

02b. Indentured Servitude

Econ 373: US Economic History

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The Evolution of New World Labor Markets

Indentured servitude

- The initial labor force that settled Jamestown came as bound servants
 - Poorly treated, little compensated, not incentivized to work, willing to run away
- This was due to a principal-agent problem (due to presence of moral hazard or “hidden actions”) that required changes to the labor system
- In addition, passage to New World was expensive and potential workers were liquidity constrained and there were only imperfect financial markets
- The journey to the New World had to be financed in some other way

A solution to imperfect capital markets

- Passage to the New World was expensive for a typical European laborer
 - Today, people take loans to move, to go school, to start a business, etc
 - These options were not available to the general population before 19thC
- Indentured servitude is an example of a forward labor contract
 - Payment for labor services came in form of transportation, basic room and board
 - Other dimensions of living conditions and treatment could be contracted
 - Labor services were provided for specific term of indenture, formalized in a contract

THIS Indenture witnesseth, That John Reid of
freehold in the County of ~~Montgomery~~ New York,
gives with the Consent of his Father, John Reid of place
hath put himself, and by these Presents doth voluntarily, and of his own free
Will and Accord put himself an Apprentice to Robert Livingston Esq^r of New York
with him to lives and (after
the Manner of an Apprentice) to Serve from the first Day of November
Anno Domini, One Thousand Seven Hundred and Forty two

till the full Term of ~~five years~~
be compleat and ended. During all which Term the said Apprentice his
said Master faithfully shall serve, his
Secrets keep, his lawfull Commands gladly every where obey: he shall do
no Damage to his said Master nor fee to be done by others without let-
ting or giving Notice to his said Master he shall not waste his said Masters
Goods, nor lend them unlawfully to any, he shall not commit Fornication,
nor contract Matrimony within the said Term. At Cards, Dice or any other
unlawful Game, he shall not play, whereby his said Master may have
Damage with his own Goods, nor the Goods of others within the said Term,
without Licence from his said Master, he shall neither buy nor sell, he
shall not absen himself Day nor Night from his said Masters Service
without his Leave, nor haunt Ale-Houles, Taverns or Play-Houses; but in all
Things as a faithful Apprentice he shall behave himself to his said Master
and all his during the said Term. And the said Master during the said
Term shall by the best Means or Method that he can, Teach or cause the said
Apprentice to be Taught the Art and Mystery of a Merchant
And also shall find and provide unto the said Apprentice sufficient meat

Drinking Lodging

For the true Performance of all and every the said Covenants and Agreements,
either of the said Parties bind themselves unto the other by these Presents, In
Witness whereof they have hereunto interchangeably put their Hands and Seals
this First Day of November in the Seventeenth Year of
His Majesty's Reign Annoq; Domini, One Thousand Seven Hundred and Forty
two

Sealed and delivered in
the Presence of

John Alexander
Richd Smith

John Reid
John Reid Jr.

name	year	age	female	literacy	length
ABBITT, Abraham	1724	19	0	0	4
ABBOTT, Peter	1733	24	0	0	4
ADAMSON, John	1723	18	0	1	5
ADDAMS, Robert	1725	17	0	1	6
AIKENHOAD, Patrick	1731	20	0	1	4
AINSLY, Thomas	1720	19	0	1	4
ALLAM, George	1723	17	0	0	4
ALLBURY, John	1738	19	0	1	5
ALLEN, James	1728	19	0	1	4
AMPHLETT, Benjamin	1749	20	0	1	4
ANDERSON, John	1722	19	0	1	5
ANDERSON, William	1718	18	0	1	4
ANDREWS, Thomas	1737	20	0	0	7

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 - Labor services were provided for specific term of indenture, formalized in a contract
- There was an economic rationale for indentured servitude
 - Not only result of exploitation, cruelty, etc

The negative view of indentured servitude

Many . . . were convicts from jails, transported instead of being hanged; a few were political and military prisoners taken in war or rebellion. There were rogues, vagabonds, whores, cheats, and rabble of all description, raked from the gutter and kicked out of the country.

The evolution of indentured servitude

- Initially one firm handled recruiting, shipping, employment in the New World
 - i.e., the Virginia Company of London
 - The explorer John Smith was the company's third president
 - Investigated for poorly managed finances and charter was revoked in 1624
 - Colonists maintained the right to self-government
- In the first place, VA Company funds used to pay transportation costs
 - Migrants worked directly for VA Company
- Under this arrangement large groups of men lived and worked communally in military-type conditions, which was unpopular with recruits

The evolution of indentured servitude

- Difficulties managing workers led VA Company to seek new solution
- By 1619, new system introduced:
 - New colonists bound for term to VA Company, sent over at the Company's expense
 - Free planters of rented from VA Company at a fixed rate, provided for maintenance
- Final evolution was simply selling workers to individual planters for period necessary to repay loans (as specified in workers' contracts)
- This transferred supervision costs and contract enforcement to planters

The evolution of indentured servitude

- Active markets for indentured servants arose in Europe and in colonies
 - These markets provided link between European labor supply and labor demand of colonial planters from 1620s through period of American Revolution (and after)
- Indentured servitude was particularly important in the early history of those colonies that produced staple crops for export – sugar, tobacco, or rice
- Single contractual form and enforcement proved useful over long period
 - ~~ Why?

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For the true Performance of all and every the said Covenants and Agreements,
either of the said Parties bind themselves unto the other by these Presents, In
Witness whereof they have hereunto interchangeably put their Hands and Seals
this First Day of November in the Sixteenth Year of
His Majesty's Reign Anno^r Domini, One Thousand Seven Hundred and Forty
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the Presence of

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John Reid Jr.

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 - ~~ Why?
- What are labor economics of the market for indentured servants?

Human Capital and Indentured Servitude

Economic analysis of labor markets

- What is best way to understand value of labor provided by indentures?
 - ~~ What approaches do economists take to labor (or other) markets today?
- The **human capital** value of labor
 - ~~ Does compensation vary with skill/demographic characteristics?
- The **asset** value of labor contracts
 - ~~ Does price of indentured servant contract reflect value of labor provided?
- The role of **selection** in migration
 - ~~ Does choice of destination reflect unobserved characteristics of labor?

The human capital of indentured servants

- First approach to evaluating market of indentured servants is to ask whether “wages” reflected productive characteristics, i.e., human capital

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$$\text{length of service}_i = \beta_0 + \beta_1 \text{gender}_i + \beta_2 \text{age}_i + \beta_3 \text{literacy}_i + \dots + \epsilon_i$$

- Implication of human capital theory is that individual characteristics that are correlated with marginal product of labor will predict length of service

Results for Determinants of Indentured Servant Contract Length

Symbols	(1)
Constant	β_0
	6.611 (0.0782)
Observations	N
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	Symbols	(1)
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Results for Determinants of Indentured Servant Contract Length

Symbols	(1)	(2)
Constant	β_0	6.611 (0.0782)
Female	β_1	0.112 (0.0844)
Age	β_2	
Observations	N	2,807

Results for Determinants of Indentured Servant Contract Length

	Symbols	(1)	(2)
Constant	β_0	6.611 (0.0782)	6.611 (0.0783)
Female	β_1	0.112 (0.0844)	0.004 (0.0754)
Age	β_2		-0.099 (0.0037)
Observations	N	2,807	2,807

Results for Determinants of Indentured Servant Contract Length

	Symbols	(1)	(2)	(3)
Constant	β_0	6.611 (0.0782)	6.611 (0.0783)	6.689 (0.0782)
Female	β_1	0.112 (0.0844)	0.004 (0.0754)	-0.076 (0.0755)
Age	β_2		-0.099 (0.0037)	-0.094 (0.0038)
Literacy	β_3			-0.277 (0.0370)
Observations	N	2,807	2,807	2,807

The asset value of indentured servant contracts

- Second approach is to consider value created by indentured servant from the perspective of an employer for the duration of employment:

PV = present value

The asset value of indentured servant contracts

- Second approach is to consider value created by indentured servant from the perspective of an employer for the duration of employment:

$$PV = \sum_{i=1}^n \frac{NP_i - w_i}{(1+r)^i}$$

where

- n = length of indentured servant contract
- NP_i = expected mean productivity in year i of contract
- w = cost to employer of maintaining indentured servant in year i of contract
- r = discount rate

Indentured servitude and market efficiency

- Analyzing determinants of length of service and contract prices provide two approaches for assessing market efficiency
- It is useful to consider some of the details of the specific context indentured servitude in the Old and New World during this period
 - Prices need not be identical for the market to be efficient
 - Labor demand in Americas and labor supply in Europe may not be matched
 - There could be mistakes or unforeseen events that cause prices to diverge
 - Strictly speaking, only expected prices need to be the same
- Evidence is consistent with this market “working well”

Destination choice and indentured servitude

- Final consideration is role of selection
- Indentured servants could be contracted to different locations
- We can then think about whether servants moving to two locations (e.g., West Indies versus mainland) had different productive characteristics
 - We want to know whether certain kinds of servants (i.e., “bad” versus “good”) were more likely to move to the West Indies rather than Maryland, Virginia, etc

Results for Determinants of Indentured Servant Contract Length by Destination

		West Indies	Mainland	
	Symbols	(1)	(2)	Previous
Constant	β_0	7.794 (0.1252)	5.397 (0.0848)	6.689 (0.0782)
Female	β_1	-0.271 (0.0954)	0.078 (0.1166)	-0.076 (0.0755)
Age	β_2	-0.1330 (0.0064)	-0.049 (0.0038)	-0.094 (0.0038)
Literacy	β_3	-0.276 (0.0550)	-0.1387 (0.0418)	-0.277 (0.0370)
Observations	N	1,429	1,378	2,807

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 - We want to know whether certain kinds of servants (i.e., “bad” versus “good”) were more likely to move to the West Indies (rather than Maryland)
- ~~ Why? Economic reasoning?

The Supply of Labor to the New World

The market of indentured servants in the New World

- Indentured servants were a major source of labor supply to the New World, but were eventually displaced by slave labor
- Let's consider sources of labor supply: free labor, slave labor, and indentured servants

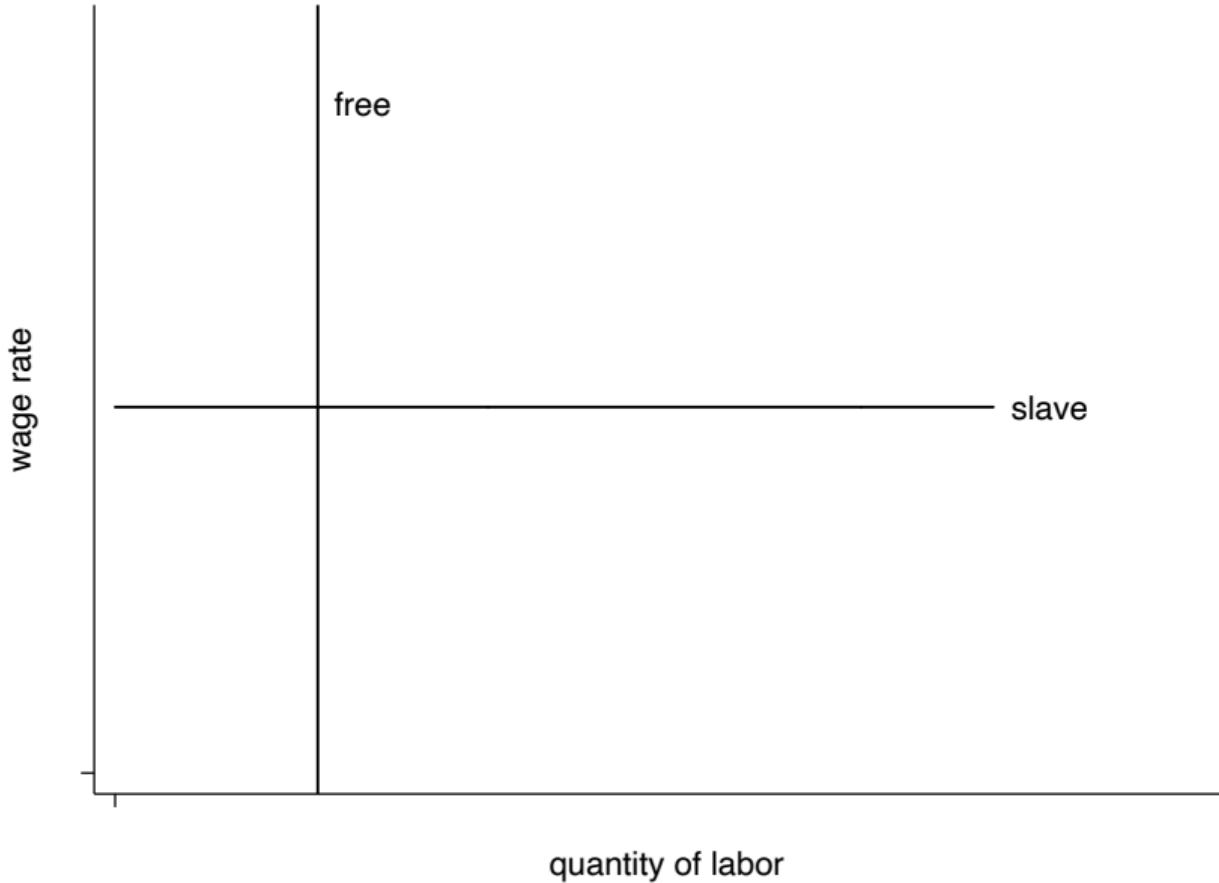
Aggregate Labor Supply to the New World



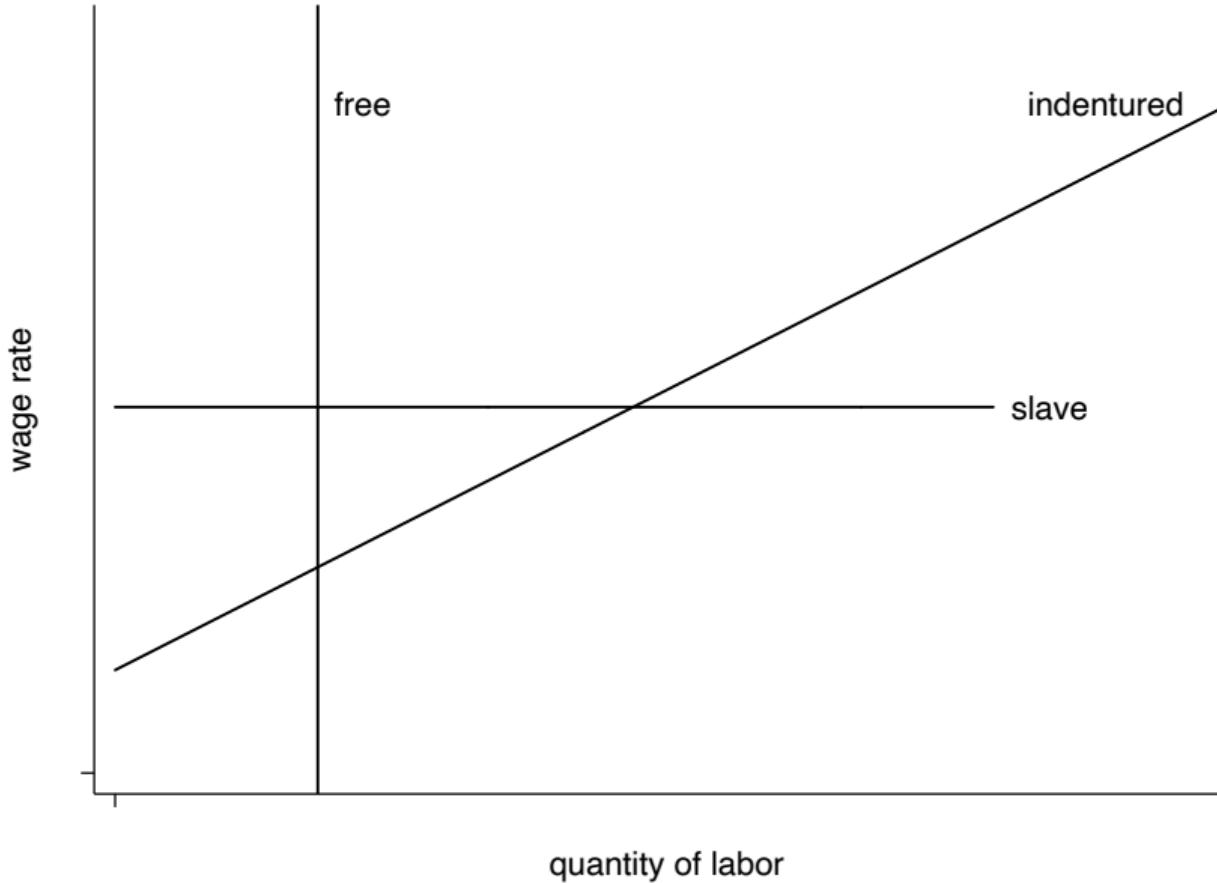
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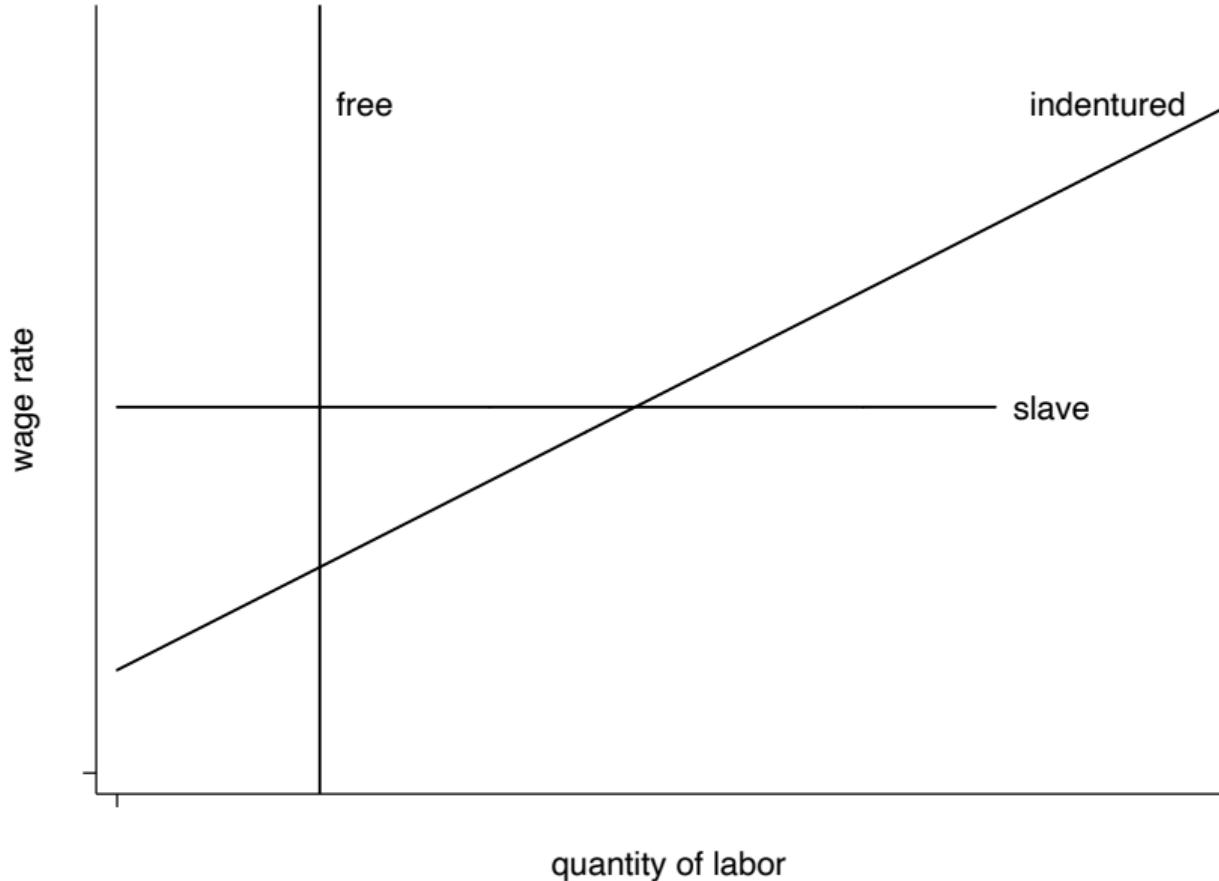
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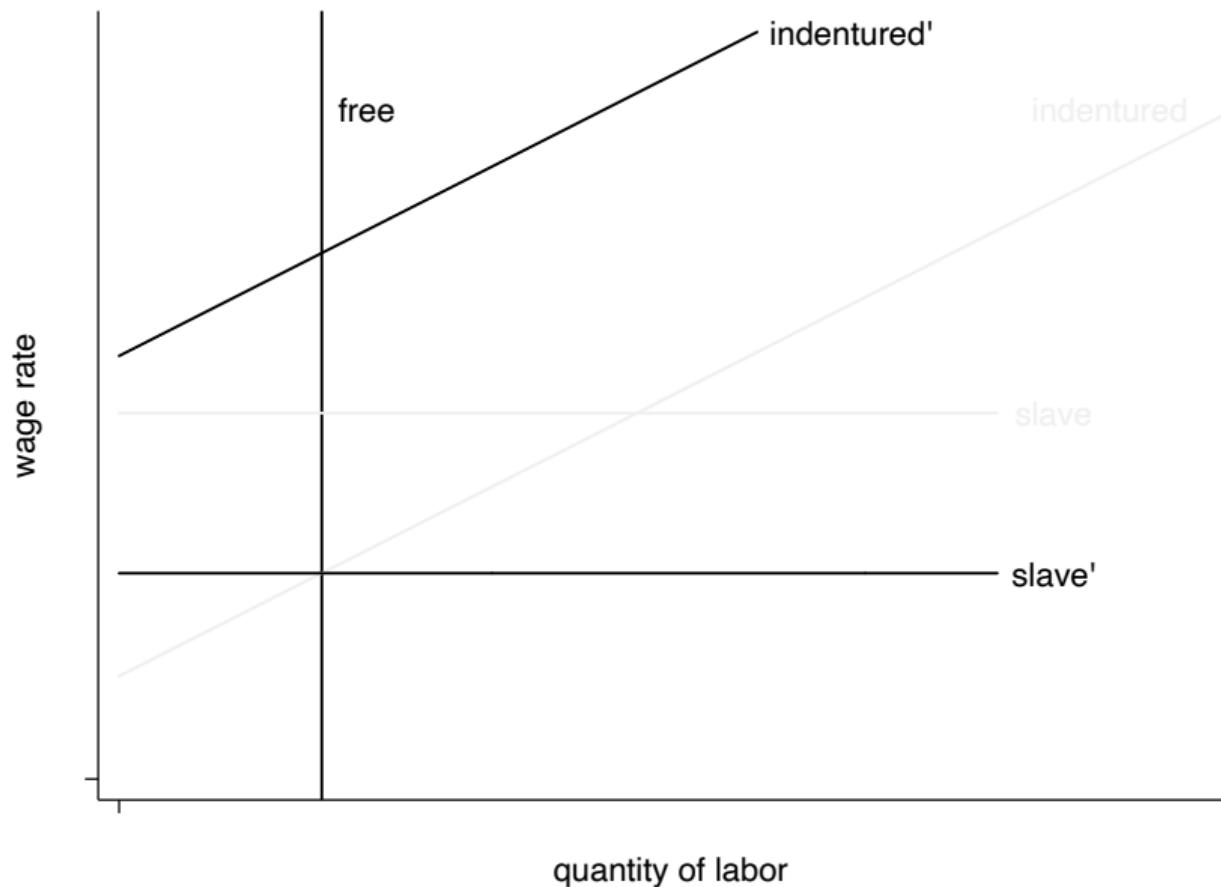
The market of indentured servants in the New World

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- Let's consider sources of labor supply: free labor, slave labor, and indentured servants
- To understand the forces behind changes in the composition of the labor force in the New World, consider a decrease in ocean shipping costs
 - i.e., due to increased productivity in transportation services

Aggregate Labor Supply to the New World



Aggregate Labor Supply to the New World with a Decrease in Transport Costs



The market of indentured servants in the New World

- Indentured servants were a major source of labor supply to the New World, but were eventually displaced by slave labor and free labor
- Let's consider sources of labor supply: free labor, slave labor, and indentured servants
- To understand the forces behind changes in the composition of the labor force in the New World, consider a decrease in ocean shipping costs
 - i.e., due to increased productivity in transportation services
- This is a powerful explanation for disappearance of indentured servitude, its replacement with slavery, and rise voluntary European migration