

# Venice and Amsterdam

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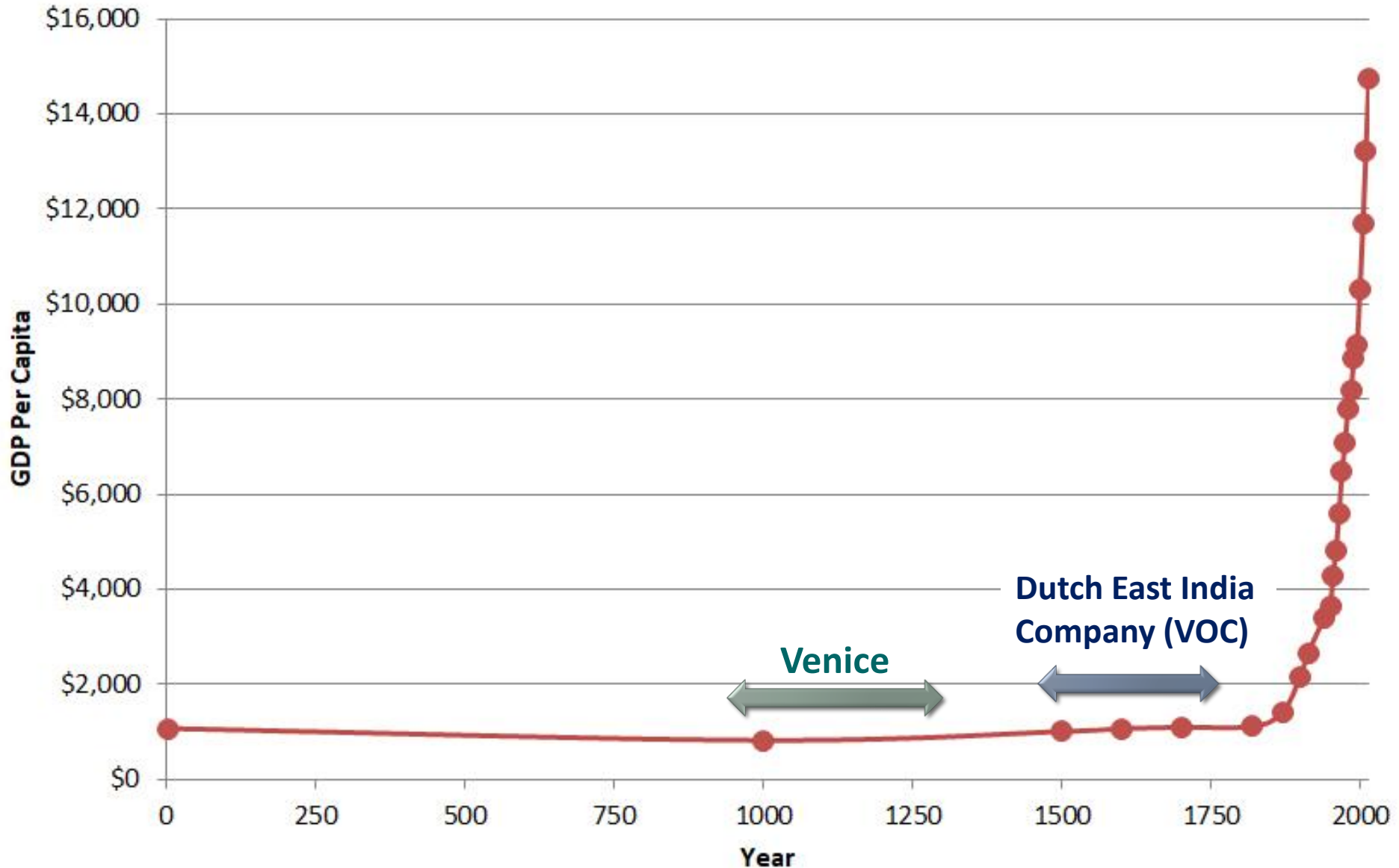
*Major trade hubs were driven by innovative legal and financial institutions.*

EE 482: Public Policy and Industrialization  
Semester 2 / 2020  
Faculty of Economics, Thammasat University

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# Global GDP Per Capita, 1-2015

## 2011 International Dollars



Source: GDP data from ourworldindata.org. Population data from worldpopulationhistory.org

# Economic History of Venice



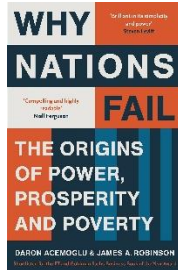
**Source:** [https://www.reddit.com/r/CityPorn/comments/kigi0/aerial\\_view\\_of\\_venice\\_italy\\_1920x1145/](https://www.reddit.com/r/CityPorn/comments/kigi0/aerial_view_of_venice_italy_1920x1145/)



**Source:** <https://www.airpano.com/360article/italy-venice/>

# Economic History of Venice

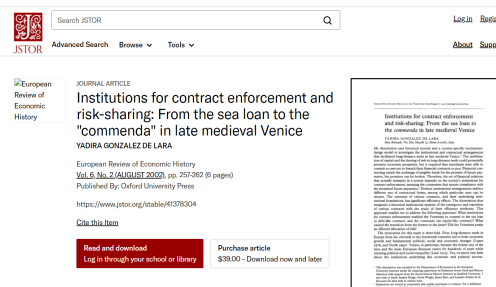
## Main references



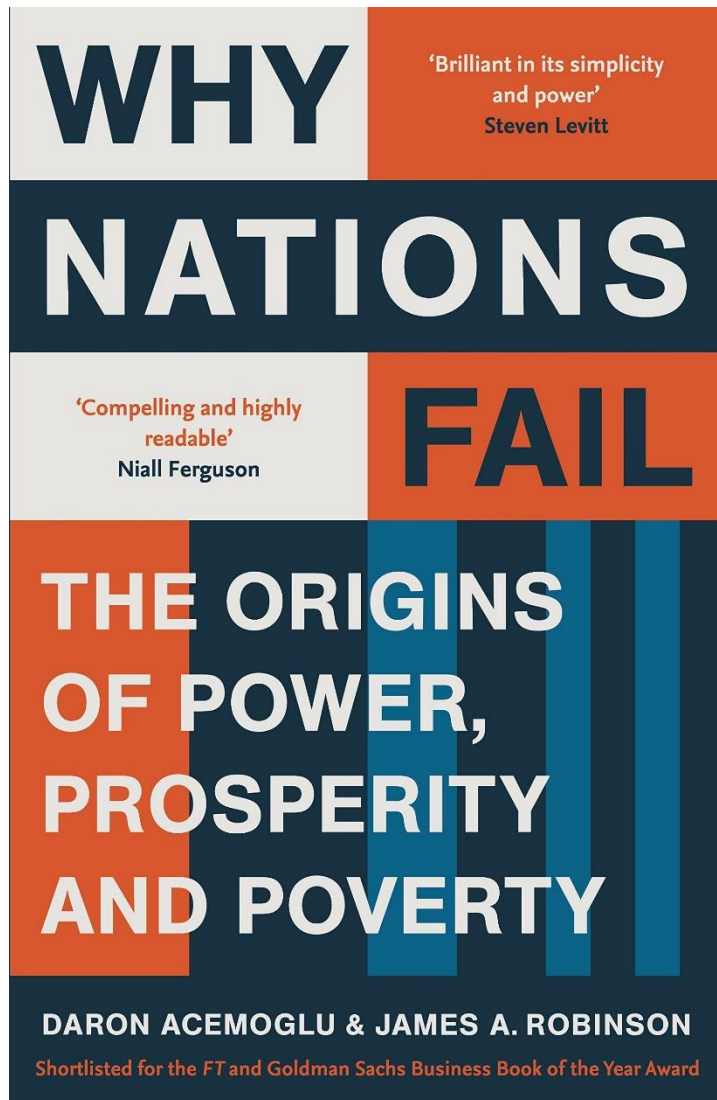
Acemoglu, D., & Robinson, J. (2012), *Why Nations Fail*. London: Crown Publishing Group



Puga, D., & Trefler, D. (2014), *International trade and institutional change: Medieval Venice's response to globalization*. *Quarterly Journal of Economics*, 129(2), 753-821.



Gonzalez de Lara, Y. (2002), *Institutions for contract enforcement and risk-sharing: From the sea loan to the "commenda" in late medieval Venice*. *European Review of Economic History*, 6(2), 257-262.



# Why Nations Fail: The Origins of Power, Prosperity and Poverty

by Daron Acemoglu (MIT) and James A. Robinson (Harvard University)

<http://whynationsfail.com/>

# Towards a Theory of Institutions

- **Extractive economic institutions:** Lack of law and order. Insecure property rights; entry barriers and regulations preventing functioning of markets and creating a nonlevel playing.
- **Extractive political institutions** - in the limit “absolutism”:  
Political institutions concentrating power in the hands of a few, without constraints, checks and balances or “rule of law”.
- **Inclusive economic institutions:** Secure property rights, law and order, markets and state support (public services and regulation) for markets; open to relatively free entry of new businesses; uphold contracts; access to education and opportunity for the great majority of citizens.
- **Inclusive political institutions:** Political institutions allowing broad participation – *pluralism* - and placing constraints and checks on politicians; rule of law (closely related to pluralism).
- But also some degree of *political centralization* for the states to be able to effectively enforce law and order.



Medieval Shipping Lanes of the Eastern Mediterranean

Source: Puga and Trefler (2014)

- By 1050, Venice had a population of 45,000 people.
- This increased by more than 50 percent, to 70,000, by 1200.
- **By 1330** the population had again increased by another 50 percent, to **110,000**.
- Venice was then as big as Paris, and probably **three times** the size of **London**.

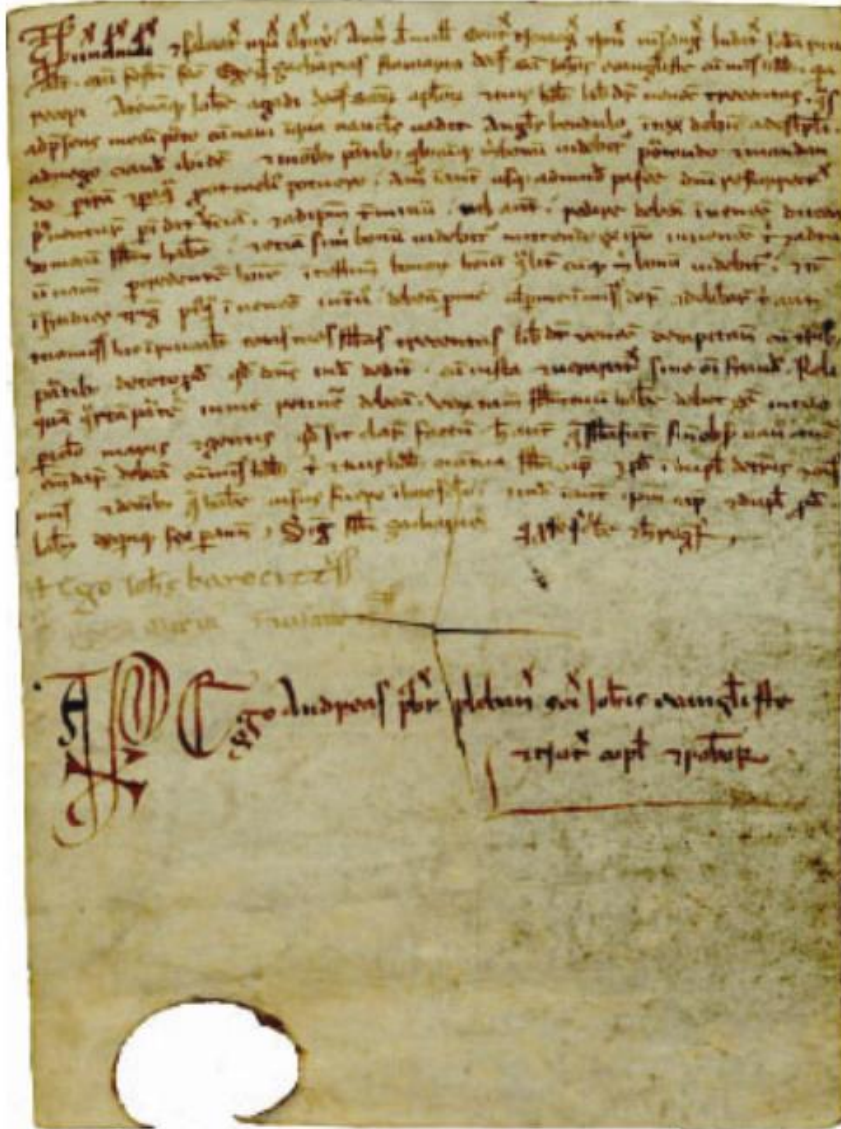
Source: Directly quoted from Acemoglu and Robinson (2012), *Why Nations Fail*. London: Crown Publishing Group.

- One of the key bases for the economic expansion of Venice was a series of **contractual innovations making economic institutions much more inclusive**.
- The most famous was the *commenda*, a rudimentary type of **joint stock company**, which **formed only for the duration of a single trading mission**.
- A *commenda* involved **two partners**, a “**sedentary**” **one** who **stayed in Venice** and **one who traveled**.
- The **sedentary partner put capital** into the venture, while the **traveling partner** accompanied the **cargo**.

- Typically, the sedentary partner put in the lion's share of the capital.
- **Young entrepreneurs** who **did not have wealth** themselves could then **get into the trading business** by **traveling with the merchandise**.
- It was a **key channel of upward social mobility**.
- Any **losses in the voyage were shared** according to the **amount of capital the partners** had put in.

- If the voyage made money, **profits** were based on **two types** of *commenda* contracts.
- If the ***commenda* was unilateral**, then the **sedentary merchant** provided **100 percent** of the **capital** and received **75 percent** of the **profits**.
- If it was **bilateral**, the **sedentary merchant** provided **67 percent** of the capital and received **50 percent** of the **profits**.

# Colleganza between Zaccaria Stagnario and Giovanni Agadi, August 1199



Original parchment document (left), reproduced with permission from Archivio di Stato di Venezia (document identifier: San Zaccaria, Pergamene, b. 35 pergg., n. 160).

Puga and Trefler (2014)'s translation from the Latin (right), based on the transcription of the parchment in (Morozzo della Rocca and Lombardo, 1940, document 444).

- Studying official documents, one sees how powerful a force the *commenda* was **in fostering upward social mobility**: these documents are **full of new names**, people who had previously **not been among the Venetian elite**.
- In government documents of AD 960, 971, and 982, the number of new names comprise **69 percent, 81 percent, and 65 percent**, respectively, of those recorded.

**Source:** Directly quoted from Acemoglu and Robinson (2012), *Why Nations Fail*.  
London: Crown Publishing Group.

- This **economic inclusiveness** and the **rise of new families** through trade forced the **political system** to become **even more open**.
- The **doge**, who governed Venice, **was selected** for life by the **General Assembly**.
- Though a general gathering of all citizens, in practice the **General Assembly** was **dominated** by a **core group of powerful families**.

- These political reforms led to a **further series of institutional innovations**: in law, the creation of **independent magistrates, courts, a court of appeals,** and **new private contract** and **bankruptcy laws**.
- These new Venetian economic institutions allowed the creation of **new legal business forms** and **new types of contract**.
- There was **rapid financial innovation**, and we see the beginnings of **modern banking** around this time in Venice.
- The dynamic moving Venice toward **fully inclusive institutions** looked unstoppable.

- But there was a tension in all this.
- Economic growth supported by the **inclusive Venetian institutions** was accompanied by **creative destruction**.
- Each new wave of enterprising young men who became **rich via the *commenda*** or other similar economic institutions tended to **reduce the profits** and economic success of **established elites**.
- And they did not just reduce their profits; they also **challenged their political power**.

- **Political tensions** mounted steadily in Venice between 1297 and 1315.
- The **Great Council partially responded** by making **itself bigger**.
- In an attempt to co-opt its most vocal opponents, it grew **from 450 to 1,500**.
- This expansion was **complemented by repression**.
- A **police force** was introduced for the first time in 1310, and there was a steady growth in **domestic coercion**, undoubtedly as a way of **solidifying the new political order**.

- The switch toward **extractive political institutions** was now being followed by a move toward **extractive economic institutions**.
- Most important, they **banned the use of *commenda* contracts**, one of the **great institutional innovations** that had made Venice rich.
- This shouldn't be a surprise: the ***commenda* benefited new merchants**, and now the **established elite was trying to exclude them**.

- Another step came when, starting in 1314, the **Venetian state** began to **take over and nationalize trade**.
- It organized state galleys to engage in trade and, from 1324 on, began to **charge individuals high levels of taxes** if they wanted to engage in trade.
- **Long-distance trade** became the **preserve of the nobility**.
- This was the beginning of the **end of Venetian prosperity**.

- Political and economic institutions became **more extractive**, and Venice began to experience **economic decline**.
- By 1500 the **population had shrunk** to one hundred thousand.
- Between 1650 and 1800, when the population of Europe rapidly expanded, that of **Venice contracted**.



Volume 129, Issue 2  
May 2014

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I. INTRODUCTION

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THE EXECUTIVE

III. INSTITUTIONAL CHANGE: THE  
RISE OF CONTRACTING  
INSTITUTIONS AND INCLUSIVE

## International Trade and Institutional Change: Medieval Venice's Response to Globalization\*

Diego Puga, Daniel Trefler

*The Quarterly Journal of Economics*, Volume 129, Issue 2, May 2014, Pages 753–821,  
<https://doi.org/10.1093/qje/qju006>

**Published:** 07 March 2014



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### Abstract

International trade can have profound effects on domestic institutions. We examine this proposition in the context of medieval Venice circa 800–1600. Early on, the growth of long-distance trade enriched a broad group of merchants who used their newfound economic muscle to push for constraints on the executive, that is, for the end of a de facto hereditary Doge in 1032 and the establishment of a parliament in 1172. The merchants also pushed for remarkably modern innovations in contracting institutions that facilitated long-distance trade, for example, the *colleganza*. However, starting in 1207, a

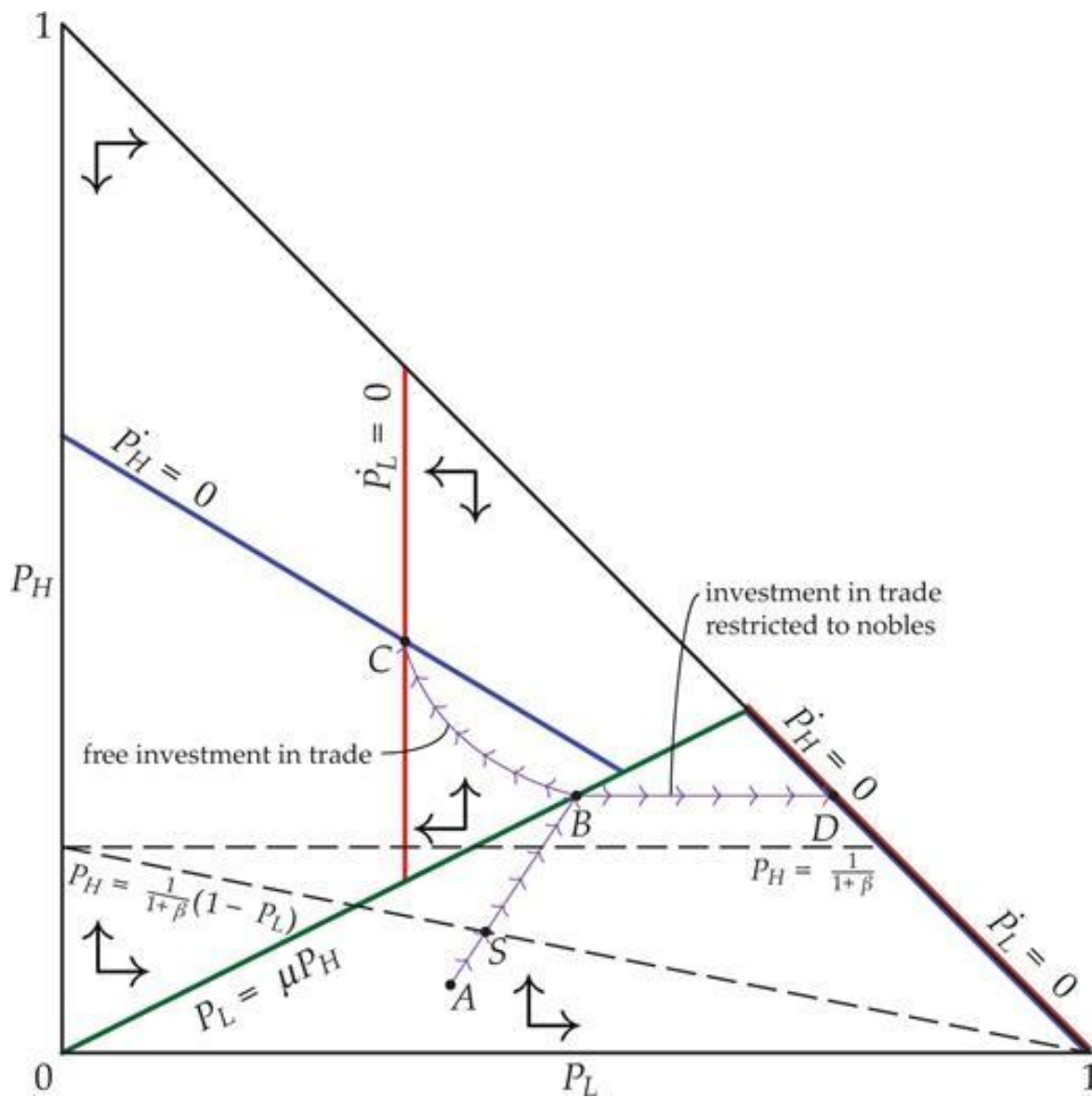
**Source:** <https://academic.oup.com/qje/article/129/2/753/1868053>

# International Trade and Institutional Change: Medieval Venice's Response to Globalization

- We [Puga and Trefler (2014)] now take an in-depth look at one particular **contracting innovation** — the *colleganza*.
- This was a predecessor of the **jointstock company** and is viewed by economic historians as one of the **key commercial innovations** of medieval times, if not the key innovation (e.g. Lopez and Raymond 1967, p. 174).
- Our main aim is to draw out the implications of **long-distance trade** for the **evolution of income distribution** and set the stage for the empirical work to come.
- For further details on the *colleganza* and comparisons with other contemporary commercial contracts, see Lopez and Raymond (1967), Pryor (1987), and Gonzalez de Lara (2010).

# International Trade and Institutional Change: Medieval Venice's Response to Globalization

- Initial wealth limits the occupational opportunities available to credit-constrained individuals, and this in turn affects wealth dynamics.
- We [Puga and Trefler (2014)] tailor the **occupation** and **investment opportunities** to our Venetian setting and also add in political economy considerations.
- In **the model**, **all Venetians** can **initially participate** in **international trade**.
- Those without much capital of their own can either **remain in Venice as craftsmen** or become **traveling merchants** by signing a *colleganza* contract with a sedentary merchant, who will put up the required capital.
- Those with intermediate wealth can finance their own voyage.
- Finally, the very wealthy can be sedentary merchants in multiple *colleganza*.
- International trade is risky, and the **success or failure of commercial voyages** drives **economic and social mobility**.



**Figure IV:** Evolution of the Wealth Distribution

Few Rich Merchants  $\mu P_H < P_L$

Many Rich Merchants  $\mu P_H \geq P_L$

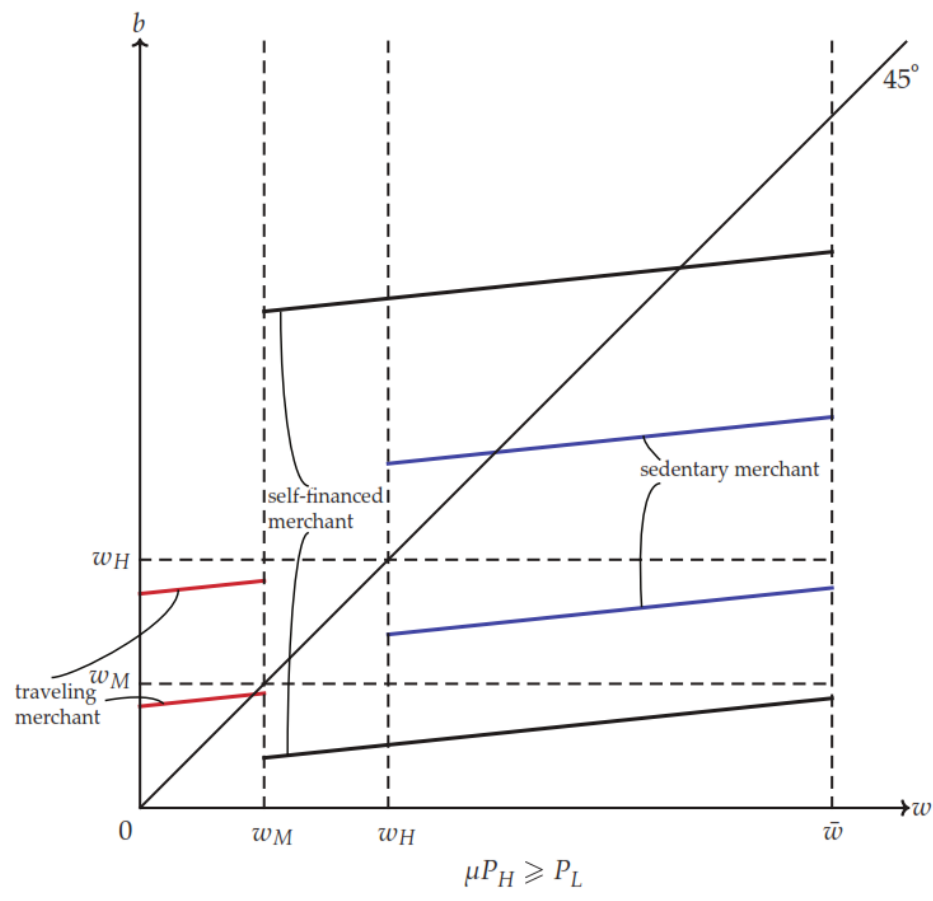
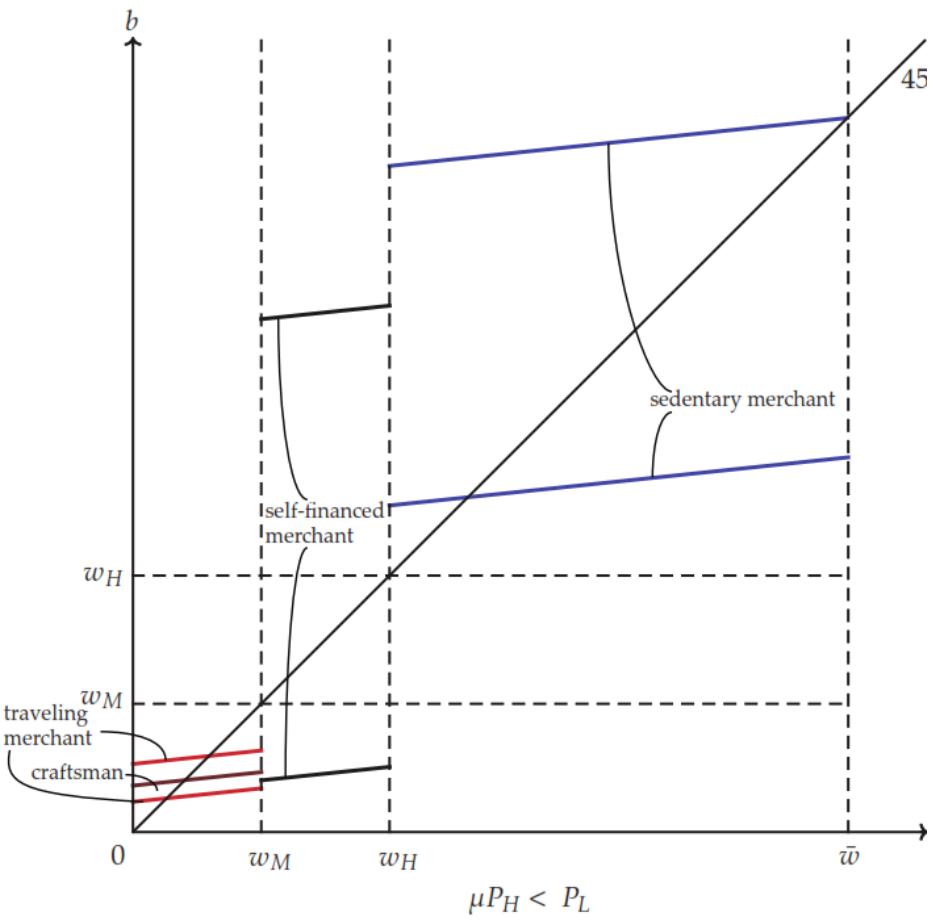


FIGURE A.1: Occupations and Bequests by Individual Wealth

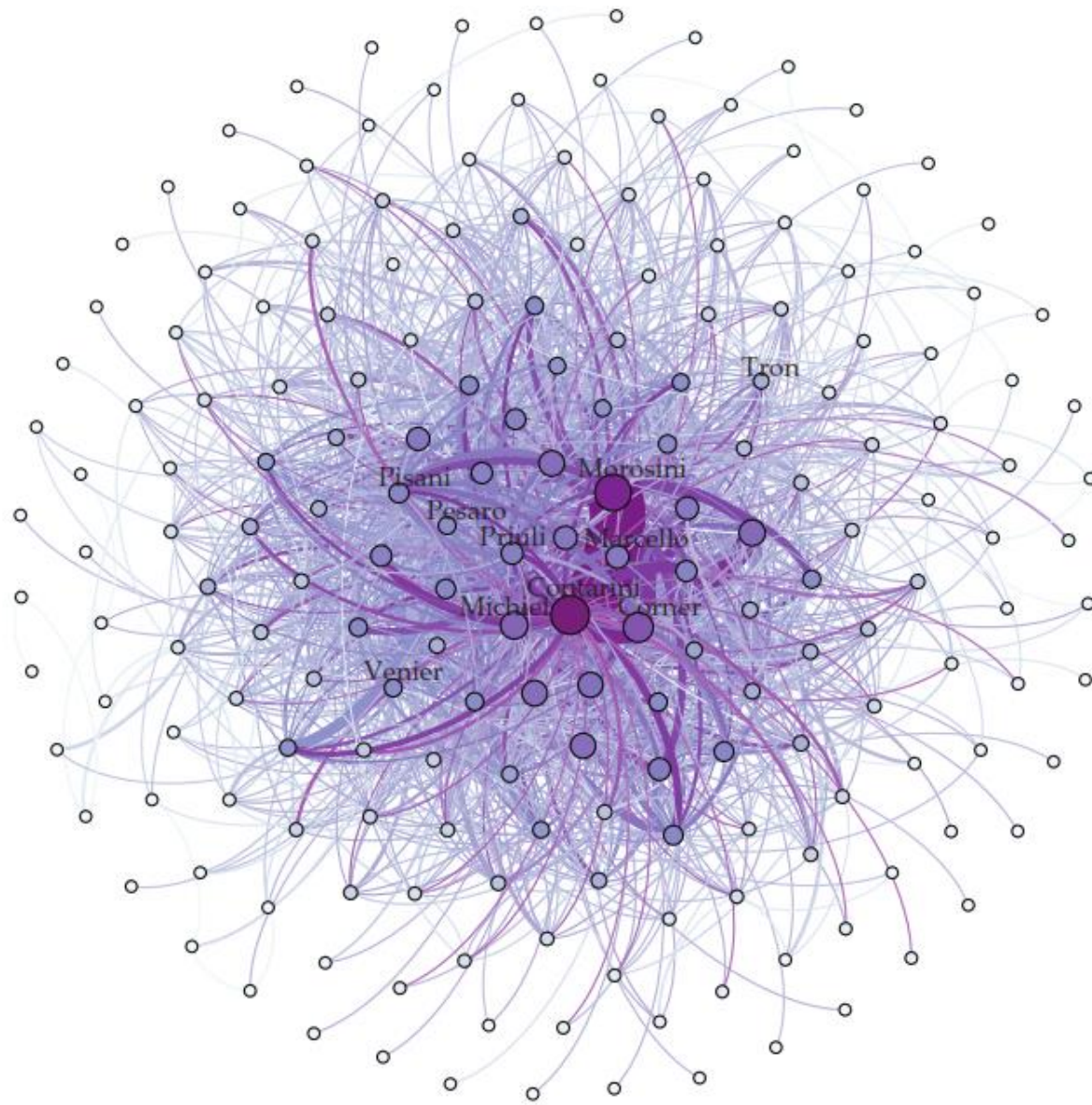
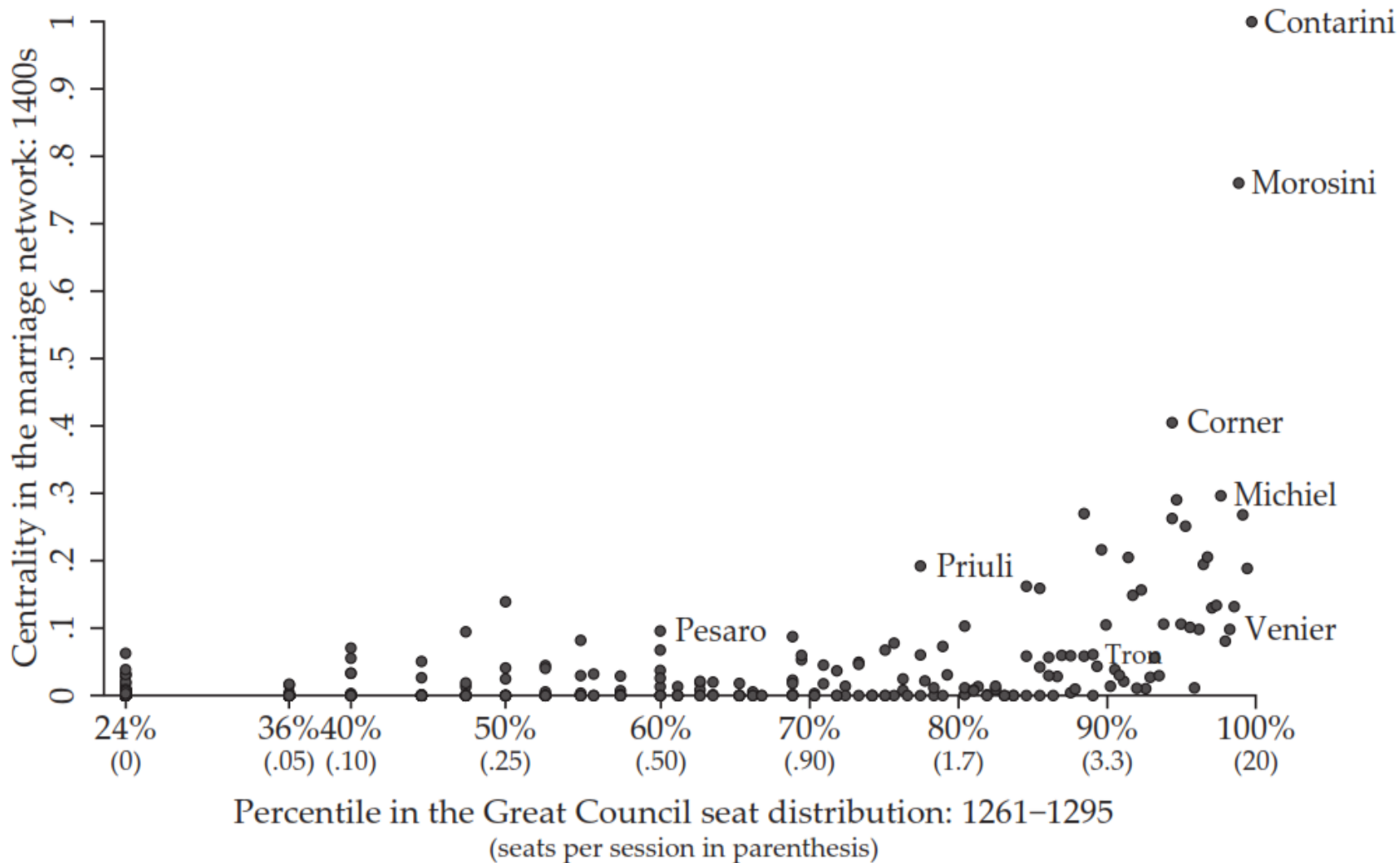
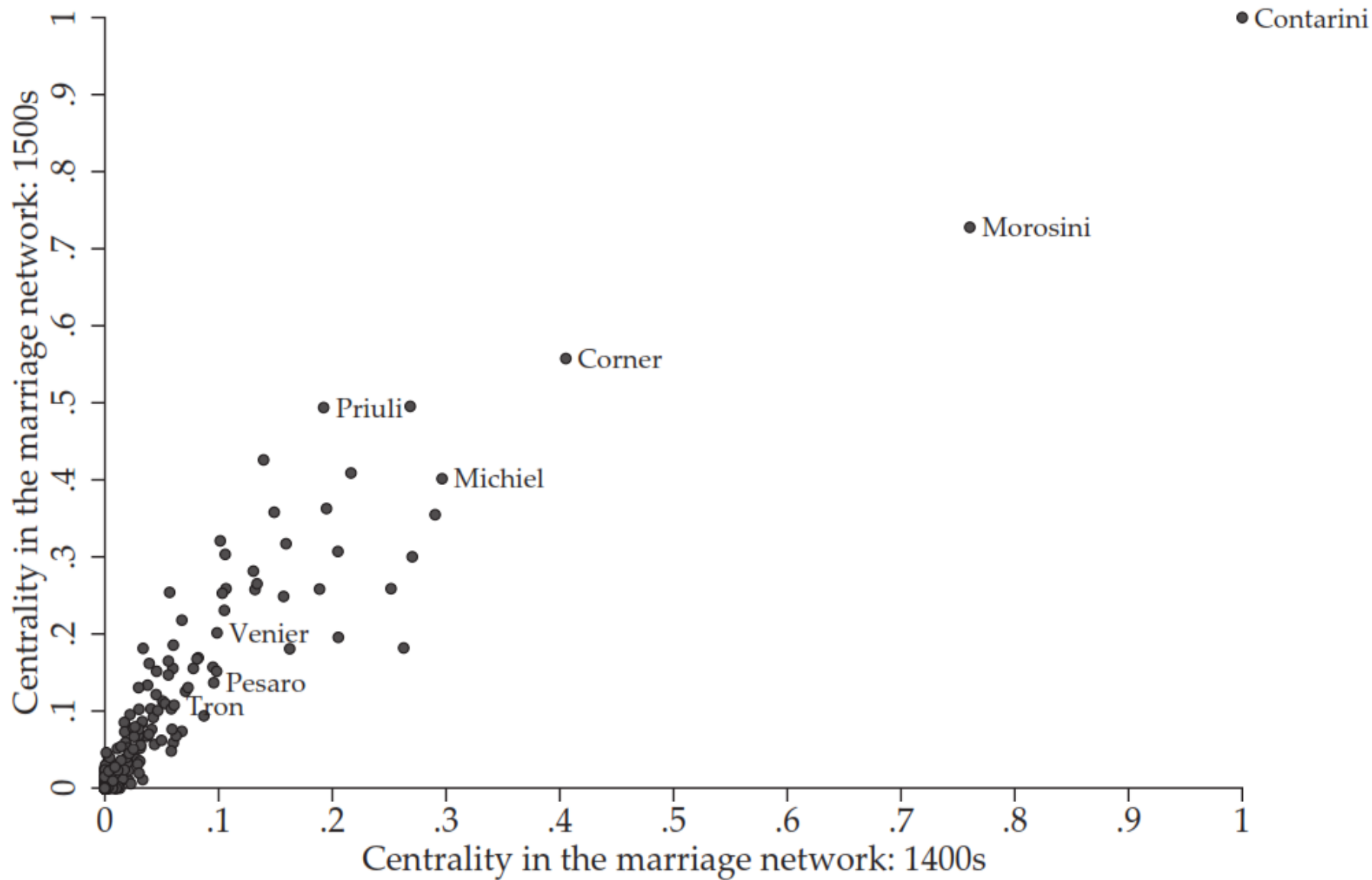


FIGURE VI

Marriage Network among Noble Families in 1400s



**FIGURE VII:** Centrality in the Marriage Network in 1400s against Great Council Seat Share in 1261–1296



**FIGURE VIII:** Persistence in Centrality in the Marriage Network

## JOURNAL ARTICLE

# Institutions for contract enforcement and risk-sharing: From the sea loan to the "commenda" in late medieval Venice

YADIRA GONZALEZ DE LARA

European Review of Economic History  
Vol. 6, No. 2 (AUGUST 2002), pp. 257-262 (6 pages)  
Published By: Oxford University Press

<https://www.jstor.org/stable/41378304>

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## Institutions for contract enforcement and risk-sharing: From the sea loan to the *commenda* in late medieval Venice

YADIRA GONZALEZ DE LARA  
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My dissertation uses historical records and a context-specific mechanism-design model to investigate the institutional and contractual arrangements that facilitated long-distance trade in late medieval Venice.<sup>1</sup> The mobilisation of capital and the sharing of risk in long-distance trade could potentially promote economic prosperity, but it required that merchants were able to commit *ex-ante* not to breach their financial contracts *ex-post*. Financial contracting entails the exchange of tangible funds for the promise of future payments, but promises can be broken. Therefore, the set of financial relations that actually transpire in a society depends on the society's institutions for contract enforcement, meaning the constraints that ensure compliance with the promised future payments.<sup>2</sup> Distinct institutional arrangements enforce different sets of contractual forms, among which particular ones can be chosen. The selection of various contracts, and their underlying institutional foundations, has significant efficiency effects. The dissertation thus integrates a historical institutional analysis of the emergence and transition of various contracts with the study of their efficiency attributes. This approach enables me to address the following questions: What institutions for contract enforcement enabled the Venetians to commit to the sea loan (a debt-like contract) and the *commenda* (an equity-like contract)? What caused the transition from the former to the latter? Did the Venetians attain an efficient allocation of risk?

The motivation for this study is three-fold. First, long-distance trade in Europe from the eleventh to the fourteenth centuries led to both economic growth and fundamental political, social and economic changes (Lopez 1976, and North 1990). Venice, in particular, became the richest city of the time and the main European financial centre for hundreds of years while enjoying political and social tranquility (Lane 1973). Yet, we know very little about the institutions underlying this economic and political success.

<sup>1</sup> This dissertation was awarded by the Department of Economics at the European University Institute under the inspiring supervision of Professors Avner Grief and Ramon Marimon with support from the Social Science History Institute at Stanford University. I also wish to thank Andrea Drago, Gavin Wright, Jaime Reis, and Leandro Prados de la Escosura for their help in various ways.

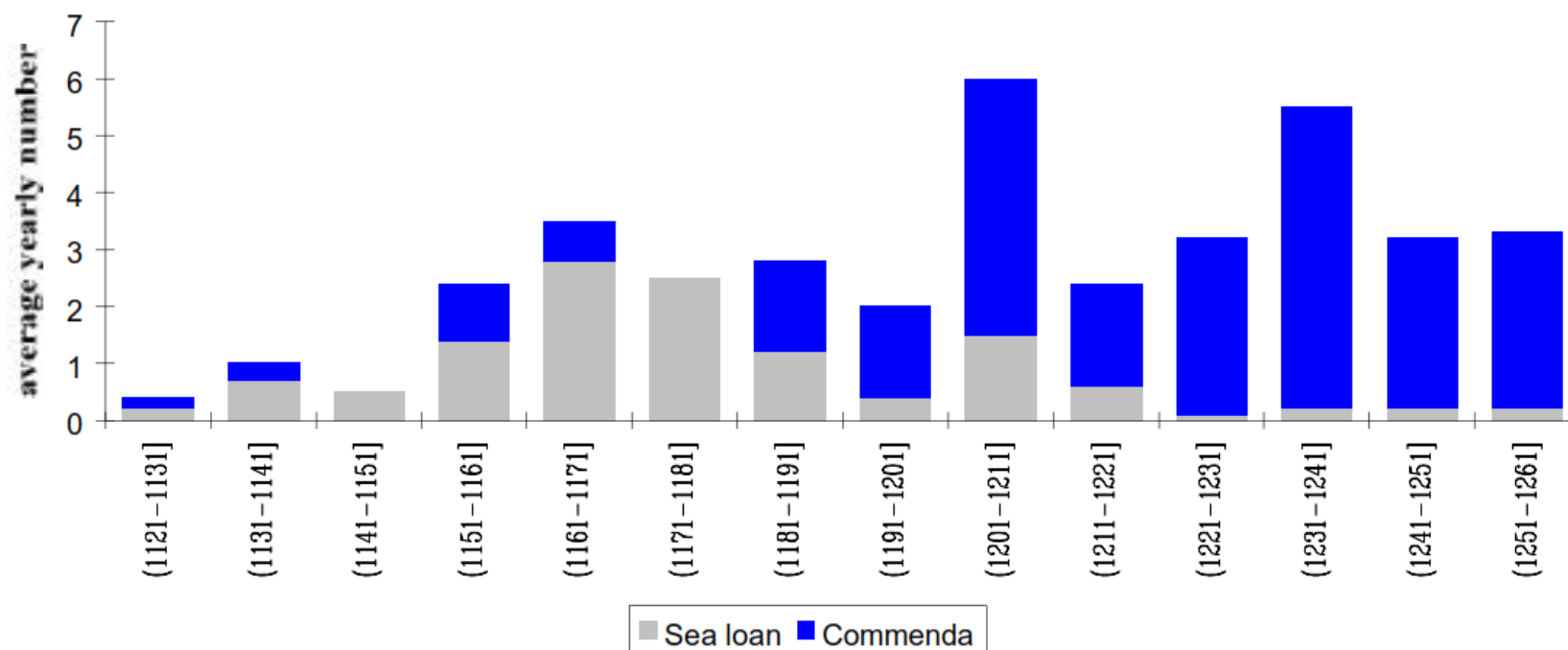
<sup>2</sup> Institutions are viewed as constraints that enable merchants to commit. For a definition of institutions, see Grief (forthcoming) and North (1990).

## Abstract

This paper integrates a historical institutional analysis of the emergence and transition of various contracts with the study of their efficiency attributes. In particular, it uses historical records and a context-specific mechanism-design model to investigate the institutional and contractual arrangements that facilitated mobilization of capital and risk-sharing in late medieval Venice. Institutional arrangements that enhanced the State's ability to verify information led the transition from the sea loan (a debt-like contract) to the commenda (an equity-like contract). This implied a better allocation of risk and, arguably, further mobilization of capital. This empirically supported explanation for the development of alternative contracts differs from both a simple “reputation mechanism”— according to which exchange is done through networks— and the standard static explanations of optimal security design— which focuses on the efficiency of various contractual forms ignoring their underlying institutional foundations. The paper also provides a rationale for the efficiency and observed co-existence of debt and equity, as well as for the participation of merchants-entrepreneurs to the funding of their own ventures (inside equity).

**FIGURE IV**

**Documented Sea Loan and Commenda Contracts and their Distribution over Time**



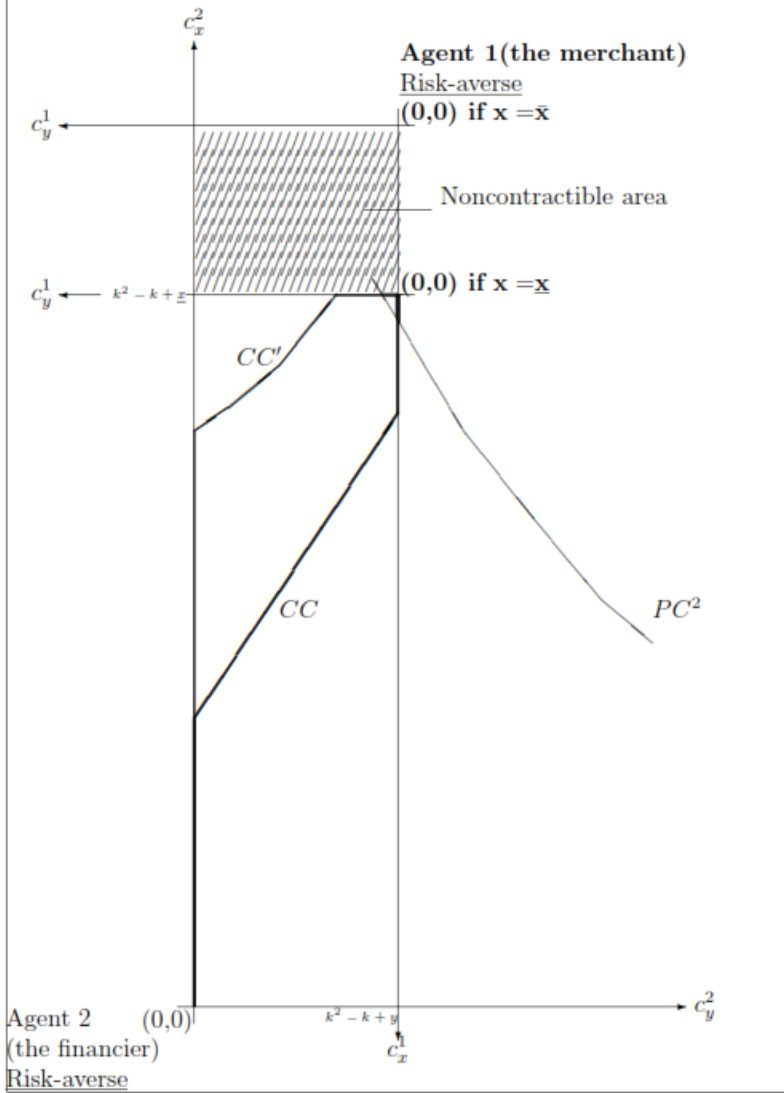
**TABLE I**  
**Contracts Financing Ventures to Egypt**

Period	sea loan	commenda
twelfth century	91%	9%
1200-1214	6%	94%

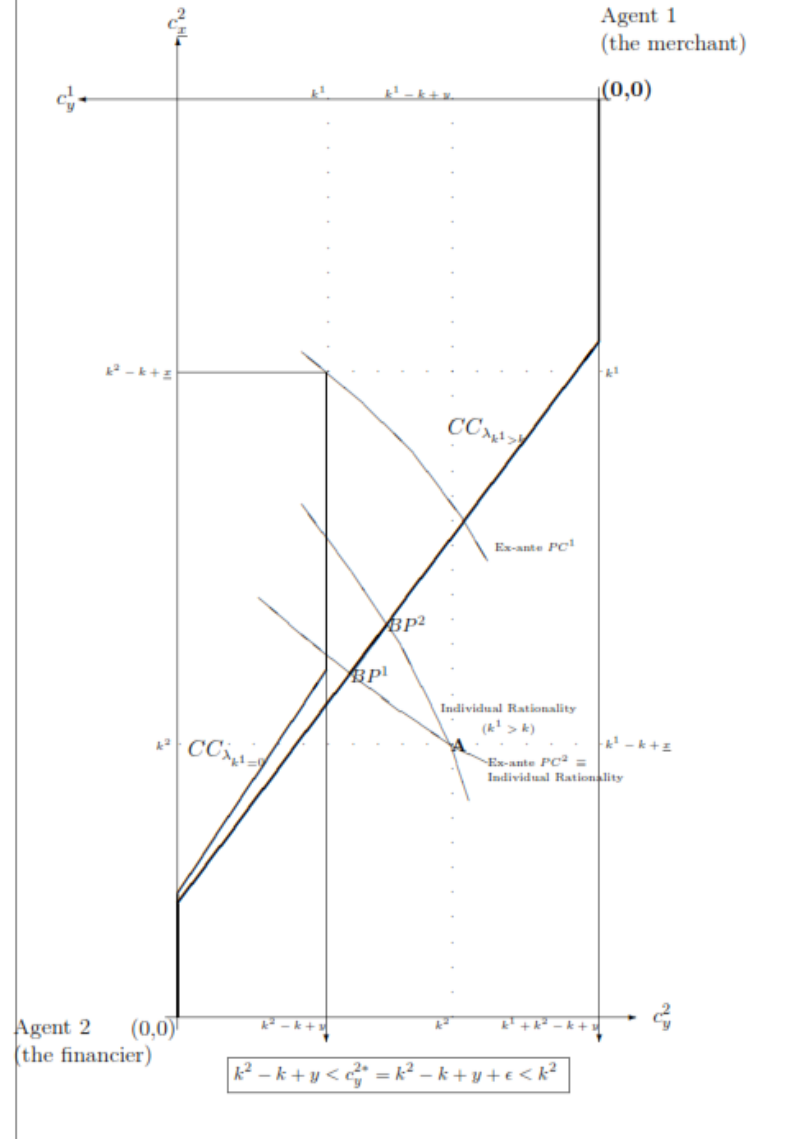
**TABLE II**  
**Relative Representation of Sea Loans (s.l.) by Place of Departure**

Period	% of s.l. over ventures departing from Venice	% of s.l. over ventures departing from outside Venice	Total % of s.l.
1121-1180	79 %	77 %	76 %
1181-1220	17 %	56 %	29 %
1221-1261	1 %	71 %	4.6 %

Edgeworth box diagram showing the distribution of contract



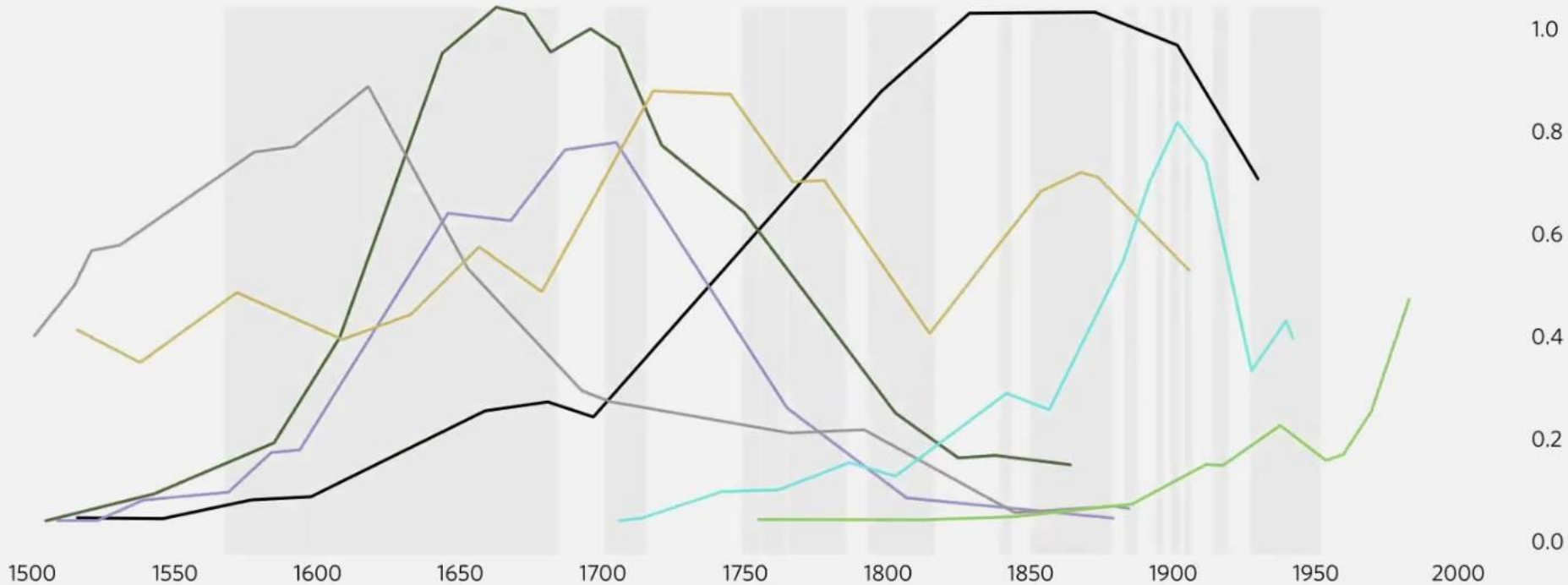
Edgeworth box diagram showing the distribution of contract



# **Economic History of Amsterdam and Dutch East India Company**



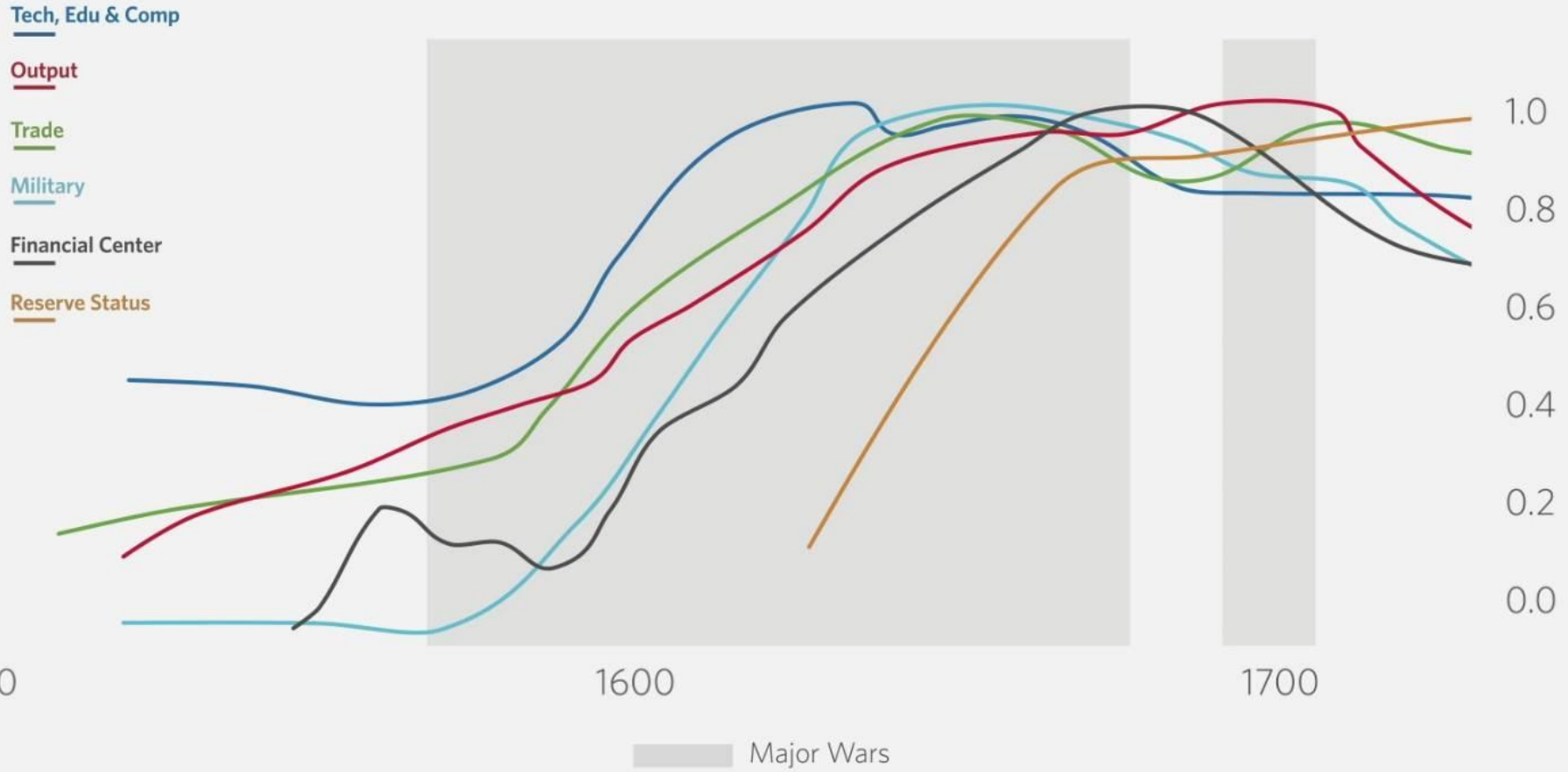
**Source:** <https://www.iamsterdam.com/en/see-and-do/things-to-do/canal-cruising/reasons-to-see-amsterdam-from-the-water>



## Estimates of Relative Standing of Great Empires

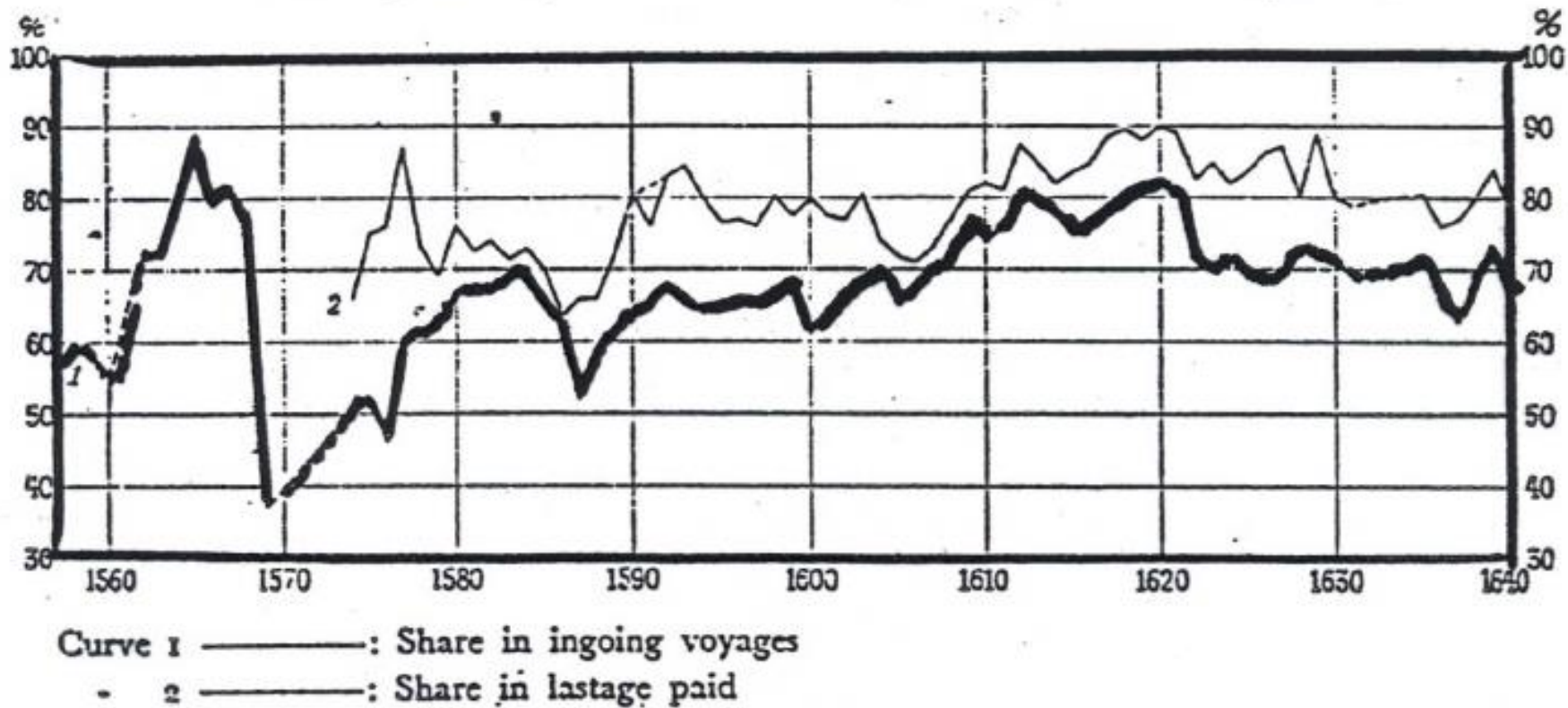
Major Wars

# The Dutch



## DIAGRAM II

*Percentage Share of the Dutch in the Traffic through the Sound 1557-1640*

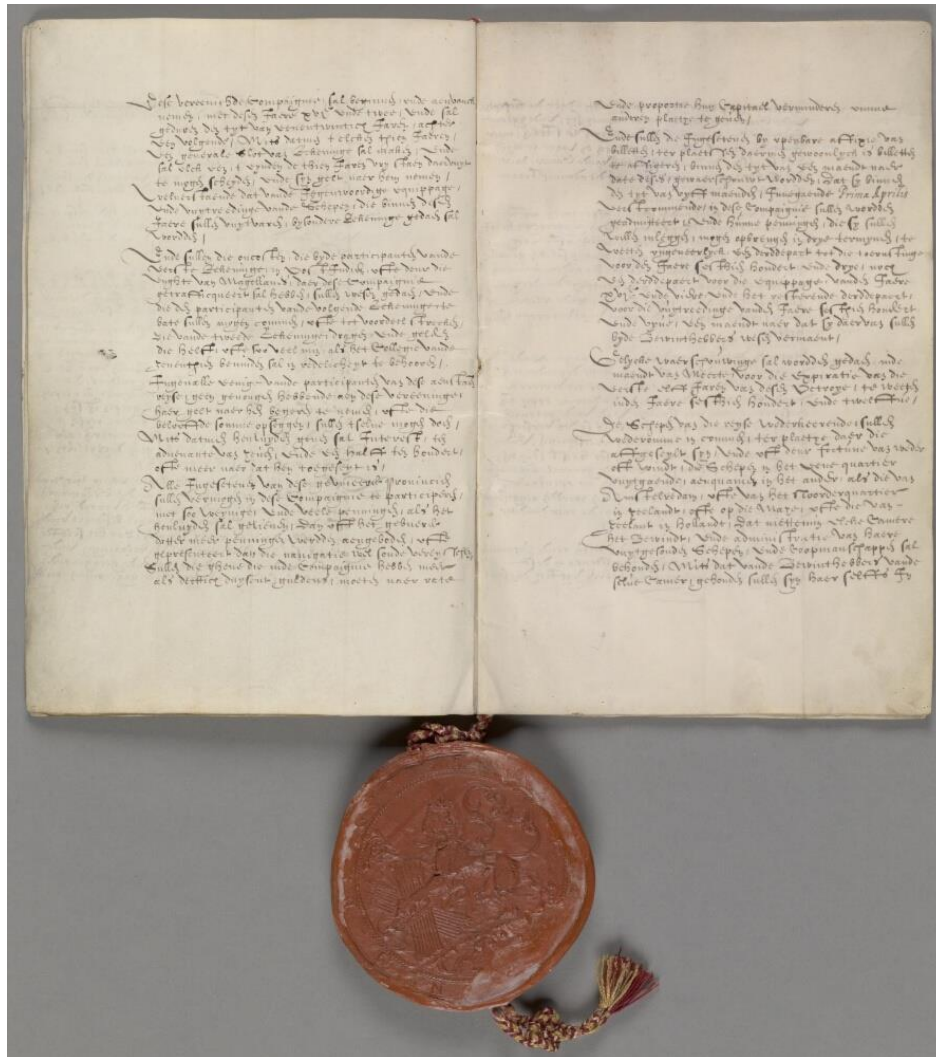


The return of the fleet of the 'Oude Compagnie', in Amsterdam in 1599.  
This company, which later merged into the VOC, had issued shares, but had not held an IPO.



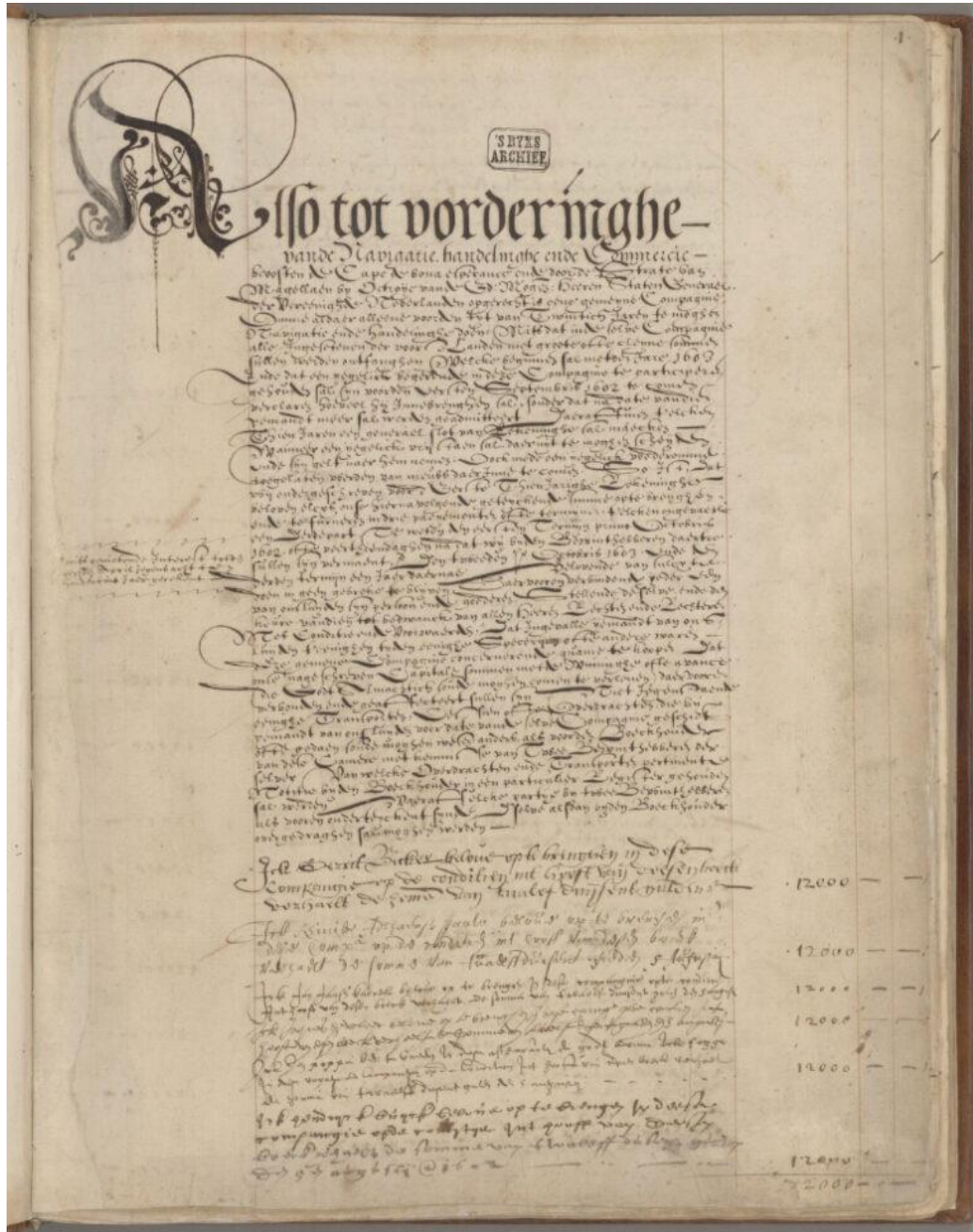
*Painting by Hendrick Cornelisz. Vroom.  
Rijksmuseum Amsterdam. License: CC0*

The **Dutch East India Company (VOC)** held its **‘initial public offering’ (IPO)** in **August 1602**. It was the **first of its kind in world history** and therefore a key event in financial history, and the **history of the capitalist world**.



- The IPO had been announced in the VOC charter—the company’s founding document of March 20, 1602.
- “All the residents of these lands,” stated article 10, “may buy shares in this Company.”
- Subscribers could decide for themselves how much to invest: there was no minimum or maximum.
- The next article stated that posters would be put up announcing the IPO.

**Source:** Directly quoted from <https://www.worldsfirststockexchange.com/2020/10/15/the-worlds-first-ipo/>



- First page of **VOC capital subscription ledger** (Amsterdam branch; August 1602).
- The introduction on this page contains the provision that **shares in the VOC could be traded**.
- At the foot of the page, the entries of the **directors** Gerrit Bicker, Reinier Pauw, Jan Jansz Kaerel, Jacques de Velaer, Jan Poppen, and Hendrick Buyck can be seen.
- They each **invested 12,000 guilders**—an amount of money for which you could buy six unpretentious canalside houses in early seventeenth-century Amsterdam.

**Source:** Directly quoted from <https://www.worldsfirststockexchange.com/2020/10/15/the-worlds-first-ipo/>

- When the IPO closed on August 31, 1602, **1,143 investors** had subscribed to the initial capital of the Dutch East India Company's Amsterdam branch.
- The **second to last subscription** was made by Neeltgen Cornelis.
- She was **Dirck van Os's maid** and had seen investors coming and going all month.
- She **subscribed a hundred guilders**, for which she had had to work long and hard: **her wages were less than fifty cents a day**.
- This seems to have inspired the bookkeeper Barent Lampe to pay **his servant a bonus**.
- The very last entry in the book reads "Barent Lampe for Dignum Jans \_\_\_ 50 guilders."





The Hendrick de Keyser Exchange. C.J. Visscher, c.1613.  
*Collection of the Capital Amsterdam foundation*

## The Baltic and English Grain Export Trades:

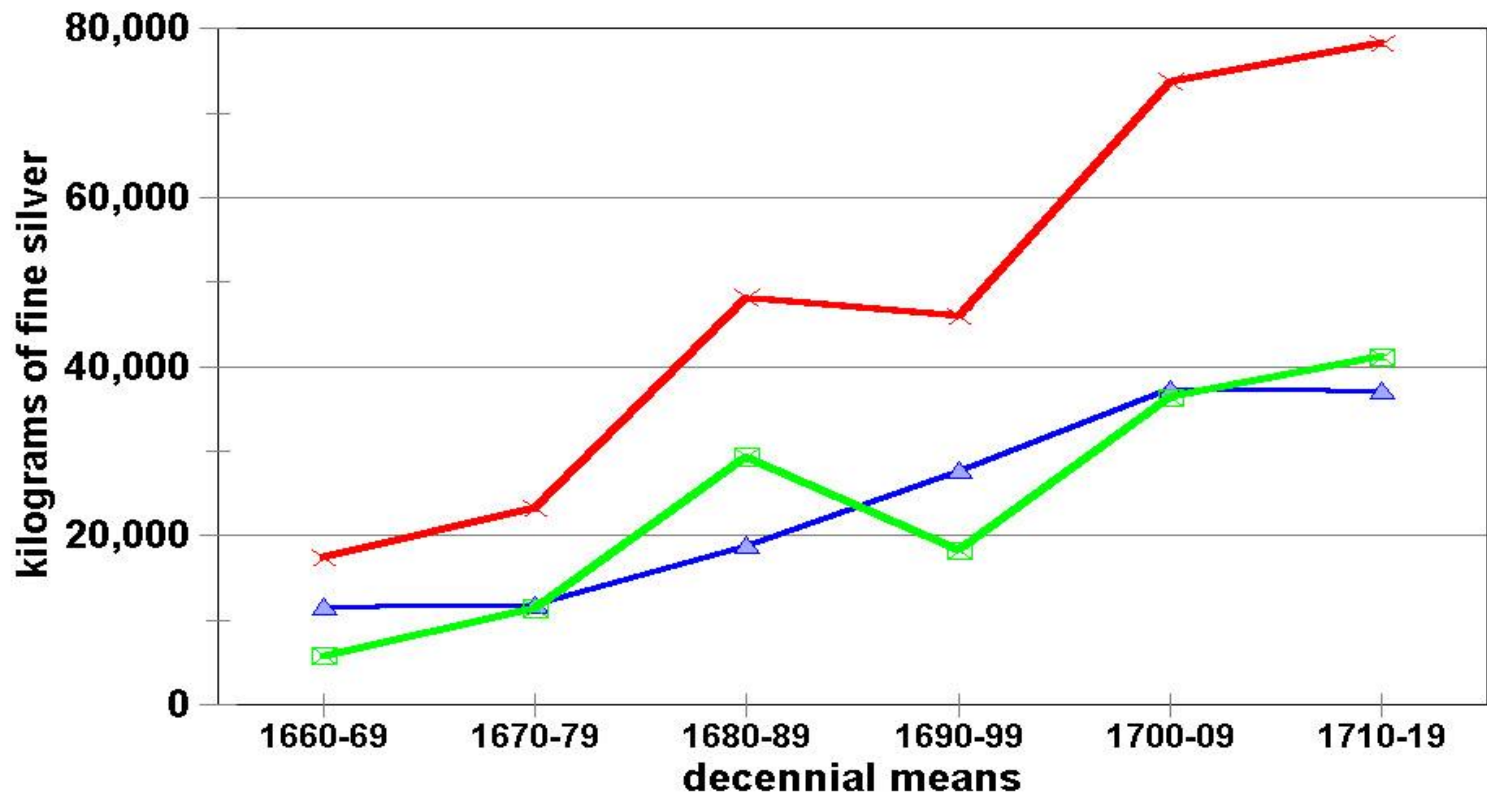
average annual exports in quarters (of 8 bushels)\*  
1600-49 to 1700-49

PERIOD	BALTIC**	ENGLAND	TOTAL
1600-59	719,250	?	?
1650-99	585,900	26,250	612,150
1700-49	325,500	453,600	779,100

\* 1 Quarter = 8 bushels = 64 gallons of grain = 480 lb. (1 bu. = 60 lb.; 6 x 80 = 480 lb.)

\* about 80% on the seaborne Baltic grain exports, on average, was carried in Dutch ships (a higher proportion in the earlier than in the later periods).

## Dutch & English Silver Exports to Asia 1660-9 to 1710-9 in kilograms



—▲— Dutch East India Co. —■— English East India Co. —×— Total Silver Exports

### Exports of Silver to Asia by the Dutch East India Company

[Vereenigde Oostindische Compagnie], decennial means: in Dutch Gulden (guilders or florins) and Kilograms of Fine Silver, 1602 - 1795

Decade	Value in Gulden (guilders)	Kilograms Fine Silver	Index: 1600-49 = 100
1600-09	647,375.0	6,959.7	71.9
1610-19	965,800.0	10,382.9	107.3
1620-29	1,247,900.0	12,610.8	130.3
1630-39	890,000.0	8,994.0	92.9
1640-49	880,000.0	8,892.9	91.9
1650-59	840,000.0	8,488.7	87.7
1660-69	1,190,000.0	11,563.1	119.5
1670-79	1,220,000.0	11,854.6	122.5
1680-89	1,972,000.0	18,847.0	194.8
1690-99	2,900,500.0	27,720.9	286.5
1700-09	3,912,500.0	37,392.9	386.4
1710-19	3,882,700.0	37,108.1	383.5
1720-29	6,602,700.0	63,104.0	652.1
1730-39	4,254,000.0	40,656.8	420.1
1740-49	3,994,000.0	38,171.9	394.5
1750-59	5,502,000.0	52,584.3	543.4
1760-69	5,458,800.0	52,171.4	539.1
1770-79	4,772,600.0	45,613.2	471.4
1780-89	4,804,200.0	45,915.2	474.5
1790-99	3,233,600.0	30,904.5	319.4