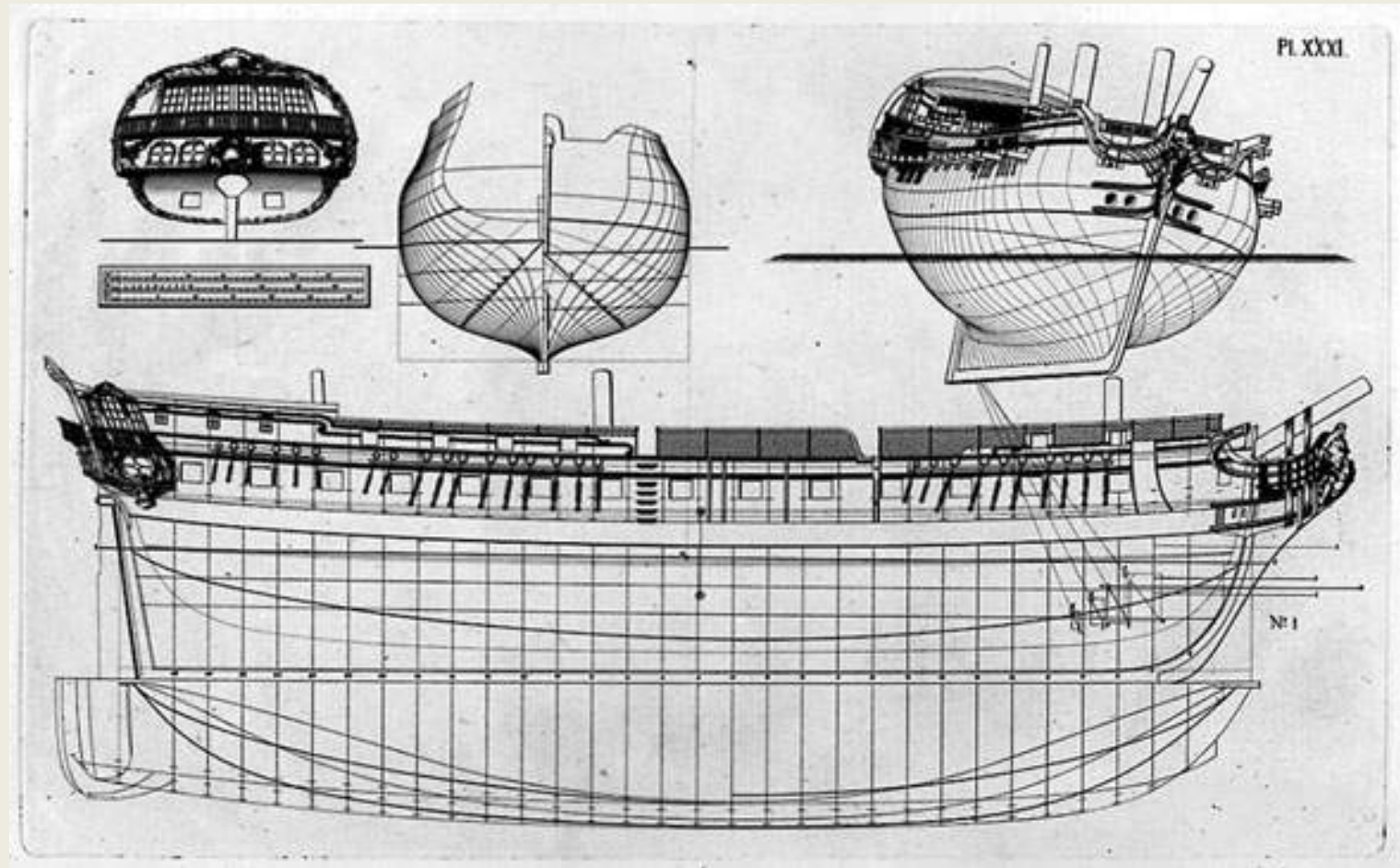


Baltic Imports for Shipbuilding in Spain

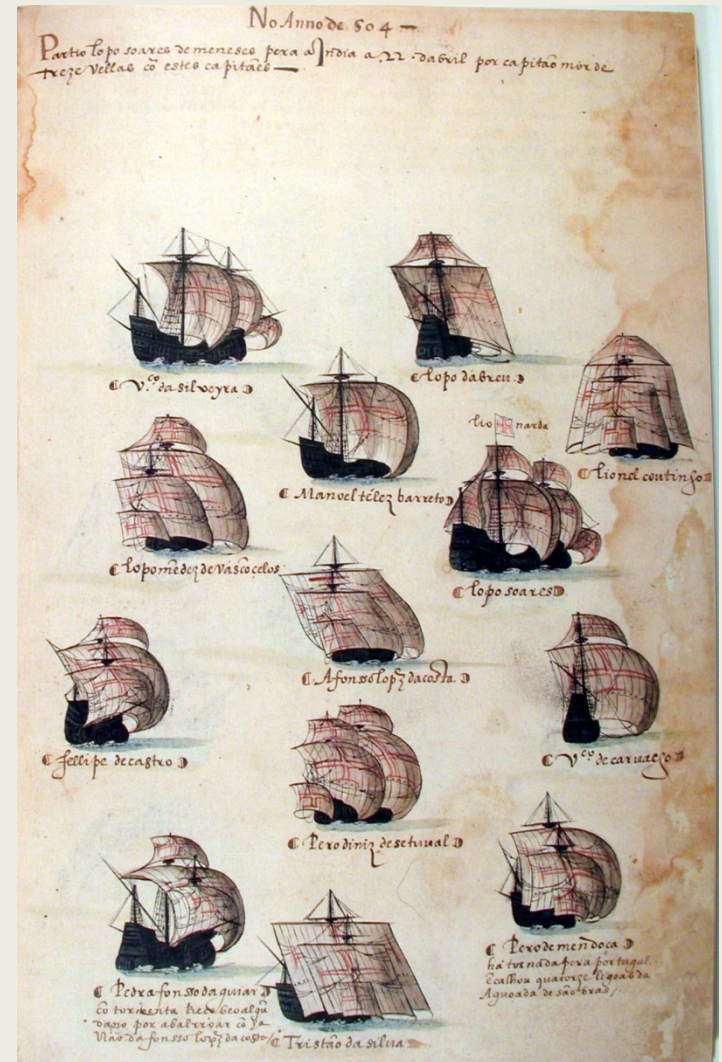
Nathan Gallagher | University of Groningen



Architectura Navalis Mercatoria

Introduction

- Shipbuilding was important for Spain's national security and international trade.
- Deforestation an early concern
- Efforts to protect Spain's forests
- Stricter laws in the 18th century
- How did this affect Spain's forest usage?



Memorias das Armadas

Main Research Question

- How much timber did Spain import for shipbuilding during the early modern period, and what can this tell us about Spanish forestry?





Methodology

- Sound Toll Registers Online (STRO)
 - Coded database to determine which shipments were going to Spain, and which were timber
 - Identify Spain's major interests
 - Estimate volume of imports
 - Identify trends

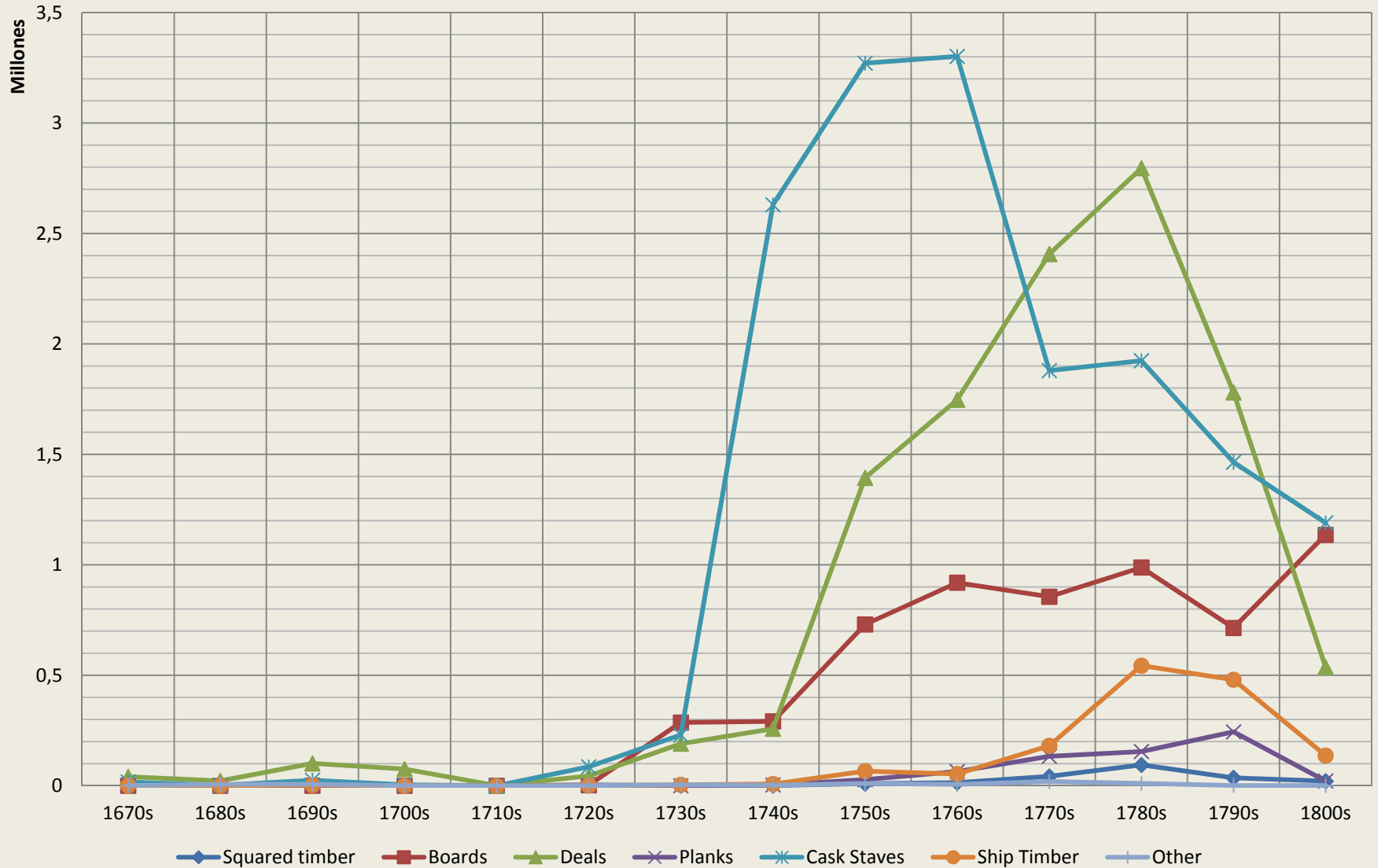
Database Coding

- Products were given unique codes and converted to volume based on typical dimensions for each product.

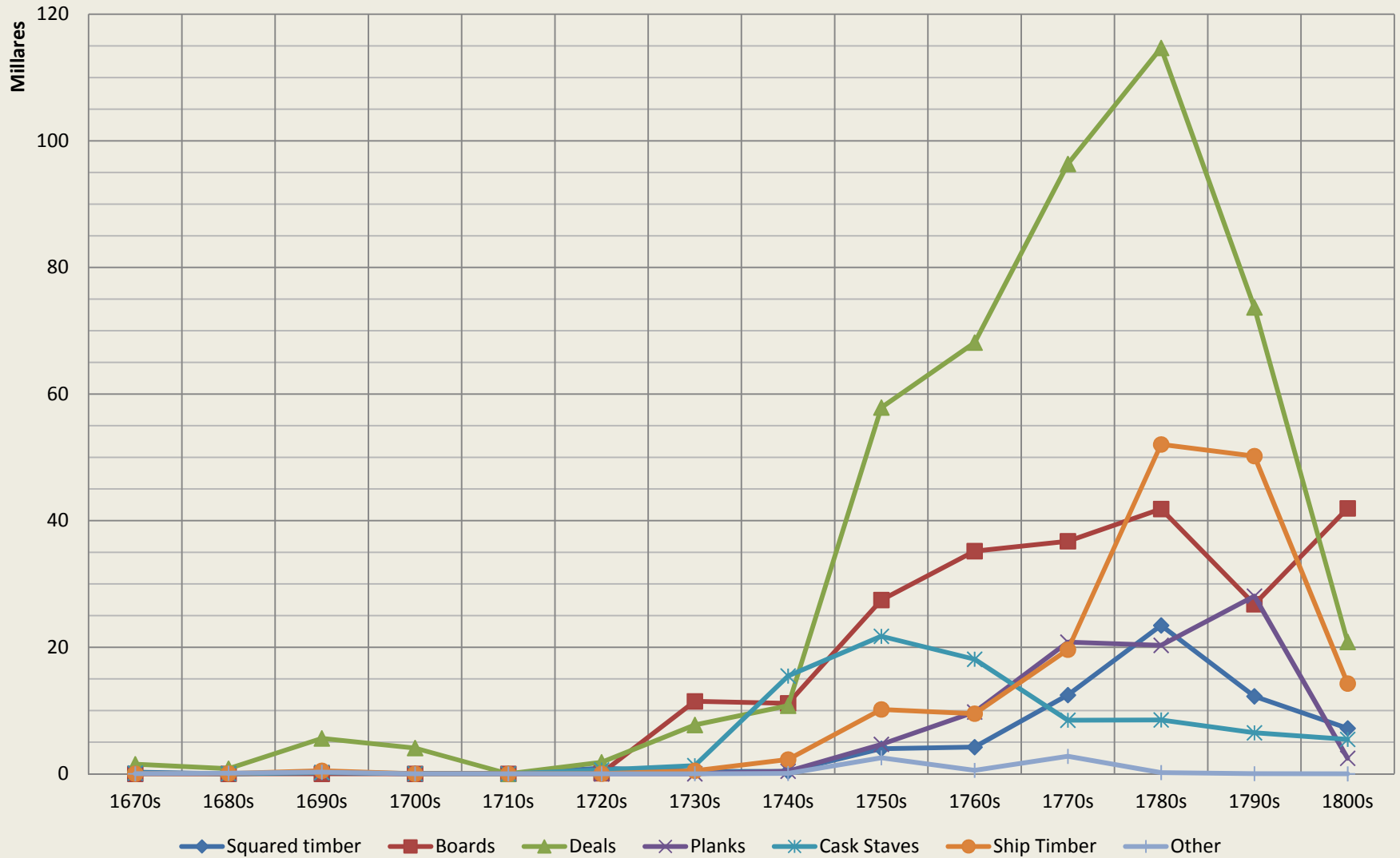
Balks	201	2
Blocks	112	1
Boards, specified	207	2
Boards, unspecified or ordinary	230	2
Boards, reduced	231	2
Boat hooks	114	1
Compass timber	101	1
Deals, ordinary, unspecified or 6 allen	202	2
Deals, Prussian	203	2
Deals, Swedish	210	2
Deals, specified lengths	215	2
Deals, Norse	211	2
Deals, Reduced	220	2
Firewood	401	4
Handspikes	102	1
Knees	103	1
Laths	302	3
Ledges	104	1
Masts	105	1
Masts, boat	106	1
Oars	107	1
Other ship timber	150	1

Planks	205	2
Planks, thick	206	2
Planks, ship's	108	1
Pumps and pump wood	113	1
Rafters	311	3
Rods	309	3
Spars	109	1
Spars, small	110	1
Split wood	310	3
Staves, unspecified	303	3
Clapboards	304	3
Staves, hogshead	308	3
Staves, pipe	305	3
Treenails, ships	111	1
Unprocessed or semi-processed timber	306	3
Quartered timber	208	2
Wainscot	307	3
Level 3 timber unknown	350	3
Squared timber	240	2
Wales	115	1
French wood	340	3
Keels	120	1
Treenails	250	2

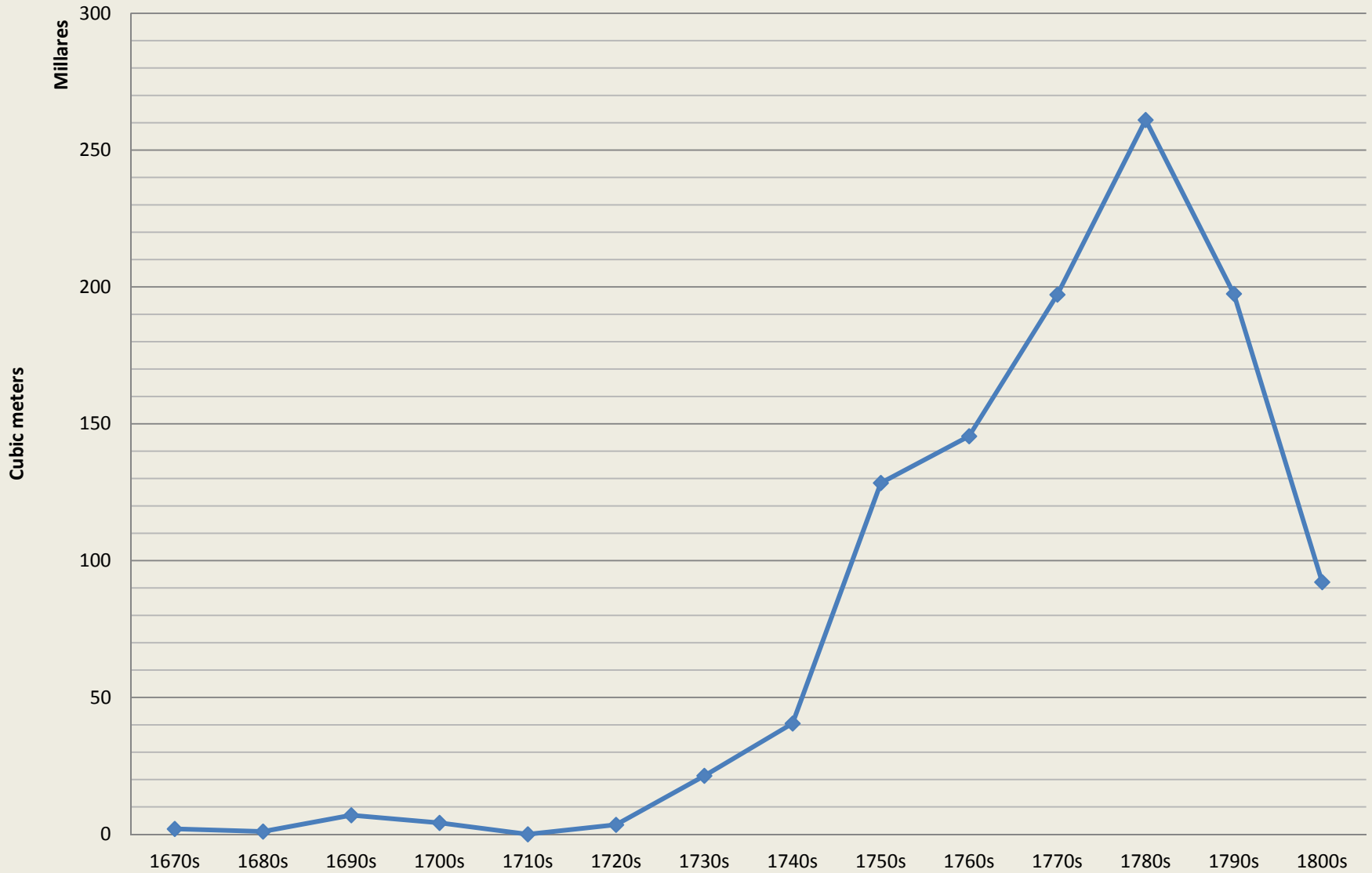
Pieces of Timber to Spain via Danish Sound 1670-1806



Timber Volume to Spain via Danish Sound (cubic meters) 1670 - 1806



Estimated volume of timber to Spain via Danish Sound

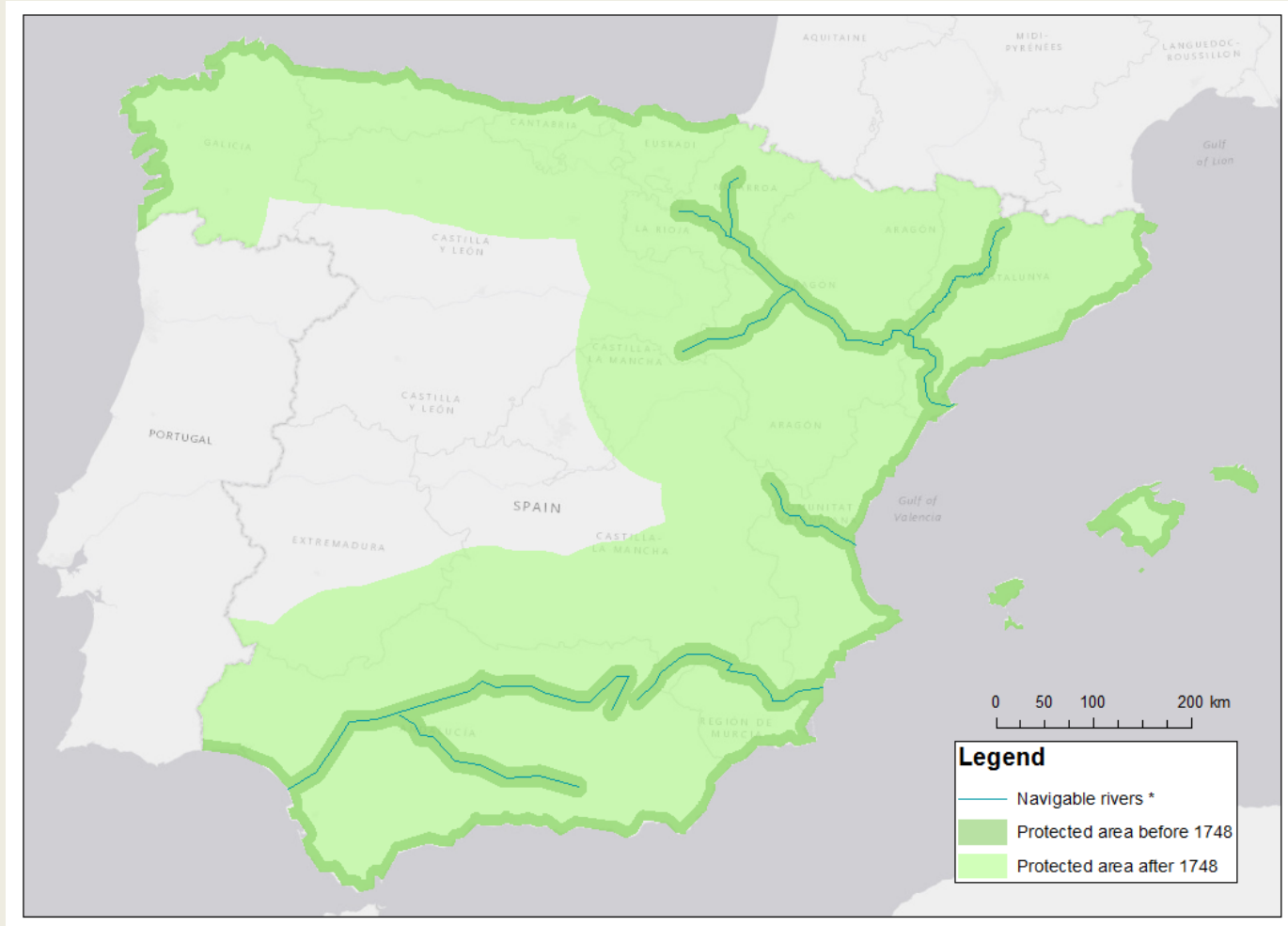


Putting the pieces together...

- STR shows increase of imports around 1750
 - Coincides with *ordenanzas* of 1748
- Spain 2nd largest Navy by 1780s
 - John Wing: Effective forest management
- Rafael Torres Sánchez: 1748 *ordenanzas* counterproductive
- Initial investigation of Spanish documents:
 - Import rates of Navy seem to remain low
 - Baltic timber was expensive compared to local timber

Ordenanzas of 1748

Approximate forest area protected for Spanish Navy



* "Navigable" rivers selected after John Wing. "Spanish Forest Reconnaissance." 368.

Hypothesis



José Patiño

- The Spanish Navy successfully protected forest resources to supply their own needs, but forced private builders to seek timber outside of Spain.

Strategy

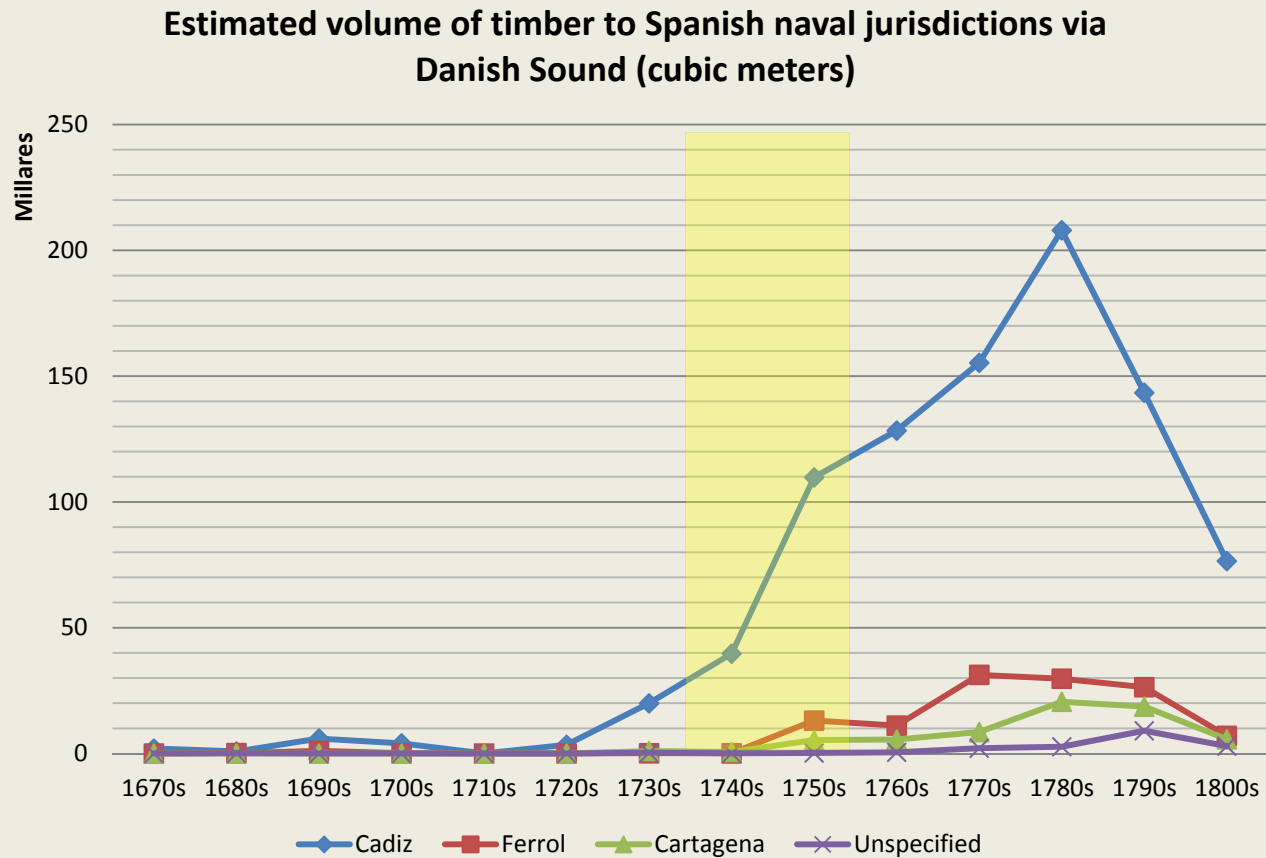
- Archivo General de Simancas, Tribunal Mayor de Cuentas (TMC)
 - Contains similar info to STR
 - Potential to tabulate and cross-reference
 - “Completeness” currently unknown
 - Collected from 1730-79
- Small dataset for *Magdalena* case study will guide future strategy



Archivo General de Simancas

Strategy

- Focus on Cadiz
- Priority 1740s-50s





Thank you

