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Tuesday 29 October 2019

The Rothschild Archive
at Rothschild & Co
New Court
51 Saffron Lane
London EC4A 3AL

with The European Association for Banking and Financial History (EABH)



Back to the Future: Monetary Policy in the Middle Ages - Lessons for the Future

Nathan Sussman
Graduate Institute Geneva
EABH Minting History Workshop
October 29, 2019
Rothschild Archive, London

Can we learn anything from medieval monetary history?

A period of the development of economic and political institutions

The rise of a national monetary system

The development of economic (monetary) theory.

A period of monetary experimentation.

Abundant archival data

A medieval homo economicus?

Example from the Salic Law (France 550 A.D)

Title XXIV. Concerning the Killing of little children and women.

1. If any one have slain a boy under 10 years-up to the end of the tenth-and it shall have been proved on him, he shall be sentenced to 24000 denars, which make 600 shillings.
3. If any one have hit a free woman who is pregnant and she dies, he shall be sentenced to 28000 denars, which make 700 shillings.
6. If any one have killed a free woman after she has begun bearing children, he shall be sentenced to 24000 denars, which make 600 shillings.
7. After she can have no more children, he who kills her shall be sentenced to 8000 denars, which make 200, shillings.

Monetary Theory in the middle ages



Why Money was invented

‘When the Most High divided to the nations their inheritance, when He separated the sons of Adam, He set the bounds of the people.’¹ Next, men were multiplied on the earth, and possessions were divided to the best advantage. The result of this was that one man had more than he needed of one commodity, while another had little or none of it, and of another commodity the converse was true: the shepherd had abundance of sheep and wanted bread, the farmer the contrary. One country abounded in one thing and lacked another. Men therefore began to trade by barter: one man gave another a sheep for some corn, another gave his labour for bread or wool, and so with other things. And this practice persisted in some states, as Justin² tells us, till long afterwards. But as this exchange and transport of commodities gave rise to many inconveniences, men were subtle enough to devise the use of money to be the instrument for exchanging the natural riches which of themselves minister to human need.

with them as he has occasion for them. The greater part of his occasional wants are supplied in the same manner as those of other people, by treaty, by barter, and by purchase. With the money which one man gives him he purchases food. The old cloaths which another bestows upon him he exchanges for other old cloaths which suit him better, or for lodging, or for food, or for money, with which he can buy either food, cloaths, or lodging, as he has occasion.



Oresme

Adam Smith



State versus Private Money?

Back to Oresme and Adam Smith:

Money in the middle ages was a commodity money

The most important function: medium of exchange

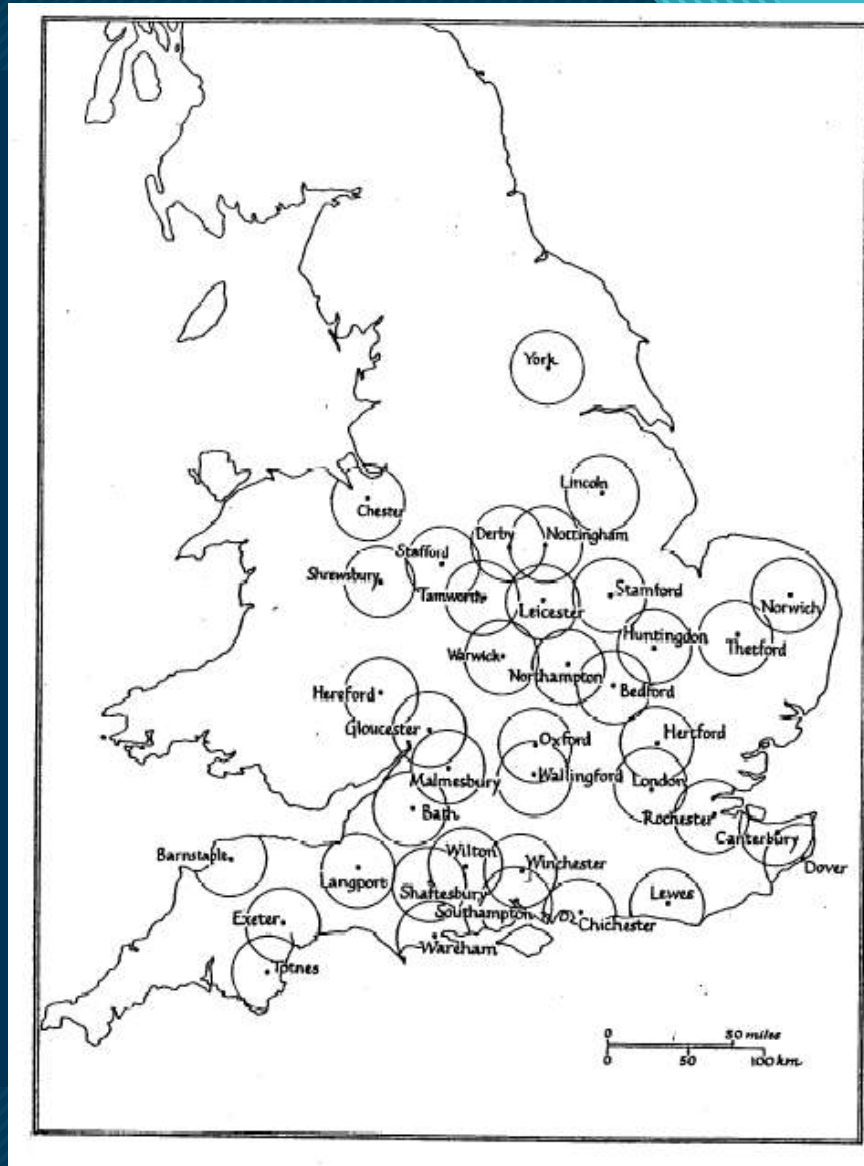
The most important function of a medium of exchange is to minimize transaction costs.

Universal acceptance of a medium of exchange is optimal.

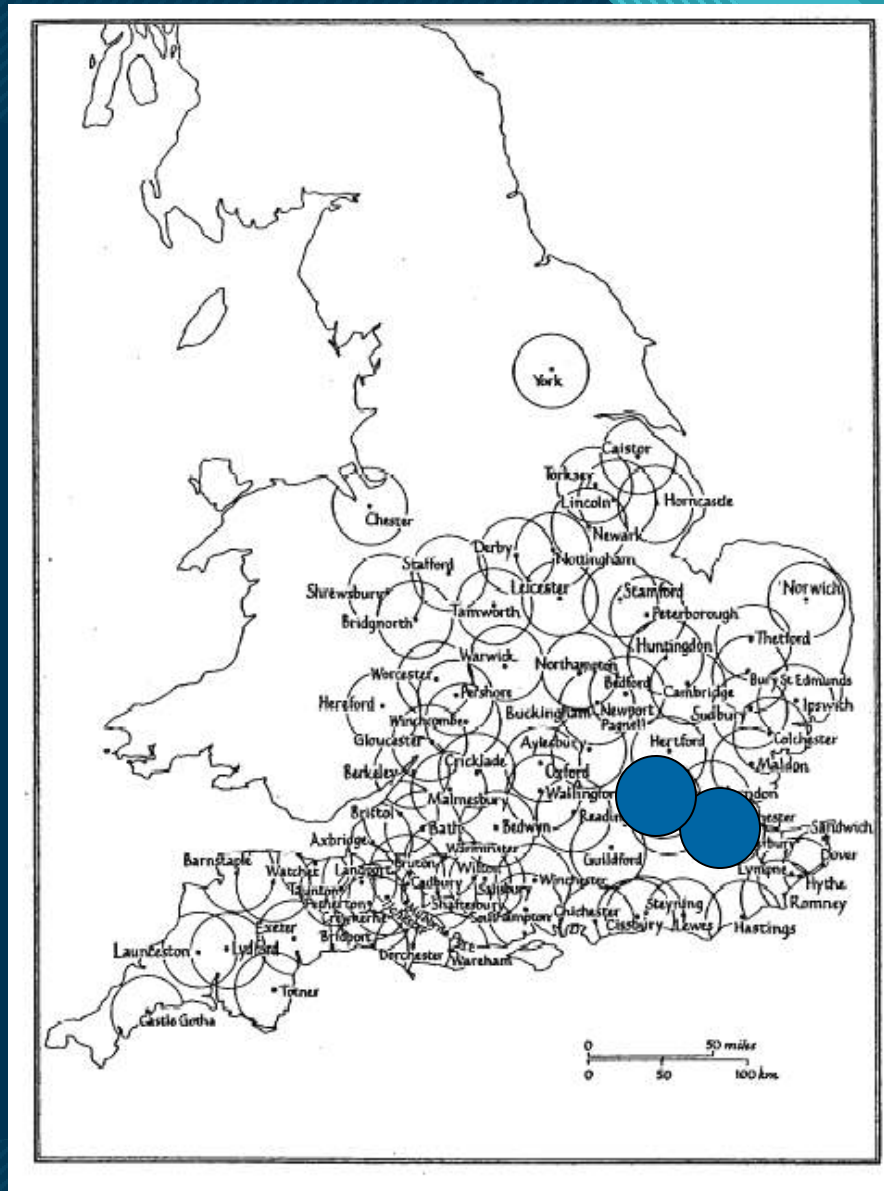
Universal acceptance is conditional on an intrinsic value that is agreed by all parties to exchange.

From private to National money- the English case

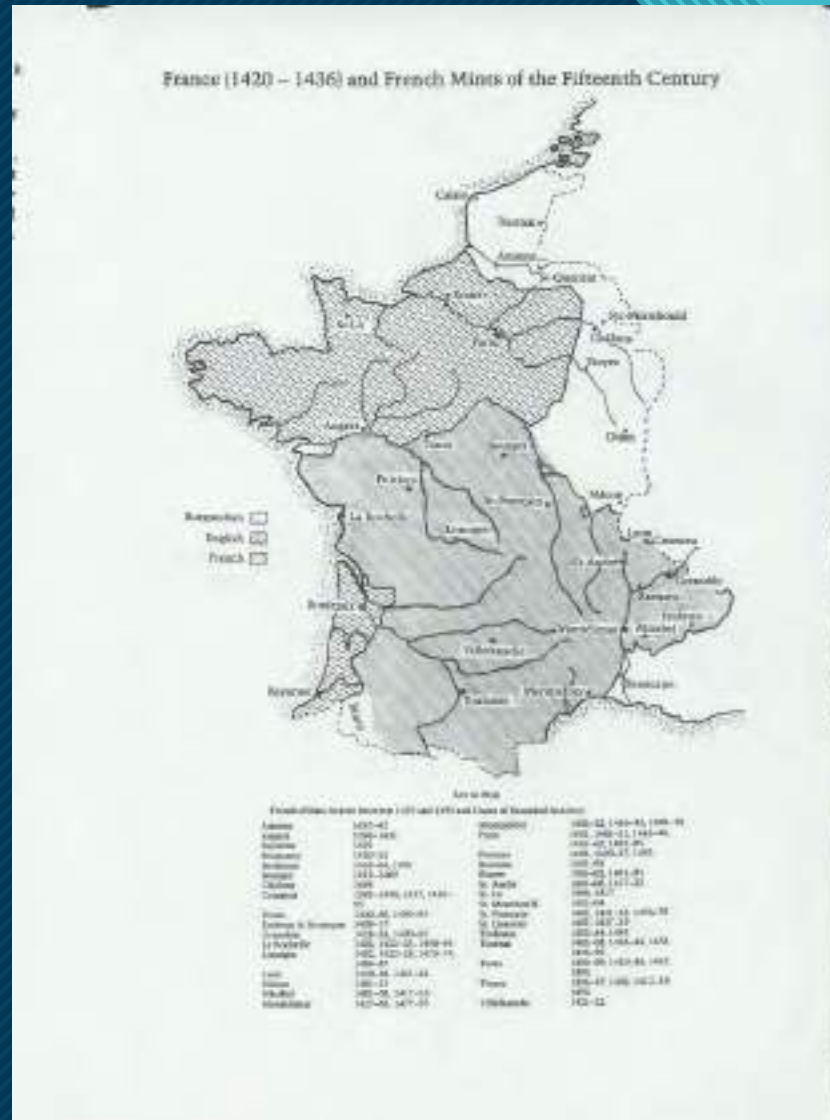
English mints c. 900 A.D



English mints: 973-1066 - centralisation



French mints: 1300-1450- de-centralisation



Establishing a national universally accepted
medium of exchange in a competitive currency
market: the case of France

Setting and institutional framework to ensure commitment to quality and economic efficiency

1. Monetary system managed from Paris.
2. Monetary court: 'cour de la monnaie.'
3. Comptroller (in Paris)
4. Local mint run by mint master (franchise)
5. Royal overseers in local mint:
 1. Guards
 2. Quality control
 3. Engraver
6. Labor employed by mint master

Principles of monitoring and quality control

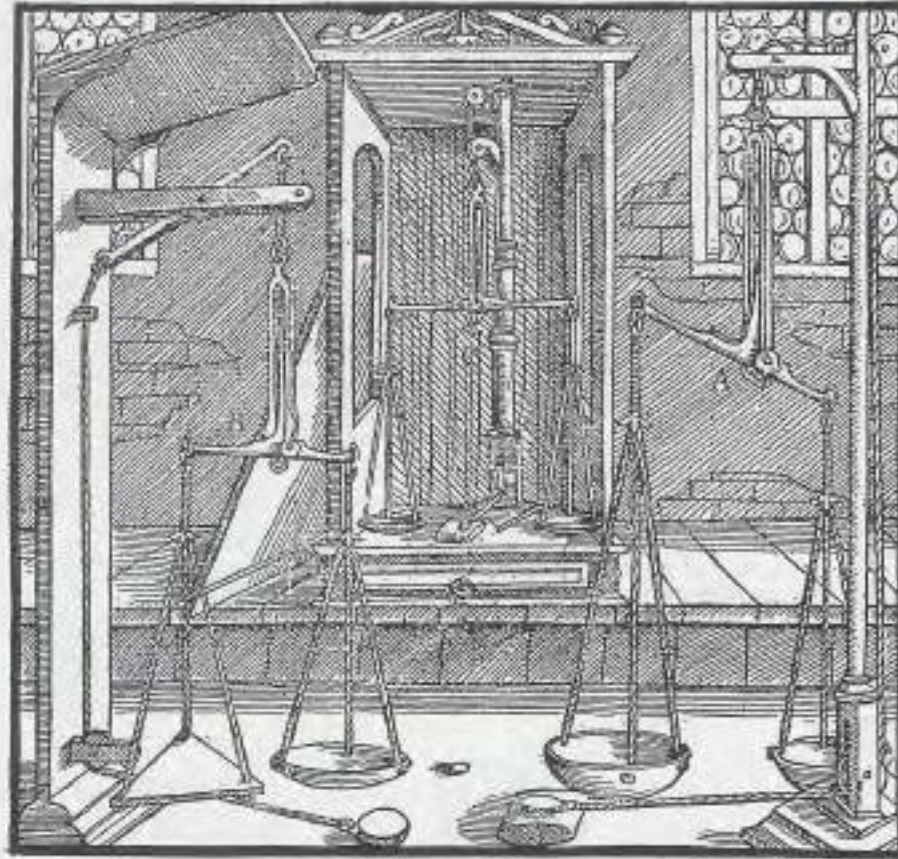
1. Accounts
2. In-house quality control by royal employee
3. Quality control in Paris based on random samples of coins

[illegible]

(The first part of the answer is correct. The second part is incorrect. The correct answer is that the function is not differentiable at $x=0$ because the limit $\lim_{h \rightarrow 0} \frac{f(0+h) - f(0)}{h} = \lim_{h \rightarrow 0} \frac{h^2 \sin \frac{1}{h}}{h} = \lim_{h \rightarrow 0} h \sin \frac{1}{h}$ does not exist.)

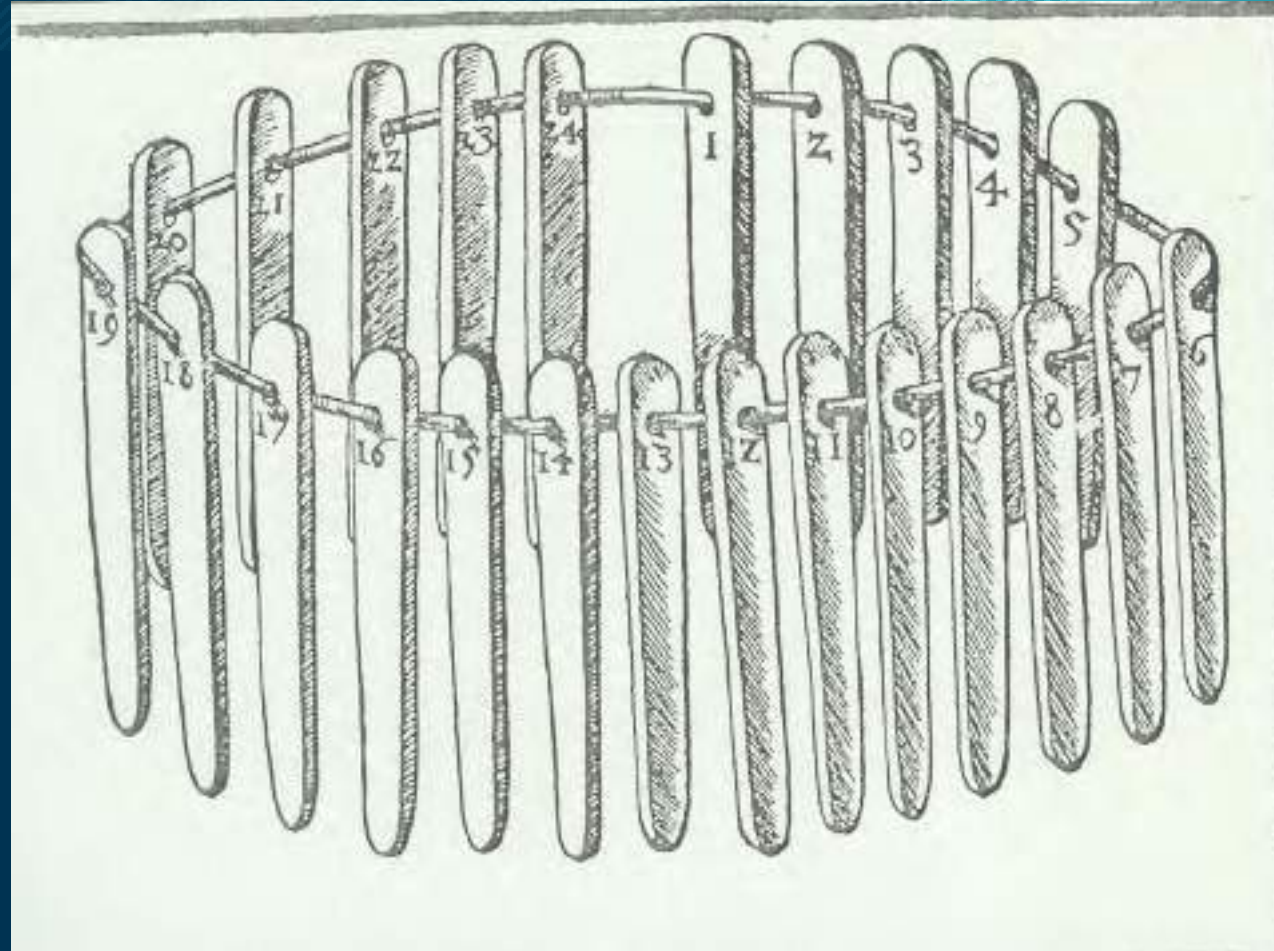
(faint handwritten notes)

Quality control : Assaying weight of coins



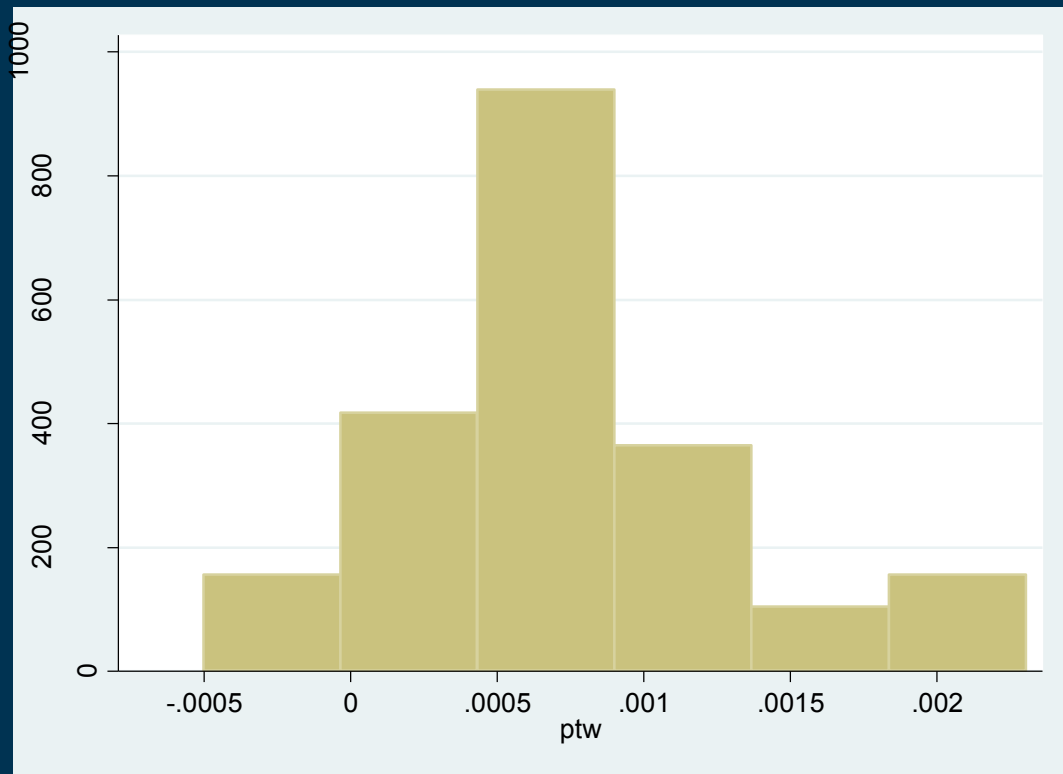
A—FIRST SMALL BALANCE. B—SECOND. C—THIRD, PLACED IN A CASE.

Quality control : Assaying fineness of coins

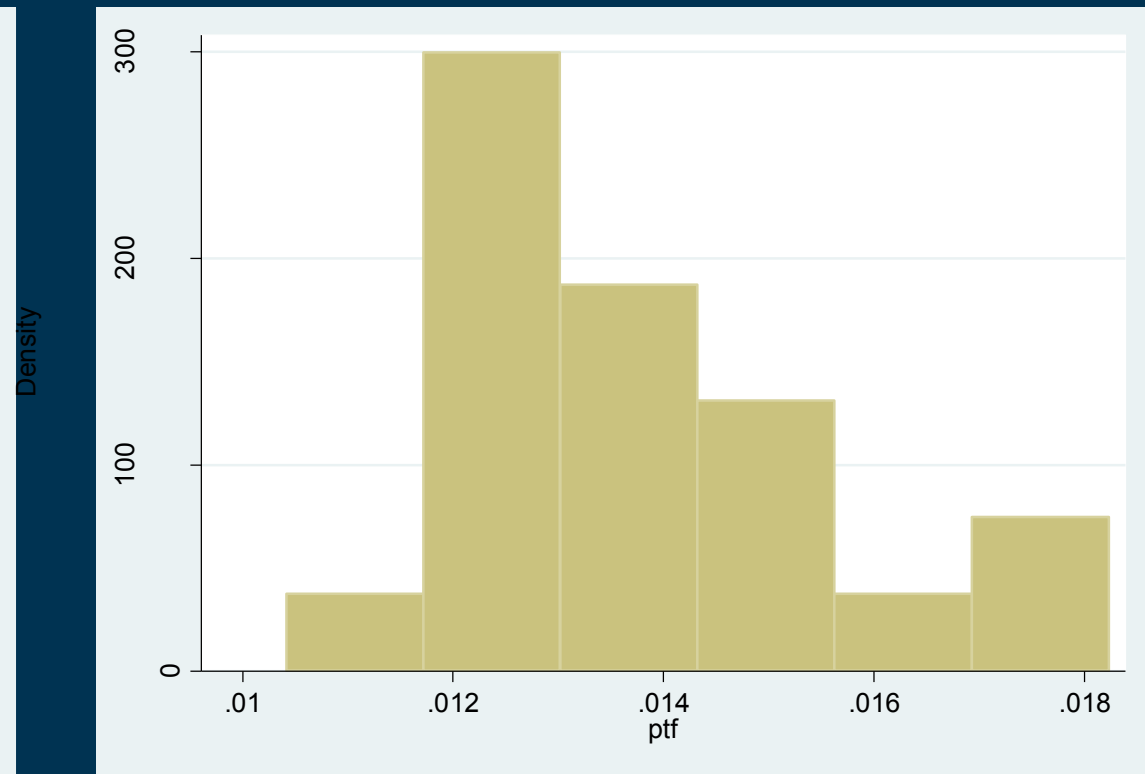


Summary of assaying of random samples in Paris

Deviations of weight



Deviations of fineness



First lesson: Ruler's coins (state) dominated private money:

1. Rulers had a comparative advantage because of economies of scale in creating credibility.
2. Rulers control legal system and can treat preferentially contracts using state currency.

Outcome: universal acceptance of state currency

From coinage to monetary policy (France 1270-1450)

To conduct monetary policy the state needs to control the **unit of account** (nominal value) of the currency. Not only the striking of coins.

Money of account: *livre tournois* = 20 *Solidi* = 240 *Deniers*.

Coins have no engraved face value – it is declared by the state

Definitions and example:

Mint par – **L** : The nominal value (in money of account) of a unit of weight of pure metal.

The mint price – **Q** The nominal value paid by the mint to sellers of a unit of weight of pure metal

Seignorage: **S** = $L - Q$ – the price of money

N Number of coins struck from a unit of pure metal

F The fineness (in %) of the coins

V nominal value of the coin

Example:

$N = 100$ $V = 1 \text{ solidi (12 deniers)}$ $F = 50\%$

$L = 200 \text{ solidi} = 10 \text{ livres tournois}$

$s = 5\%$

$Q = 9.5 \text{ livres tournois}$

$$L = \frac{V \bullet N}{F}$$

How does medieval monetary policy work?

Policy instruments: Setting the exchange rate between precious metals and the money of account (The mint par) and the seignorage rate

Recall the (Cambridge) quantity equation: $M = K(i)PY$

For a given stock of coins in the economy changing the mint par is equivalent to changing the nominal money supply

M. Change in the seignorage rate are equivalent to changes in the interest rate and affect **k**

Example: when the economy is expanding and the stock of coins is fixed the monetary authorities can increase the mint par to avoid price deflation. It can also reduce seignorage and attract more bullion to the mints.

Second Lesson: Monetary policy can work without banks or a positive interest rate. As long as there is a distinction between a medium of exchange (coins) and reserves (bullion).

Growing literature on monetary policy in the age of zero and negative interest rates (Kimball, Buiter, Rogoff).

Cash-reserve conversion (CRC) rate: a negative interest rate of 4% equivalent to CRC of 100 to 96.

Literature on the decline of banks and 100% reserve ratio for banks.

Debasements and inflation tax

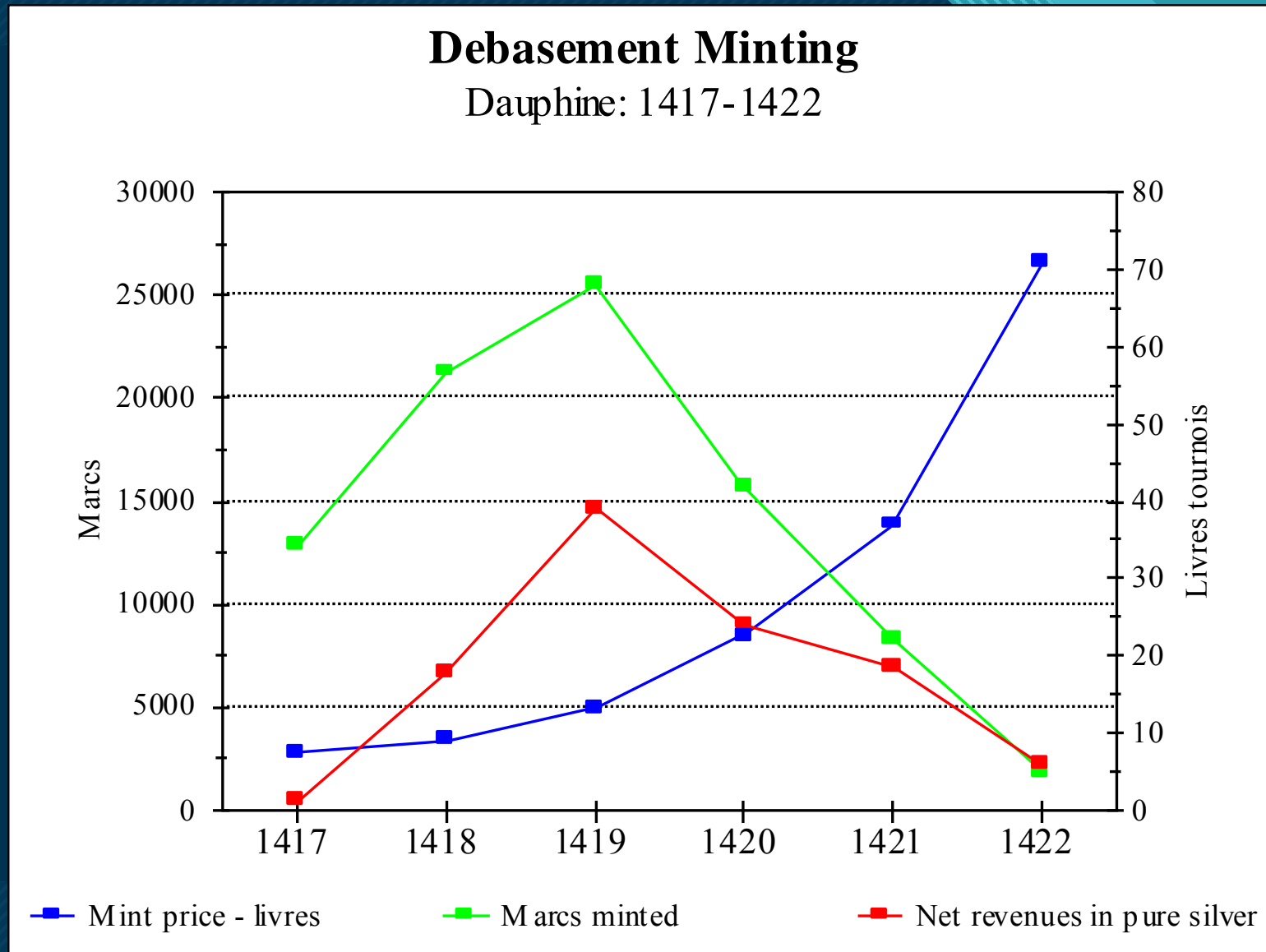
Monetary policy was used to raise inflation tax revenues.

(precedents in the bible, China, ancient Greece and Rome)

Debasement (inflation tax): increasing the Mint Par and the seignorage rate at the same time.

Requirement: the government can enforce the use of the official unit of account (no Dollarization) and prices adjust with a lag to changes in the exchange rate (similar to competitive devaluations under fixed exchange rate regime)

Example: France during the 100 years war



Lesson 3: State monopoly over monetary policy can create moral hazard problems.

Oresme: Does the money belong to the people or to the ruler?

It belongs to the people and the ruler as to credibly commit to maintain its value

Precursor to the independence of central banks.

Summary

The medieval monetary experience suggests that

1. 'Public money' has a comparative advantage over 'private money' because of economies of scale in commitment technology.
2. Monetary policy can function without banks (inside money) or positive interest rates.
3. The superiority of public money creates a moral hazard that calls not only for efficiency in commitment technology but also for credibility and accountability.

Orseme had figured it all out by 1350

Thank You

Influence of the Byzantine Empire on the Numismatics of the Crusader States (1099-c.1150)

Jack Hanson

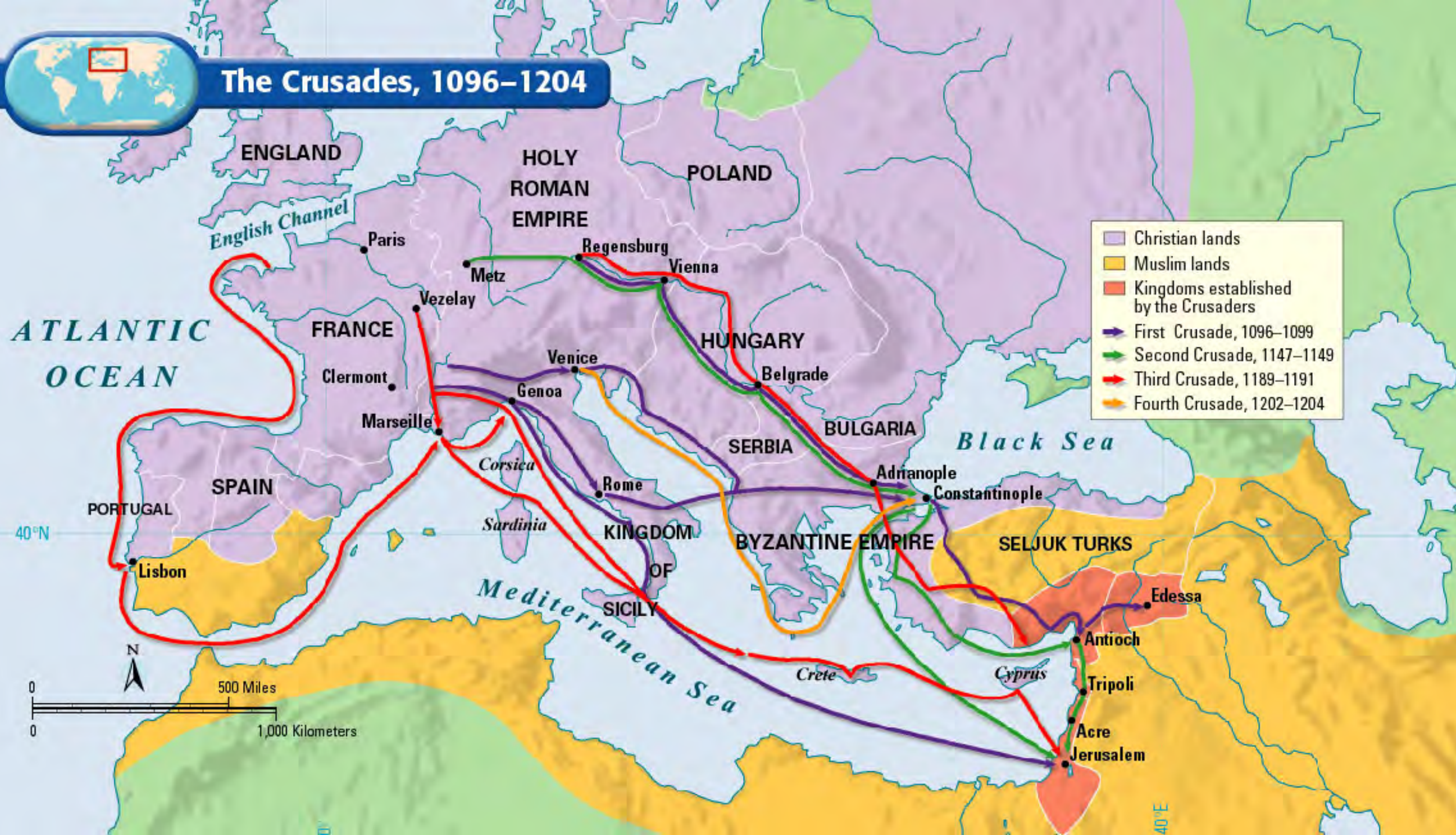
Emmanuel College, University of Cambridge



UNIVERSITY OF
CAMBRIDGE



The Crusades, 1096–1204









Bearers of the Cross

Material Religion in the Crusading World, 1095-1290

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BIRMINGHAM



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the Order of
ST JOHN



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Crusader Coins at the Museum of the Order of St John



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Principality of Antioch

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**Byzantine Copper Follis
and the Deesis Mosaic**

**Edessa and
Antioch Versions**



Use of Byzantine Greek

- ΠΕΤΡΟΣ (Peter)
- IC XC NI KA (Jesus Christ Conquers)
- ☩ KEBOI OHTOAV AOCOVΤ ANKPИ (Oh Lord, Come to the Aid of thy Servant, Tancred)
 - ΒΑΛΔ/OVINO/KOMH (Baldwin, Count)
 - ☩ KEBOH/ΘEITωCω/ΔOYΛωP/OTCEPI/ω (Lord, Help Your Servant, Roger)
 - X(PICTE) B(OHΘEI) B(AΛΔONINO) K(OMH) (Christ, help Count Baldwin)
 - *POTZER/ΠΡΙΓΚ(Ι)Π/OCANT/IOX (Roger, Prince of Antioch)*
 - TA-NK-P-H (Tancred)
 - ☩ /ΒΑΛΔ/OYINOC/ΔECΠO/THC (Baldwin, Despot)
 - ΒΛΔN or ΒΔHN (Baldwin)
 - *KE/BOHΘ/PIKAP/Δω (Lord, Save Richard)*



**Minted by
Bohemond II
(r. 1111-30)**

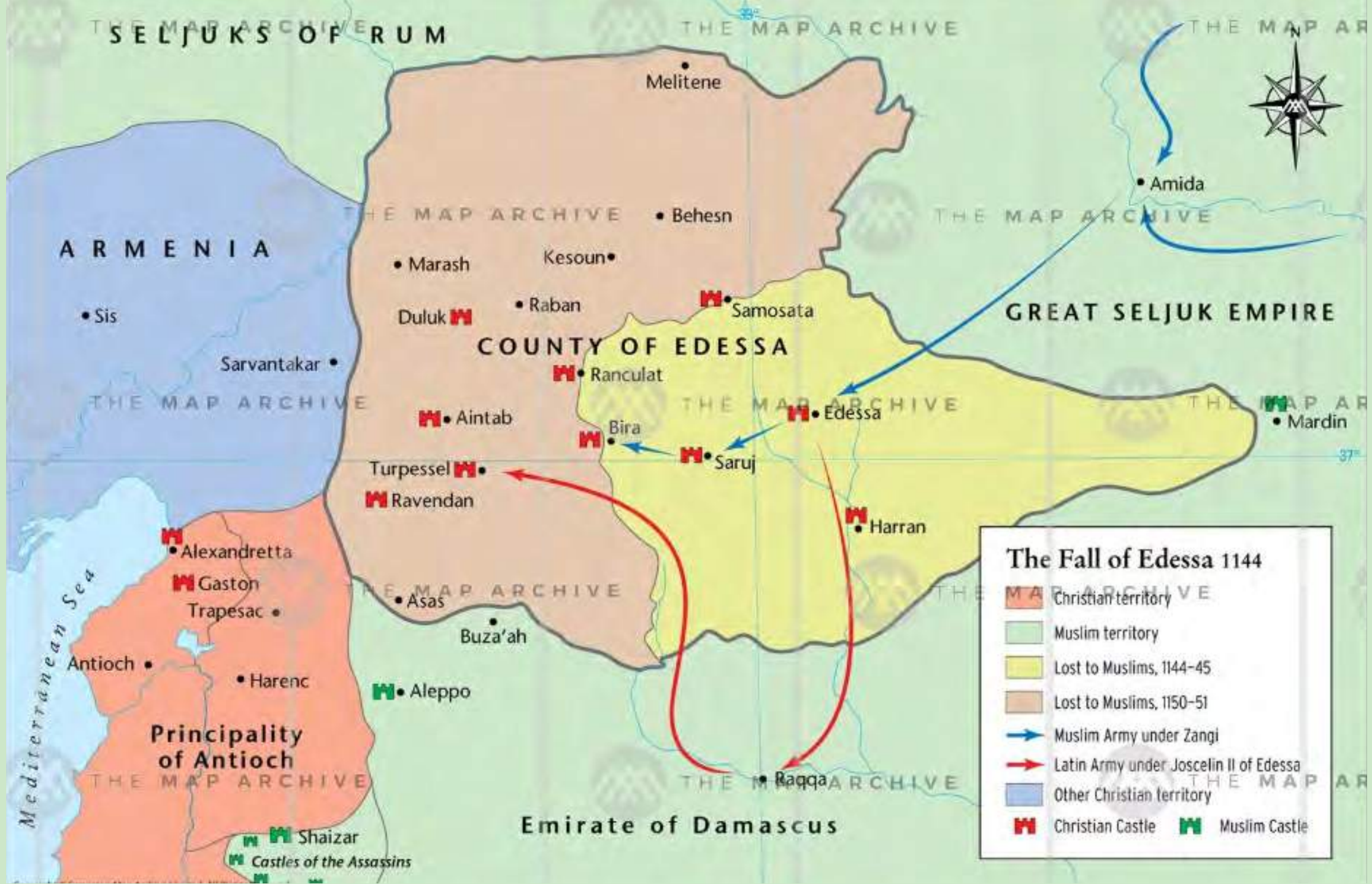


**Minted by Tancred
(r. 1100-3, 1105-11)**















Byzantine
Empire

Black Sea

Kingdom of G

Constantinople

Sinope

Trebizond

Nicaea

1097

Dorylaeum

1097

Ancyra

Halys

Amasia

Danishmend

Sivas

Seljuk Sultanate
of Rûm

Konya

Principality of
Armenian Cilicia

Malatya

Edessa

Sis

Tarsus

Aleppo

Antioch

Seljuk Principalities

Mediterranean Sea

mil
kilometres

- ΟΜΕΓΑΣ/ΑΜΗΡΑΣ/ΑΜΗΡΓΑ/ΖΗΣ (The Great Emir, Amir Ghazi)
- ΟΜΕ/ΛΗΚΙΣΠ/ΑΧΗΣΡΩ/ΜΑΝΙΑC and ΚΑΙΑΝ/ΑΤΟΛΗΣ/ΜΑΧΑΜΑΤΙC
- ΑΜΗΡ (Amir - Leader), ΓΑΖΗΣ (Ghazi - Warrior), ΜΑΧΑΜΑΤΙC (Muhammad), ΑΝΑΤΟΛΗΣ (Anatolia), ΜΕΛΗΚ (Malik – King)





Money and the Empire

Coins, monetary regimes and monetary policies in the Kingdom of Naples (1554-1580)

Lilia Costabile¹

François R. Velde²

¹University of Naples Federico II

²Federal Reserve Bank of Chicago

eabh, The Rothschild Archive 2019



The project - The context - The monetary system

The project

- Project on the monetary history of the Kingdom of Naples, 1550's - 1620's. Themes:
 - money and prices in commodity-money systems,
 - monetary policy (objectives, channels, techniques)
 - the international circuit of silver in the early modern period
 - the political economy of money (conflicting claims, bargaining power, distributional effects)
 - paper money
 - monetary and banking crises (1622), strategies for crisis resolution

The context: Naples part of the Spanish empire since 1503-4

- Law- and Policy- Makers:

- chain of command from King + his Councils in Spain ⇒ Viceroy “assisted” (and controlled) by senior officials (Collateral Council) ⇒ (for economic matters): Ministry of finance (Camera della Sommaria) ⇒ Mint, Banks

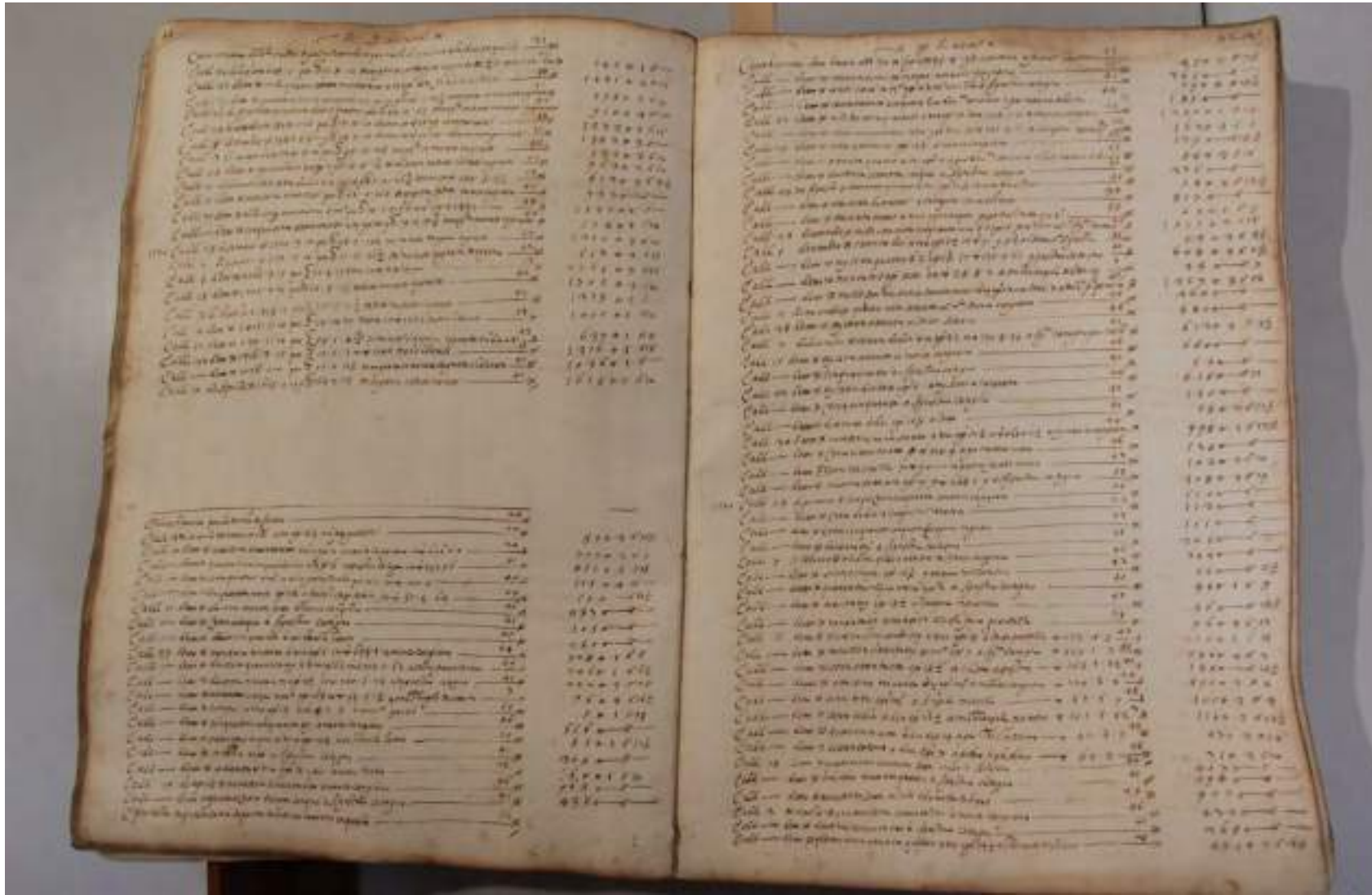
- Stakeholders:

- Spanish rulers: Naples as a source of finance (for wars, for payment of international creditors)
- Nationals: urban and provincial nobility/ bourgeoisie (popolo)/ plebs in the city, poor peasants in the countryside, semi-feudal system
- Foreign businessmen, most important among them the Genoese (silver merchants, businessmen, large creditors, ...)

Our sources

- Several, published and unpublished, and among them:
- the books of the Royal Mint of Naples invaluable source for:
 - Long time series for minting volumes, collected for the first time
 - Circumstances of minting (when, why, for what purposes, relation to current economic and political events); minting regimes; provenance of silver flows; orders to mint specific coins; seignorage rates and their division between the Court and mint officials/workers; other minting costs; organization of the mint as a firm, etc.
 - History of the country discovered/rediscovered through the history of its money

The books of the Royal Mint



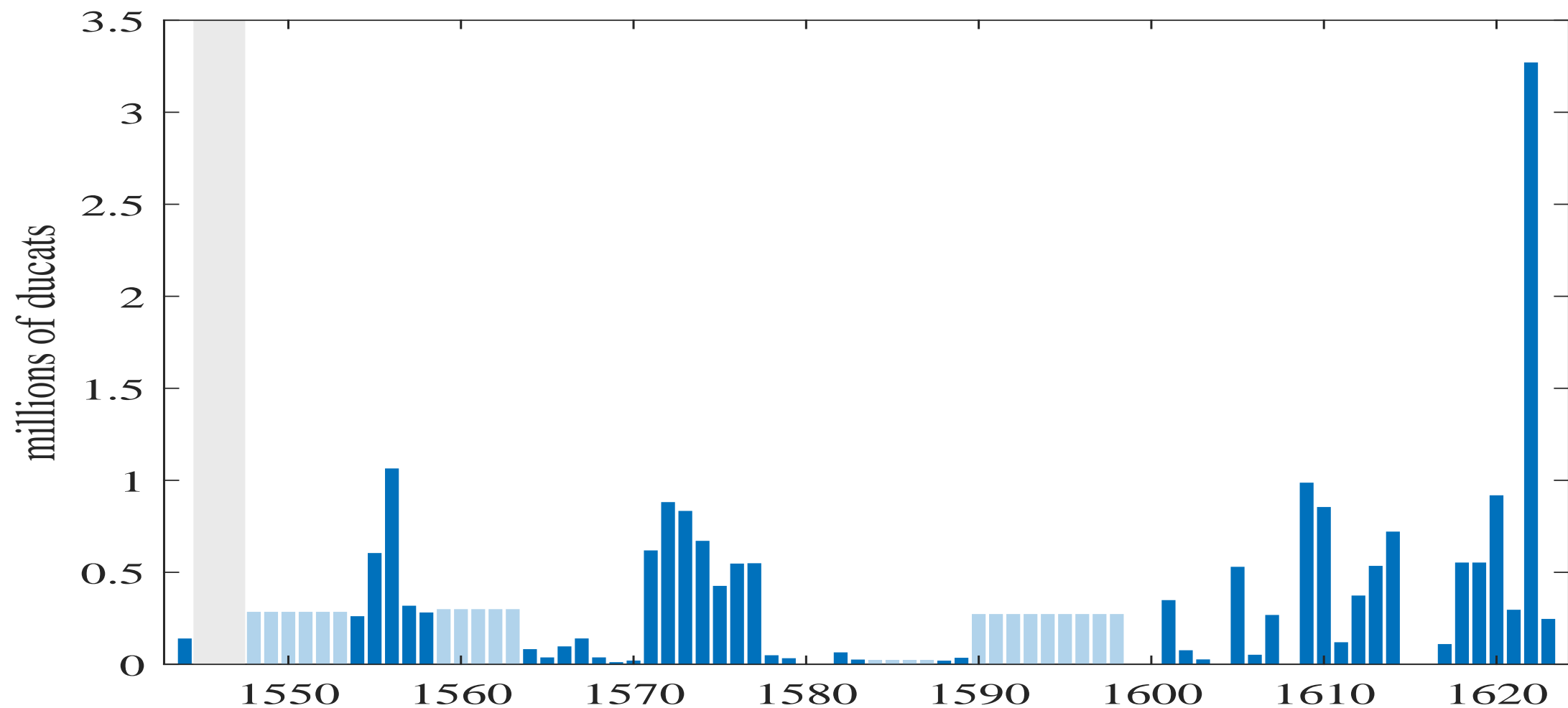
The books of the Royal Mint



The books of the Royal Mint



Minting volumes from the 1540's to the 1620's



The Neapolitan Monetary System

- Gold:
 - gold scudo of the five mints (Naples, Venice, Genoa, Florence, Spain) coined since 1538, 3.4 grams, 22 carats. (91.7 fine), was the international currency (on fixed exchange rate with the international unit, scudo di marche)
- Silver:
 - carlino and multiples ($\frac{1}{4}$; $\frac{1}{2}$; 2)
 - large multiples minted from the mid-1550's: ducato = 10 carlini (32.gr.); mezzo ducato = 5 carlini
 - carlino was the monetary unit
- Copper:
 - small submultiples (less than $\frac{1}{4}$) of the carlino, tornese = $\frac{1}{20}$ of a carlino, cavallo = $\frac{1}{120}$ of a carlino
- Coins undated until 1572, then dated occasionally (lots of interesting questions for numismatists)

Carolus V RO IM // Hispa[nia]rum Utrius Sici MIR
132/3 (R for Ram, the mint master)



Carlino: Philip R. Ang. Fr. Neap. P. H(ispaniae)// Fidei Defensor

celebrating Philip's accession to the Kingdom of Naples, 25 Nov, 1554: King of England by marriage with Mary Tudor, 25 July 1554

2.99 grams, 92.9 fine (justo carlino), 2.8 grams fine silver

(IBR Giovan Battista Ravaschieri, mint master 1548-1567). "Antico carlino", "ideal" for Philip IV



Tarì: Philip R. Ang. Fr. Neap. P. H(ispaniae) //Securitati
populor. 1tarì = 2 carlini



Mezzo ducato. Philip R. Ang. Fr. Neap.
P.H(ispaniae)//Securitati Populor. MIR 160



The books of the Royal Mint of Naples Viceroy Alba's order to mint silver ducats, 18 may 1556



Ducato, 1^o type. Philip R. Ang. Fr. Neap. P.
H(ispaniae)//Hilaritas Universa, gr. 29.912, 92.9 fine
MIR 158 (1554 or 1556?)



Ducato, 2^o type. Philip Rex Aragon. Utri. Sic. //
Hila.ritas Univer. MIR 169 (1556 or 1558?)



261

½ carlino Philip II: the debased, clipped coin par excellence

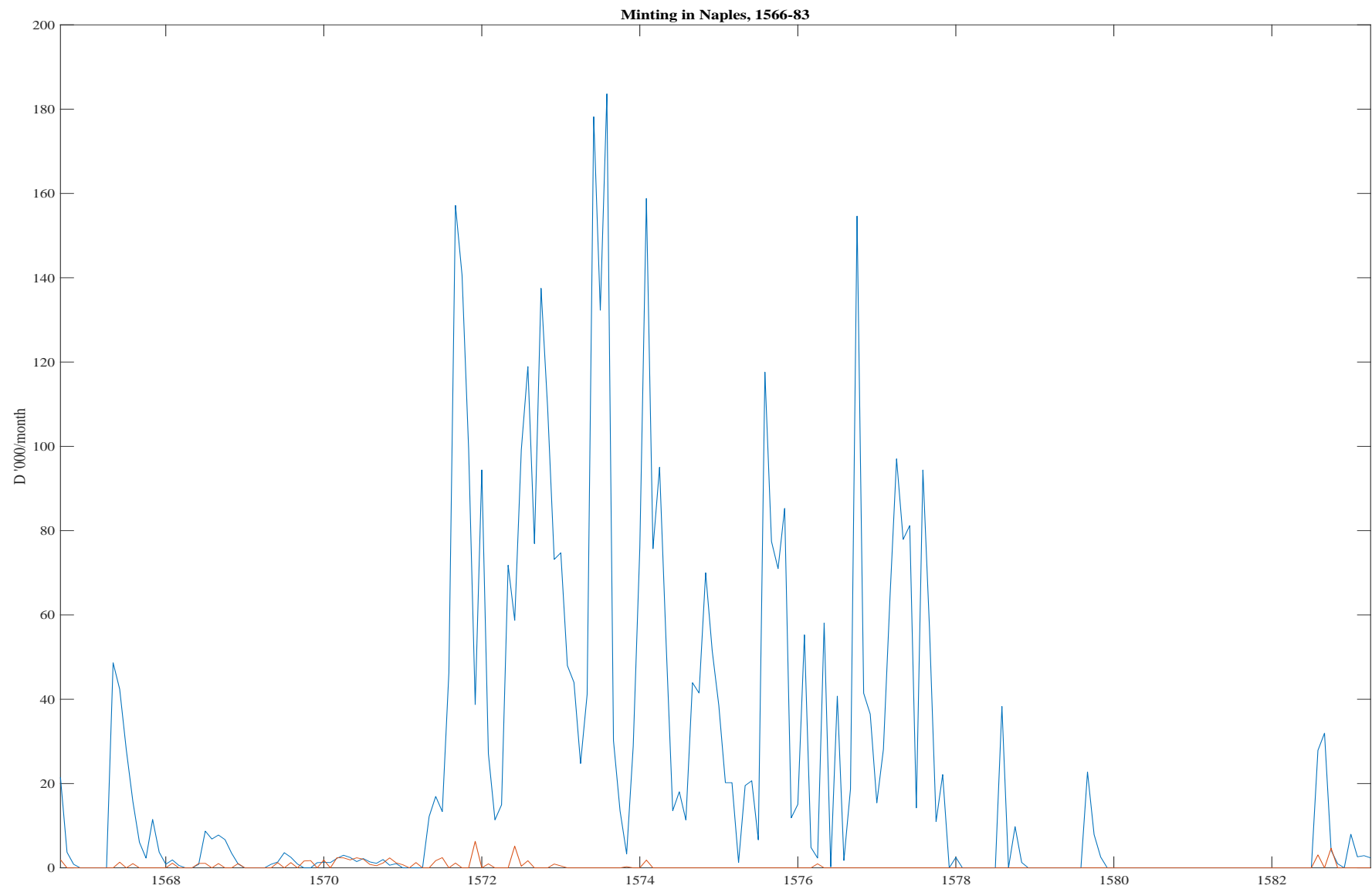


Cavallo. MIR 198/3



The 1570's

Minting in Naples 1566-1582



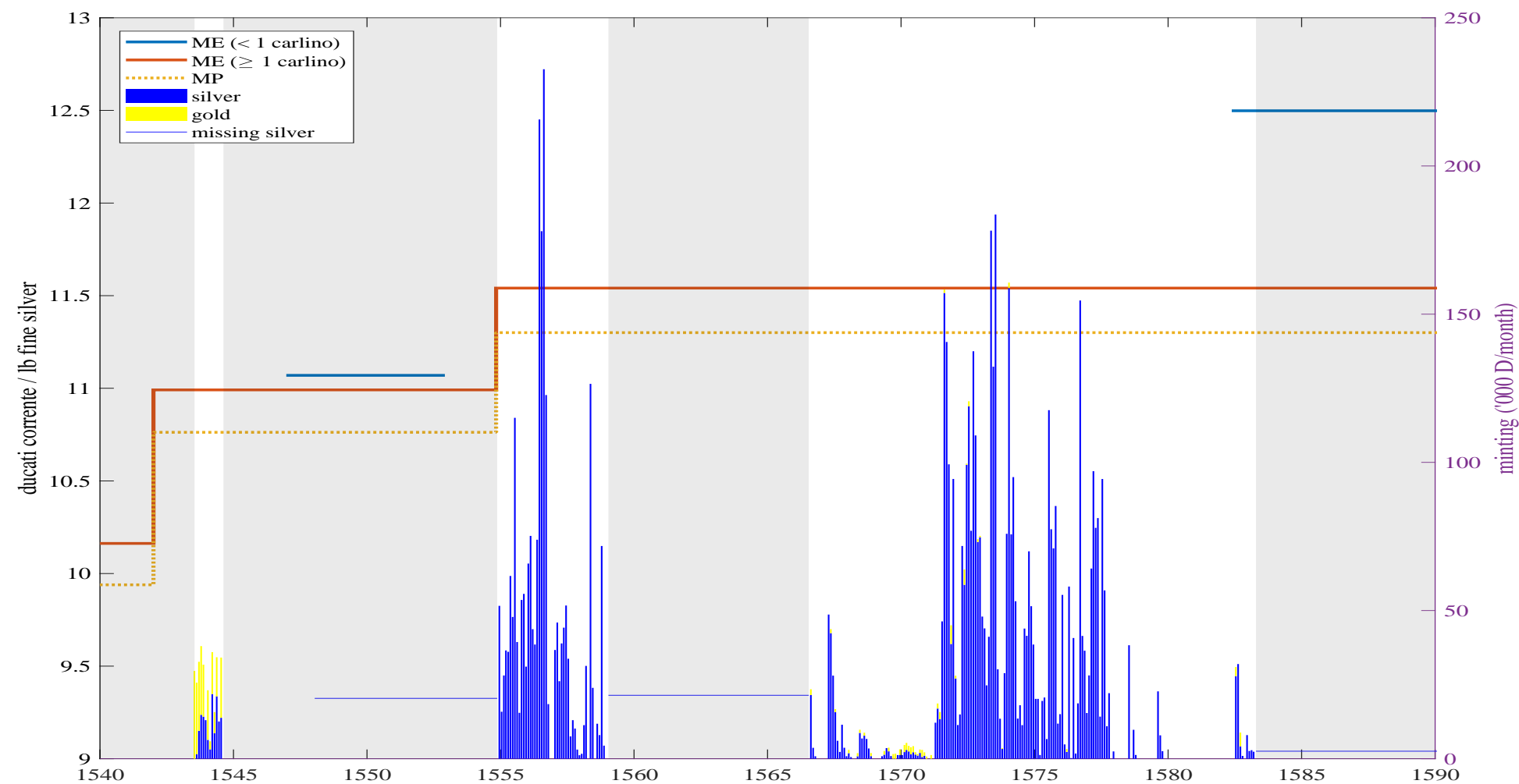
The money supply, April 1571- October 1577

- Silver
 - 132 tons of silver were coined at the mint, or 20 tons per year on average
 - That is roughly 10 per cent of the New World's production of silver at the time!
 - In ducats, minting was 4.3 million, or D50,000 per month on average
 - minting in 1578 and 1579 amounted to D49,349 and D33,214 respectively;
 - it was nil in 1580 and 1581
- Copper:
 - D 9.000
- Gold:
 - less than D 30,000

Why so much minting?

- Debasements rise ME and MP, thereby encouraging minting (imports of the precious metals) and discouraging melting
- No need to debase any coin in the 1570's, differently than in the 1550's

Minting activity and debasements



Composition per coin-denomination

- Half ducats: 71%
- Ducats: 5%
- Tarì 18%
- Carlini, less than 5%
- Grani 1%
- Small coins 6% or 24% according to where in the spectrum we locate the tarì

The lion's share:

Philip II Mezzo ducato 1575. MIR 174/6.



Questions

- 1. Why this composition per coin denomination?
- 2. Why these huge minting volumes?

1. Granvela and the problem of small change

- Viceroy of Naples between 19 April 1571 and 18 July 1575
- Aware of the imbalance in the monetary system
- Never tired of repeating that the shortage of small coins was:
 - obstructing commerce, as people found it difficult to make small transactions
 - hurting the poor, as people found it difficult to give alms

Granvela's objectives and solutions

Objectives:

- Avoid the shortage of small coins
- Minimize the costs for the government
- Avoid government-induced inflation from excessive direct coinage

Solutions:

- Quota (37%) in favour of *relatively* small coins (carlini, tarì) imposed on *private* minting (rather than relying on incentives)
- Direct coinage of a modest amount of *very* small coins (copper and low grade silver), subsidized by the government (negative net seignorage)

Rebalancing only partial

- The Viceroy faced strong demand for ducats and half ducats by big merchants bringing silver to the mint
- Sent oral orders, often contradicting his own official (written) orders
- He let the merchants have it their way on several occasions, also speeding up minting operations in their favour through penalties and prizes, sticks and carrots for the mint workers

2. Lepanto

- The Sommaria in 1591 made the connection quite clear as it recalled the good old times when the mint was "fertile" and "gold and silver were coined at the mint, especially when the most serene don John of Austria came to this Kingdom." (9 August 1571- June 1577)
- Holy League established by a treatise signed on 25 May 1571, was dissolved in 1573, but war continued until 1577, then died away as Spain turned its attention to Flanders, and the Turks to their domestic problems and their border with Persia
- Perfect overlapping with the big spurt at the Neapolitan Mint (April 1571- October 1577)

Granvela and Don John, Naples, Church of Santa Chiara, 1571. Medal, s.d. mm. 43.50 – standard blessed by Pius V



Ioannes Austriae Caroli V Fil. Aetas Su Ann XXIII //
veni et Vici,Tunis (born in 1547, 26 years old in 1573)



Private and official flows

- Juan Morales de Torres, administrator of the Army's Treasury and general paymaster of the Royal fleet. Official money from Spain produced a dense network of payments linking the army and the public administration, both in Naples and Sicily, to big and small financial capitalists, merchants, suppliers of various goods.
- Agostino Riberola, Genoese merchant, lender and supplier to Don John.

The end of an era, roots of the problem

- Everything changes after the 1570's:
 - From shortages of small coins until the 1570's, to a glut afterwards;
 - From monetary exuberance (1571- 1577) to a “sudden stop” in 1577 and languishing minting activity in the 1580's;
 - From an “unlimited minting” regime to “direct minting”, out of necessity rather than choice
 - From a purely metallic circulation to a mixed one: the public banks and the circulation of their paper money in the 1580's;

Thank you !



HM Treasury



The
Royal
Mint
MUSEUM

The one pound sterling coin – past, present and future

Kevin Clancy – Director, Royal Mint Museum

Mario Pisani – Deputy Director, HM Treasury

29 October 2019

This presentation does not reflect the official view of HM Treasury or the UK Government













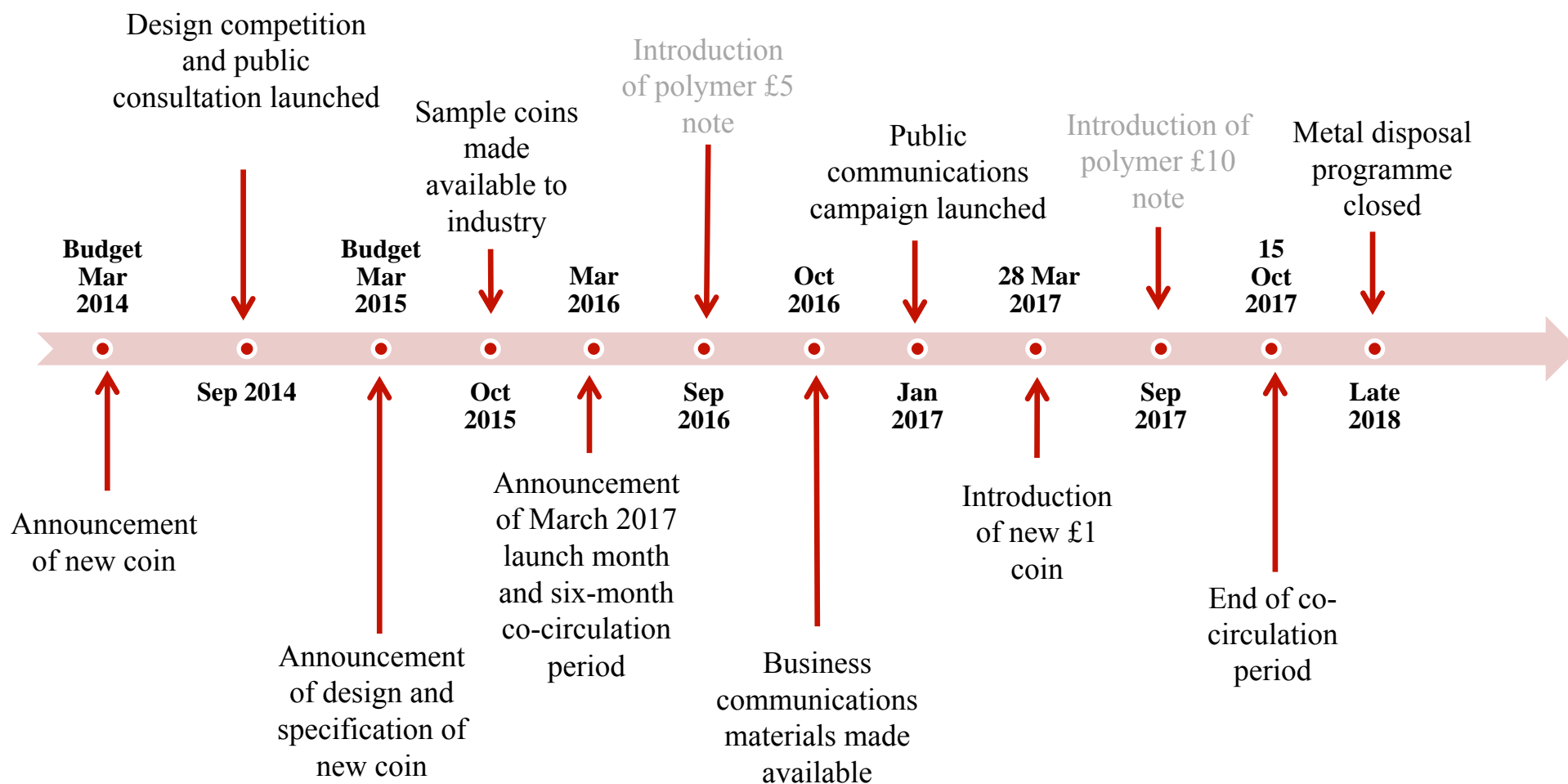






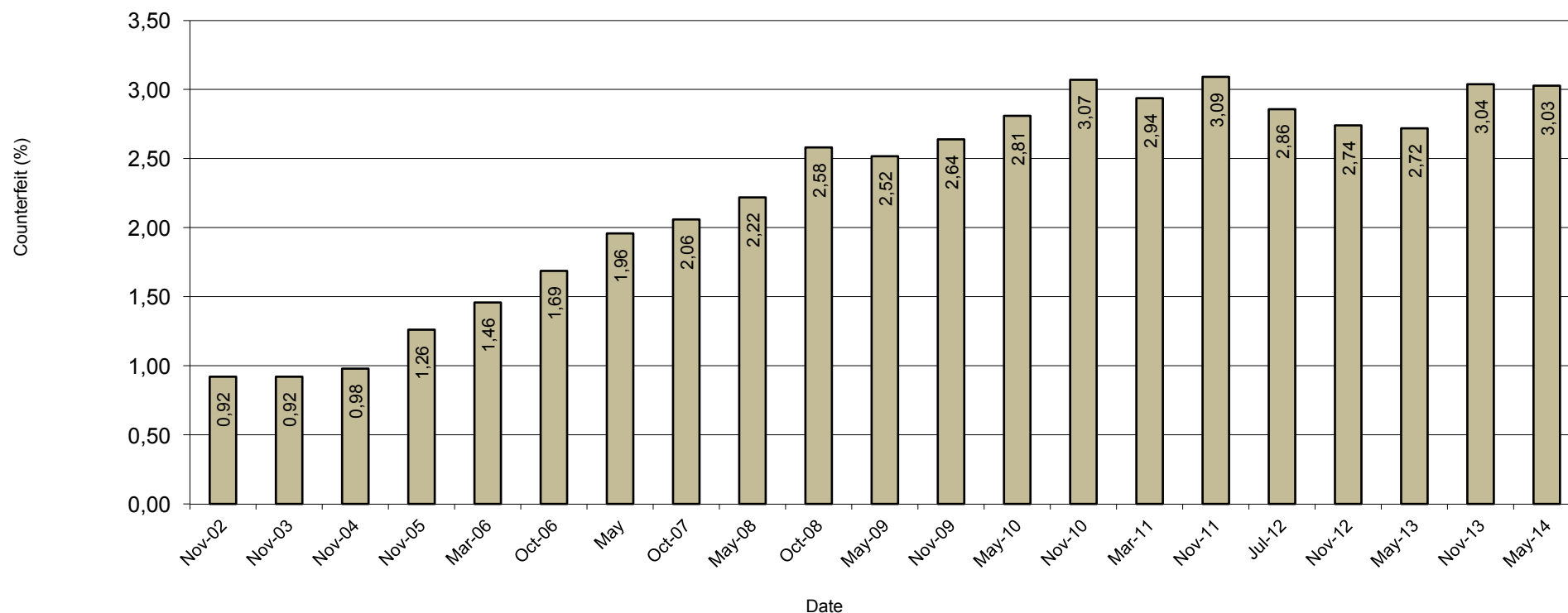


Timeline – launch of the new £1 coin

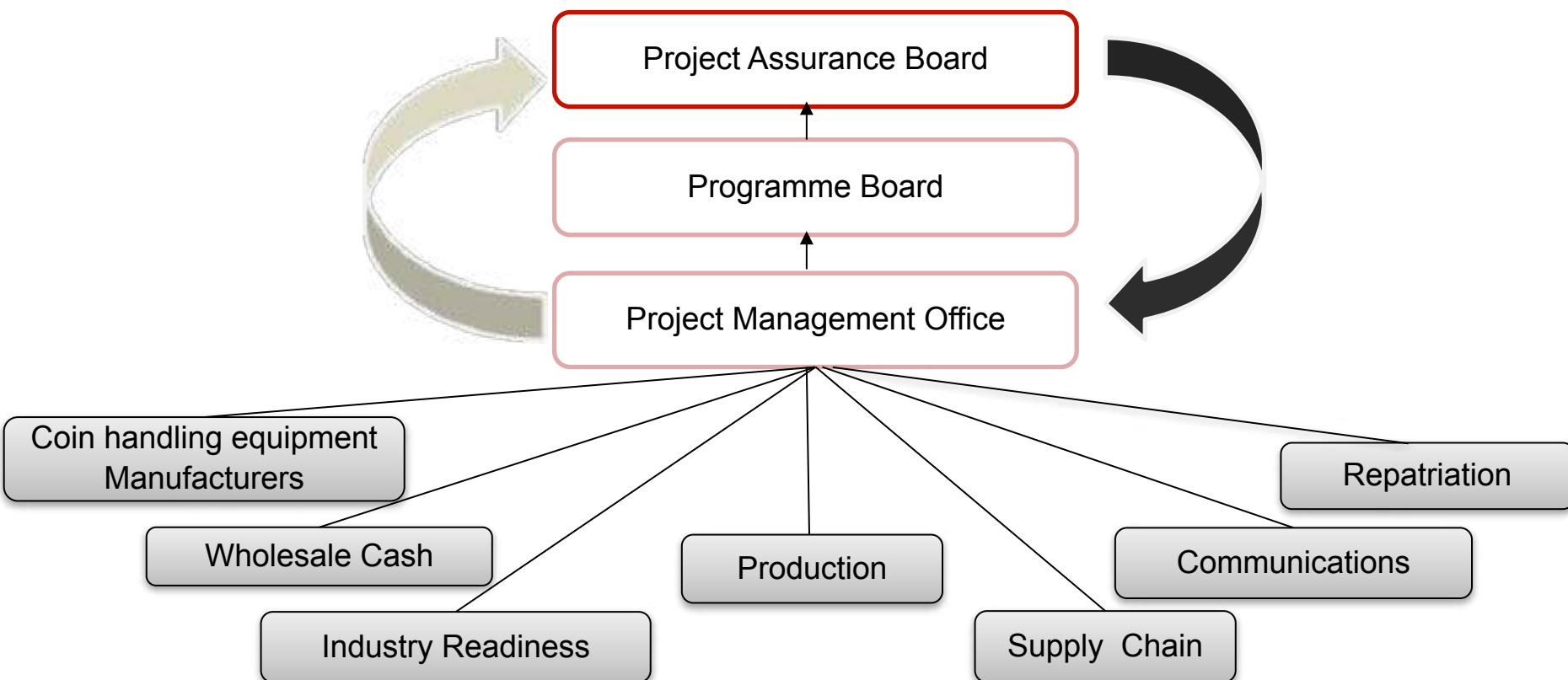


Phase 1 – pre-launch: the counterfeiting problem

UK £1 Counterfeit Coin Surveys 2002 - 2014



Phase 1: programme governance



Phase 1: production



- ✓ 1.4 billion new coins produced
- ✓ Half of this produced ahead of launch
- ✓ 1.2 billion coins issued in first 6 months

Phase 1: security features



Phase 2 – launch: communication campaigns



Phase 2: media activity on launch day



Phase 3 – withdrawal: repatriation campaign

CHANGE
OVER



Phase 3: future of cash

Chart 3.A: Forecast use of cash for transactions by volume (billions)

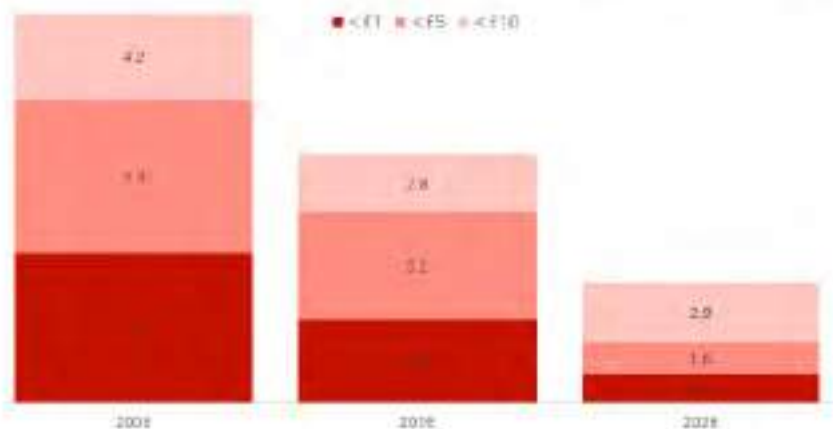
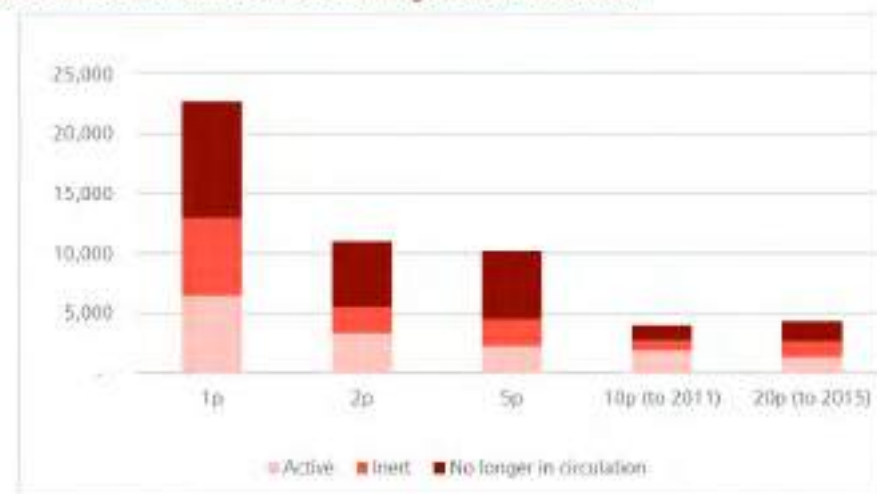


Chart 2.A: Millions of coins issued remaining in active circulation



Questions



The archives of the Paris Mint and their contribution to financial history

Dominique ANTERION, Paris Mint historical collections curator

Minting History

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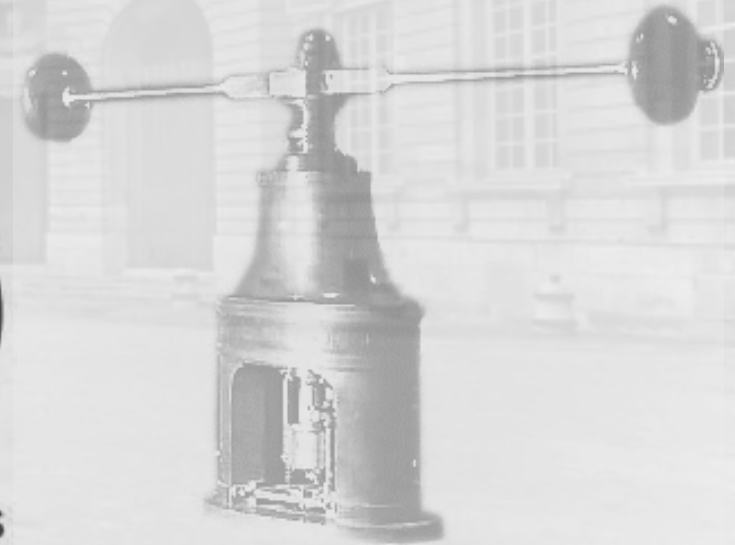
29 October 2019

The Rothschild Archive, London

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DEPUIS 1150 ANS



**L'Hôtel de la
Monnaie,
Huile sur toile de
Pierre-Antoine
Demachy (1783)**

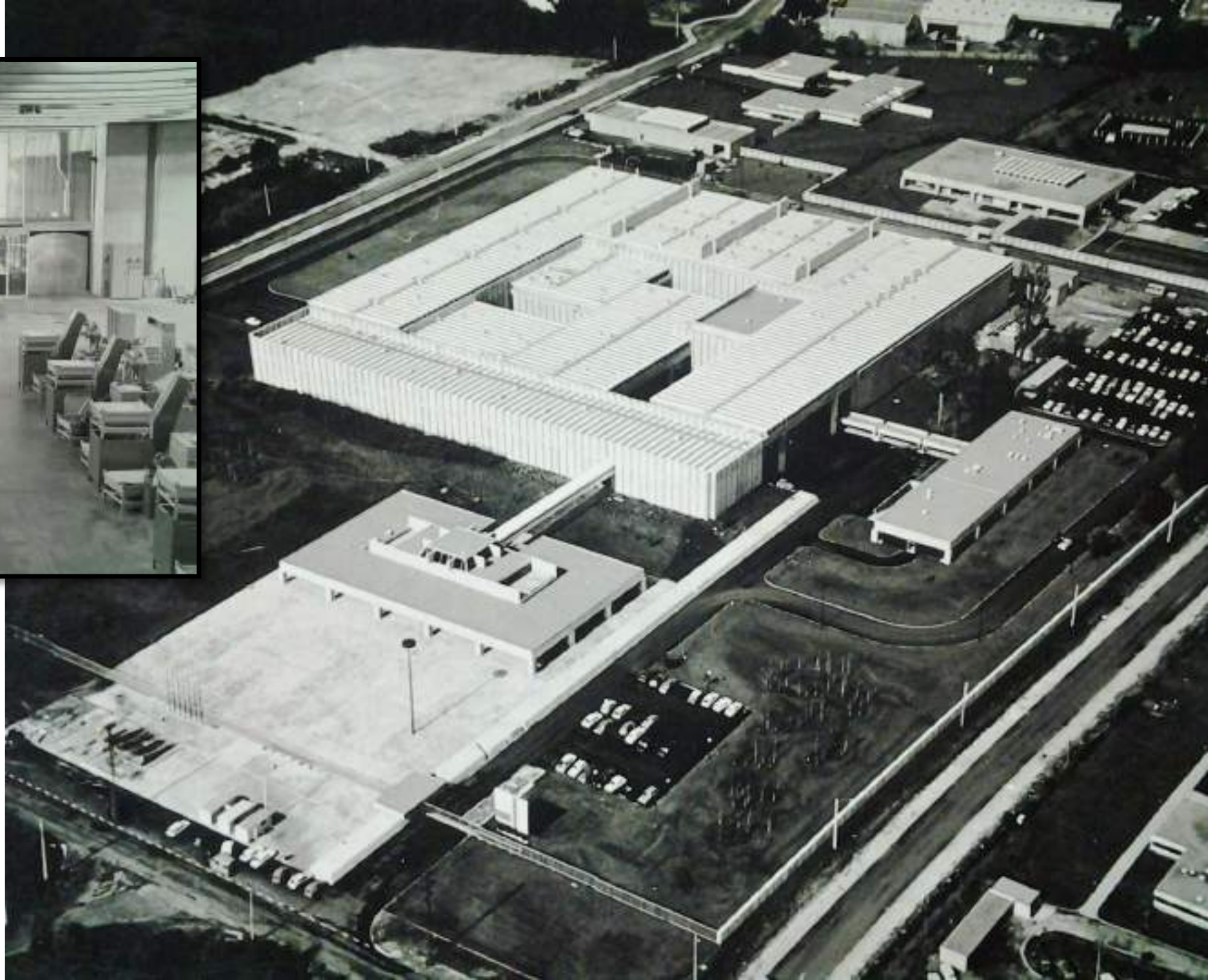
**Monnaie de Paris,
Collections historiques**





Etablissement monétaire de Pessac, 1974

**Monnaie de Paris, archives
historiques**





Euro français, 2019
Monnaie de Paris, Dépôt légal



Mauritania, 20 ouguyia, 2017
Monnaie de Paris, Dépôt légal



Notre-Dame de Paris, 2019
Monnaie de Paris, Dépôt légal



LOUIS, par la grâce
N. 618. Paris 27 mai 1831

Monsieur le Comte,

Je regrette beaucoup n'avoir pu terminer plus tôt
la rédaction de l'ordonnance sur les affaires par
la voie légale; j'ai été obligé d'interrompre
pour ~~me~~ m'occuper d'une autre instance au
conseil d'Etat. Mais pour la fin de la quinzaine
au quinze jours, si une ordonnance de gouvernement
abrégeait tout le travail que je pourrais composer
sur les affaires, si je suis parvenu seul à leur
l'approbation que l'indication de leur lieu à l'impres-
sion des placards à la presse.

Quel que soit l'appareil de la fabrication de
nos monnaies, nous ne sommes pas chargés, il
nous en faut d'autres que j'ai
à me en occuper.

Je suis, Monsieur le Comte, votre dévoué
serviteur.

allongé
page 200

Administration
Paris

Recevez et Transmets

Servie des Eaux Libérées de Paris

Extrait du rapport au Libérateur des Eaux
du 1^{er} Mars 1877

Analyse d'un alliage envoyé le 24 Avril

	N ^o 1	N ^o 2	
Cuivre ...	82.5	82.5 %	} 95.7
Plomb ...	14.5	14.4 %	
Fer ...	2.2	2.3 %	

quantité soluble

du Eaux

D U

Pour la Fabrication de
ent, avec faculté
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Centre des
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Lyon

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J. Monnoies May 1718

EDIT DU ROY,

Pour la Fabrication de nouvelles Espèces d'Or &
Argent, avec faculté de porter à la Monnoye
les Médaillons en fus de Billets de l'Estat.

du mois de May 1718.

la Cour des Monnoyes.





DIRECTION
DES MONNAIES ET MÉDAILLES

CATALOGUE
DES FONDS D'ARCHIVES
DE LA MONNAIE DE PARIS

par Jean-Marie DARNIS

TOME PREMIER

PARIS
1996

DIRECTION
DES MONNAIES ET MÉDAILLES

CATALOGUE
DES FONDS D'ARCHIVES
DE LA MONNAIE DE PARIS

par Jean-Marie DARNIS

TOME SECOND

PARIS
1999

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DIRECTION
DES MONNAIES ET MÉDAILLES

CATALOGUE
DES FONDS D'ARCHIVES
DE LA MONNAIE DE PARIS

par Jean-Marie DARNIS

TOME TROISIEME

PARIS
2006

“ In addition to its scientific interest it is worth considering the various stages of a slow national and international monetary constitution, in which the researcher is able to apprehend the entirety of the metal currency in its mode of manufacture, the market circuit of high finance. These documents represent only a small part of the phenomenon but provide logistical support, in particular, to the sub-series Z1B (Court of Currencies) and the sub-series AF4 (Finance) of the Archives of France, to the funds of the currencies kept at the National Library of France or the Bank of France or funds of coins and tools of the Mint of Paris, or even to those more recent kept in the Archives Ministry of Finance “

Alain Erlande-Brandenburg, Director of the French National Archives (1996)

Recherches en archives

Bibliothèque

Guide des sources

Généalogie

Collaborations scientifiques

Informations pratiques

Accueil du portail > SAEF > **Horaires et accès**

Horaires et accès



La salle de lecture est accessible tous les jours sur rendez-vous

Accès

Entrée piétons : 471 avenue de l'Europe

77176 Savigny-le-Temple

RER : ligne D - arrêt Savigny-le-Temple - sortie gare routière

Autoroute A5 : sortie Savigny-le-Temple Parc d'activités

Accès Parking à l'arrière du bâtiment, par le 9 rue de l'Aluminium

Horaires

Du lundi au vendredi

de 9h30 à 17h30

OLD FUND (series A to P) from 1418 to 1944 :

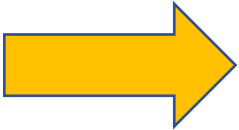
- administrative organization of the direction of coins and medals (series **A** to **D**, **M** and **N**)
- management and responsibility of personnel (**I** and **L**)
- work of artists draughtsmen, painters, sculptors and engravers (**G** and **P**), experiments (**E**), the manufacture of currencies and medals (**F** to **H**, **J** and **N**)
- presentation of monetary "treasures" and visits to the Mint (**M**)
- monetary policy (**K**) and disputes in this area (**O**).

MODERN AND CONTEMPORARY FUND (RD series to RT) 1944 to 1996 :

It is a replica of the themes reported in the first fund (RD to RP), with two additional series devoted to national and international exhibitions (RS) and the Bulletin of the French Medal Club (RT).

- so-called private funds (series S) : acquisitions or donations, funds sold by agents of this administration, collectors or artists.
- manuscripts and registers of correspondences, minutes of commissions, memoirs, treaties, etc.
- folio formats are described in the X-series, the 8-degree and 4-degree formats in the Y-series.

Manufacturing and current money :

- Monetary Contests (1903-1943): **G-1 to G-3**
- Monetary fabrications, French colonies (1779-1926): **H-1 to H-2**;
foreign orders and auctions (1846-1954): **H-3 to H-26**, (1945-1973): **RH-1 to RH-14**; supplies, manufactures, domestic issues of the Paris
currency (1882-1980): **H-26 to H-38**; (1920-1992): **RH-15 to RH-41**
- Orders, strikes and emissions for foreign countries (1945-1973).
-  - Monetary Conventions and Circulation Legislation (1806-1922): **K-1 to K5**; (1845-1980): **RK1**;
- The Committee on The Control of Money Circulation: Surveys and
Statistics, Debates, Meetings and Projects (1880-1945): **K-6 to K-9**;
(1898-1972): **RK-2 to RK-6**;
- National and international law on counterfeit currency (1762-1954): **O-1 to O-13**; (1929-1970), as well as specific cases of counterfeiting and
crimes (1944-1992).

Latin Monetary Union 1865



France

Weight 6.4516g Gold 0.1867 oz. Fineness 90% gold Diameter 21mm



Italy



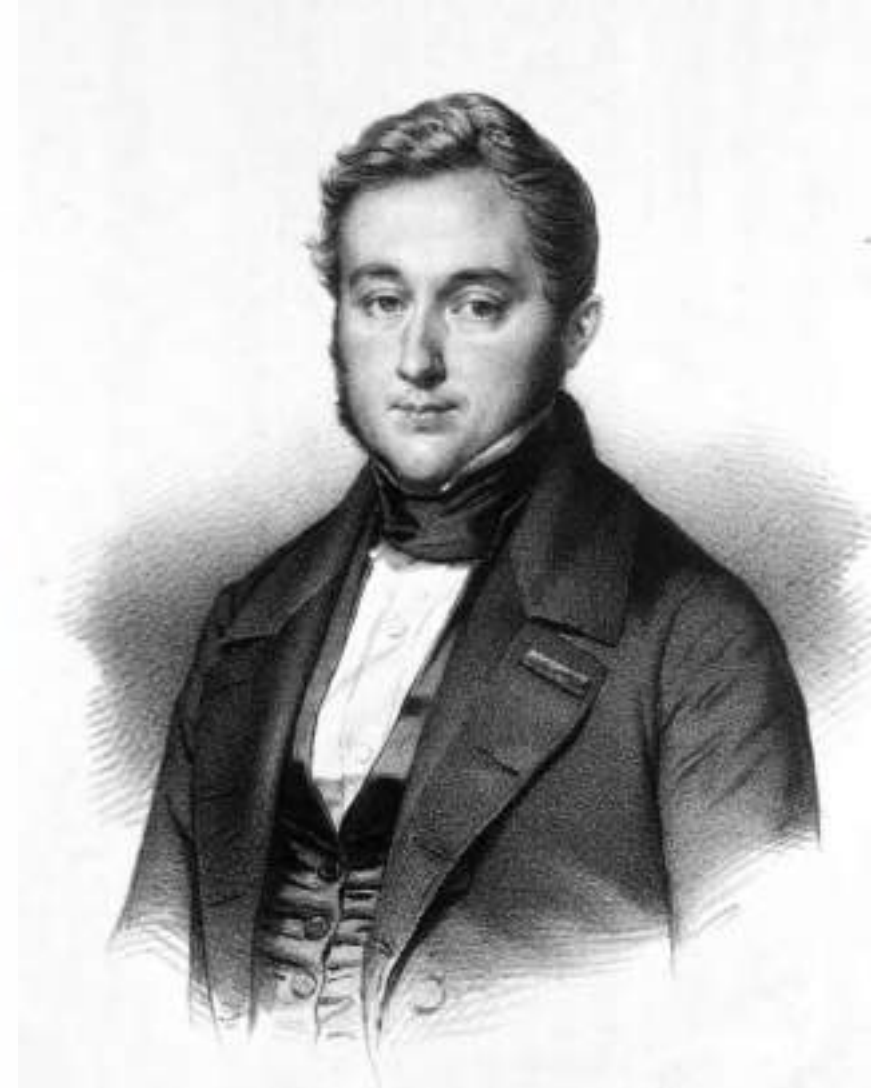
Belgium



Switzerland



Example for the gold 20mm module





5 francs or « cent sous » coin



LA CHASSE A LA PIÈCE DE CENT SOUS

C'est la chasse aux grands escrocs,

Tous courent après les sous

Depuis le banquier spéculant

Jusqu'au militaire, curé,

Cependant, l'argent est toujours,

**JEAN WARRON,
TECHNICIEN HORS PAIR
ET ARTISTE EXCEPTIONNEL**

Le musée de la Monnaie de Paris présente une exposition consacrée à Jean Warron, un des plus grands orfèvres de la France du XVIII^e siècle.

Orfèvre de la Monnaie de Paris, Jean Warron est un des plus grands orfèvres de la France du XVIII^e siècle. Il est connu pour ses œuvres en or et en argent, notamment ses bijoux et ses objets de culte. Ses œuvres sont caractérisées par une grande finesse de travail et une grande originalité. Il a été nommé orfèvre de la Monnaie de Paris en 1750 et a travaillé jusqu'à sa mort en 1780.

Les œuvres de Jean Warron sont conservées dans les collections du musée de la Monnaie de Paris. Elles sont exposées dans une salle dédiée à son œuvre. Les visiteurs peuvent admirer ses bijoux, ses objets de culte et ses œuvres en or et en argent.



**L'ART DE LA COLLECTION /
CONSTRUIRE DU SENS**

L'art de la collection est un art qui consiste à sélectionner, acquérir et organiser des œuvres d'art. C'est un art qui nécessite une grande connaissance de l'histoire de l'art et une grande sensibilité.

Le musée de la Monnaie de Paris présente une exposition consacrée à l'art de la collection. Les visiteurs peuvent découvrir les œuvres de collectionneurs célèbres et les œuvres de collectionneurs moins connus.

Les œuvres de collectionneurs célèbres sont exposées dans une salle dédiée à leur œuvre. Les visiteurs peuvent admirer les œuvres de collectionneurs célèbres et les œuvres de collectionneurs moins connus.

Les œuvres de collectionneurs moins connus sont exposées dans une salle dédiée à leur œuvre. Les visiteurs peuvent découvrir les œuvres de collectionneurs moins connus et les œuvres de collectionneurs célèbres.

Les œuvres de collectionneurs célèbres et les œuvres de collectionneurs moins connus sont exposées dans une salle dédiée à leur œuvre. Les visiteurs peuvent découvrir les œuvres de collectionneurs célèbres et les œuvres de collectionneurs moins connus.



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L'ARGENT

Il est souvent le métal préféré des collectionneurs.

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Il est souvent le métal préféré des collectionneurs.





1840-1850: LES PRESSES À LA PRESSE

Les presses à la presse sont des machines utilisées pour imprimer des documents, des livres, des journaux, etc. Elles sont constituées d'un cadre en bois ou en métal, d'un bras horizontal et d'un levier vertical. Le levier est actionné par une manivelle, ce qui permet de comprimer l'encre sur le papier.

Les presses à la presse sont très précises et permettent d'imprimer des documents de haute qualité. Elles sont encore utilisées aujourd'hui pour imprimer des documents officiels, des livres de luxe, etc.

Les presses à la presse sont une invention importante de l'imprimerie. Elles ont permis de produire des documents en grande quantité et de manière précise.

Les presses à la presse sont une machine à vapeur qui utilise la pression pour imprimer des documents. Elles sont constituées d'un cadre en bois ou en métal, d'un bras horizontal et d'un levier vertical.

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DU PAIR
ET DES CHANGES
VILLES DE L'EUROPE

Paris de Monmartre

Environ Biol Fish (2008) 81:239–249
DOI 10.1007/s10641-007-9260-2

[illegible]

LES CALCULS *simple et composé des Intérêts et des Rentes,*

DESCHAMPSY, *historien de la guerre d'Espagne en la Roumanie, à Paris.*

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Colado de Capitan a San Remeo de Renteria.

[illegible]

LE GUIDE
DE TOUS LES COMMERCE.

© 2004 Blackwell Publishing Ltd, *Journal of Internal Medicine* 255: 109–116



Accuse
Imper
est le ut
de la loi
à l'Etat
et l'honneur de la nation
à l'honneur de la nation
à l'honneur de la nation

Dépose
dans l'Etat
à l'honneur
à l'honneur
à l'honneur
à l'honneur
à l'honneur
à l'honneur

Je me propose
à l'honneur
à l'honneur
à l'honneur
à l'honneur
à l'honneur
à l'honneur

J.J. Grandville inv.
E. Forest del.

POUR LA FRANCE
VERSEZ VOTRE OR



L'Or Combat Pour La Victoire

ÉDITÉ PAR LA SOCIÉTÉ
DES ANNONCES ARCHIVES

DESSINÉ PAR PABLO



- Lui, c'est bien Mais Vous !

05
DEC
2019
—
23
FÉV
2020

DOSSIER

Intermezzo

Deux ans d'enrichissement et de restauration des collections patrimoniales du Musée du 11 Conti

EN SAVOIR PLUS



**NEXT PARIS MINT
MUSEUM EXHIBITION
Dec 2019 > Feb 2020**

02
AVR
2020
—
03
NOV
2020

ÉVÉNEMENT

Akan, les valeurs de l'échange

Au-delà de l'or pesé pour échanger, les poids disent bien autre chose qu'un simple prix...

EN SAVOIR PLUS



**NEXT PARIS MINT
MUSEUM EXHIBITION
Apr 2020 > Nov 2020**



https://www.monnaiedeparis.fr/fr/expositions/exposition_temporaire/current



Hunting for Treasures, the Archives of the Mint of Mexico, the Provincial Houses and the Mint of Guanajuato.

Alma Parra Campos

Dirección de Estudios Históricos, INAH

Minting History Workshop, Rothschild Archives

29th October, 2019



PART 1.

Rescue of the records of the Mexican Mint
and the Provincial Mints.

LA INDUSTRIA
PARAESTATAL EN MÉXICO

Guadalupe Velasco Ávila/Eduardo Flores Clair
Alma Aurora Parra Campos/Edgar Omar Gutiérrez López

Estado y Minería en México (1767-1910)

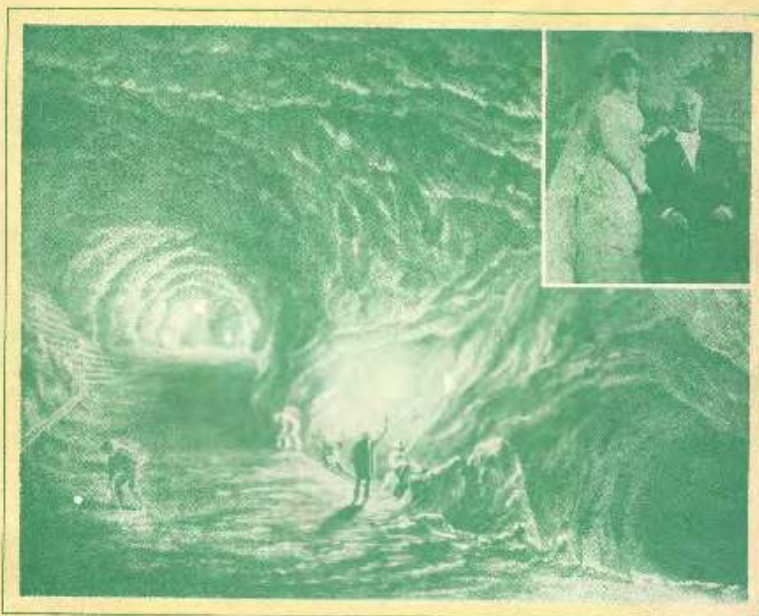


*State and mining in
Mexico 1767-1910*, by
Velasco, et. al. 1988.
Search for local and new
records



DIRECCION DEL ARCHIVO HISTORICO CENTRAL

GUIA DEL FONDO RUL Y AZCARATE



INSTITUTO NACIONAL
DE ANTROPOLOGIA E HISTORIA
DIRECCION DE ESTUDIOS HISTORICOS



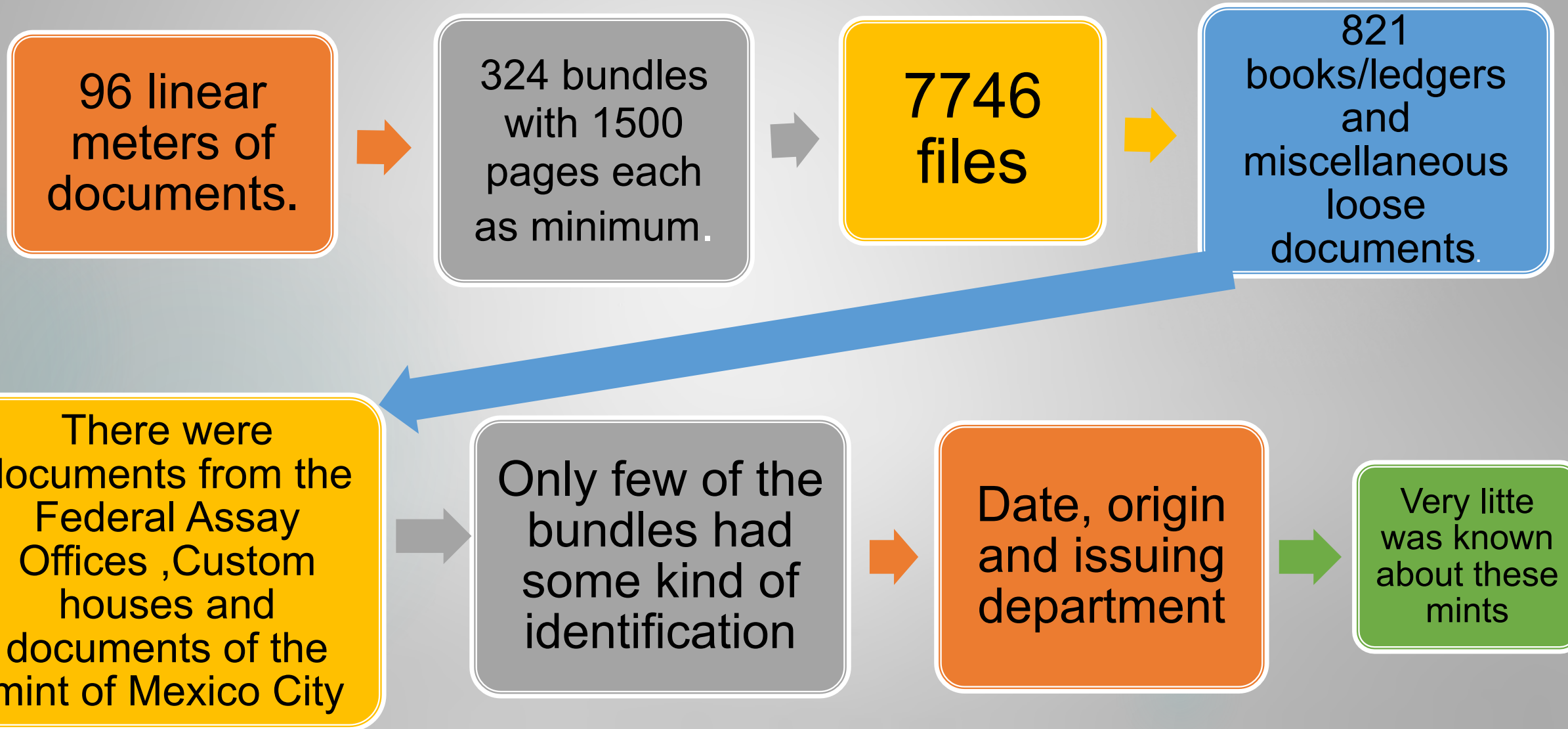
GUIAS Y CATALOGOS 76

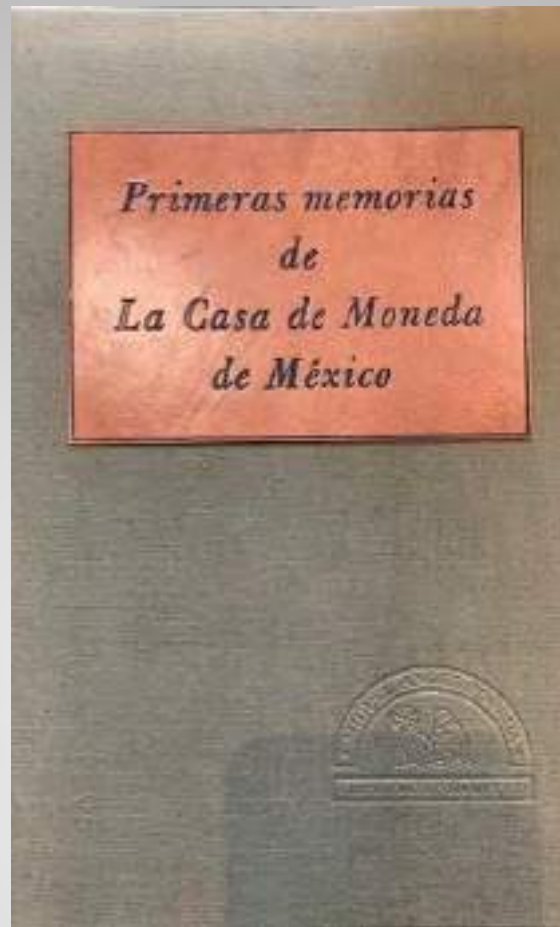
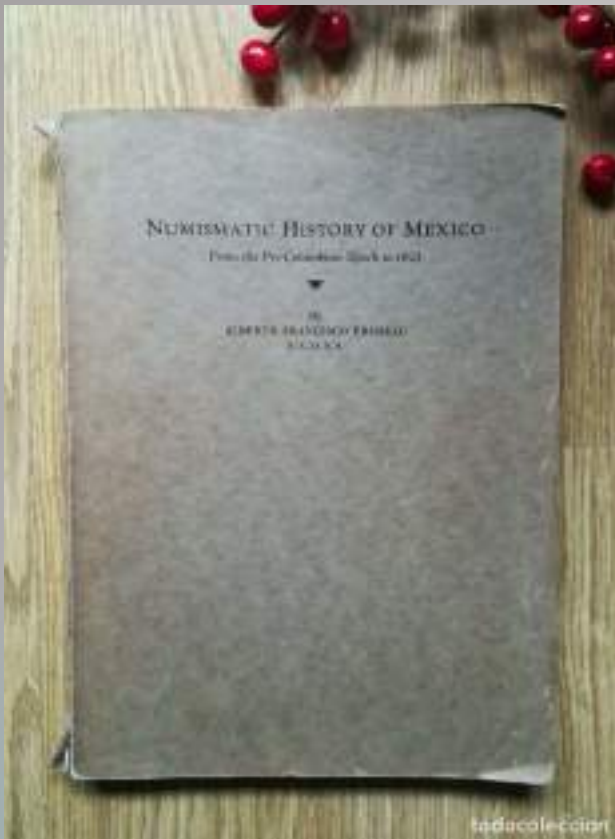
*Guide to the Rul y Azcárate
family papers. National
Archives, Mexico, 1988.*



The cupboard. (1993)

CONDITIONS OF THE RECORDS AND CHARACTERISTICS





Facsimile *Memoria Casas de Moneda*, from 1849 edition.
Francisco Pradeau's *Numismatic History of Mexico*

ORIGIN OF PROVINCIAL MINTS

- 1. Transport of both specie and precious metals, back and forth to the Mexico City Mint were harsh and expensive.**
- 2. Interruption of routes due to climate conditions, banditry and**
- 3. Rise in prices of coin production.**
- 4. From the end of XVIII century wars in Europe took resources and privileges away from mining, making transport and supplies dearer.**
- 5. The 1810 War of Independence multiplies the crises and encourages the establishment of local Mints in mining regions.**
- 6. From 1821 legislation promotes foreign investment in mining and grants concessions for operation of Mints in mining regions.**



First stage,
opening of the
Cupboard

Mexico City and Federal Assay Offices	1731	-1961
---	------	-------

Zacatecas	1810	-1905
-----------	------	-------

Guanajuato	1825	-1900
------------	------	-------

Guadalajara	1792	-1895
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Oaxaca	1859	-1905
--------	------	-------

Alamos	1876	-1895
--------	------	-------

Culiacán	1875	-1905
----------	------	-------

Dates
comprising
the
documents
found of each
of the
provincial
houses

Second stage.
Finding a place
for the cupboard
papers.





First proper bookshelving



The foundry. Disclosure of more records



20th Century records and periodicals



New bookshelves for the records



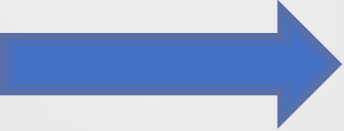


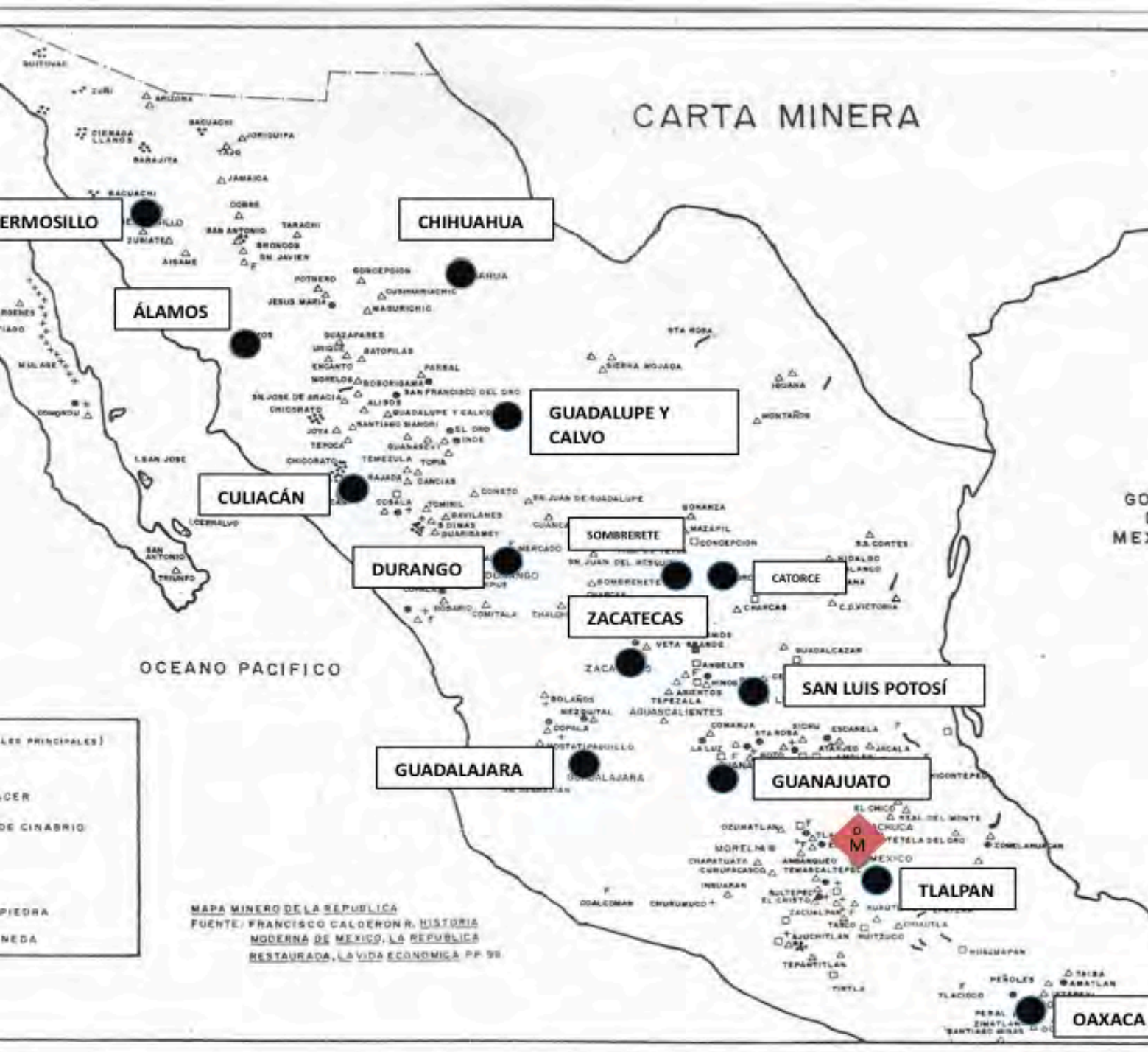
Inés Herrera
Alma Parra



Mint of Mexico, Catalogue

VALUE OF THE RECORDS OF PROVINCIAL MINTS

1. Indicate the degree of regional growth surrounding mining activities and the federalization, that came along with the Independence from Spain.
2. Indicate the importance of those regions as a source of fiscal income, which they wanted to retain as federal states. This modified the balance of power vs. central authorities.
3. The presence of private capital in activities previously controlled by the government. Very importantly  Foreign Capital.
4. The development of a new type of enterprise, both industrially and in terms of business organisation. Due to adoption of new technologies and the creation of public enterprises vs. private enterprises as it happened in Zacatecas.
5. Opening of new lines of research and the search for additional sources.



Provincial Mint Houses

Most important mining sites with British Investment and new Mints



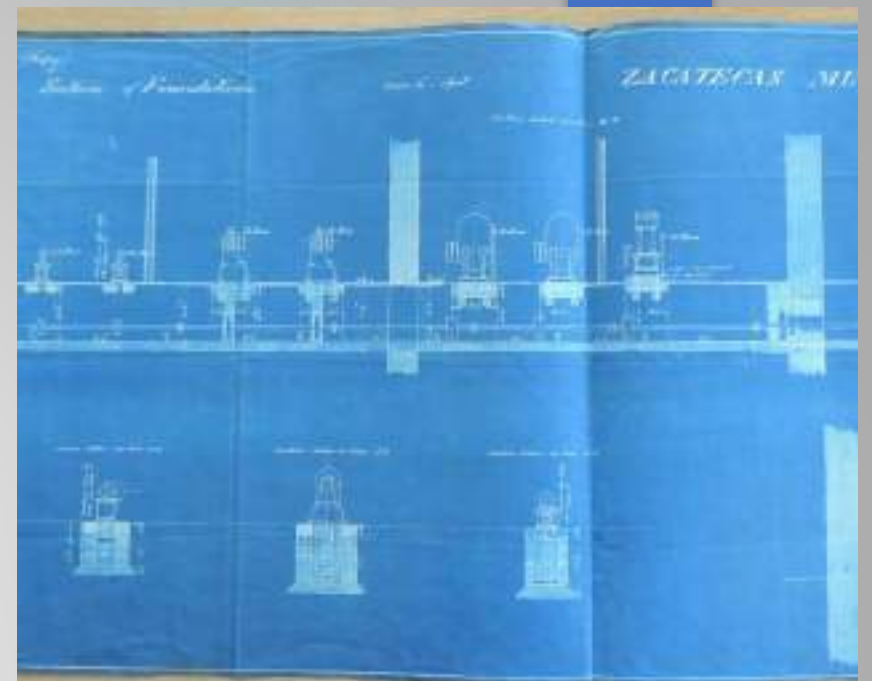
Guanajuato

Zacatecas

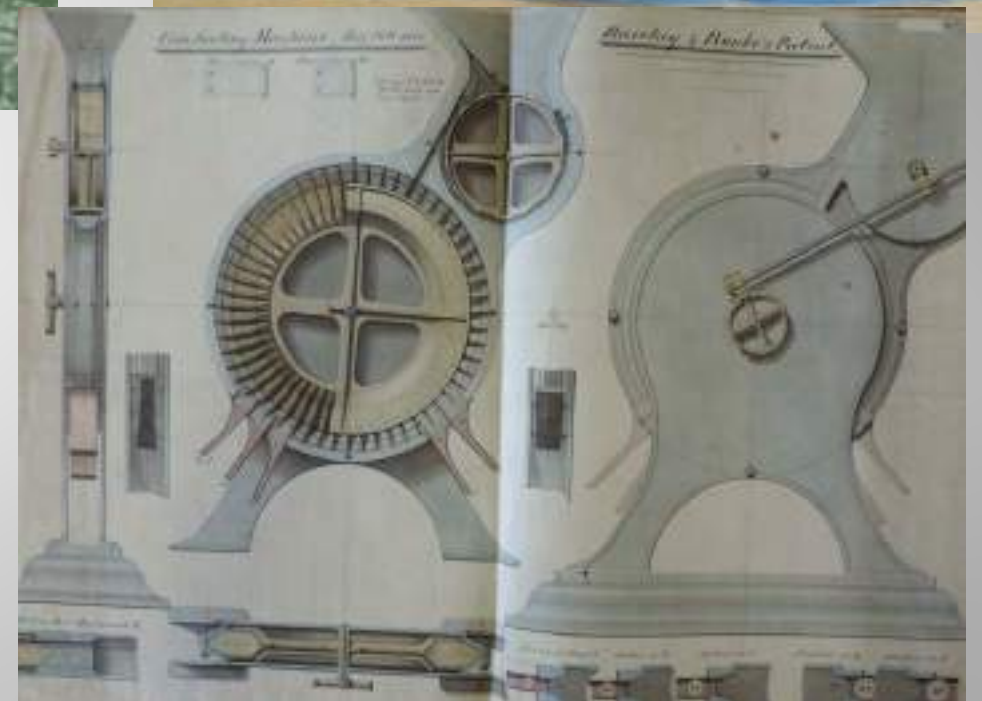
Real del Monte

Real de Catorce



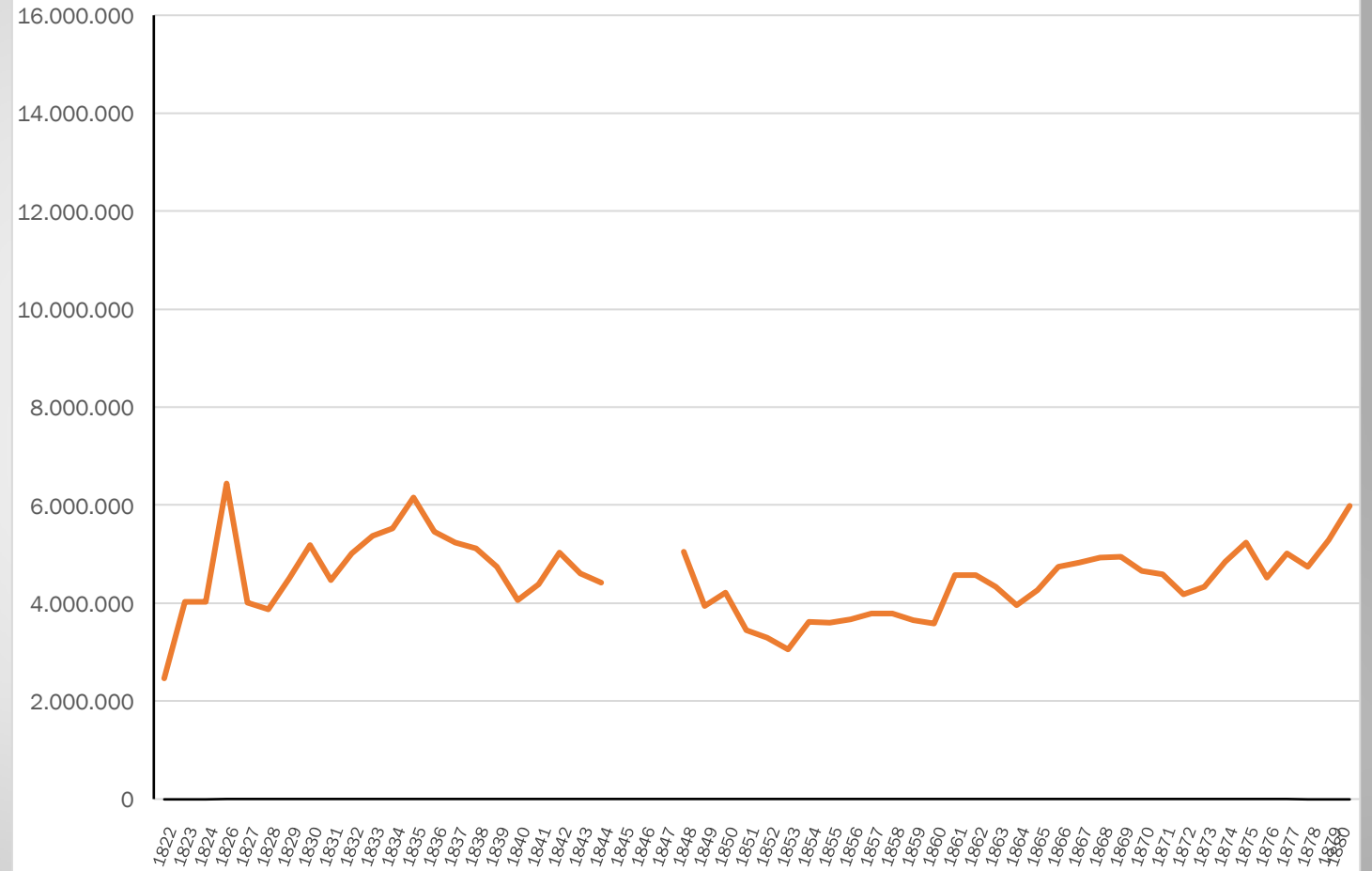


Plan for the
Zacatecas Mint
(Boulton & Watt Collection)

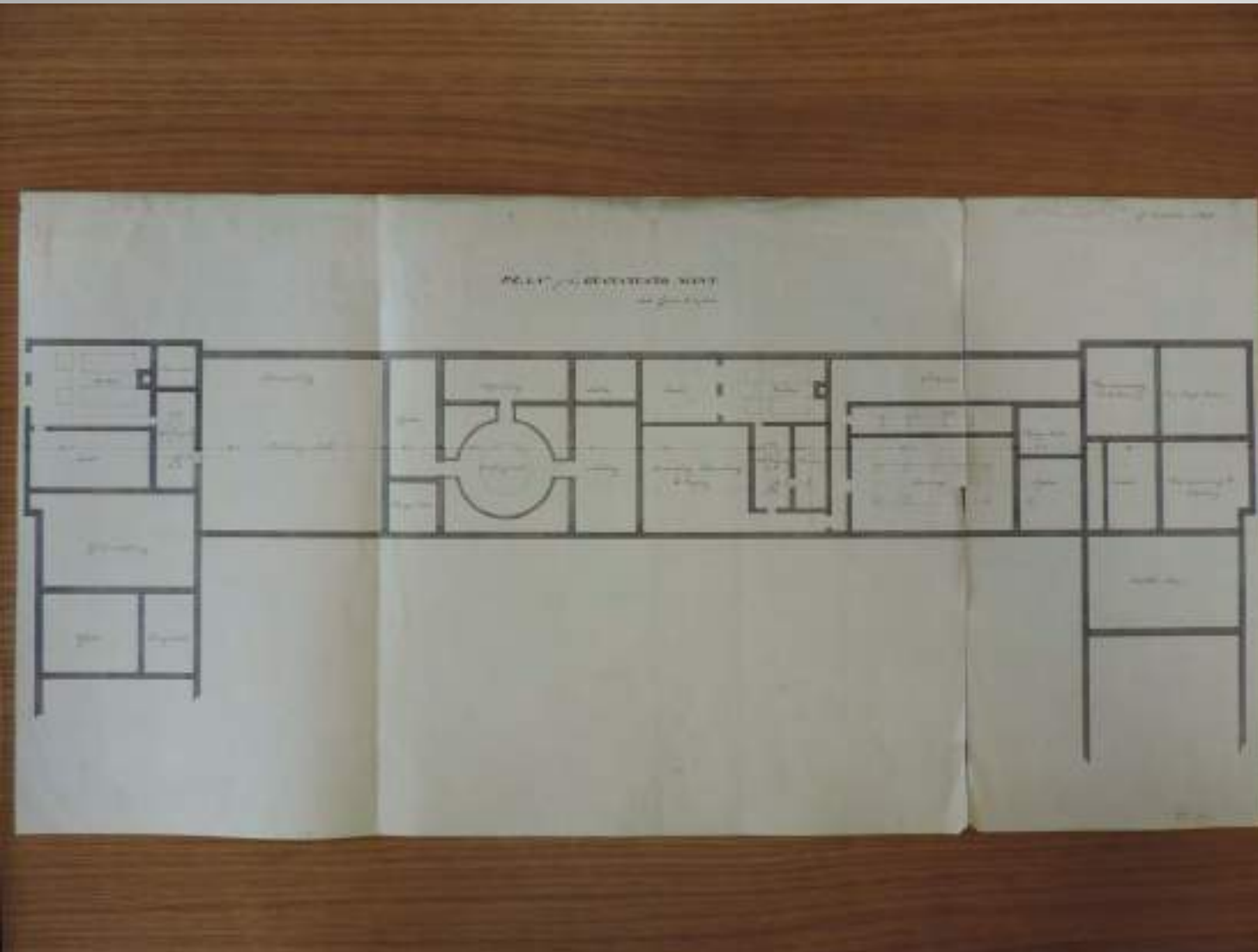




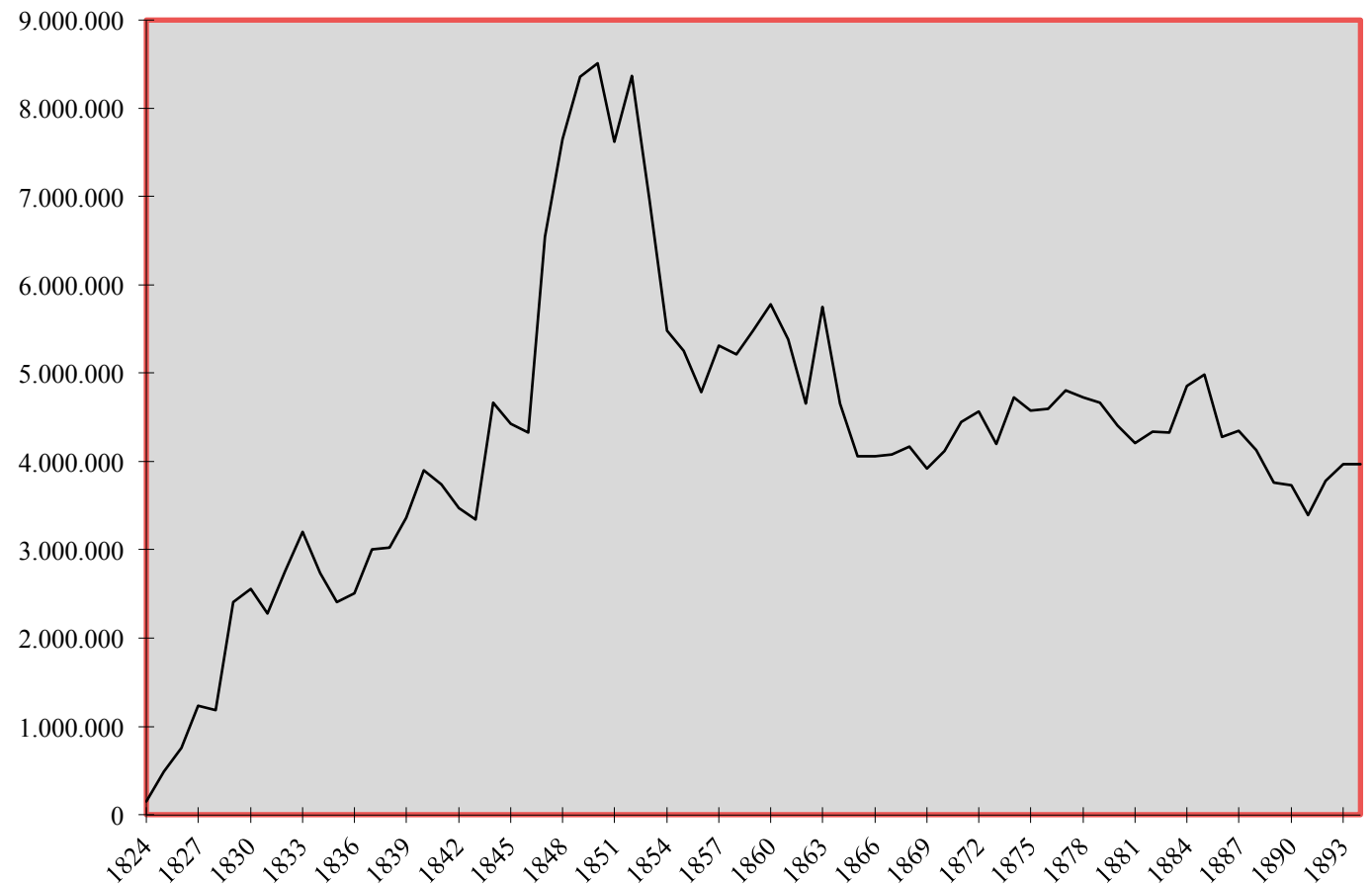
Zacatecas Mint Production, 1822-1890



Plan for the Guanajuato Mint (Boulton & Watt Collection)

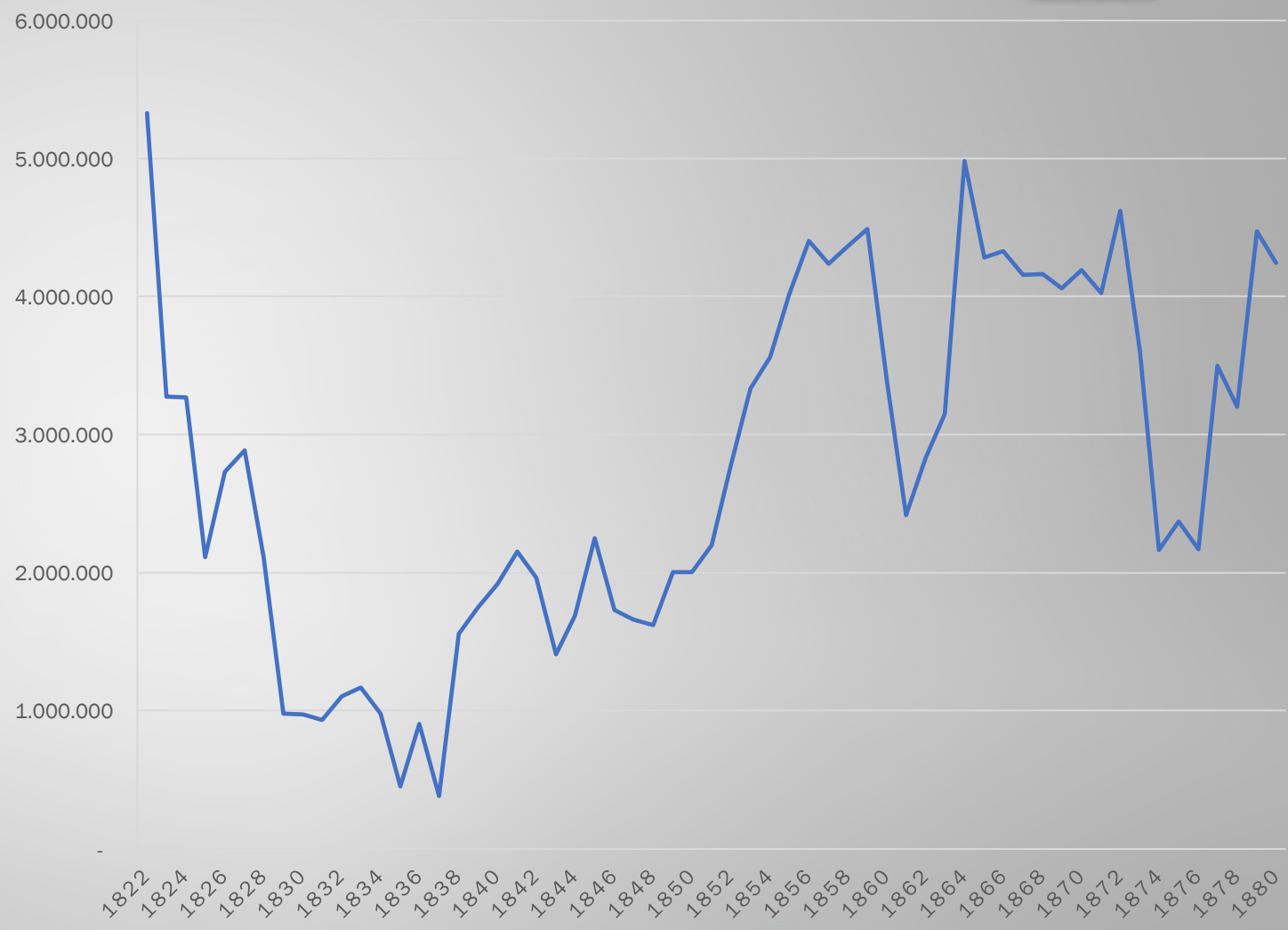


Guanajuato Mint Production, 1824-1894



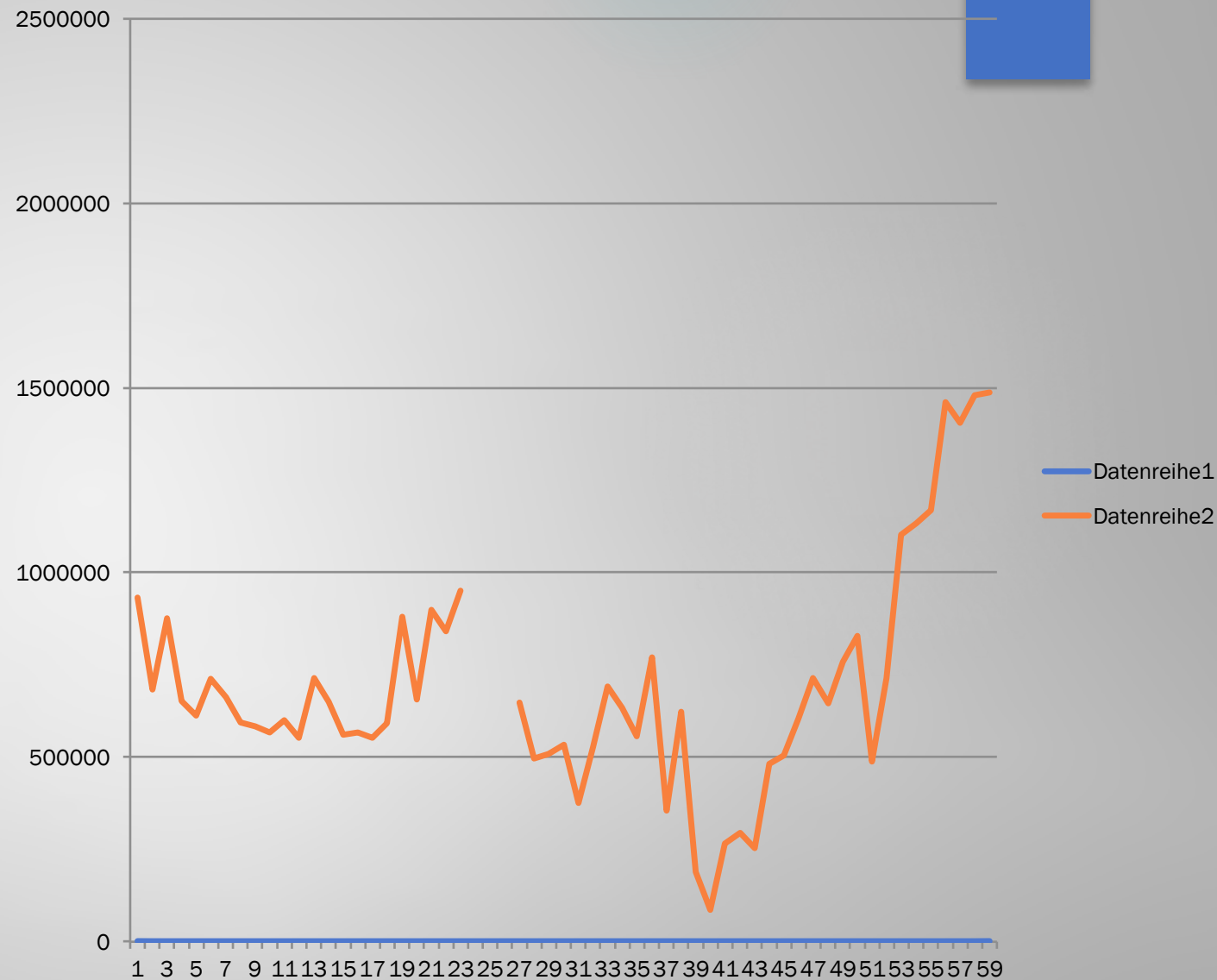
Source: Memoria sobre la Administración Pública del Estado de Guanajuato, 1895. Imprenta y Litografía de la Escuela Porfirio Díaz, Morelia, s/f. basada en cifras de acuñación.

Mexico City Mint production 1822-1890



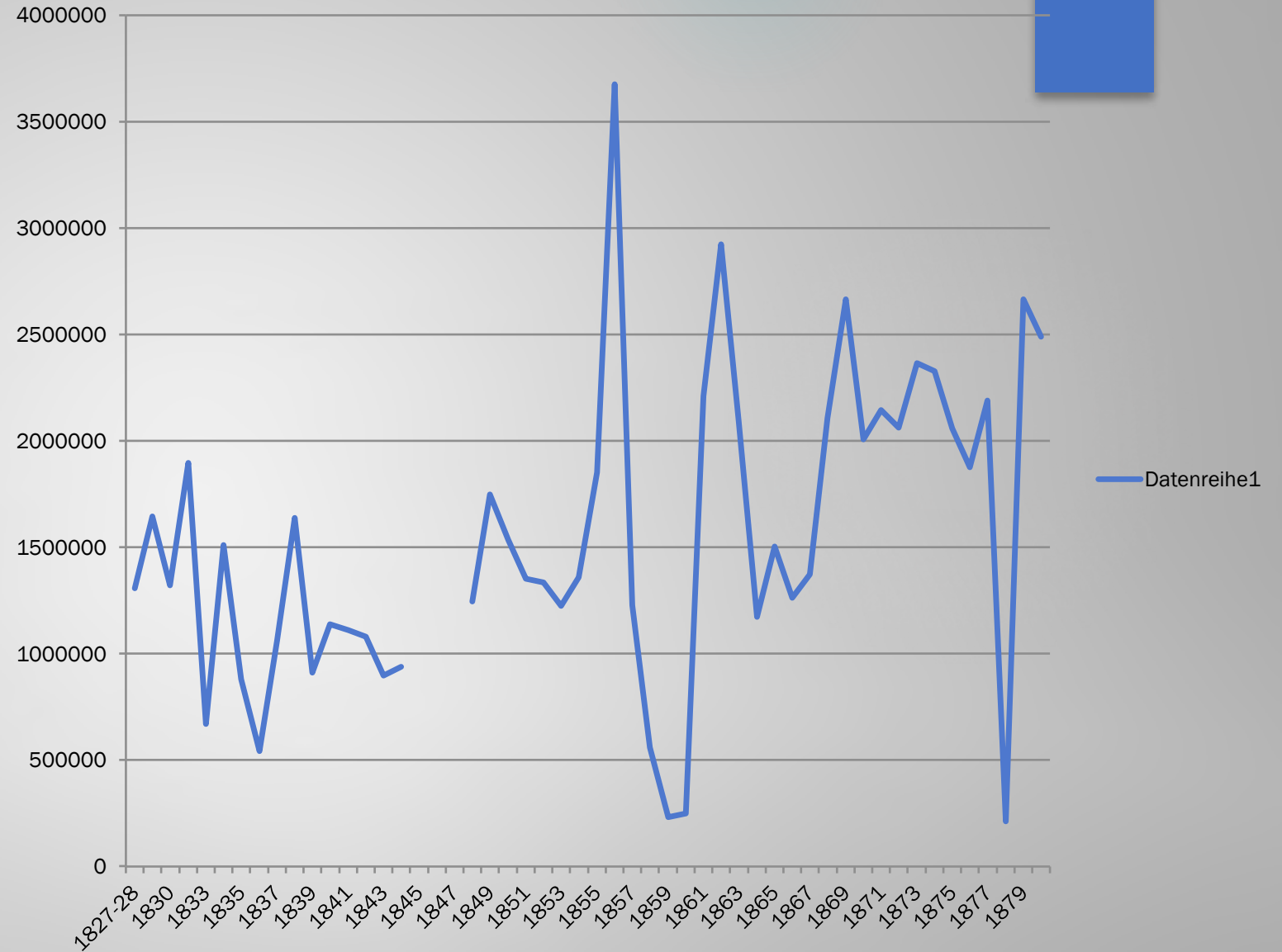


Guadalajara Mint Production 1822- 1880

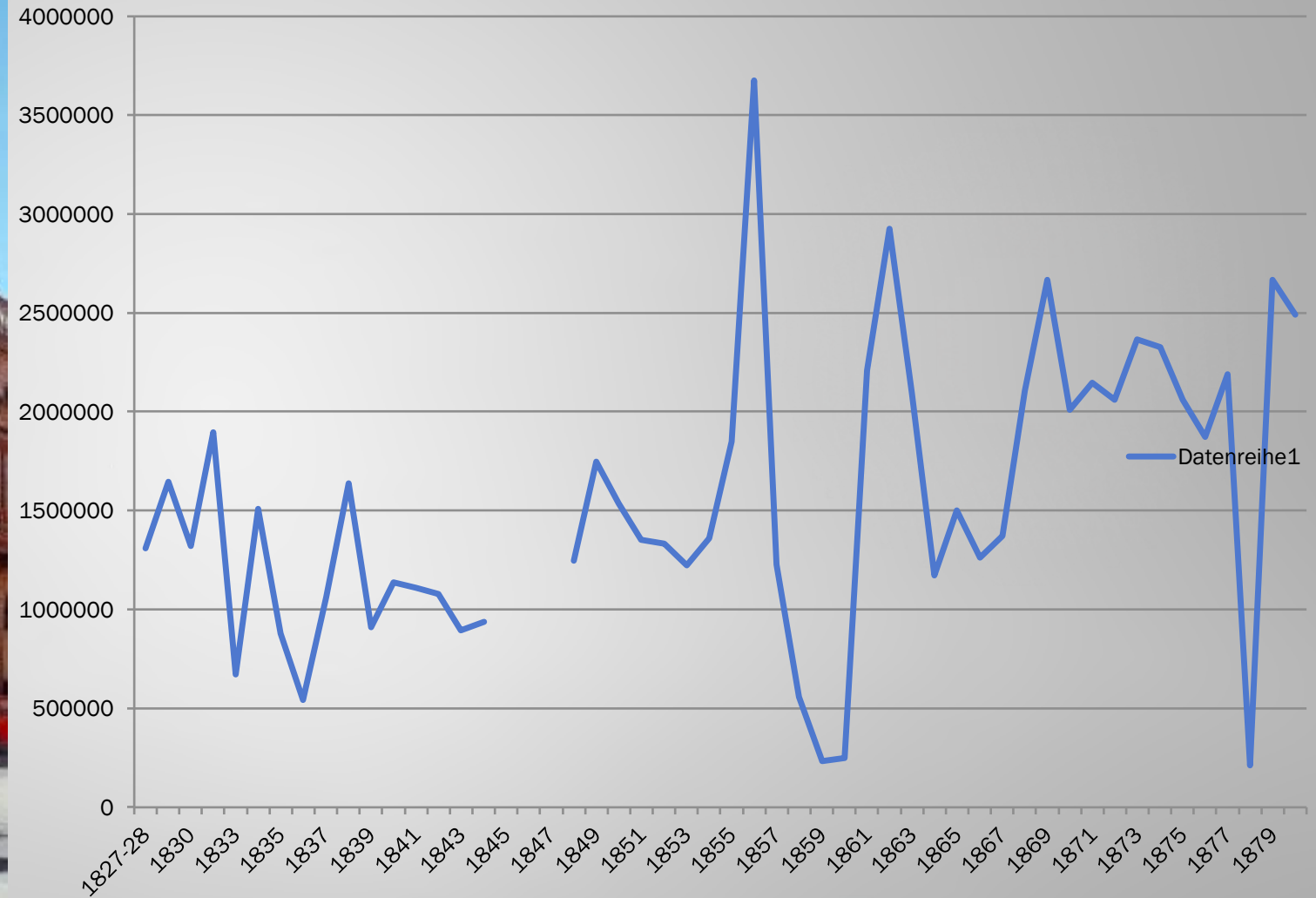




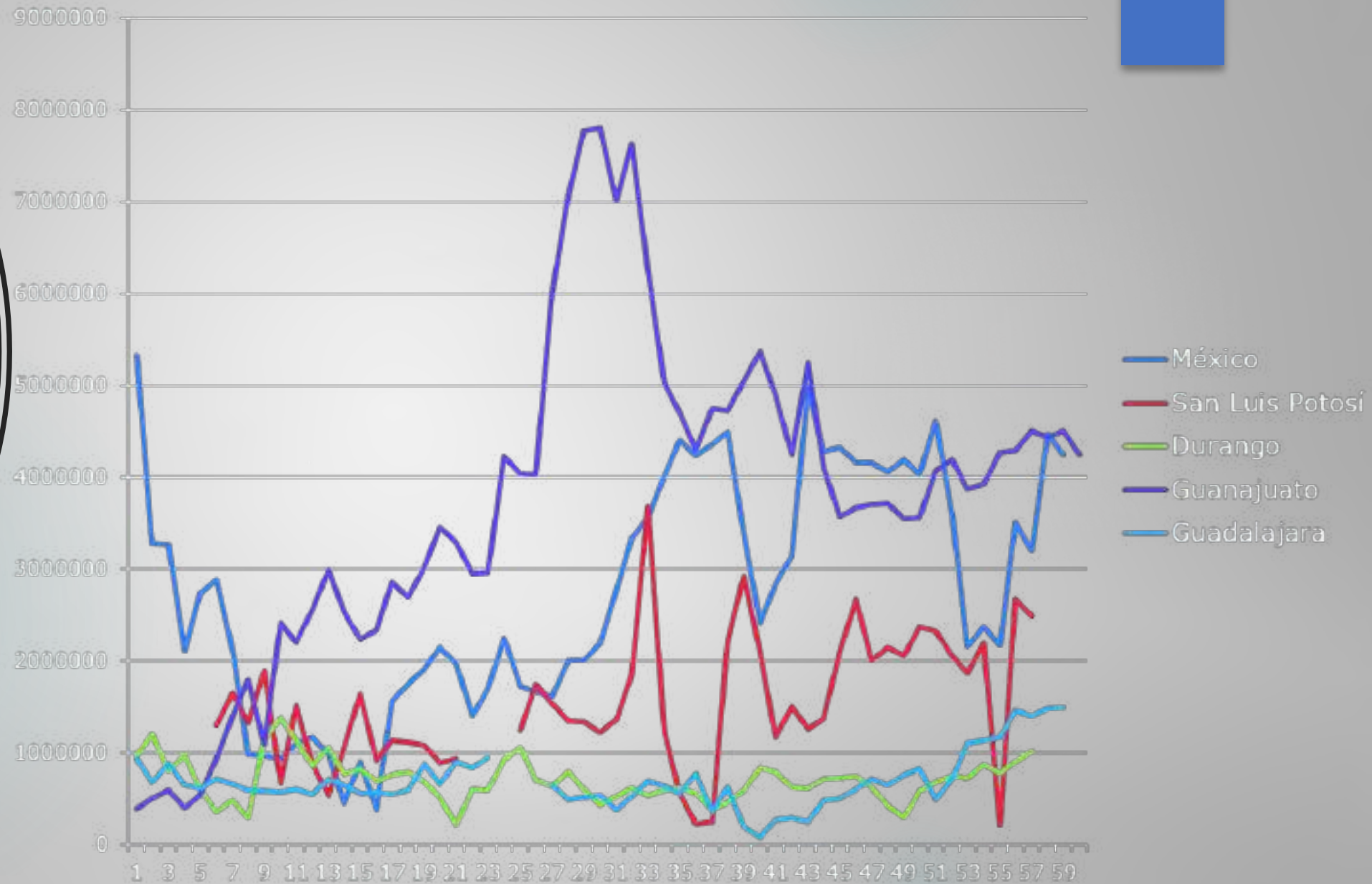
Durango Mint Production, 1827-1880



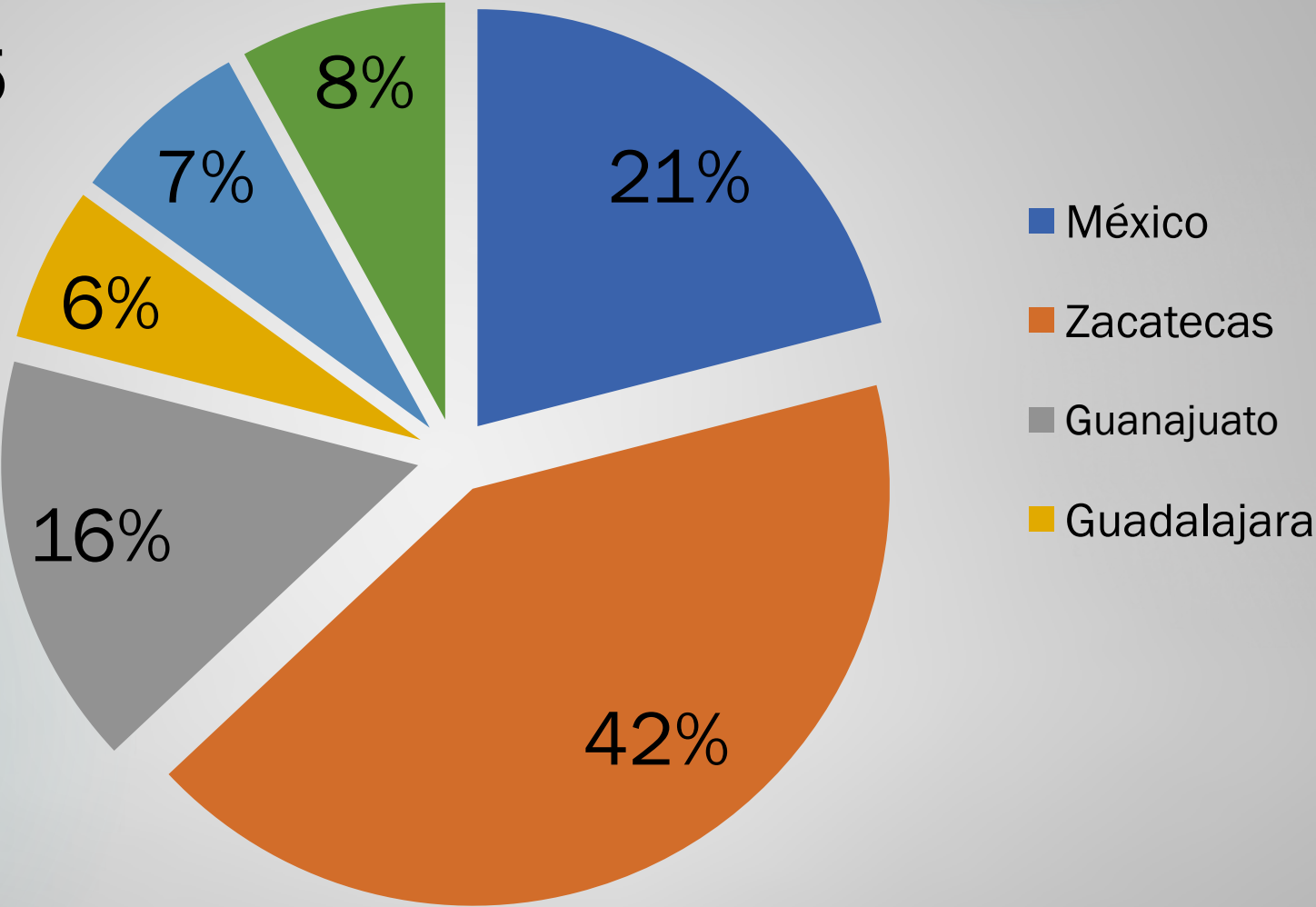
San Luis Potosí Mint Production 1827-1880



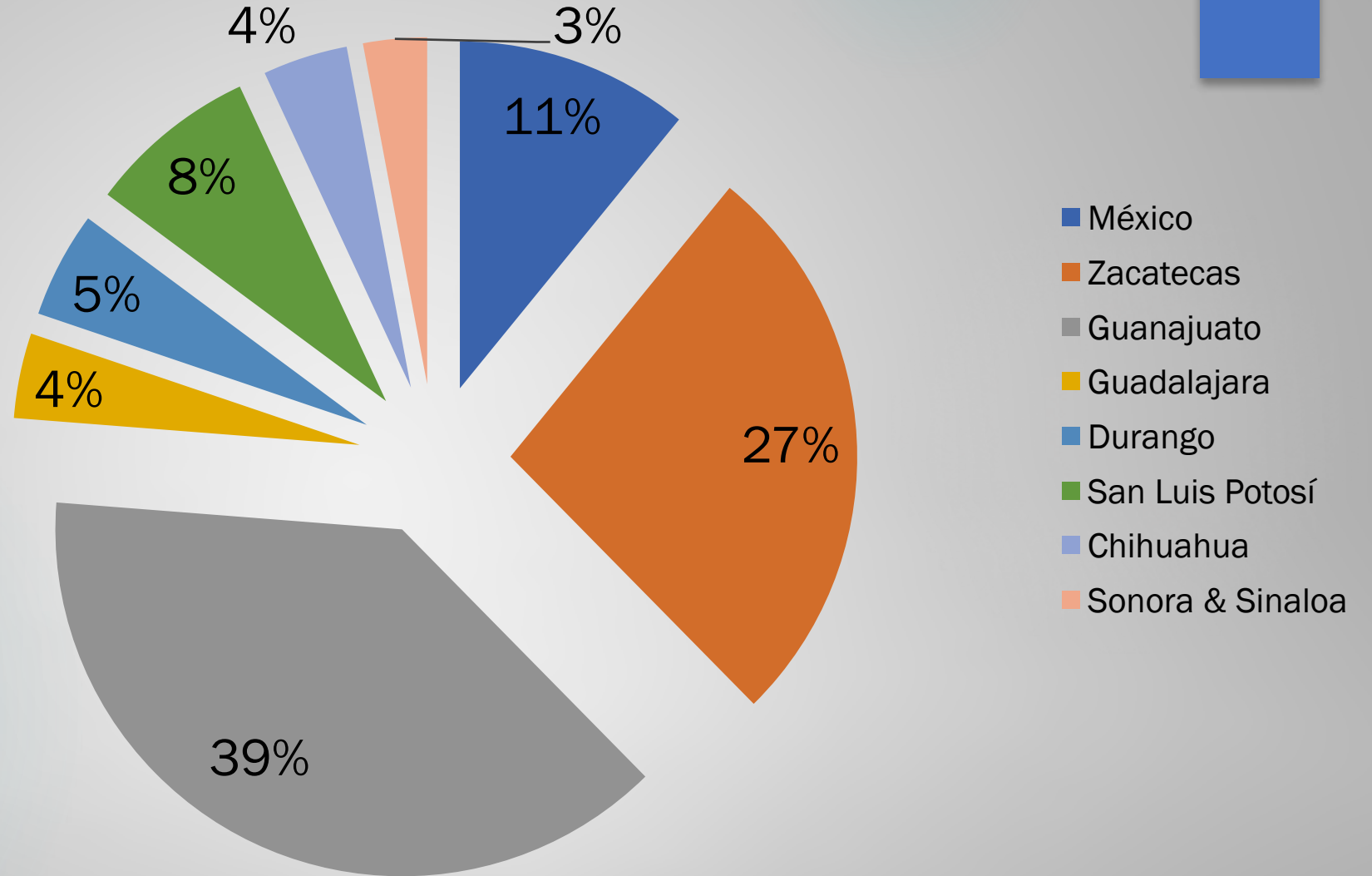
Provincial
Mints
Comparative
production
1824-1890



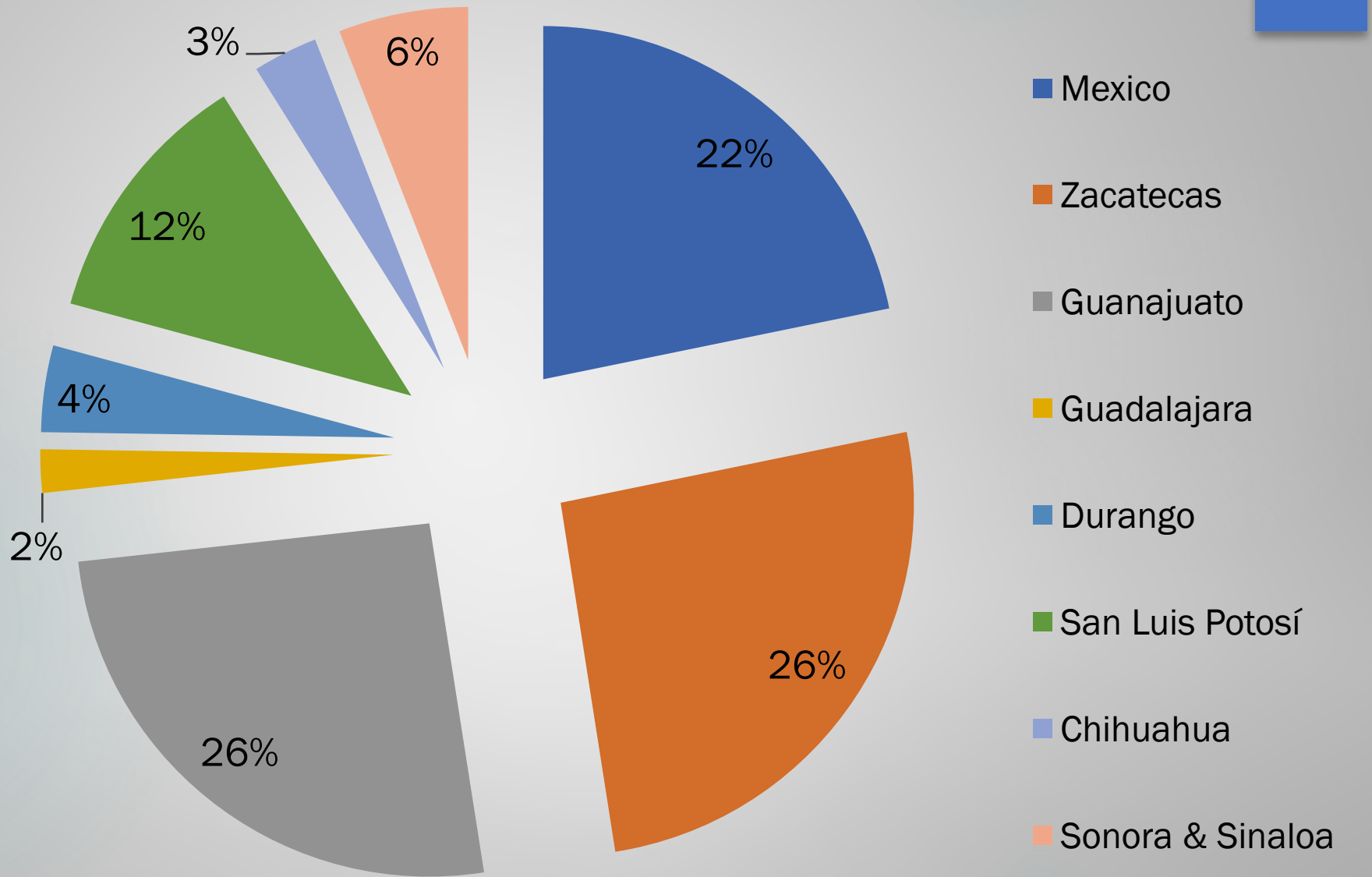
Percentages of production by region 1824-1835



Percentages of production by región 1846- 1850



Percentages of
production by
region 1861-1865

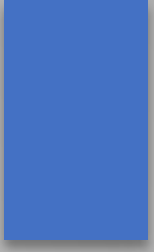


Part 2. The Guanajuato Mint

- Based on an ongoing study about the biggest family enterprise from the late 18th Century to the late 19th.
- Need to explain its role as the main producer of silver in the late 18th Century and again in the mid- 19th

Guanajuato Mint central to this research.

The Anglo Mexican Company obtained a concession from the Government of Guanajuato to erect, furbish and produce coins. This Company had already contracts to exploit the most important mines in Guanajuato.



Main obstacle... the most incomplete records found at the Mexico Mint were those of the Guanajuato Mint with only 13 boxes copies of the contracts with Anglo Mexican Mining Company and a few files with correspondence with Mexican authorities.

Search for new sources.

- 1. Company Reports**
- 2. Travellers and Consular Reports**
- 3. Cornwall Record Office, Harvey's Collection**
- 4. National Archives Kew**
- 5. Boulton & Watt Archives**
- 6. Notary Archives, Mexico**
- 7. National Archives, Mexico**
- 8. Notary Archives, Guanajuato**
- 9. Millington Collection, University of Virginia**

First contact

▪

Barclay, Herring y Richardson bankers for the Anglo Mexican, gave the first loans to the Mexican government after independence. Although they also embarked in the “Méxican Mint” they withdrew from that Project.

Administrative structure Anglo Mexican Mining Association

London

- ▶ Board of Directors
- ▶ President
- ▶ Deputy President
- ▶ 10 Commissioners
- ▶ Auditors
- ▶ Bankers
- ▶ Lawyers

Mexico

- ▶ An agent in Veracruz
- ▶ An agent in Mexico City
- ▶ Two commissioners in Guanajuato (originally) to coordinate productive activities

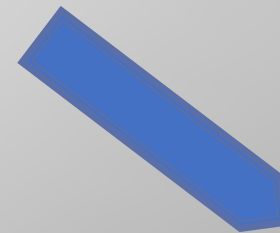
in:



Mines

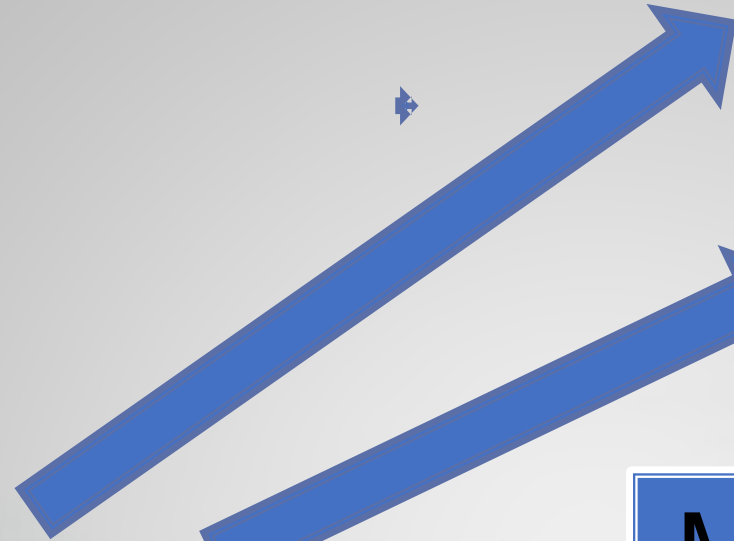


Refining activities



Minting

London
↓
Guanajuato



Veracruz



Mexico City



Mine Captains



Refining Haciendas
Managers



Minting administration

Mexico agents
Robert Staples &
Co.

Guanajuato

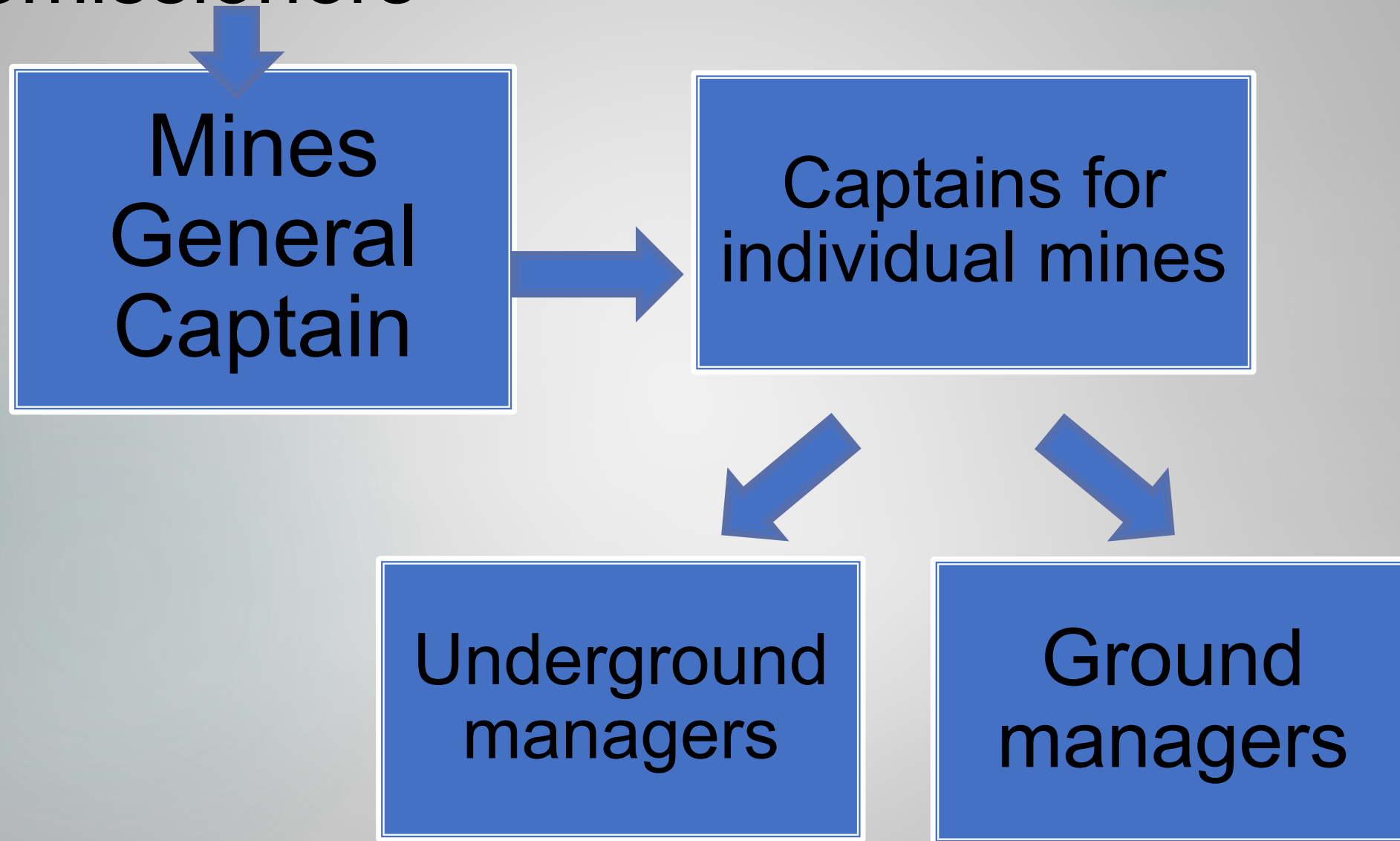
Veracruz agent
Joseph Welsh



Comissioners 1824-
1831

- ▶ William Dollar
- ▶ William Williamson
- ▶ Edward Hurry
- ▶ William Jones
- ▶ John Millington

Comissioners





Suppliers of machinery and tools.



Awarded, London, 1852, for Excellence and Practical Success of Engine Model of Single-Acting Pumping Engine, for Supplying Towns with Water.

HARVEY AND CO.,
ENGINEERS AND GENERAL MERCHANTS,
HAYLE, CORNWALL,
And **HAYLE FOUNDRY WHARF, NINE ELMS, LONDON.**
CITY OFFICES (GREENHALL HOUSE), 214, OLD BROAD STREET.

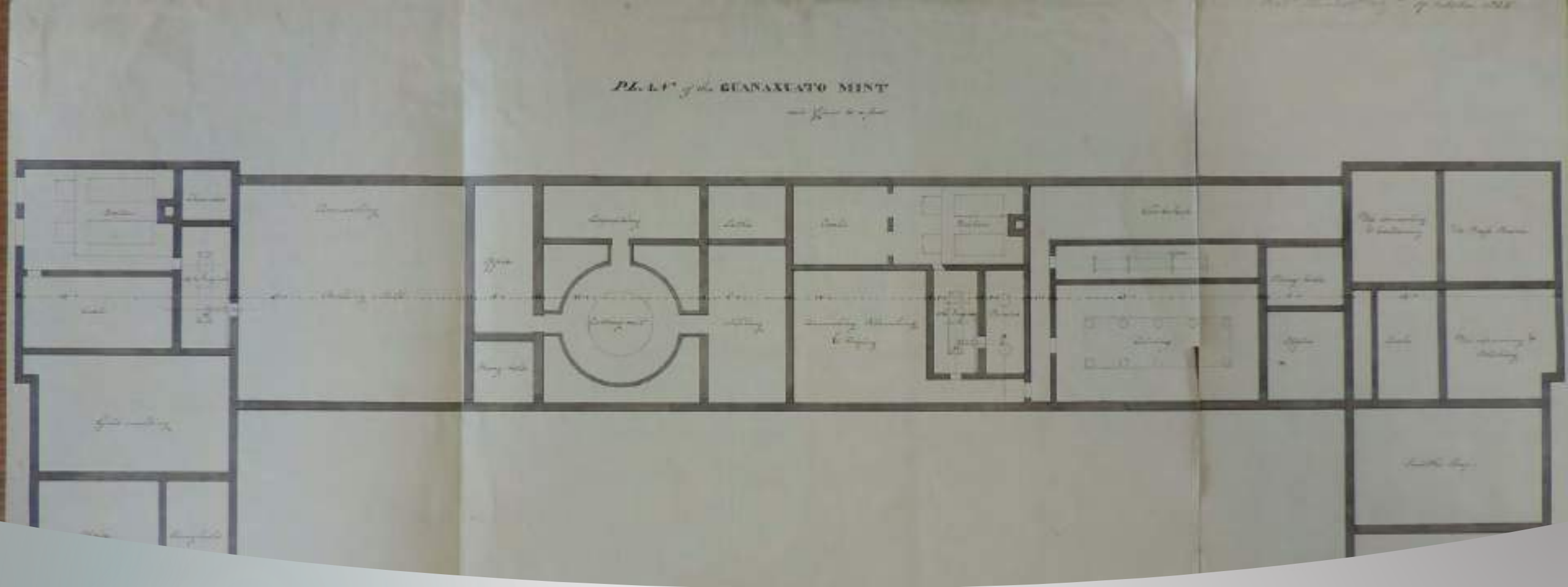
Manufacturers of Pumping and other Land
AND MARINE STEAM ENGINES OF THE LARGEST KIND IN USE.
MACHINERY, MILLWORK, MINING MACHINERY, & MACHINERY
SHIPBUILDERS IN WOOD AND IRON.

D'S PATENT PNEUMATIC ORE STAMPING
engines at Work at Hayle Foundry Wharf, Nine Elms, by previous application as either of the above.

SECOND-HAND MINING MACHINERY FOR SALE
IN FIRST-RATE CONDITION.

WINDING ENGINES, STAMPING ENGINES, STEAM CAPTAINS, and CRUSHERS
FITWORK OF ALL DESCRIPTIONS, and all kinds of MATERIALS required for MINING.

For further Particulars, apply to
HARVEY AND CO., Engineers and General Merchants



Plan for the Guanajuato Mint 1825 (Boulton & Watt Collection)

Contracts with Anglo Mexican

- ▶ First. 1825 William Williamson signed the first contract with Carlos Montes de Oca Governor of the State of Guanajuato including 21 articles for its operation.
- ▶ Started operations until 1828 due to problems between Government requirements and actual Mushet Plan for the Mint factory.
- ▶ Renewed contracts in 1842 and 1846

ANGLO MEXICAN FROM MINING TO MINTING

1

1827/29 started relinquishing contracts with the previous mine owners and focused on Minting, a more profitable venue.

2

They received the bulk of Guanajuato mines production.

3

Set the pace of a profitable business which would benefit from one of the most important mining bonanzas in the 1840s and 1850s. Mine of la Luz

4

Although they could not foresee mining discoveries, they had already laid the legal base and the physical infrastructure to gain from the 1840s&50s bonanza

5

The Guanajuato Mint business reveals also a great deal of information regarding the relationships between Mexican and British entrepreneurs.

<i>Drum Book</i>	
10. <i>Drum Book</i> for 1826	3 5 0 0
11. <i>Drum Book</i> for 1826	3 5 0 0
12. <i>Drum Book</i> for 1826	3 5 0 0
13. <i>Drum Book</i> for 1826	3 5 0 0
14. <i>Drum Book</i> for 1826	3 5 0 0
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17. <i>Drum Book</i> for 1826	3 5 0 0
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93. <i>Drum Book</i> for 1826	3 5 0 0
94. <i>Drum Book</i> for 1826	3 5 0 0
95. <i>Drum Book</i> for 1826	3 5 0 0
96. <i>Drum Book</i> for 1826	3 5 0 0
97. <i>Drum Book</i> for 1826	3 5 0 0
98. <i>Drum Book</i> for 1826	3 5 0 0
99. <i>Drum Book</i> for 1826	3 5 0 0
100. <i>Drum Book</i> for 1826	3 5 0 0



List of tools and replacements for the machinery for the Guanajuato Mint, 1826. (Millington Archives and Boulton & Watt Collection)



Guanajuato Mint at the end of the 19th Century
(Fototeca INAH)



Thank you!