

ECONOMICS 113 — MIDTERM EXAMINATION #1

PART I. Paired Identification (24 points total; 18 minutes total)

Choose **two** of the following **three** pairs of items. Define or identify each term in the pair (8 points). Then, briefly discuss the connection between the two terms (4 points). Each answer is worth 12 points total. You should spend about 9 minutes on each question.

- (1) (a) Grant of encomienda, and
 (b) Indenture (or, indentured servant) contract
- (2) (a) Proclamation Line of 1763
 (b) 36°30' Line of the 1820 Missouri Compromise
- (3) (a) Steamboat and
 (b) Steam engine

Part II. Using Economic Models and Concepts to Explain Historical Events (36 points total; 27 minutes total) **Answer all three questions.**

- (1) (12 points) Use a model of the supply of and demand for labor to explain why the skill premium increased in the United States between 1840 and 1860.
- (2) (12 points) Use the economic concept of specialization and trade to describe pre-Columbian Mississippian civilization. Include two (2) details from the Barrington article in your description.
- (3) (12 points) Use the results summarized in the table below to explain why the commercialization of agriculture is an explanation for the variation across towns in pauperism rates and their rise over time. (There are more results included below than you need in your answer.)

Factors correlated with N.Y. state pauperism rate

	1823	1840/44	1855/59
population growth rate	-0.79*	0.23	0.60
% population that's urban	0.52	0.48	0.60
% Non-Agricultural labor force	0.60	0.81**	n.a.
% Manufacturing labor force	n.a.	n.a.	0.48
Household production per capita	-0.69*	-0.90**	-0.74*
% population foreign born	0.27	0.79*	0.67*

Notes: All results are for the sample including New York City.

* Significant at 5 percent level.

** Significant at 1 percent level.

Source: Hannon, Joan Underhill, "Poverty in the Antebellum Northeast," *Journal of Economic History* 44 (December 1984): Table 5.

PART III. Table Identification (12 points total; 9 minutes total) **Answer both questions.**

- (1) What are the data in the table saying? (2 points) What is an explanation of the pattern shown? (4 points)

Number of children (ages 0-9) per 1000 women (16-44), 1840	
Missouri	2350
Arkansas	2259
Alabama	2224
Indiana	2016
Illinois	1944
Iowa	1874
Rhode Island	1130
Massachusetts	1071
Connecticut	1047

Source: Paul David & William Sundstrom, "Old-Age Security Motives, Labor Markets, and Farm Family Fertility in Antebellum America", *Explorations in Economic History* 25 (April 1988): Table 1.

- (2) What are the data in the table saying? (2 points) What is an explanation of the difference between the patterns shown for wheat & for cotton? (4 points)

Agricultural Productivity		
crop	year	Hours per Acre at harvest
wheat	1800	40
	1840	23
cotton	1800	50
	1840	45

Source: *Historical Statistics*, Series K445-K459.

Part IV. Map Identification (8 points total; 6 minutes total)

Using the map below, sketch in each of the following. Label the area with (1), (2), etc. (2 points each)

- (1) Mississippi River
- (2) New England
- (3) Northwest Territory
- (4) Indian Territory after Removal



PART V. Short Essay Question (20 points total; 15 minutes total)

Answer **one** of the following **two** questions. (The questions have the same part (a), but differ starting with part (b).) Base your answers on lecture, discussion section, **and** the assigned reading. *Complete answers will draw from all three sources.*

Sources of Economic Growth				
period	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.

(1) The Solow growth model is based on the production function $Y = A \cdot F(K, L)$. Economic historians often use the production function $Y = A \cdot F(K, L, T)$ instead. There are two types of economic growth: extensive growth (increases in the quantities of inputs) and intensive growth (increases in productivity). The table at the left indicates the relative roles of extensive and intensive growth in U.S. economic history.

- a. (6 points) Describe the Solow growth model by answering the following questions: (i) What does the equation $Y = A \cdot F(K, L, T)$ “say”? (That is, write out the equation in a sentence.) (ii) What question(s) does the Solow growth model answer? (iii) What key assumption(s) does the Solow growth model make? (iv) According to the Solow model, what is (are) the key determinant(s) of the long-run rate of growth of the economy?
- b. (6 points) One source of extensive growth in the antebellum period was increased labor supply from immigration. **Choose any two** foreign countries. For each, **briefly** describe when that country’s residents migrated to the U.S., why they emigrated from their home country, and what sort of work they engaged in when they settled in the U.S.
- c. (4 points) One source of intensive growth in this period came from the use of slave labor in the

Be sure to label parts (a), (b), (c), and (d) in your answers.

Southern states. What evidence do we have that slave labor was more productive than free labor? What are the three explanations for why slave labor was more productive than free labor?

- d. (4 points) The most famous “counterfactual” was Bob Fogel’s proposal of a hypothetical system of canals as a way of investigating the importance of the railroad to economic growth. Formulate a “counterfactual” scenario that would enable scholars to determine the importance to economic growth of *either* immigration *or* slavery.

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(2) The Solow growth model is based on the production function $Y = A \cdot F(K, L)$. Economic historians often use the production function $Y = A \cdot F(K, L, T)$ instead. There are two types of economic growth: extensive growth (increases in the quantities of inputs) and intensive growth (increases in productivity). The table at the left indicates the relative roles of extensive and intensive growth in U.S. economic history.

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- b. (4 points) One source of extensive growth in the antebellum period was increased cultivation of land. Between about 1800 and 1850, what parts of the country were settled, and what were the primary source(s) of labor on those lands?
- c. (6 points) One source of intensive growth in this period was the securing of rights to the land through three means: (i) Removal, (ii) a system of property rights laws, and (iii) surveying of land. **Choose any two** of these three means of securing rights. For each, **briefly** define it, and then discuss the incentive(s) to undertaking or establishing that means of securing rights.
- d. (4 points) The most famous “counterfactual” was Bob Fogel’s proposal of a hypothetical system of canals as a way of investigating the importance of the railroad to economic growth. Formulate a “counterfactual” scenario that would enable scholars to determine the importance to economic growth of *either* land acquisition *or* securing of rights to the land.

Be sure to label parts (a), (b), (c), and (d) in your answers.