## Handout for February 26, 2015

Table 1. Top 5 Industries			
1790 & 1860	1910		
Cotton goods Lumber	Machinery Lumber		
Boots & shoes	Printing & Publishing		
Flour & meal Men's clothing	Iron & steel		

Source: Walton & Rockoff, p. 375; Hughes & Cain, *American Economic History*, Figure 8.2.

## Table 2. Distribution of Total Output

	Agric	Manuf	Transp & Utilities	Trade Finance & Services
1869	22	15	11	41
1879	19	13	13	43
1889	14	19	11	42
1899-1903	18	19	10	40
1910-1913	19	20	11	37
2010	1	12	5	62

Source: Value Added, Billions of 1879 Dollars, *Historical Statistics*, Series F251-F261. For 2010, U.S. BEA, "Value Added by Industry as a Percentage of Gross Domestic Product," <u>www.bea.gov</u> (Accessed 2/16/2015). Omitted categories are mining, construction, and government.

#### Table 3. Distribution of Labor Force

	Agric	Manuf	Transp & Utilities	Trade Finance Services
1870	53	19	— 2	24 —
1890	43	19	6	21
1910	31	22	9	25
1920	27	26	10	25
2010	1	9	4	64

Source: 1870-1920, *Historical Statistics*, Series D152-D166. 2010, U.S. BEA, *National Income & Product Accounts*, Table 6.5D. Omitted categories are mining, construction, and government.

### Table 4. Average # employees per establishment

	1869	1889	1909
Food products	6	9	8
Printing	17	14	12
Lumber	6	18	17
Furniture	9	37	40
Machinery	14	35	56
Textiles	51	99	153
Primary Metals	85	203	317

Source: Atack & Passell, Table 17.5.

#### Table 5. Annual Earnings of Industrial Workers

	1982 dollars	Annual rate of change
1875-79	\$ 4,000	
1885-89	5,000	2.2 %
1895-99	5,300	0.6
1901-05	6,100	2.4
1911-15	6,900	1.2
2010	26,600	0.8

Source: Scheiber, Vatter, Faulkner, *American Economic History*, p. 247. 2010 data: \$60,018 is wages & salaries per ull-time equivalent employee in manufacturing (US BEA, NIPA Table 6.6D), deflated to 1982 dollars using <u>www.measuringworth.com</u>. Annual rate of change for 2010 is measured over 30 years, 1980-2010.

	% Male		% Female
Blacksmith	100	Millinery, custom	98
Carpentry	100	Dressmaking	97
Painting, Wallpaper	100	Corsets	81
Shipbuilding	100	Shirts	79
Carriages & wagons	99	Men's accessories	74
Flour milling	99	Millinery & lace	73
Foundry, machine shops	99	Hosiery & knit goods	67
Agric implements	98	Boxes	65
Boots & Shoes, custom	98	Clothing, women's	63
Leather	98	Silk	57

#### Table 6. Male & Female Intensive Industries, 1890

Source: Claudia Goldin, Understanding the Gender Gap, Table 3.4.

#### Table 7. Women's Labor Force Participation Rates (percent of population)

	white		non-	white
	single	married	single	married
1890	38	2	60	22
1900	42	3	60	26
1920	45	6	59	32
2010	56	61	57	66

Source: Claudia Goldin, Understanding the Gender Gap, Table 2.1, p. 17. 2010 data from U.S. BLS, Women in the Labor Force: A Databook (2011 edition), Table 6. "Single" includes never-married, divorced, separated, and widowed. LFPR calculated for population age 16+. Race category for 2010 is "Black or African American"; race category in earlier censuses was "Non-White."

### Table 8. Enrollment and Graduation Rates, 1900-1935, 1970, 2000, 2010

	Secondary Enrollment as % of 14-17 year olds	High school graduate as % of <b>17 yr old</b> population	BA degrees, as % of high school graduates 4 years earlier
1900	10.6	6.4	36
1905	12.4		32
1910	17.8	8.8	30
1915	24.5		25
1920	35.0	16.8	
1925	45.9		27
1930	54.9	32.1	
1935	65.9	42.7	17
1970	92.0	75.9	31
2000	95.7	69.8	49
2010	97.1	77.0	53

Source: Statistical Abstract 1999, Table 1425. 2000 data from 2002 Statistical Abstract, Table 200. 2010 data from

http://www.census.gov/hhes/school/data/cps/2010/tables.html. "Secondary enrollment" for 2010 includes both middle and high school students. Also

http://nces.ed.gov/programs/digest/d11/tables/dt11\_286.asp and http://nces.ed.gov/programs/digest/d11/tables/dt11\_111.asp for columns 2 & 3.

20 (10 and black) 2020 2020				
	< 5 years school	High school graduate	College graduate	
1910	23.8	13.5	2.7	
1920	22.0	16.4	3.3	
1930	17.5	19.1	3.9	
1940	13.5	24.1	4.6	
1950	10.8	33.3	6.0	
1960	8.3	41.0	7.7	
1970	5.3	55.2	11.0	
1980	3.4	68.6	17.0	
1990	2.4	77.6	21.3	
2000		84.1	25.6	
2010		87.1	29.9	

# Table 9. Educational Attainment of Population25 yrs and older, 1910 - 2010

*Source:* Statistical Abstract 1999, Table 1426. 2000 and 2010 data from *2012 Statistical Abstract*, Table 229.

# Table 10. Number of New Colleges andUniversities Established, 1638 - 1934

	Public Private	
1638-1819	9	40
1820-1859	15	225
1860-1879	35	151
1880-1899	49	197
1900-1934	35	165

Source: Goldin and Katz, "Shaping of Higher Education," p. 42.

	private	public	ratio: public / private	
MEDIAN NU	IMBER OF STUDEN	ITS		
1897	128	242	1.89	
1924	359	1225	3.41	
1934	382	1561	4.09	
% INSTITUT	TIONS WITH >1,00	<b>00</b> STUDENTS		
1897	4.9	9.9	2.02	
1924	15.1	59.6	3.95	
1934	14.2	71.1	5.03	
% STUDENTS WHO WERE IN SCHOOLS WITH >1,000 STUDENTS				
1897	34.9	41.1	1.18	
1924	60.1	90.3	1.50	
1934	62.6	94.3	1.51	

Source: Goldin and Katz, "The Shaping of Higher Education," Table 1.



Figure 1

### Table 11. More & Bigger Public Universities and Colleges, 1897-1934

	1910	1928	change from 1910 to 1928
log per capita wealth	0.236	0.852	0.857
	(0.09)	(0.37)	(0.260)
% population ≥65 yrs	2.13	1.423	-1.749
old	(0.26)	(0.79)	(0.737)
% labor force in	-0.067	-0.144	-0.0495
manufacturing	(0.034)	(0.097)	(0.095)
% population Catholic	-0.0913	-0.377	-0.265
	(0.031)	(0.09)	(0.090)
Auto registrations per capita, 1930		0.0568 (0.02)	
% 17-year-old males in public college, 1910			1.090 (0.384)
South (0/1 dummy	-0.0449	-0.0935	-0.0735
variable)	(0.01)	(0.03)	(0.027)
New England (0/1	0.0444	0.100	0.0811
dummy variable)	(0.01)	(0.03)	(0.033)
Constant	-0.136	-0.468	-0.324
	(0.07)	(0.27)	(0.199)
R <sup>2</sup>	0.895	0.874	0.758
n	48	48	48
avg of dependent var.	0.0882	0.091	0.212

# Table 12. Determinants of High School Graduation Rates1910, 1928 and change 1910-to-1928

	Log of Gov't spending on higher education per capita	
% labor force in mining	4.14	2.38
	(1.59)	(1.62)
% labor force in agriculture	1.73	1.45
	(0.85)	(0.79)
% labor force in manufacturing	2.47	3.05
	(1.57)	(1.47)
% population Catholic	631	628
	(0.58)	(0.54)
Log (auto registrations per	1.31	1.06
capita)	(0.28)	(0.27)
Private college enrollment per		-0.258
1000 residents		(0.095)
West (0/1 dummy variable)	0.803	0.782
	(0.26)	(0.24)
South (0/1 dummy variable)	0.753	0.667
	(0.024)	(0.23)
East North Central (0/1 dummy	0.493	0.386
variable)	(0.21)	(0.20)
Constant	-1.68	-0.115
	(1.79)	(1.76)
R <sup>2</sup>	0.759	0.798
n	48	48

Table 13. Determinants of State Support forHigher Education, 1929

Notes: standard errors in parentheses

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

Notes: standard errors in parentheses

Source: Goldin & Katz, "Shaping of Higher Education," Table 2.



**Figure 2** Source: Goldin, Claudia and Lawrence F. Katz. "The Shaping of Higher Education: The Formative Years in the United States, 1890 to 1940." *Journal of Economic Perspectives* 13 (Winter 1999): Fig 1

and others whose attendance at college extended for more than four years.



**Figure 3** Source: Goldin, Claudia and Lawrence F. Katz. "The Shaping of Higher Education: The Formative Years in the United States, 1890 to 1940." *Journal of Economic Perspectives* 13 (Winter 1999): Fig 2