

University of Notre Dame
Economics 43130, Spring 2011
Takehome Final Examination
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Choose any **eight** questions. Grad students must submit answers to **ten** questions. Each question will be assigned equal weight in grading. Wisdom and practicality dictate succinct and concise essay answers; but I will not stipulate any fixed length requirements. **All statements should be supported by appropriate citations, with a full bibliography (in *Journal of Economic Literature* standard format) appended at the end of each answer.** {This is *history*. You must provide the reader with a map to your sources.} A well-chosen citation from your assigned texts in the syllabus usually shows you were on top of the course.

This exam is due on **noon** in 400 Decio on May X for this course. The preferred mode would be to submit it electronically, by email. If a printout is submitted by hand, it must include an electronic version on disk. It should be written in a standard word processor format, and formatted double-spaced in a 12-point font. Don't play games with fat margins, extra-wide spacing, and so forth: you risk my wrath during the grading process, which is not very smart. Mark the number of each question chosen clearly, submit the answers in numerical order, and *paginate the entire document* prior to turning it in. If it is turned in *for any reason whatsoever* after this deadline, I reserve the right to assign it a grade of F.

1. Compare and contrast the account of the impact of the recent economic crisis upon the economics profession provided by Roger Backhouse in *The Puzzle of Modern Economics* and that provided by the instructor in the first week of class. Your answer should include two points of agreement, and at least three separate points of divergence. In the second meeting, a student raised major historiographic complaint about Backhouse. Either report whether you agree with that complaint; or else, indicate how you might personally object to the history found in Backhouse .

2. Tony Judt, in "Goodbye to all That" in *New York Review of Books*, September 12, 2006, pp.88-92 argues that, "in the coming years, as visible disparities of wealth increase...the moral appeal of some refurbished version of Marxism is likely to grow." One might add the crash of October 2008 into the mix, although Judt could not have known about it back in 2006. Using what you know from the class about Marx's work, briefly describe Marx's theories of capitalist exploitation and crisis, and then evaluate Judt's prediction, giving at least *four* distinct reasons for your position.

3. The history of the relationship of orthodox neoclassical theory to the discipline of psychology has been a recurrently stormy one. (See Backhouse, *Puzzle*, p.169: "The conventional view... is that people are rational in a very precisely defined sense.") Choose any **two** psychologists (or schools of psychology) from any time *prior to the last 20 years*, and explore whether (or not) and how neoclassical economists were willing or able to take their visions of the mind into account, and point out whether (or not) they changed economic theory. What do your examples tell you about modern claims that economists now care a lot about the lessons of psychology?

4. Does a particular economic theory, like (say) neoclassical price theory, necessarily come intrinsically equipped with a particular political orientation? Is it 'naturally' radical or conservative? Or has there been such a thing as value-free 'positive' economics in the past? *Hint*: No one could give this a comprehensive definitive treatment in a few pages. Hence, in order to answer this question, briefly describe the rise of "Neoliberalism" and its relationship to the Chicago school of economics. Did the economic theory dictate *a priori* the politics prevalent there, or was it the other way around? What does this say about chapter 8 of Backhouse's book? Then give your personal opinion concerning the initial question above.

5. In class I argued that the theory of supply and demand did not start out as a part of the neoclassical project; that the marriage of neoclassical price theory to supply and demand only happened in the 1890s; and that even in modern times the version of supply and demand you studied in Economics 1 is not fully consistent with full rigorous general equilibrium. Cite and explain the work of one writer of your choice who illustrates *any two* of those three claims.

6. Roncaglia, pp.481-4, raises the vexed issue of whether the IS-LM curve framework (which was *not* invented by Keynes) does or does not adequately express Keynes' theory. First briefly describe the basic IS-LM model and who invented it and why. Then give two reasons in favor, and two reasons against the legitimacy of the IS-LM model as legitimately 'Keynesian'. (Be careful to define what it means in your opinion to be a 'Keynesian'.) Which position do you tend to favor?

7. Some people criticize the 'physics thesis' in *More Heat than Light* as ignoring that there were many 'precursors' or anticipators of neoclassical theory before the advent of energetics in the mid-19th century—hence, it really was 'discovered' after all. (Roncaglia does something similar in his Chapter 10.) Pick any *two* such precursors, describe their work in some detail, and then evaluate whether they can be used to disprove the physics inspiration of neoclassical price theory.

8. The Physiocratic contention that manufacturing was an "unproductive" activity has often been treated by modern commentators as a thesis so wildly in error that it verges upon the incomprehensible that eighteenth-century readers would even entertain it. It offended Adam Smith, and it offends modern historians like Helen Boss in her *Theories of Surplus and Transfer* (1990). Briefly describe the structure of the *Tableau*, and then provide an historically grounded and rationally motivated explanation of the idea that only agriculture is 'productive'. Your answer should include examples of actual Physiocratic uses of the productive/unproductive distinction.

9. Mirowski in *More Heat than Light* p.224 gives one example of an attempted line-by-line translation from energy physics to neoclassical economics by Irving Fisher. Write out the equations for a simple problem of motion, as we did in class, and then explain point by point which of Fisher's translations 'worked' and which ones should be deemed failures. What does this suggest to you about the drawbacks of the attempt to render economics scientific by means of such copying of the natural sciences?

10. Could Samuel Bailey's critique of Ricardian economics ever have plausibly given rise to a lasting rival school of economic analysis in Britain? Start by outlining Bailey's position, especially with regard to value theory, and then list the criteria that would have had to been met, in your opinion, for it to succeed as a viable ongoing theoretical research program. What does this incident imply about how the economics profession would come to get its boundaries constituted?

11. Here is a commonplace claim: We get the sorts of economic theories that we do because changes in the "real economy" summon forth more accurate descriptions and prescriptions for dealing with it. Answer all four parts of this question: (a) What sort of genre of history of economics

(a la Khalil) does this give rise to? (b) Identify **one** incident or theory from this history of economic thought which would seem to illustrate this belief. (c) Criticize the belief that *this incident* was best understood as being prompted by changes in the economy and not changes in intellectual history. (d) Do you think the current crisis will validate the general claim?

12. In class we described the ways in which Walras' theory of general equilibrium failed to deal with the problem of how prices actually were set, and by whom. First describe his theory of *tâtonnement*, and then explain why this was regarded as flawed even during his lifetime.

13. Write a short essay outlining the contributions of *any two* the main figures involved in the history of the geometric conception of supply and demand from Cournot to Marshall, relating it where appropriate to the classical and neoclassical traditions. Can it reasonably be claimed that the "laws of supply and demand" constitute the reconciliation of classical theories of cost of production with neoclassical theories of psychological value? In what sense?

14. One of the more interesting reactions to *More Heat than Light* is to see how defenders of neoclassical economics account for the fact that a multitude of their neoclassical heroes made explicit comparisons of physical mechanics to their economic models. Choose any **two** such exercises [some possibilities: R. Marchionatti & E. Gambino on Pareto, *Journal of Political Economy*, 1997; J. van Daal & A. Jolink on Walras in the *Journal of the History of Economic Thought*; Claude Mouchot, *idem.*, 1998; any author in Neil de Marchi, ed. *Non-Natural Economics*, Donald Walker in the *Economic Journal* (1991, (101):615-31), Michael White, *History of Political Economy* 2004; Michael McLure, *Pareto, Economics and Society: the mechanical analogy*], describe how the mechanical analogy is explained away, and assess the quality of their arguments.

15. Explain the theory behind Marx's theory of the falling rate of profit, and how it was supposed to relate to his theory of the transition from capitalism to socialism. How was this different from the Ricardian tradition? Give two reasons frequently given why this central prediction has never panned out.

16. Outline three different reactions of various early neoclassical authors (that is, up until the 1940s) to the problem of the measurement of utility. Include citations to the texts where they appear. Discuss the extent to which these reactions had anything to do with contemporary developments in psychology. Rank them in order of their plausibility, from your own point of view, and indicate how effective they were at the time they were proffered.

17. Briefly describe William Thomas Thornton's attack on the notional idea of laws of supply and demand, and show how he used his critique to provide an argument for the economic legitimacy of trades unions. Why was this incident so important in the British context of the 1860s? Then why do you think Thornton has been forgotten in the interim?

18. One of the biggest about-faces of orthodox economics in the 20th century was the embrace of Keynes, and then an equally thorough rejection of Keynes. Briefly sketch what Keynes actually wrote about the causes of depressions, and then summarize Backhouse, *Puzzle*, chap. 7 on when and why the rejection happened. What does this tell you about the writings of Paul Krugman, who has argued that Keynesian theory of an older vintage is perfectly adequate to explain the current crisis?

19. Roncaglia, *Wealth of Ideas*, p.435 calls Piero Sraffa "one of the leading intellectuals of the 20th century", but I'll bet you've never heard of him before this class. Outline *three* arguments that support this assessment of his importance for economics. Do you personally think these qualify him to be deemed as important as, say Paul Samuelson?

20. Briefly outline the sequence of arguments found in John Maynard Keynes' *General Theory* concerning the causal determinants of income, employment and the price level. How much does this conform to what you find in the intermediate macroeconomics textbook you used at ND? [Citations to the textbook are mandatory for this answer.] Does the divergence help explain the existence of a separate field of 'macroeconomics'?

21. Wade Hands and I have argued that one of the main reasons for the triumph of neoclassical economics in America in the post-WWII period was that it was not a monolithic doctrine, but rather the serendipitous combination of a number of different and contradictory doctrines situated in different American 'schools,' each of which claimed for itself the mantle of being the true 'neoclassical' theory. (This story can also be found in *Machine Dreams*.) Briefly describe three of these versions of neoclassicism, and indicate how they handled the issue of the relationship of the government to the economy. What did each owe to their wartime experience? Why did this help defeat other rival schools of economics in the postwar US?

22. In class I argued there were really only four big theories of value in the history of economics. Briefly describe the 'field' and 'information' theories, with the purpose of comparing and contrasting how they both work. Provide one example of an economist who is representative of each value theory. Which is the version you have been most frequently taught in your experience here at Notre Dame, and what does that say about how much you are exposed to up-to-date developments?

23. Lately, There has been a new sensitivity to the problem of conflicts of interest in modern economics. Economists frequently accuse their agents of having selfish interests and reacting to incentives, but rarely turn those observations on themselves with regard to their economic ideas. For this question, please view the movie *Inside Job* (2010) and the interview with Gerry Epstein: http://therealnews.com/t2/index.php?option=com_content&task=view&id=31&Itemid=74&jumi_val=6099

Give two separate examples of conflicts of interest in the history of economics. In your answer, first provide two examples of how conflicts of interest might have had deleterious effects upon the knowledge provided by modern economists. In your view, is this a serious problem, and if so, what do you think should be done about it? Secondly, provide some suggestions how one would explore whether this problem had gotten worse (or not) over the last century.

24. What is "Duhem's thesis" and why is it so important for the question of whether economic theory has passed empirical tests? Give one very specific example of a famous test of an economic theory in actual history, and describe the empirical outcome. Does your example say something about the role of econometrics in economics? Was the outcome a sign that economics is or is not a science?

25. *Machine Dreams* argues that computers were intimately bound up with early 19th century political economy, but were abruptly divorced from economic considerations in the period roughly 1870-1950, only to slowly come to the fore in economic discourse in more recent times. Briefly summarize this argument, and then discuss **one** of the following questions: (a) What accounts for the curious hiatus in the middle period? (b) What role was played by the rise of the digital computer after WWII? (c) Why do machines play such a dominant role in the history of economics?

26. The dominant school of economics in America in the 1920s/30s was known as "Institutionalism". First, describe the summary offered by Malcolm Rutherford in JHET Sept. 2000. Then briefly describe the work of any *one* of the main Institutionalist economists: Thorstein Veblen,

John R. Commons, and Wesley Clair Mitchell. Which aspect of the school does your chosen figure best illustrate? Why did the school decline after WWII?

27. Describe Khalil's taxonomy of different types of history of economics. Pick the type of history that seems most useful from your own point of view, and give one incident from the history of economic thought that illustrates your point. Finally, identify an actual text in the history of thought that embodies your preferred type of history.

28. What were *five* of the seven different approaches to the analytical device of production functions in the history of neoclassical microeconomics? Give one brief example of each you choose. Begin your essay by describing what was unusual about the rise of neoclassical production theory, including consideration of *More Heat than Light* chapter 7. What tended to be their relationship to other disciplines, such as engineering or physics?

29. *Machine Dreams* argues that the version of game theory that was first advanced in 1928 and 1944 was rejected by the economics profession. Briefly name the early versions, and then write a brief outline history of invention and then the delayed acceptance of Nash equilibrium in game theory, taking care to identify the initial economists' reactions to Nash, and the timing and later factors encouraging its revival. Has the Nash equilibrium proven to be empirically robust? [Optional: What effect, if any, did the book and/or movie *Beautiful Mind* have upon your answer?]

30. The "Chicago School" was the site of the main pro-market school of orthodox economics in the post-WWII period up to 1980. Briefly describe the circumstances of the initial founding of the school, and its relationship to the development of the main doctrines of "Neoliberalism". It is equally the source of the recent popularized economics book *Freakonomics*. Were you familiar with this book and/or this school before starting this class? List at least two ways *Freakonomics* reveals its Chicago heritage. What does this suggest about the relationship of economists to their patrons and their public?

31. I have argued in the 2007 *Journal of Economic Behavior and Organization* April 2007, (63):209-242 that one of the major changes in more recent economics is the slow repudiation of the neoclassical doctrine that all markets operate essentially in the same manner, in favor of the idea that markets are diverse in their structures and consequences. First, summarize this argument. What implications does this transformation have for the relationship of neoclassical economics to physics and the other natural sciences?

32. Whom do *you* think is the most important economist you have studied in this course? Why? {HINT: The question looks short and easy, but don't let it fool you. You have to provide detailed arguments (and not just opinions) with copious citations to do this question justice, which means reading some original texts. Moreover, you need to compare and contrast your choice with a few alternative obvious suspects.]

33. Write a brief essay explaining the history and significance of the Sonnenschein/Mantel/Debreu theorems for the empirical grounding of neoclassical price theory in the 20th century. Include in your answer some contrasting reactions to this theorem (outlined in the reading by Abu Rizvi), and evaluate whether this has anything to do with Duhem's Thesis.

34. I have argued in class and in chapter 3 of *Machine Dreams* that John von Neumann was the most important figure in 20th century economics. The reasons given there turn out to have nothing to do with the innovations described in Roncaglia, *Wealth*, pp.342-8. Outline both arguments, and then provide your own opinion of this thesis.

35. In class I argued that the "socialist calculation controversy" which began in the 1930s

was one of the key influences on the development of highbrow neoclassical economic theory in postwar America. First briefly identify the main protagonists of the controversy, describe the main opposing positions, and then describe how it got transformed when it was transported to the American context. In your opinion, did the Fall of the Berlin Wall put an end to this theoretical argument, or not?

36. Marion Fourcade's *Economists and Societies* (available in the Concourse page for this course) describes a range of reasons why American neoclassical economics has come to dominate the teaching of economics throughout the world in the last 30 years. As she writes on p.243, "what goes on in the US field of economics acts as a powerful force for the rest of the world." Describe *three* of her reasons, and then critique them. Will the current economic crisis do anything to change this, in your opinion?

37. Both Mirowski in *More Heat than Light* and I.B. Cohen in *Natural Images in Economics* (ed. Mirowski) insist that Adam Smith cannot be reasonably characterized as a "Newtonian" thinker. Leonidas Montes in *Cambridge Journal of Economics* 27:723-747 (2003) and Eric Schliesser in the *British Journal for the History of Philosophy* 2005 summarizes the case in favor. Choose one source from each side of the argument, and briefly indicate the ways in which Smith would and would not qualify. What difference does this make to the understanding of Smith's work?

38. Choose any **two** of the following early neoclassical economists: Leon Walras, William Stanley Jevons, Francis Ysidro Edgeworth, Irving Fisher, Alfred Marshall. Compare and contrast how their respective price theories worked, the extent to which they were familiar with the physics underpinnings, and the ways in which they dealt with the problems of dynamics of price setting.

39. Compare and contrast the ideas of Friedrich Hayek and any **one** of the following: Joseph Stiglitz, Adam Smith, John Maynard Keynes, or Gary Becker. [*Hint*: this question is actually mostly about the information theory of value.] You must cite original texts to support your claims.

40. Backhouse, *Puzzle*, p.115: "Many of the developments in microeconomics during the period since WWII need to be understood as the result of economists trying to be scientific." How would you begin to make sense of this statement? *Hint*: You need to provide at least **four** criteria to be used to compare the scientific status of economics since 1870 to the present; or else, you need to criticize the ambition to attain scientific status with at least **four** generalizations about the history.

41. While the crisis that began in 2008 was widely conceded to originate in the financial sector, the formal theory of finance taught in business schools entirely missed out in warning about it. Backhouse, *Puzzle*, chap. 5 provides some reasons. First, name and describe two relevant financial theories and briefly indicate when they were first enunciated. Then give at least two reasons why these theories proved oblivious to the crisis.