX scandal)

Answer/comment

Traders would collude to move the market exchange rate away from where it naturally was in order to have some of their clients lock in a rate worse than what the market would give them. Many firms were involved, including Bank of America, Barclays, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, Morgan Stanley, Royal Bank of Scotland and UBS.

- 3.5 Briefly explain what a ‘dark pool’ is. What is the dark pool scandal? (Hint: google dark pool scandal)

Answer/comment

A dark pool is a private exchange (as opposed to public exchanges such as NYSE) where firms can conduct trades with little transparency as to information related to the trades. The lack of transparency was important for those wanting to execute large trades without disrupting the market or being targeted by predatory traders. Barclays has been accused of deceit and fraud by making its practices favor high-frequency and predatory trading. Other firms have also been charged with similar violations.

- 4 Troubled asset relief program (TARP). TARP was enacted with the goal of stabilizing the economy at the height of the crisis. TARP has been extremely controversial with traditional liberals criticizing it as a handout to corporate fat cats and free market conservatives criticizing the government’s unwillingness to let market forces rule. Supporters often take the position that TARP was the lesser of the evils on the table at the time—that some rapid and large government action, distasteful as it would be, was needed to reduce the risk of a Great-Depression-style collapse. Reasonable people disagree on these issues and you should form your own opinion.

This question focusses mainly on some of the facts.

- 4.1 TARP involved the government providing capital to firms in return for certain claims. What was the total capital that could be provided under TARP, both under the original legislation and as later amended.

Answer/comment

\$700B in the original legislation and \$475B under amended legislation.

- 4.2 The Congressional Oversight Panel for TARP reported in 2009 on the present value of the financial claims the government received for the capital provided. How much value did the oversight panel assess that the government got for each dollar in capital provided?

Answer/comment

\$0.66

- 4.3 Late last year, the government unwound the last of the TARP investments. Approximately what was the net direct costs of TARP (funds invested vs. funds received)?

Answer/comment

We will accept a wide variety of answers here as sources vary based on different accounting approaches. All of the acceptable answers are however, quite small relative to the money at risk. Some say a small profit; some a small loss. In either case, under about \$50 billion.

*The cumulative collections under TARP, as of February 28, 2015, together with Treasury's additional proceeds from the sale of non-TARP shares of AIG, exceed total disbursements by almost \$15 billion. (Treasury has recovered \$441.7 billion or 103.4% of the disbursed amount when the \$17.6 billion of non-TARP AIG funds collected is included.)

- 4.4 Does the answer to the previous question resolve the matter of whether TARP was a good idea? Why or why not?

Answer/comment

It does not. There are many reasons, but they mainly all come down to the fact that we are talking here mainly about direct accounting costs. For example, even if TARP led to a small gain in accounting terms, if it added to moral hazard and raised the likelihood or likely cost of another crisis, then it was a bad thing. On the other hand, even if TARP cost a few hundred billion dollars, if it forestalled a Great Depression event, then it was probably worthwhile.

The point: the direct accounting costs are really a smallish part of the overall cost or benefit. Economists and, ultimately, economic historians will continue to debate these costs, just as they

continue to debate the merits of various policy choices during the Great Depression.

A standard one might apply is whether TARP seemed to be among the best available options, given what was known at the time of adoption. While there is debate on this point, a large range of folks across the spectrum of political and economic beliefs argue that TARP was at least a reasonable choice in light of what was known at the time.