

- Upcoming office hours are hurricane dependent, if classes are in session I'll be in office hours
- Today we're discussing the referee report assignment, there is additional info on Blackboard
- Upcoming required readings:
  - This week we'll get to Sawers (1992) and the Federalist Papers (Nos. 11, 30 and 35)
  - After that is Temin (1968) on the Bank War

# Referee Report

- The first referee report is coming up, it is due September 28th at 5pm
- For the first part of today's lecture we're going to talk about what a referee report is
- We'll discuss how the publication process works in economics, how I write referee reports, and how you should write your referee report (which is not the same as how I write mine)
- The key details are contained in a handout posted on our Blackboard site

# From Idea to Publication

Here is the basic timeline of an economics paper:

- 1 Come up with the idea, gather data, run regressions, gather more data, run more regressions . . .
- 2 Write up a working paper version of the paper
- 3 Present at conferences, workshops and seminars, do more analysis and rewrites based on feedback
- 4 Polish the paper
- 5 Send the paper to the best journal you think it has a chance out
- 6 Hopefully receive referee reports and a chance to revise, if not return to step 4
- 7 Do everything the referees ask for and send it back to the journal
- 8 Repeat steps 5 and 6 until acceptance or rejection
- 9 If rejected return to step 4

# From Idea to Publication

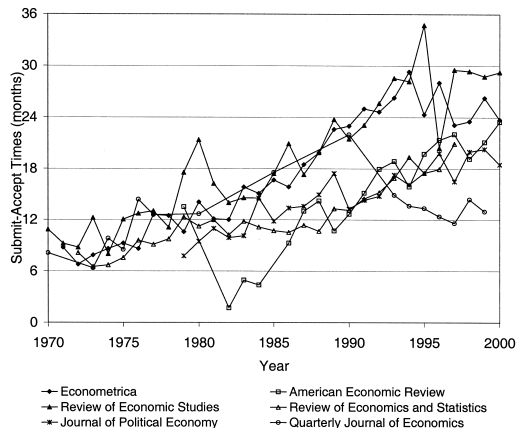


FIG. 1.—Mean submit-accept times for papers in top general-interest journals

# From Idea to Publication

TABLE 1  
MEAN SUBMIT-ACCEPT TIMES AT VARIOUS JOURNALS

JOURNAL	MEAN TOTAL REVIEW TIME IN YEAR			
	1970	1980	1990	1999
Top Five General-Interest Journals				
<i>AER</i>		13.5 <sup>*</sup>	12.7	21.1
<i>Econometrica</i>	8.8 <sup>†</sup>	14.0 <sup>†</sup>	22.9 <sup>†</sup>	26.3 <sup>†</sup>
<i>JPE</i>		9.5	13.3	20.3
<i>QJE</i>	8.1	12.7	22.0	13.0
<i>REStud</i>	10.9 <sup>†</sup>	21.5	21.2	28.8
Other General-Interest Journals				
<i>Canadian J. Econ.</i>		11.3 <sup>*</sup>		16.6
<i>Econ. Inquiry</i>		3.4 <sup>*</sup>		13.0
<i>Econ. J.</i>		9.5 <sup>*</sup>		18.2 <sup>†</sup>
<i>Internat. Econ. Rev.</i>	7.8 <sup>†</sup>	11.9 <sup>†</sup>	15.9 <sup>†</sup>	16.8 <sup>†</sup>
<i>REStat</i>	8.1	11.4	13.1	18.8
Economics Field Journals				
<i>J. Appl. Econometrics</i>			16.3 <sup>†</sup>	21.5 <sup>†</sup>
<i>J. Comparative Econ.</i>		10.3 <sup>†</sup>	10.9 <sup>†</sup>	10.1 <sup>†</sup>
<i>J. Development Econ.</i>	5.6 <sup>††</sup>	6.4 <sup>†</sup>	12.6 <sup>†</sup>	17.3 <sup>†</sup>
<i>J. Econometrics</i>		9.7 <sup>†</sup>	17.6 <sup>†</sup>	25.5 <sup>†</sup>
<i>J. Econ. Theory</i>	.6 <sup>†</sup>	6.1 <sup>†</sup>	17.0 <sup>†</sup>	16.4 <sup>†</sup>
<i>J. Environmental Econ. and Management</i>		5.5 <sup>†</sup>	6.6 <sup>†</sup>	13.1 <sup>†</sup>
<i>J. Internat. Econ.</i>		8.7 <sup>*</sup>		16.2
<i>J. Law and Econ.</i>		6.6 <sup>*</sup>		14.8
<i>J. Math. Econ.</i>	2.2 <sup>††</sup>	7.5 <sup>†</sup>	17.5	8.5
<i>J. Monetary Econ.</i>			11.7 <sup>†</sup>	16.0 <sup>†</sup>
<i>J. Public Econ.</i>	2.6 <sup>†§</sup>	12.5 <sup>†</sup>	14.2 <sup>†</sup>	9.9 <sup>†</sup>
<i>J. Urban Econ.</i>		5.4 <sup>†</sup>	10.3 <sup>†</sup>	8.8 <sup>†</sup>
<i>Rand J. Econ.</i>		7.2 <sup>*</sup>	20.0	20.9
Journals in Related Fields				
<i>Accounting Rev.</i>		10.1	20.7	14.5
<i>J. Accounting and Econ.</i>		11.4 <sup>†</sup>	12.5 <sup>†</sup>	11.5 <sup>†</sup>
<i>J. Finance</i>		6.5 <sup>*</sup>		18.6
<i>J. Financial Econ.</i>	2.6 <sup>††</sup>	7.5 <sup>†</sup>	12.4 <sup>†</sup>	14.8 <sup>†</sup>

\* Date from Yohe (1980) pertain to 1979 and probably do not include the review time for the final resubmission.

<sup>†</sup> Does not include review time for final resubmission.

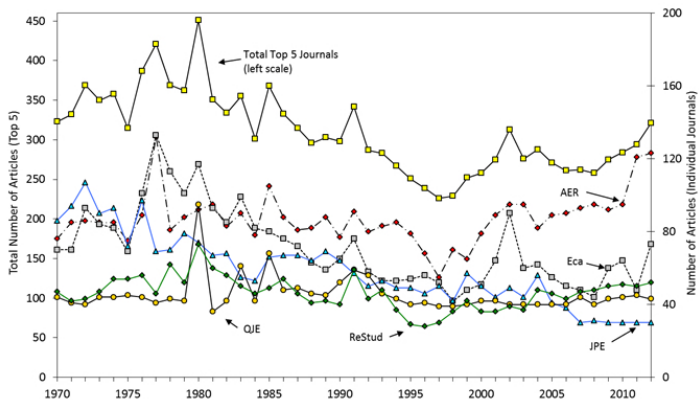
<sup>††</sup> Data for 1974.

<sup>§</sup> Data for 1972.

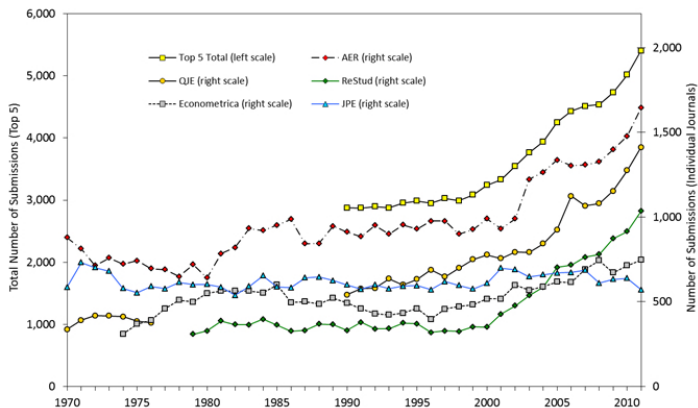
TABLE 3  
REVISIONS AT THE *QJE*

	YEAR OF PUBLICATION								
	1940	1950	1960	1970	1980	1985	1990	1995	1997
Mean submit-accept time (months)	3.7	3.8	3.6	8.1	12.7	17.6	22.0	13.4	11.6
Mean number of revisions	.6	.8	.6	1.2	1.4	1.5	1.7	2.2	2.0
Mean number of revisions before acceptance	.4	.1	.2	.5	.8	1.0	1.7	2.2	2.0
Mean author time for first preaccept revision (months)	1.4	2.1	2.0	2.1	3.0	4.2	3.6	4.1	4.7

# From Idea to Publication



# From Idea to Publication





# The Referee Process

- Peer review at economics journals is intended to accomplish two things:
  - Ensure the technical correctness of articles
  - Ensure that articles significantly add to our body of knowledge
- The referee assesses a paper both for correctness and for the novelty and size of its contribution
- The referee relays this assessment to the editor
- The referee also prepares a report for the authors, summarizing the paper and highlighting its strengths and weaknesses
- This report typically contains suggestions for improving the paper

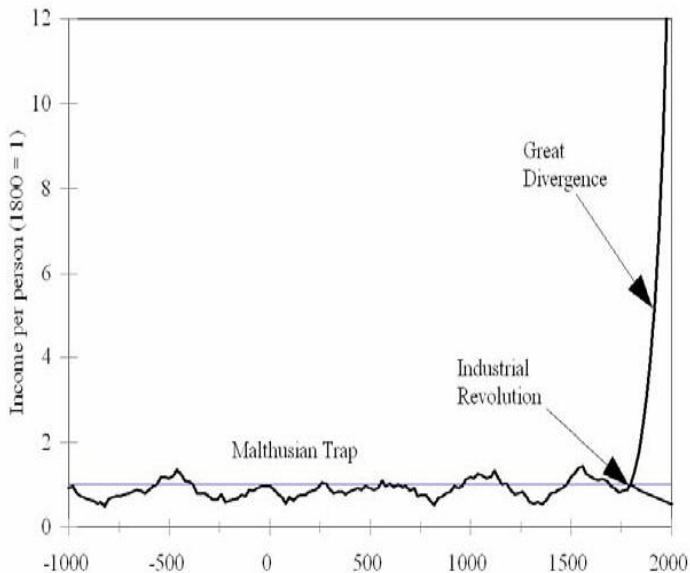
# The Referee Process



Now let's look at some sample referee reports and talk about what I expect in your reports.

- Due September 28, 5pm: Galenson (1981) “The Market Evaluation of Human Capital: The Case of Indentured Servitude”
- Due November 2, 5pm: Abramitzky, Boustan and Ericksson (2014) “A Nation of Immigrants: Assimilation and Economic Outcomes in the Age of Mass Migration”

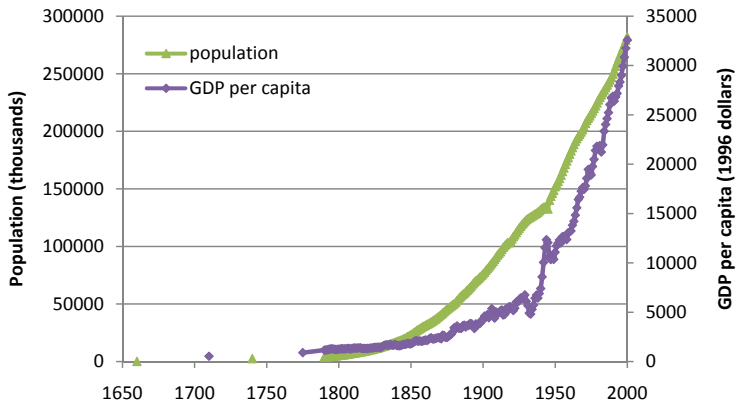
# The Economic History of the World



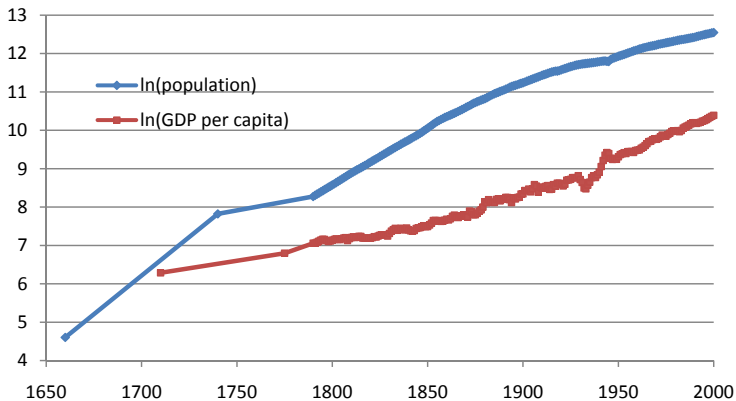
# The Malthusian Trap

- The Malthusian Trap is a situation in which an economy is stuck at a particular income per person. The basic logic is the following:
  - Suppose there is a rise in income per person (maybe because technology improved)
  - Higher income levels lead to more births and fewer deaths
  - Population grows
  - Output grows but output per worker falls until income per person is back at its original level
- The problem is that limited resources mean output can't grow as fast as population

# America as the Exception to the Rule



# America as the Exception to the Rule





# America as the Exception to the Rule

- The United States has a unique history among developed economies
- When America was colonized, the rest of the world was very much stuck in a Malthusian trap
- However, the colonies managed to experience rapid population growth without declining output per person
- One reason was America's unique abundance of natural resources

# Growth During the Colonial Period

- The colonial period had high population growth rates: population was growing at about 3.5% per year
- The size of the economy was growing substantially: total output increased by a factor of 10 between 1710 and 1775
- Per capita income grew but it grew slowly: output per person increased by roughly one third between 1710 and 1775
- The colonies weren't in a Malthusian trap but they weren't experiencing modern growth either

# Other Ways to Grow

- Obviously any economy ultimately runs into natural resource constraints
- Are there other ways to sustain growth in income per person?
- There are really only two ways to do it:
  - Use more inputs per person (for example, build more machines)
  - Use inputs more efficiently (better technology, better allocation of resources, etc.)

# Growth From Independence to 1840

- Little data leads to lots of stories
- Standard growth accounting data do not exist
- Paul David (JEH, 1967) proposed a clever solution that doesn't require knowing total GDP:
  - Total output per capita must equal average output per worker times the fraction of the population in the workforce
  - Average output per worker is the weighted average of output per worker in agriculture and output per worker in other sectors
  - David assumes productivity in manufacturing relative to productivity in agriculture was constant (strong assumption)

# Growth From Independence to 1840

- David's approach gives us a different way of breaking down the sources of growth in output per capita that doesn't require measuring GDP and the capital stock
- Output per capita can grow because of any or all of the following (somewhat observable) factors:
  - A shift of workers from agriculture to other sectors (productivity was higher in other sectors)
  - An increase in agricultural productivity (which by assumption implies an increase in productivity in other sectors)
  - An increase in the labor force participation rate

# Growth From Independence to 1840

## Sources of Change in Per Capita Output, 1800-1860

Decade	Percentage Change Attributable To:			Total
	Shift out of Agriculture	Change in Agricultural Productivity	Labor Force Participation Rate	
1800-09	-0.009	-0.032	0.003	-0.038
1810-19	0.039	0.035	0.019	0.095
1820-29	0.066	0.178	-0.012	0.240
1830-39	0.055	0.110	0.025	0.200
1840-49	0.061	0.000	0.066	0.131
1850-59	0.011	0.215	0.000	0.228

A few reasons to be skeptical:

- David's growth in agricultural productivity numbers seem big for a period with little technological advance
- Many of David's non-agricultural laborers may have actually been in agriculture
- Manufacturing productivity was likely growing differently than agricultural productivity

# Growth After 1840

- We know much more about growth after 1840 because the data gets much better
- Better data allows us to get good measures of output and to break down growth into growth in labor, capital, land and productivity
- The main factors in economic growth since 1840 turn out to be quite different than the main factors before 1840



# Growth After 1840

- With good data on output, labor and capital we can do standard growth accounting
- This means calculating the contributions of growth in technology ( $A$ ), labor ( $L$ ), capital ( $K$ ) and natural resources ( $Z$ )
- For growth in total output:

$$g_Y = g_A + ag_K + bg_L + cg_Z$$

- For growth in output per worker:

$$g_{\frac{Y}{L}} = g_A + ag_{\frac{K}{L}} + cg_{\frac{Z}{L}}$$

- $a$ ,  $b$  and  $c$  represent the share of income that goes to each particular input (if we use a lot of one input, growth in that input will have a big effect on growth in output)

## **Growth Accounting, 1840-1990**

---

Annual Rate of Growth of:

Period	Labor	Capital	Land	Output
1840-1860	3.42%	6.57%	3.73%	4.75%
1870-1930	2.24	4.35	2.55	3.75
1940-1990	1.59	3.14	0.34	3.22

---

# Growth After 1840

## **Growth Accounting, 1840-1990**

Percentage of Output Growth Attributable to:				
Period	Labor	Capital	Land	Productivity
1840-1860	49%	26%	10%	15%
1870-1930	43	27	4	27
1940-1990	41	14	0	45

# Summarizing American Growth

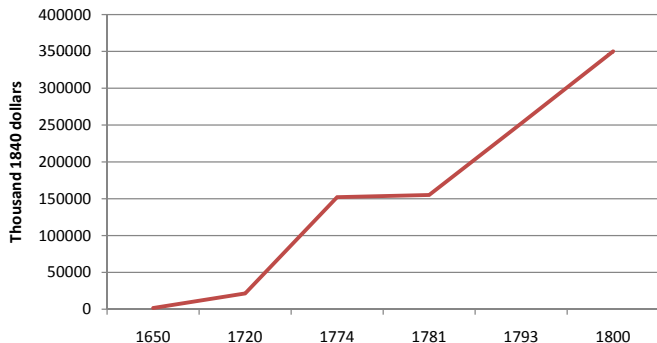
- Population growth has consistently been a big part of overall growth in output
- Growth in land remained relevant throughout the 1800s (until the frontier closed)
- Growth in capital has declined in importance (although growth in capital per worker remains important to growth in output per worker)
- Growth in productivity has really emerged as the biggest factor in explaining growth in output and output per worker
- To put things simply, early American growth was all about extensive growth (expanding land and labor supply), modern growth is all about improving productivity

# Putting American Economic Growth in Perspective

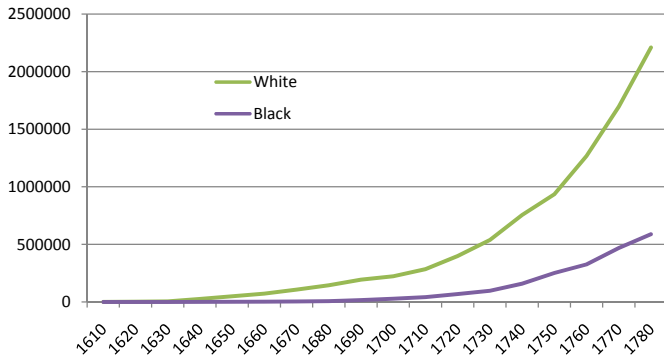
Rank	Country	GDP per capita (2010 US dollars)
180	Democratic Republic of Congo	171
179	Liberia	239
178	Sierra Leone	311
145	Kenya	912
	<b>United States, 1710</b>	<b>952</b>
144	Nicaragua	972
118	Indonesia	2,329
	<b>United States, 1840</b>	<b>2,336</b>
117	Paraguay	2,337
84	Namibia	4,543
	<b>United States, 1880</b>	<b>4,585</b>
83	Azerbaijan	4,807
52	St. Kitts and Nevis	10,315
	<b>United States, 1929</b>	<b>10,640</b>
51	Lithuania	11,172
37	Oman	18,013
	<b>United States, 1945</b>	<b>18,079</b>
36	Czech Republic	18,557
10	Austria	45,989
<b>9</b>	<b>United States</b>	<b>46,381</b>
8	United Arab Emirates	46,857
7	Netherlands	48,223
6	Ireland	51,356
5	Denmark	56,115
4	Switzerland	67,560
3	Qatar	68,872
2	Norway	79,085
1	Luxembourg	104,512

International Monetary Fund, World Economic Outlook Database, April 2010

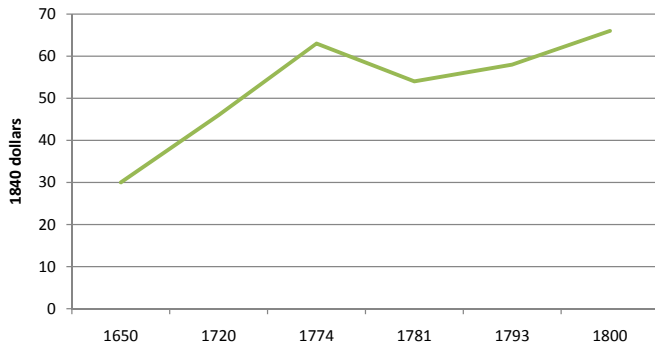
# Growth of the Colonial Economy - GDP



# Growth of the Colonial Economy - Population



# Growth of the Colonial Economy - GDP per capita





# Why Settle America?

- Early exploration of the Americas had a lot to do with *mercantilism*
- An oversimplification: countries assumed greater military and political power came from greater stocks of gold and silver
- The Spanish had success in finding places with gold and silver that could be mined
- Other countries had to rely on trade to build up stocks of silver and gold
- This led countries to seek out colonies that had different resources from the mother country and to set up extractive institutions

Philipp Wilhelm von Hornick, *Austria Over All, If She Only Will*, 1684 (quoted in Robert Ekelund Jr. and Robert Hebert, *A History of Economic Theory and Method*, Waveland Press, 1997):

- That every inch of a country's soil be utilized for agriculture, mining or manufacturing
- That all raw materials found in a country be used in domestic manufacture, since finished goods have a higher value than raw materials
- That a large, working population be encouraged
- That all export of gold and silver be prohibited and all domestic money be kept in circulation
- That all imports of foreign goods be discouraged as much as possible

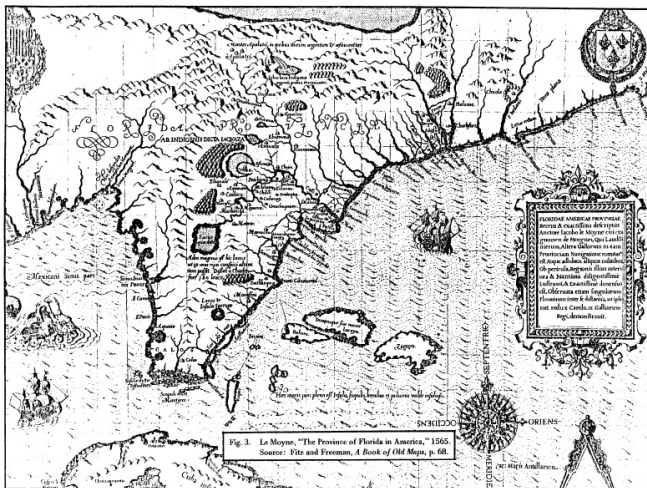
Philipp Wilhelm von Hornick, *Austria Over All, If She Only Will*, 1684 (quoted in Robert Ekelund Jr. and Robert Hebert, *A History of Economic Theory and Method*, Waveland Press, 1997):

- That where certain imports are indispensable they be obtained at first hand, in exchange for other domestic goods instead of gold and silver
- That as much as possible, imports be confined to raw materials that can be finished [in the home country]
- That opportunities be constantly sought for selling a country's surplus manufactures to foreigners, so far as necessary, for gold and silver
- That no importation be allowed if such goods are sufficiently and suitably supplied at home

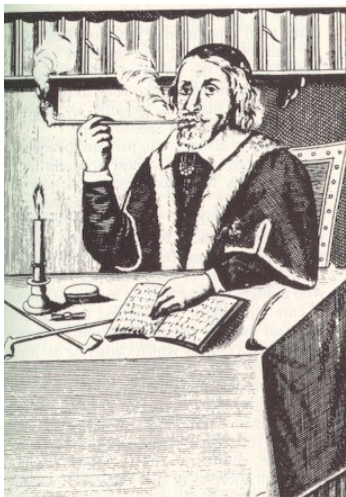
# Why Settle America if You're British?

- The colonies in the mid-Atlantic didn't yield gold or silver
- Initially, British businessmen thought the southern colonies might be good for silk and winemaking
- That didn't really pan out, but tobacco did
- The northern colonies were about subsistence agriculture and port services

# Why Settle America if You're British?



# Why Settle America if You're British?



PANACEA;  
OR  
The Universal Medicine,  
BEING  
A DISCOVERY  
of the  
Wonderfull Vertues  
OF  
Tobacco  
Taken in a Pipe,  
WITH  
Its Operation and Use both in  
*Physick* and *Chyrurgery*.

---

By D<sup>r</sup> EVERARD, &c.

---

LONDON,  
Printed for *Simon Miller* at the Star in *S<sup>t</sup> Pauls*  
Church-yard, near the West-end, 1659.

# Mercantilist Policy and the Colonial Economy

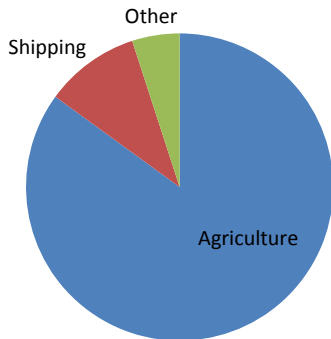
- Although the colonies didn't have gold and silver, the colonial economy was very much shaped by mercantilist policy
- Colonies were supposed to provide England with commodities unavailable in England and to serve as a captive market for English finished products
- Colonies weren't supposed to compete with the mother country: you sell your resources to England, not to other countries, and you buy your finished goods from England, not from other countries

# Mercantilist Policy and the Colonial Economy

- These mercantilist policies had very different effects on the southern and northern colonies
- Southern colonies had land that could be used for tobacco
- Britain provided a growing market for tobacco, supply of tobacco rose dramatically during the entire colonial period
- Northern farmland wasn't all that good so as population grew, the marginal product of labor dropped
- Mercantilist policy didn't leave many manufacturing jobs for these farmers to switch to
- The one big industry the north did have was shipping (they had timber and lots of things needed to be shipped)



## Colonial Workforce by Sector



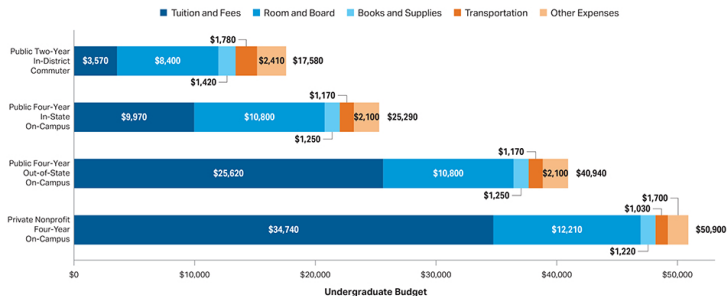
# The Colonial Economy

- So the colonial economy was dominated by agriculture
- The good news: there was plenty of land to farm
- The bad news: to farm all that new land, the colonies needed more people
- More good news: wages were good in the colonies relative to Britain so people wanted to work in the colonies
- More bad news: travel from England to the colonies was extremely costly (almost equal to a German migrant's annual salary)
- Solution: indentured servitude

# Credit Constraints and Indentured Servitude

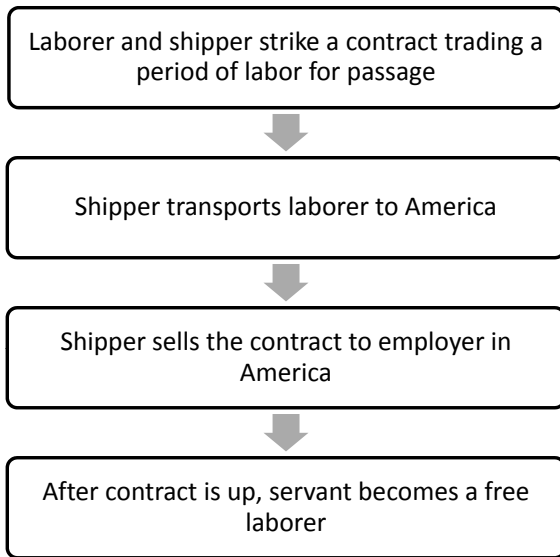
- The cost of passage to America was £5 to £10, an amount greater than average annual income at the time
- To put that in perspective, think about college tuition
- If there were no student loans, how would people pay for college?
- Maybe you work first and save up for college
- Median income for a high school graduate age 25 to 34 in 2016 was \$32,143 (CPS data)

# Credit Constraints and Indentured Servitude

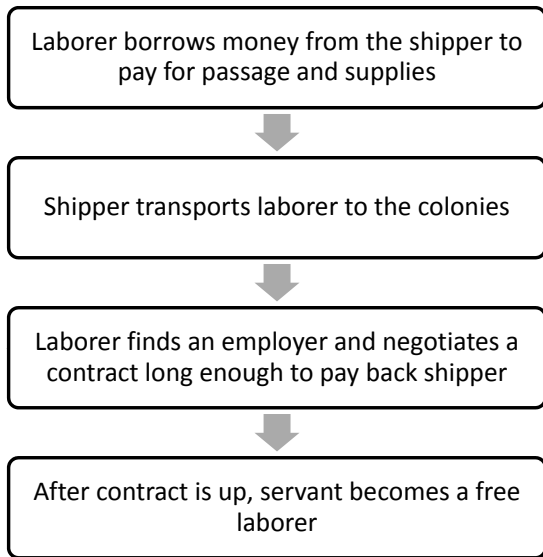


Sources: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2015 Enrollment data.

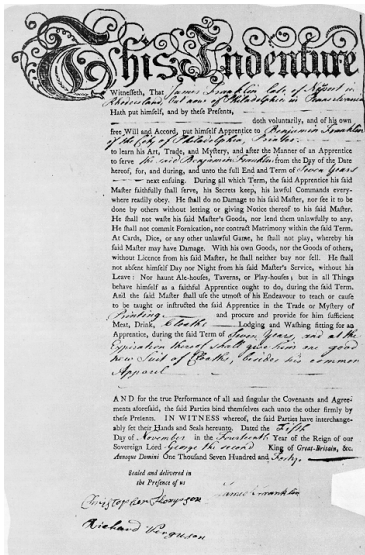
# How Indentured Servitude Works - Standard



# How Indentured Servitude Works - Redemptioners



# How Indentured Servitude Works



## How Indentured Servitude Works

This indentured...between [Alexander Beard]...of the one part, and [John Dickey]...of the other part, witnesseth, that the said [Alexander Beard] doth hereby covenant, promise and grant, to ...[John Dickey]...and his assigns, from the day of the date hereof until the first and next arrival at [Philadelphia] in America...and during the term of [three] years to serve in such service and employment as the said [John Dickey] or [his] assigns shall there employ [him]...In consideration whereof the said [John Dickey] doth grant...to pay for [his] passage, and to find allow [him] meat, drink, apparel and lodging, with other necessaries, during the said term; and at the end of the said term to pay unto him the usual allowance, according to the custom of the country in the like kind...