

## ***ECONOMICS 113 — FINAL EXAMINATION Questions***

### **PART I. QUESTIONS FROM LAST THIRD OF COURSE (60 points possible; 60 minutes)**

#### **A. Paired Identification (12 points total; 12 minutes total)**

Choose **one** of the following **two** pairs of items. Define or identify each term in the pair (8 points). Then, briefly discuss the connection between the two terms (4 points). Your answer is worth 12 points total. You should spend no more than 12 minutes on the question.

- (1) (12 points; 12 minutes)
  - (a) Changes in women’s labor force participation rates, 1970-2000
  - (b) Changes in marriage patterns, 1970-2000
  
- (2) (12 points, 12 minutes)
  - (a) Productivity growth slowdown, 1973-1995
  - (b) Rise of the service sector, post-World War II period

#### **B. Using Economic Models and Concepts to Explain Historical Events (36 points total; 36 minutes total)**

Answer **three** of the following **four** questions. Allocate no more than 12 minutes to each question.

- (1) (12 points; 12 minutes) Use the concept of comparative advantage to discuss the pattern and causes of outsourcing in recent years.

- (2) (12 points; 12 mintes) Use the production function  $Y = A \times (K_{IT})^{v_{K_{IT}}} \times (K_N)^{v_{K_N}} \times (L)^{v_L}$  and the table at right to explain the post-1995 rise in the growth rate of labor productivity.

<b>Explaining the Revival in U.S. Productivity Growth</b>			
Share of Change in Productivity Growth Rate Due To . . .			
. . . <i>Capital Deepening</i>		. . . <i>TFP</i>	
IT-Related	Other	IT-Related	Other
43 %	-15 %	26 %	42 %

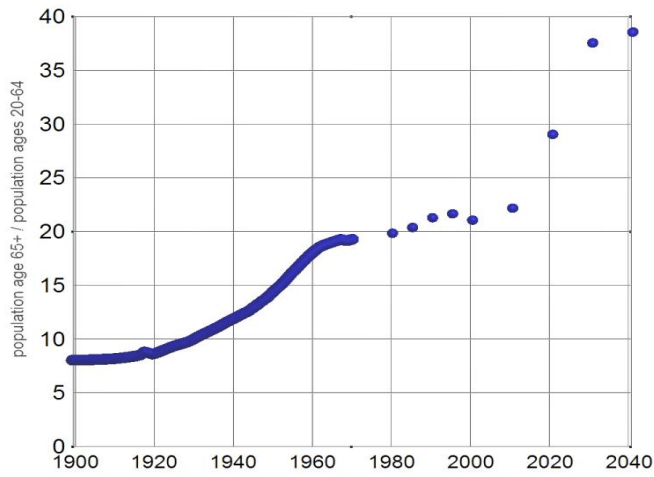
*Source:* Stiroh, “Information Technology & the U.S. Productivity Revival,” *Business Economics* (January 2002): Table 1, last column.

- (3) (12 points; 12 mintes) Use the Phillips Curve to discuss the Reagan Administration’s economic policies and their effectiveness in simultaneously lowering unemployment and inflation.
  
- (4) (12 points; 12 mintes) Use Thurow’s idea of “brainpower industries” and the concept of competition to discuss the impact of the current pattern of educational attainment by gender and by race/ethnicity on the distribution of income by gender and by race/ethnicity.

**C. Graph and Table Interpretation (12 points total; 12 minutes total)** Answer **both** questions.

- (1) (6 points; 6 minutes) What is the graph saying? What is an implication of the graph for the future of Social Security?

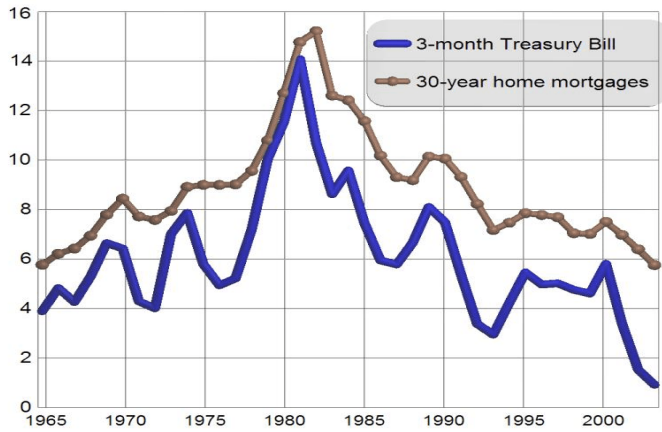
Old Age Dependency Ratio, 1900 - 2040



Sources: Historical Statistics, Series A29-A42; Statistical Abstract 2002, Tables 12 & 13.

- (2) (6 points; 6 minutes) What is the figure saying? What is the connection between the figure and the Savings and Loan Crisis?

Interest Rates, 1965-2003



Source: Economic Report of the President 2004, TableB73

**PART II. QUESTIONS FROM ENTIRE COURSE (50 points possible; 50 minutes total)**

**A. Paired Identification (20 points total; 20 minutes total)**

Choose **two** of the following **three** pairs of items. Very briefly – one sentence – define or identify each term in the pair (2 points). Then, discuss the connection between the two terms (8 points). **Note the point allocation!** Each answer is worth 10 points. You should spend no more than 10 minutes on each question.

- (1) (10 points; 10 minutes)
  - (a) Pattern of fertility in the antebellum years
  - (b) Pattern of fertility after 1964  
(Connection: focus on role of labor market opportunities)
  
- (2) (10 points; 10 minutes)
  - (a) 19<sup>th</sup> century immigrants' wages relative to wages of native-born, according to Hannon
  - (b) 20<sup>th</sup> century Mexican immigrants' wages relative to wages of native-born, according to Feliciano  
(Connection: focus on explanations)
  
- (3) (10 points; 10 minutes)
  - (a) Insider lending in antebellum New England
  - (b) Development of a national currency in postbellum United States  
(Connection: focus on role of asymmetric information)

**B. Using Economic Models and Concepts to Explain Historical Events** (30 points total; 30 minutes total) Answer **two** of the following **three** questions. Allocate no more than 15 minutes to each question.

(1) (15 points; 15 minutes) Use Goldin and Katz's results shown at the right to speculate as to the explanation of the 2002 pattern of high school graduation rates by state. Give specific examples of at least two states that currently have relatively high and at least two states that currently have relatively low graduation rates.

<b>Determinants of High School Graduation Rates, 1928</b>	
(standard errors in parentheses)	
	1928
log per capita wealth	0.852 (0.37)
% population ≥65 yrs old	1.423 (0.79)
% labor force in manufacturing	-0.144 (0.097)
% population Catholic	-0.377 (0.09)
Auto registrations per capita	0.0568 (0.02)
South (0/1 dummy variable)	-0.0935 (0.03)
New England (0/1 dummy variable)	0.100 (0.03)
Constant	-0.468 (0.27)
R <sup>2</sup>	0.874
n	48

Source: Goldin & Katz, "Human Capital and Social Capital," Table 1.

- (2) (15 points; 15 minutes) Use Rowthorn & Ramaswamy's results shown at the right to speculate as to the cause of the United States' late 19<sup>th</sup> and early 20th century "deagriculturalization."

**Internal vs External Causes of  
Deindustrialization**  
(t-stats in parentheses)

Indep. Variables	Manufacturing / Real GDP	Manufacturing / Employment
Log Y	6.55 (7.02)	11.65 (10.92)
(Log Y) <sup>2</sup>	-0.363 (7.09)	-0.643 (11.01)
Log Relative Price	-0.611 (9.82)	
Exports - Imports	0.020 (6.39)	0.015 (4.16)
Imports from LDCs	-0.003 (0.14)	-0.041 (1.57)
Investment / GDP	0.018 (6.16)	0.014 (4.26)
R <sup>2</sup>	0.84	0.91
Turning Point	\$8,276	\$8,673

Source: Rowthorn & Ramaswamy (1999), Table 3 (8AVG) and Table 4 (9AVG).

- (3) (15 points; 15 minutes) Illustrate Professor Olney's parting message – PROFIT MAXIMIZATION IS NOT A "VALUE." – with any historical example that was discussed in class. Explain the connection between the example you chose and her statement. Then, provide a contemporary example – one that has been in the news in the last few years or one that you make up but which is plausible – that illustrates her parting message.

**Part III. Essay Question from Whole Course (50 points; 50 minutes)**

***The Essay: Growth in the 21<sup>st</sup> Century: Lessons from History***

We have told one story in Economics 113: the story of U.S. economic growth. It has been a complex story. We have looked at both types of growth: extensive growth (increases in the quantities of inputs) and intensive growth (increases in productivity). The table at the right indicates the relative roles of extensive and intensive growth in U.S. economic history.

Sources of Growth in Real GDP				
	Share attributable to . . .			
	Labor	capital	land	productivity
1840-1860	49	26	10	15
1870-1930	43	27	4	27
1940-1990	41	14	0	45

Source: Walton & Rockoff, Table 1-10.

The complexity of the story comes in part from our recognition that the costs of economic growth are not borne evenly. There are inequities in the distributions of gains and losses from economic growth. Some inequities are based on race or gender – slavery, marriage bars – others are not. Food prices fall, benefitting consumers, but fewer people can make a living farming.

Economic historians — and hopefully now you, too — believe that studying history can provide new perspectives on recent economic patterns and on the potential for future growth.

The comprehensive essay will address this question: what lessons do we learn from history as we assess the potential for growth – and the costs of growth – in the American economy in the 21<sup>st</sup> century? You will use examples from economic history to illustrate [1] the factors that contribute to increases in living standards, and [2] the costs borne by some individuals or groups as the rest of the economy experiences rising living standards.

Your essay should include these sections (it should also have a proper introduction and conclusion that tie the essay together):

- First, set the stage by laying out the economics. What aggregate production function can be used to discuss issues of growth in contemporary and historical contexts? What factors determine changes in output per capita (Y/P)? Highlight the theoretical sources of extensive and intensive growth. Discuss why, according to economic theory, some will lose while others gain as the economy grows. (This section will be about 1/5 of the essay)
- Second, link these theoretical economic concepts to reality by pointing to the future. What factors will provide further extensive growth in the American economy? What are the likely sources of and impact of further intensive growth? What is the potential for future inequities? (This section will be about 1/5 of the essay)
- Third, use history to illustrate the economics and to buttress your arguments in the second section. Choose three examples — one illustrating extensive growth, one illustrating intensive growth, and one illustrating inequity — with one example from each of three time periods: pre-1860, 1860-1940, and 1940-2000. You will have **three** examples in total (not nine).

For each example, begin with a summary statement as was done in the *Wall Street Journal* article on outsourcing that was distributed in class. Then, describe the historical event/episode. How does it illustrate extensive growth, intensive growth, or inequities in economic history? What happened? Why? How? What was the impact? The determinants? Provide any relevant economic analysis. Link the historical example to your statement in the second section about the future. (This section will be about 3/5 of the essay)

***The more complete your examples, the more coherent your writing, and the more***

*appropriate your examples, the better your grade.*