

**ECONOMICS 50463**  
**Perspectives in Macroeconomics**  
Study Questions for Semester (Fall 2018)

**INSTRUCTIONS:** You will find below study questions designed to guide your studying. **A subset of these exact questions will appear on your exams.** You are under no obligation to complete them but there is, not surprisingly, a high correlation between doing these and earning a high grade! Please bear the following in mind:

*General issues*

- The exams are weighted such that a perfect score on all the questions from the list below earns you at least a low B. A's are reserved for those who also answer the "hell" questions correctly. That said, data from previous classes show that there is a high correlation between doing well on the non-hell portion of exams and scoring highly on the hell portions.
- I am also happy to check over your answers to make sure they are correct. Just send a copy to [j.harvey@tcu.edu](mailto:j.harvey@tcu.edu). Please see below for the dates by which I'll need to receive your answers.
- You are free to reword any lecture or reading question however you like. However, always be sure to send it to me on your study question list so that you can be sure that I agree it includes all the important information—don't wait until the exam to find out!
- If I check your study questions and accidentally approve an incorrect answer that you then give on an exam, you get full credit. If I initially subtract points, just let me know and I'll fix it. That's the John Harvey Guarantee!
- If you are resending questions to me, please let me know which ones are new and/or adjusted from last time so I don't have to check the entire list all over again.
- Studying involves taking this list and a blank piece of paper and writing out the answers until, according to your list of answers, you don't make any mistakes. **THERE IS SIMPLY NO SUBSTITUTE FOR DOING THIS!**

*Reading questions*

- The place where the study questions are the most helpful is on the readings (I write the lecture answers on the board). As a rule, I don't go over these in class and the study question list prevents you from having to guess which parts of "The Blessings of Free Trade" I expect you to remember for the exam. I tell you up front!
- Be sure to actually read the articles and not simply harvest them for the study question answers. If you do the latter, you won't really understand the context and you'll end up having to memorize. There's too much material to do that. Those who use someone else's study question answers face the same problem. I don't actually want you to just know what's on the list, I hope you learn much more than that. However, I'm only going to test you over the list.

### *Using someone else's answers*

- There is no rule against this. The study questions are not an assignment.
- If you and a friend (or enemy or bystander) worked on the questions together, please let me know when you send the questions to me so that I can be sure you both get the John Harvey Guarantee.
- If you did not work together but choose to use someone else's already-corrected study questions, please do not send them to me unedited. In other words, if I indicated on their answers that they needed to make adjustments, make these first. In addition, let me know which ones have been adjusted so I don't have to check the entire list all over again. If you already know they are perfect, please don't send them at all. Just email me saying, "I'm using Victor Boschini's study question answers!" and then you'll get the John Harvey Guarantee based on their answers. (FYI, he's never take this course so you should probably use someone else's. That was just an example.)
- If you choose to use someone else's study questions from a previous semester, all of the above apply plus one more: please see if the questions are the same as in the previous semester (I add and subtract whole questions and change the wording on others). If this hasn't been done, I'll return the questions unchecked. And I will wish terrible things on you and your family.

### *Study question organization*

- Questions are grouped by their source. For examples, questions based on lecture material have *Lecture* before them, and then appear without spaces between them. For questions where answers can be found in the reading, the specific link is given and the questions are then grouped without spaces.
- **Green questions may also appear on the final exam.**

### *Study question deadlines*

- Anyone wanting their exam one study questions checked must have submitted them to me by midnight, Thursday, September 13.
- Anyone wanting their exam two study questions checked must have submitted them to me by midnight, Tuesday, October 23.
- Anyone wanting their final exam study questions checked must have submitted them to me by midnight, Thursday, December 6.
- Deadlines apply whether you take that exam at the regular time or not
- I do not recheck the green questions on the final exam list since they were subject to one of the two earlier deadlines.

## GENERAL BACKGROUND

### Lecture

1. Distinguish between validity and cogency. [25 words]
2. How are the concepts of cycle, endogeneity, exogeneity, and involuntary unemployment related to economic fluctuations? [122 words]
3. Give four possible sources (each) of exogenous and endogenous forces that can cause a turning point in the business cycle. [24 words]
4. Explain Say's Law (both pro and con). [122 words]
5. Distinguish between freshwater and saltwater economists. [53 words]

## EXOGENOUS/SAY'S LAW APPROVED BUSINESS CYCLE THEORIES

### Classical Model

#### Lecture

6. Explain the Classical version of the labor market where even if involuntary unemployment exists, internal forces eliminate it. [107 words]
7. Derive the Classical aggregate supply curve from a labor market. Explain each step carefully. [87 words plus graphs]
8. Derive the Classical aggregate demand curve from the Quantity Theory of Money. [97 words plus chart and graph]
9. Explain classical interest rate theory (aka the loanable funds theory of interest—it is one means of supporting Say's Law). Be sure to include the six assumptions (including who earns income and saves, who borrows and invests, the functional determinants of saving and investment, and how the financial sector operates) and the analysis that includes the graph. [198 plus graph]

### Neoclassical Keynesian/New Keynesian/Keynesian

*Harvey, John T. "Business Cycle Theory: A Critical Historical Survey" section 2.4 Keynesian*  
<http://personal.tcu.edu/jharvey/50463/BusinessCycleSurveyExcerpts.pdf>

10. One version of Keynesian theory assumes that the business cycle is caused by stop-go policies. What do these represent? Be sure to explain "stop" and "go." [85 words]
11. As Neoclassical Keynesianism evolved into New Keynesianism, the focus (of what caused the business cycle) shifted from stop-go policies to what? [one word]

#### Lecture

12. Show how unemployment can occur on the labor market diagram in the Keynesian/New Keynesian. [114 words plus graph]

### Monetarism

*Harvey, John T. "Business Cycle Theory: A Critical Historical Survey" section 2.7*

#### Monetarism

<http://personal.tcu.edu/jharvey/50463/BusinessCycleSurveyExcerpts.pdf>

13. What three assumptions are central to the Monetarist Model?

14. A key premise of the Monetarist approach is that there exists what that “is determined by real factors including technological growth, the growth of the labor supply, the rate of real investment, and institutional arrangements?” When is the only time we stray from that value and why would that occur? [32 words]
15. Under Monetarism, all changes in unemployment are of what variety? [one word]

*Lecture*

16. Monetarist: show how unemployment can occur on the labor-market diagram if workers suffer from money illusion. [graph, schematic, and 16 words]
17. Monetarist: show “over”employment on the labor-market diagram due to money illusion. [graph, schematic, and 14 words]

**New Classical Economics: Policy Ineffectiveness**

*Lecture*

18. What is the policy ineffectiveness critique that represents one of the distinguishing features between Monetarist and New Classical economics? [59 words]
19. How does New Classicism’s Ricardian Equivalence argue that fiscal policy is ineffective? [51 words]

**Real Business Cycle Theory**

*Harvey, John T. “Business Cycle Theory: A Critical Historical Survey” section 2.8 Real Business Cycle*

*<http://personal.tcu.edu/jharvey/50463/BusinessCycleSurveyExcerpts.pdf>*

20. Real Business Cycle theory argues that fluctuations in employment are a result of exogenous shocks to productivity. What, in turn, cause these? [24 words]
21. According to Real Business Cycle theory, if business cycles are just caused by exogenous shocks, then why don’t they look random to us? [42 words]

*Lecture*

22. Draw a labor market for Real Business Cycle theory. Include labor demand curves for high, medium, and low productivity periods. What can you say about the gap between the vertical portion of the labor supply curve and a given equilibrium level of employment?

**Economic Data**

*See class web page for data set, use only the one labeled “Basic”*

*<http://personal.tcu.edu/jharvey/50463/50463stff.html>*

23. What was the average rate of GDP growth from 1954:3 through 2009:2 (round to one decimal point)? [number]
24. What was the average rate of unemployment from 1954:3 through 2009:2 (round to one decimal point)? [number]
25. What was the average rate of consumer price inflation from 1954:3 through 2009:2 (round to one decimal point; column is headed Growth CPI)? [number]

26. Look at how rates of GDP growth and unemployment have changed over the data set. In particular, compare GDP growth over the first half (1954:3 to 1981:4) to that over the second half (1982:1 to 2009:2). Which was higher? Do the same for unemployment and tell which period had lower unemployment.
27. Calculate the standard deviation of the rates of change of each of GDP's main components (consumption, investment, government spending—this skips net exports) from 1954:3 through 2009:2. Which component appears to be the most volatile? Least volatile? [two words]

### US Business Cycles

**(I don't check these study questions on the assumption that you used the links)**

[http://personal.tcu.edu/jharvey/50463/RecessionDescriptions1954\\_2009.pdf](http://personal.tcu.edu/jharvey/50463/RecessionDescriptions1954_2009.pdf)

<http://personal.tcu.edu/jharvey/50463/USBusinessCyclesince1954Summary.pdf>

28. Be sure you can list all the US cycles since 1954 in order. You don't need to know any of the years. Note that in asking you to do this, my hope is that you will have to learn some of the history, too (which is, of course, the real goal!). [9 names]
29. Which cycle's expansion (i.e., "Trough to Peak") experienced the lowest level of unemployment?
30. Which cycle's expansion (i.e., "Trough to Peak") experienced the highest rate of GDP growth?
31. Which cycle's expansion (i.e., "Trough to Peak") was the longest?
32. Which cycle's recession (i.e., "Peak to Trough") experienced the highest level of unemployment?
33. Which cycle's recession (i.e., "Peak to Trough") experienced the lowest rate of GDP growth?
34. Which cycle's recession (i.e., "Peak to Trough") was the longest?

\*\*\*\*\*ABOUT TO HERE FOR EXAM ONE\*\*\*\*\*

### ENDOGENOUS/SAY'S LAW REJECTED BUSINESS CYCLE THEORIES

#### John Maynard Keynes

*Harvey, John T. "Business Cycle Theory: A Critical Historical Survey" section 2.10 Keynes*

<http://personal.tcu.edu/jharvey/50463/BusinessCycleSurveyExcerpts.pdf>

35. Keynes' believes the business cycle to be endogenous and that downturns may occur suddenly and catastrophically, while upturns emerge more slowly. What is key to this behavior?
36. Keynes suggests that risk or perfect foresight creates a world where it is possible to create mathematically object forecasts. Consequently, disappointment does not create what? [one word]
37. Keynes argued that the real world is marked by uncertainty such that it is impossible to generate mathematically objective forecasts. Yet we nevertheless act. It is the existence of what that allows us to make the necessary leap of faith? [two words]

38. Keynes argued that what two reactions become possible when our expectations lack a firm foundation? [3 words]
39. Despite the important role played by expectations and psychology in Keynes' business cycle model, he does not view it as being a function of self-fulfilling prophecy. Indeed, the problem is not that entrepreneurs become pessimistic when market conditions continue to be profitable, but that they remain optimistic as spending slows. The key is investment, which will necessarily decline for what four reasons (first three are secondary)? [41 words]
40. Keynes does not suggest that we use interest rates (or any other mechanism, for that matter) to dampen optimistic expectations. This is so because he does not believe that what is characteristic of the expansion? [1 word]

*Lecture*

41. Draw a labor market diagram with involuntary unemployment. Why is it that, given Keynes' assumptions, there exists no tendency for the involuntary unemployment to disappear (be sure to reference your graph in the explanation)? [89 words plus graph]
42. Draw Keynes' aggregate supply curve (Z). Derive it, explain carefully the relationship it represents, and tell why it is shaped as it is. Would the classicals object to the Z curve? [72 words and a graph]
43. Derive Keynes' aggregate demand curve from its component parts. [three graphs]
44. Macroeconomic equilibrium occurs when firms' expectation of sales is not disappointed. In terms of Keynes Z-D diagram, what does this mean? Explain why none of the other points can be an equilibrium and where full employment is. [94 words and two graphs]
45. Write the Keynes equation showing the demand for physical capital, define each variable, and tell the sign of the independent variables with respect to the dependent. [79 words]
46. Draw the Keynes demand and supply diagram for physical capital, showing a period of positive net investment. Label it and be sure to identify 1) the existing stock of capital (existing factories), 2) the short-period flow price (the going price for building new factories), 3) the demand price for the existing stock of capital (the going price for existing factories), 4) gross production of capital goods (total investment), 5) production just to cover depreciation (investment just to repair the capital that is wearing out), 6) net investment (investment above and beyond depreciation), and 7) the minimum flow supply price (the price below which investment goods firms will cease production). Firms will place orders for newly producible capital goods when which price exceeds which price? [73 words plus graph]
47. Draw the Keynes demand and supply diagram for physical capital, showing a period of positive net investment. Label it and be sure to identify 1) the existing stock of capital (existing factories), 2) the short-period flow price (the going price for building new factories), 3) the demand price for the existing stock of capital (the going price for existing factories), 4) gross production of capital goods (total investment), 5) production just to cover some of the depreciation (investment just to repair the capital that is wearing out), 6) net investment (investment above and beyond depreciation), 7) the minimum flow supply price (the price below which investment goods firms will cease production), and 8) total capital stock depreciation. [59 words plus graph]

Harvey: "Teaching Keynes' Business Cycle: An Extension of Paul Davidson's Capital Market Model"

[http://www.hetecon.net/documents/ConferencePapers/2013Non-Refereed/Harvey\\_AHE2013.pdf](http://www.hetecon.net/documents/ConferencePapers/2013Non-Refereed/Harvey_AHE2013.pdf)

Reading

48. Referring to Davidson's capital market diagram, Harvey says that  $p_s$  is an important benchmark even when? [21 words]
49. According to Harvey, which of Davidson's prices is that which entrepreneurs would be willing to pay for a unit of existing capital? Which is the price they must pay to have new capital built? [3 words]
50. Echoing Davidson, Harvey says that investment will inevitably decline because of the continuous additions to the capital stock. Why will this not lead to a stationary state and what happens instead? [82 words]
51. Show the four stages of the business cycle (early, mid, and late expansion and recession) along with the states of investment spending, investor expectations, and realized profits. [chart]

Lecture

52. In Keynes' model, what maintains the equality of investment and saving? Illustrate with a mathematical example. [79 words]

**Harvey: An Economic Framework for Studying Cyber Security Issues, under review at Military Cyber Affairs (you can probably skip to section 2)**

[http://personal.tcu.edu/jharvey/40223/Framework\\_for\\_Studying\\_Cyber\\_Security\\_Issues.pdf](http://personal.tcu.edu/jharvey/40223/Framework_for_Studying_Cyber_Security_Issues.pdf)

53. According to the discussion on pages 8 and 9, what is the primary determinant of employment? [1 word]
54. In a world with no government sector or trade, savings must be equal to investment. Which, however, is the driver? With respect to the one that simply follows, why is it largely a residual? [20 words]
55. What is, in reality, the only way to truly save more and why is that? [23 words]
56. Why is trust absolutely critical to a well-functioning financial system? [18 words]
57. Mortgages, college and car loans, and the financing of appliance purchases all create what? [1 word]
58. Why do central banks automatically supply reserves when the banking system runs short of the requirement? [16 words]
59. Investment, the key determinant of demand, is extremely expensive and represents a long-term and largely irreversible commitment. On top of that, the nature of the real world is such that entrepreneurs lack the basis for making reliable forecasts of future profit. Why, then, does anyone invest at all? [5 words]
60. Why will the main part of an economic upturn not continue indefinitely? How does this create a recession (sometimes catastrophically)? [109 words]
61. How do stock prices affect firm behavior and financing beyond the initial offering? [53 words]

62. How is it that a loan shows up on both sides of a bank's balance sheet? While they clearly don't need anyone's savings to make the loan, why do they not (at least initially) even worry about having sufficient reserves to make the loan and when they do look for those reserves, where will they go first? [33 words]
63. Commercial banks and similar institutions do not realistically face what kind of constraints in lending? [2 words]
64. What is the real key to an institution's financial wealth? That number indicates what in terms of how far they are from insolvency?
65. What was Lehman Brothers net worth-to-asset ratio in 2008 and what did this indicate? How much did the market lose in about a week in 2008?
66. Why is the fact that individuals are less reluctant to commit to financial than physical investment a mixed blessing? When is the negative side particularly true and why might one particularly expect problems at the top of the business cycle? Last, what are individuals and financial institutions constantly tempted to do? [119 words]

### **US Business Cycles**

**(I don't check these study questions on the assumption that you used the links)**

*[http://personal.tcu.edu/jharvey/50463/RecessionDescriptions1954\\_2009.pdf](http://personal.tcu.edu/jharvey/50463/RecessionDescriptions1954_2009.pdf)*

*<http://personal.tcu.edu/jharvey/50463/USBusinessCyclesince1954Summary.pdf>*

67. Be sure you can list all the US cycles since 1954 in order and you can specify the Important/Unique Factors in Expansion and Important/Unique Factors in Recession: Exogenous only.

### **Tests of Business Cycle Theories**

**(I don't check these study questions on the assumption that you used the links)**

*[http://personal.tcu.edu/jharvey/50463/RecessionTestsbySchool1954\\_2017.pdf](http://personal.tcu.edu/jharvey/50463/RecessionTestsbySchool1954_2017.pdf)*

68. Be sure you know the test summaries for each of the exogenous views.

\*\*\*\*\*ABOUT TO HERE FOR EXAM TWO\*\*\*\*\*



## **Michal Kalecki**

**Harvey, John T. “Business Cycle Theory: A Critical Historical Survey” section 2.3 Kalecki**  
<http://personal.tcu.edu/jharvey/50463/BusinessCycleSurveyExcerpts.pdf>

69. In Kalecki’s model, the interrelationship between investment and profits plays a key role. Because they affect each other, timing becomes very important. What two important lags exist because of the fact that there exists a gestation period for capital? [37 words]
70. Explain how the two opposing forces in Kalecki’s investment sequence affect new decisions to invest. Be sure to explain the sequence itself in your answer (you may recreate Figure 1 if you so desire). [71 words plus figure or >71 words]
71. While the opposing forces that exist in Kalecki’s investment sequence could create a business cycle, it is just as possible that rising investment could lead to increasingly optimistic expectations which lead to rising investment, and so on. To address this, Kalecki developed the idea of increasing risk. Explain what increasing risk means and the two avenues along which it operates in deterring rising investment. [128 words]

### *lecture*

72. Show how, starting with  $P_c Q_c = W_c N_c + W_I N_I$  in the basic two-sector model, consumers spend what they get and investors get what they spend.[six equations and some notes]
73. Draw Kalecki’s investment-decision curve. What does it show, how does it work, and why is it shaped the way it is? Where would equilibrium be? [graph plus 130 words]
74. Draw the business cycle Kalecki built from his investment-decision curve. Explain the assumptions he makes to make it dynamic/unstable and describe what happens in each of the four quadrants. Where would it be in equilibrium? [graph plus 175 words]

## **Hyman Minsky**

**Harvey, John T. “Business Cycle Theory: A Critical Historical Survey” section 2.9 Minsky**  
<http://personal.tcu.edu/jharvey/50463/BusinessCycleSurveyExcerpts.pdf>

75. What does Hyman Minsky’s financial instability hypothesis argue (in short)? Be sure to include sufficient detail to arrive at his famous three-word conclusion regarding capitalist finance. [51 words]
76. A decision to invest—to acquire capital assets—is always what to Minsky?
77. Minsky believes that, for a variety of reasons, the supply of finance from banks eventually becomes less than infinitely elastic. This raises the cost of financing investment. What is the consequence of this for hedge and speculative units? Be sure to define hedge, speculative, and Ponzi in your answer and tell what Ponzi units will find it necessary to do. [88 words]

### *Lecture*

78. Draw Minsky’s investment graph. Be sure label completely and add the five notes explaining each of the five functions. What does the gap between  $P_s$  and  $P_f$  show? [graph plus 22 words]

## **Wesley Claire Mitchell**

**Harvey, John T. “Business Cycle Theory: A Critical Historical Survey” section 2.1 Mitchell**  
**<http://personal.tcu.edu/jharvey/50463/BusinessCycleSurveyExcerpts.pdf>**

79. What two things stand out in terms of Mitchell’s characterization of the business cycle?  
[61 words]
80. In explaining the business cycle, Mitchell’s focus was especially what? [1 word]
81. What three forces—all a function of the expansion—come to weigh heavily on firms’  
bottom line? [87 words]
82. Mitchell says the path by which the contagion that leads to recession is via the financial  
market. The problem is not so much the failure to realize expected dividends but what?  
Hence, this leads financial institutions to do what? [36 words]

## **US Business Cycles**

**(I don’t check these study questions on the assumption that you used the links)**

**[http://personal.tcu.edu/jharvey/50463/RecessionDescriptions1954\\_2009.pdf](http://personal.tcu.edu/jharvey/50463/RecessionDescriptions1954_2009.pdf)**

**<http://personal.tcu.edu/jharvey/50463/USBusinessCyclesince1954Summary.pdf>**

83. Be sure you can list all the US cycles since 1954 in order and that you can specify the  
Important/Unique Factors in Expansion, Important/Unique Factors in Recession:  
Exogenous, and Important/Unique Factors in Recession: Endogenous for each. Note that I  
do not check this study question on the assumption that you already have the answer in  
the link above.

## **Tests of Business Cycle Theories**

**(I don’t check these study questions on the assumption that you used the links)**

**[http://personal.tcu.edu/jharvey/50463/RecessionTestsbySchool1954\\_2017.pdf](http://personal.tcu.edu/jharvey/50463/RecessionTestsbySchool1954_2017.pdf)**

84. Be sure you know the test summaries for each of the endogenous views.