



Central America: A Quest for the Progression of Economic Value. Bonus-Season V.

The origin of Central America political-economy.

Period of study: From 1700 to 1900

Episode 1
Sugar-Sugar America
Part 1

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Central America: A Quest for the Progression of Economic Value. Season V

From 1700-1900: The origin of Central America political-economy.



Outline Calendar

Season V From January 9 th to March 20 th , 2026.				
9-jan-2026 Episode 1 	16-jan-2026 Episode 2 	23-jan-2026 Episode 3 	30-jan-2026 Episode 4 	6-feb-2026 Episode 5 
Sugar-Sugar America Part I 	Sugar-Sugar America Part II 	Sugar-Sugar Central America Part III 	Cattle, Livestock and Foodstuff Central America Part I 	Cattle, Livestock and Foodstuff Central America Part II 
13-feb-2026 Episode 6 	20-feb-2026 Episode 7 	27-feb-2026 Episode 8 	6 -mar-2026 Episode 9 	13-mar-2026 Episode 10 
Bananas joining the Plateau of Central America 19th century Part I 	Banana Republics Central America Part II 	Banana Republics Central America Part III 	Summary and Conclusions Seasons I and II 	Summary and Conclusions Seasons III, IV and V 
20-mar-2026 Episode 11 	From 21-March to 5-April 2026 Safeguarding Pause Maintenance Break and Easter Week vacations. 	Next Academic Sagas 2026		Program dates
Research Agenda for the future	Maintainance Break and Easter Week vacations.	Coffee and Cacao 101 Strategies for Family Farm Small-Holders		From 6th of April to 17th of July 2026.
		Human Talent: From Feudal Slave to Chatel Serfdom to Wage Labor to Digital Beggar		From 10th of August to 11th of December 2026.



Central America: A Quest for the Progression of Economic Value. Season V

A piece of the economic puzzle of Spanish Central America in Four Seasons + Bonus



Big Picture of our Content.

Season V as of January 9th, 2026.

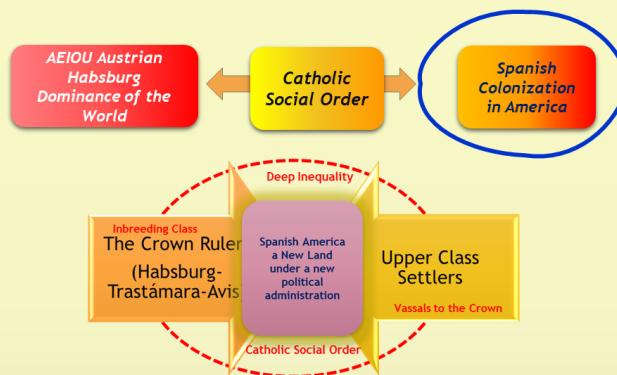
Season	Start Date	Finish Date	Number of episodes	Historical Timeline to Analyze	Main General themes
One (I) Autumn -Winter 2024	October 4 th , 2024	December 27 th , 2024	13 episodes	1492-1558	<ul style="list-style-type: none"> Historical foundations Castile & Aragon: Discovery of Spanish America, the Holy Roman Empire Charles V Holy Roman Emperor: his local, personal, regional, religious, and international agenda The Spanish Inquisition
Two (II) Winter-Spring 2025	January 24 th , 2025	May 2 nd , 2025	13 episodes	1492-1700	<ul style="list-style-type: none"> Spanish America with a Medieval Allure: Conquest and Colonization Understanding the economic philosophy of the Habsburgs Rulers in Central America: Philip II, Philip III, Philip IV, and Charles II. Commodities: Mining extraction of precious metal reserves
Three (III) Spring-Summer 2025	May 23 rd , 2025	August 29 th , 2025	14 episodes	1700-1900	<ul style="list-style-type: none"> School of Salamanca The Bourbon era begins. From Philip V (1683-1746) to Alfonso XIII (1886-1941) The War of Spanish Succession The Jesuit Suppression and Restoration (1773-1814) The meaning of the French Revolution in Spanish America The Why of Napoleon Bonaparte
Four (IV) Autumn-Winter 2025	September 19 th , 2025	December 31 st , 2025	15 episodes	1700-1900	<ul style="list-style-type: none"> Independence Bells of Central America (1800-23) United Provinces of Central America (1823-40) Derailment of violence and inner conflicts Charted Urban vs Forgotten Rural Mining + Agricultural Commodities. Never an Industrial Factory Development. Main agriculture production industries: Cacao, Indigo, coffee, Sugar-Introduction
Five (V) BONUS Winter Spring 2026	January 9 th , 2026	March 20 th , 2026	11 episodes	1500-1900	<ul style="list-style-type: none"> Analysis of Main Agriculture plantations. Sugar-Sugar America, Bananas, Cattle and Livestock, Foodstuff Summary and Conclusions Research Agenda for the future.

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From 1700-1900: The origin of Central America political-economy.



Sugar-Sugar America Part I.



“Most of good historians are chroniclers of events. A Chronicler narrates, but doesn't explain the facts.

Before proceeding further in our civilization, corporate strategists are obliged to understand the different explanations and interpretations of history. Otherwise, history will repeat under new circumstances”.

Eleonora Escalante Strategy. El Salvador

Our agenda for today's master class:

Sugar-Sugar America Part I.

- 1. General Discussion about the Primitive Sugar Value Chain*
- 2. The rise of sugar crops at the West Indies, between 1500 to 1900*
- 3. The Brazilian Business Model*



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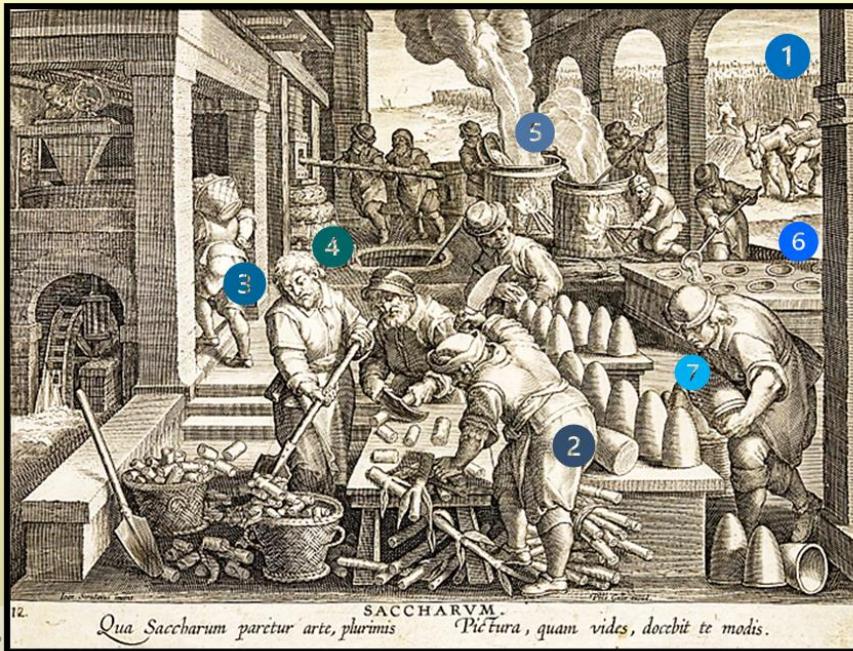
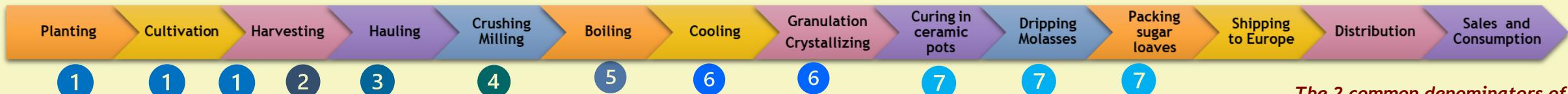
Sugar-Sugar. America Part I

General Discussion about the Primitive Sugar Value Chain

What can we infer from a drawing plate made by Jan Van Der Straet 16th century

The sugar cane plantations of Spanish America created a philosophical approach between the "patron" and "workers" that has persisted to our days: Labor in concealed serfhood.

The sugar cane production in one drawing... What was the primitive value chain of Sugar by 1492



- Our acumen when using our tools from "corporate strategy as an art" help us to identify the main steps of the sugar cane extraction and original production of sugar sketched in the 16th century by the Dutch Jan Van Der Straet.
- This is the general primitive sugar value chain in its most detailed description. Each imperial nation with a sugar plantation footing in America modified or twisted it a bit, depending on the degree of technological mechanisms of machines powered by slaves or animals or other sources of energy for boiling and refinement.
- The machinery and the infrastructure of the sugar manufacturing was correlated to the technological applications conceived for augmenting the "productivity" and "low cost-production" of the commodity.
- We will explore in detail 5 sugar production business models. As a bonus, we will dig into the particularities of the fifth model, the French one of the colony of Saint-Domingue, the most productive colony of sugar of the Antilles.

Portuguese

British

Dutch

Spanish

French

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The 2 common denominators of the sugar industry have always been the quest for high productivity at the lowest possible cost.

These two essential drivers of the historical model of the sugar industry created a global economic system with an unprecedent labor philosophical approach that has persisted into our days (in the capitalist and the socialist-communist societies).

The slave labor (as the key production factor) that powered the sugar industry for 500 years is the foundation of one of the most complex problems of Spanish American societies that has not been overcome yet: Labor in concealed serfhood.

Central America: A Quest for the Progression of Economic Value. Season IV.

From 1700-1900: The origin of Central America political-economy.



Sugar-Sugar. America Part I.

General Discussion about the Primitive Sugar Value Chain

The process of sugar manufacturing described.

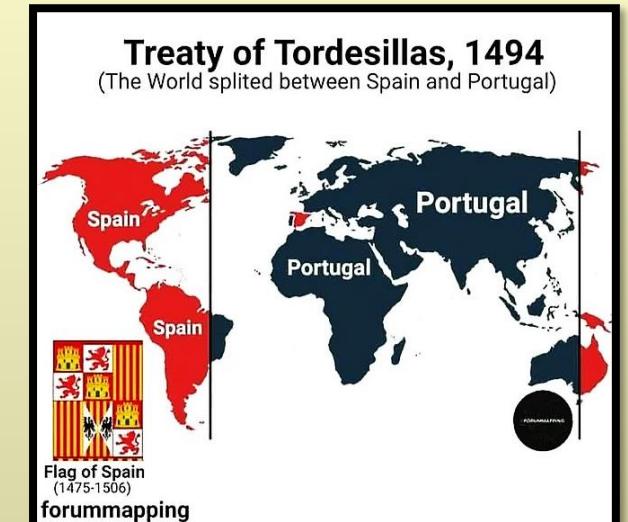
The labor foundations of the sugar plantation and its processing was African slavery.

- The premises of sugar plantations' labor were based on the prototype that slave labor was an essential requirement for the sugar industry to operate.
- The importance of sugar grew from the 16th century (as an European elite product for sweet dishes of the royal households and the rich) to the 18th century, as "THE MOST lucrative commodity of its time".
- However, its importance in Spain, Portugal and the rest of Europe, it wasn't until the British developed the sweet paladar, that sugar consumption skyrocketed. During the second half of the 17th century, Britain demand increased by fourfold, and it increased 20 times, between 1660 to 1775.
- The demand of sugar in Europe also expanded with the spread of tea, coffee, chocolate and the bakery products.
- According to Mintz, the growth of sugar production and consumption was tied to industrialization and pre-capitalism.
- The sugar processing factory used the first models of European factories in America. The industrial

processing was required to be done in or near the place of the plantation: between the 16th and 19th centuries certain technologies were applied to planting, harvesting, processing, storing and shipping of sugar and its by-products.

- **Planting and Harvesting:** Plantation owners used enslaved Africans for planting, weeding, hoeing, hauling and spreading of dung by hand, tending, harvesting and transporting the cane to the sugar factory which was segmented in different separate buildings, or under one larger warehouse with separated facilities that divided the workstations according to the process described in slide 5.
- **Crushing mill for juice extraction:** Once the cane was cut by hand, it was fed into the mill by hand by the slaves. The milling machine was a three-roller device arranged horizontally or vertically and geared with the moving power applied to the middle cylinder.
- The mill could be powered by wind, water, animal power, or by humans.

The Portuguese held the monopoly of slave trade from the year of the Treaty of Tordesillas (1494) until 1641. All the slave trade from Africa to América was performed by Portugal then. Illegally other naval superpowers as the Dutch tried to participate on it. Between 1624 to 1654, the Dutch West India Company occupied the northeast of Brazil. Portugal expelled the Dutch from Brazil, but the slave trade for plantations became an international affair for all the naval empires.



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Sugar-Sugar. America Part I.

General Discussion about the Primitive Sugar Value Chain



The process of sugar manufacturing described.

The labor foundations of the sugar plantation and its processing was African slavery.

- **Boiling:** Once the cane dark brown juice was extracted, it flew by gravity into the boiling house. The juice was sieved, to strain all the cane fragments, and it was directly boiled using heat coming from firing wood or cane dried bagasse. This first heating pan was known as a clarifier, and it was part of a boiling train.
 - **The boiling train:** Each plantation (according to its business model) held a different boiling process, but the most common one was a furnace with a series of 4 to 5 great copper kettles or pans, situated from the largest to smallest. These pans were called cauldrons or clarifiers or chaudieres. The specialist of the boiling house was called the boiler, who was constantly skimming impurities off the surface, and ladling the liquid into the next copper. The evaporation reduced the liquid, and finally the juice syrup turned into a dark brown thick ropey mass.
 - **Cooling:** At the point of crystallization, the boiler diminished the fire and ladled the substance into a cooling cistern, for granulation. These cooling vats were made of wood or cooper. The cooling lasted between 6 to 14 hours.
 - **Curing:** After cooling the sugar taffy-paste form was packed into containers and allowed to drain. These containers were of ceramic pots or clay vase molds with a hole at the bottom, to permit the molasses to drip out. This last part of the manufacturing process was done in the curing room, close to the furnace boiling room. The potted sugar remained for 30 days and then the cone shaped golden-brown sugar loaves were removed from the molds. The middle 2/3 called muscovado was then packed, while the bottom and the top of the cone was re-boiled.
 - **Packing and further draining:** Packed muscovado was shipped and refined upon arriving to England before being distributed. To produce white sugar, the Golden refined sugar passed by a second curing in ceramic molds, sealed at the top with a moistened clay cap. The moisture seeped through the pot, dissolving the molasses and dripping them out. The final product was the sugar soft and white. Let's see the plates of the process on the next slides.

Sugar cane was usually planted 16 to 18 months before harvesting. Planting needed to coincide with rainy season. Harvesting with dry season.

Fields were planted to be cut between January and May, but not all at the same time, to allow to ripen at intervals.

Boiling the dry season (Between January and April) the mature cane was harvested by hand using slaves.

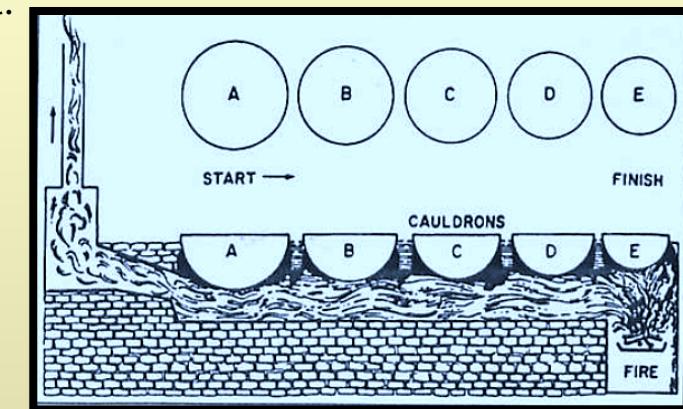


Image:

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Sugar-Sugar. America Part I.

General Discussion about the Primitive Sugar Value Chain

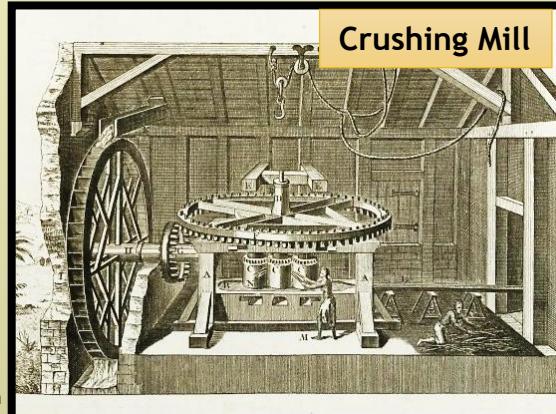
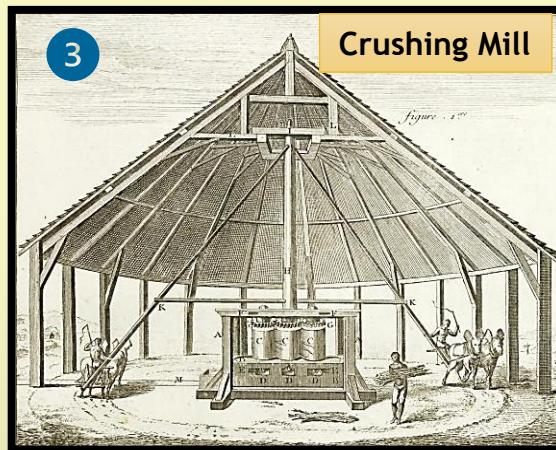
The process of sugar production described in illustrations. 1/2

The labor foundations of the sugar plantation and its processing was African slavery.

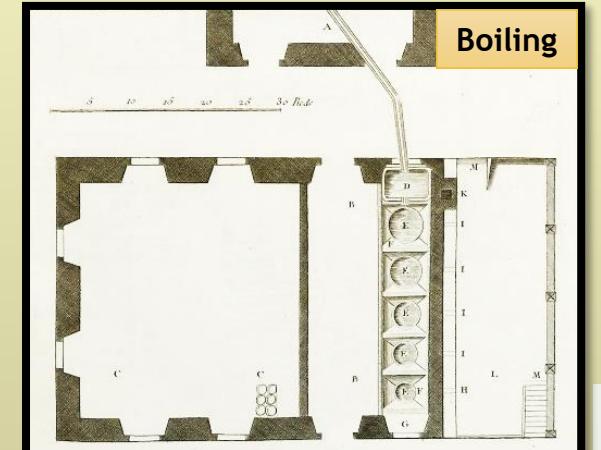
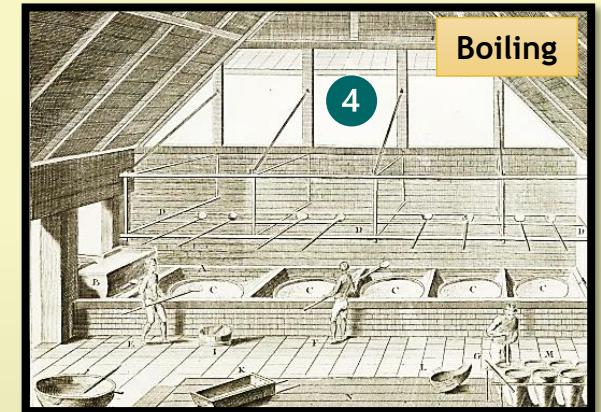


2

Hauling



The bottom-line paradigm for the planters:
There could be no sugar without slaves.



Images from the Diderot Encyclopedia 1762.

https://ia801809.us.archive.org/34/items/a_24_23.vol_01_rustique/a_24_23.vol_01_rustique.pdf

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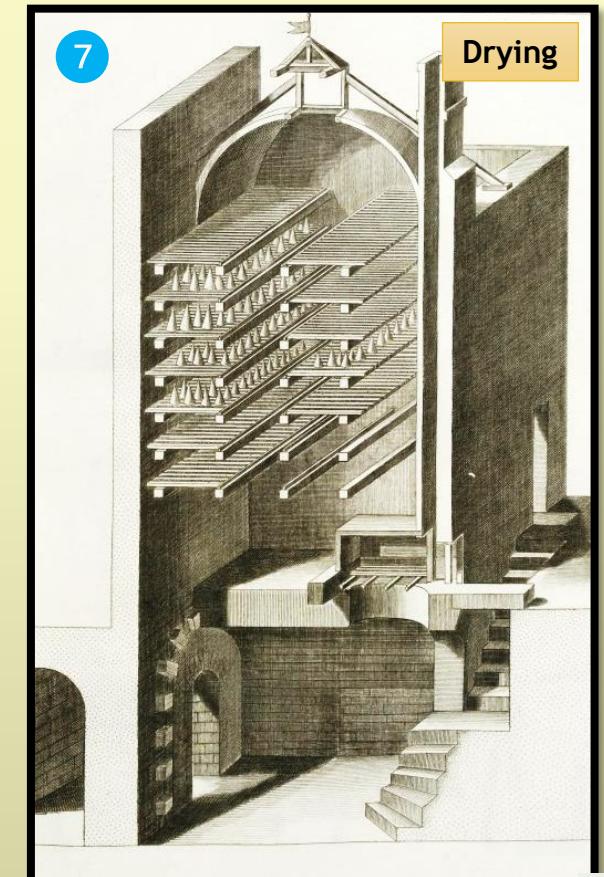
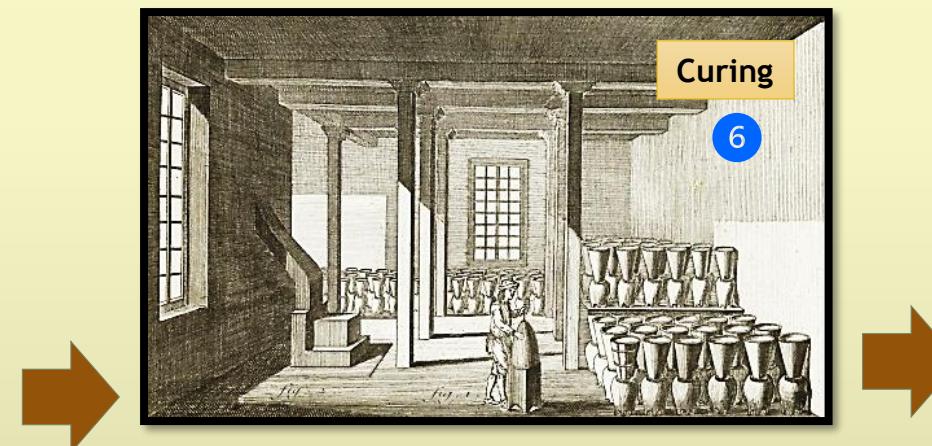
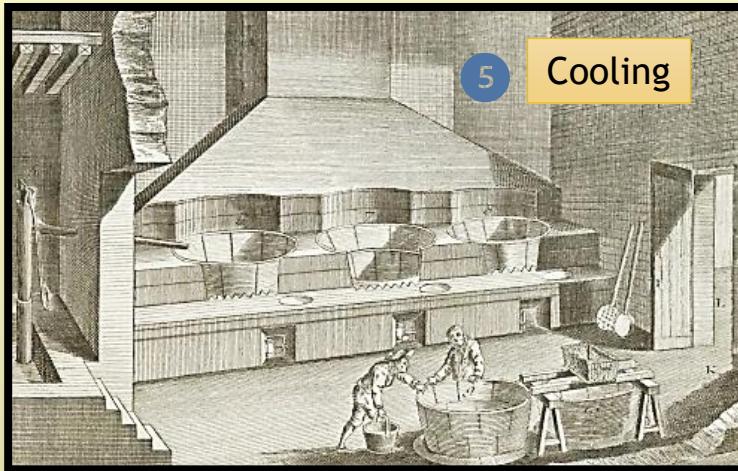
Sugar-Sugar. America Part I.

General Discussion about the Primitive Sugar Value Chain

The process of sugar production described in illustrations. 2/2

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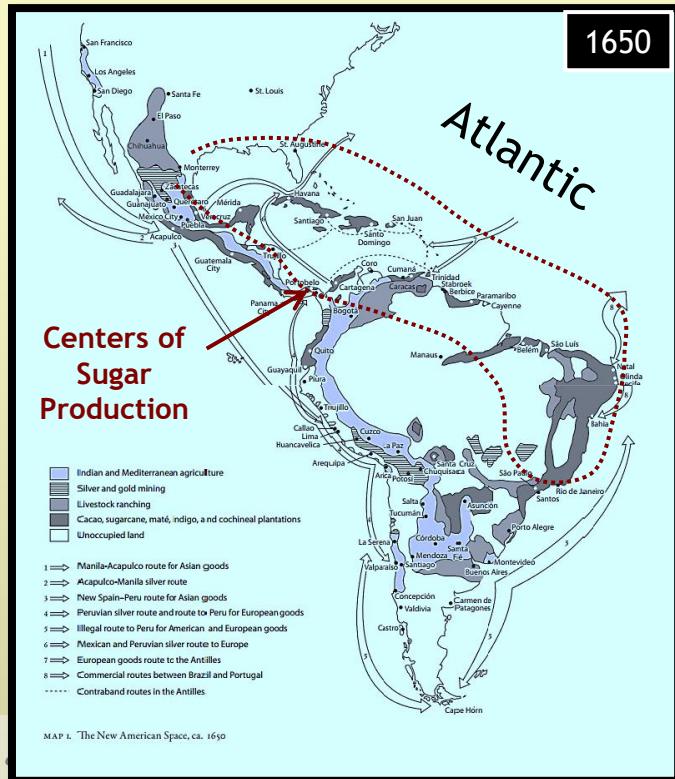


Sugar-Sugar. America Part I.

The rise of sugar crops at the West Indies, between 1500 to 1900

The sugar track

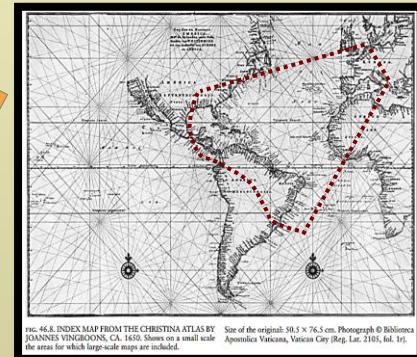
The sugar plantation complex business model was geographically set in such a way that the Atlantic coast of Spanish America (with the Caribbean Islands included) fulfilled a specific sugar supply design for the 5 top European empires.



Suppliers

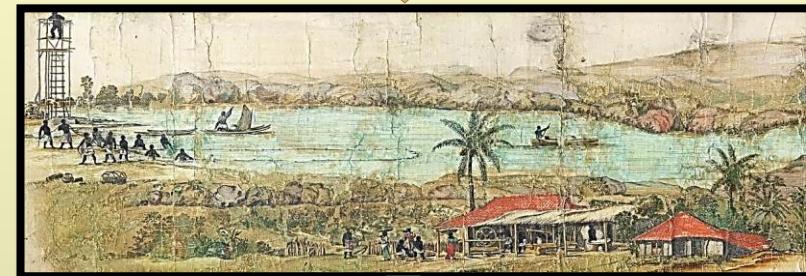
The Planters in direct vassalage to each respective empire crown

The World of Sugar 1650



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The sugar cane plantations was the main crop that triggered colonization and shifted the land economic development (utilization of the land, labor and infrastructure development) of the sugar Atlantic regions



Images from the map
<https://croucharebooks.com/browse/the-most-important-map-of-brazil-published-during-the-dutch-golden-age/>

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Sugar-Sugar. America Part I.

The rise of sugar crops at the West Indies, between 1500 to 1900

The decimation of the native pre-Hispanic populations created the conditions for sugar plantations

Sugar plantations was the main driver to change the landscape, the population patterns, the maritime routes, the labor systems (using the Atlantic trade slave), the relationship between patron-workers, and the concept of prosperity based on low-cost strategy.



Landscape

The European-Style of agriculture changed the landscape of the Sugar lands.
The growth of the cities of medium size were those born with the settlements for sugar plantations, hacienda farms and the mining ventures.



Population

Initially, the native Indians were raided by organized colonizers to be sold to planters. This occurred systematically in Bahia, Pernambuco, Ilhéus and the Caribbean Sugar Plantations (Mainly in Santo Domingo). Later when Indian population almost disappeared, the importation of African slaves began (as of 1600s).



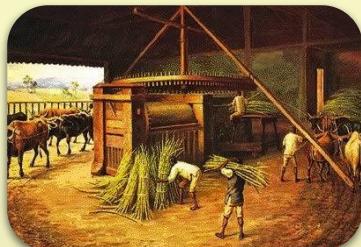
Maritime Trade Activity

The royal monopolies of sugar created commercial maritime routes with fleets and convoys to a from America supervised by the Casa de Contratación of Sevilla and the Casa da India e da Guiné in Lisbon. The Caribbean Antilles initially in the hands of the Spanish were then divided in French and English Antilles producing sugar and shipping it through the Atlantic.



Labor system

When the native population diminished, the lack of laborers caused the forced peonage. When Africans arrived as of the 1600s, the conditions for slavery were institutionalized as a rule of thumb for sugar planters. The African slaves were advantageous for the Sugar Plantations' owners.



Enterprise

Each empire developed its own sugar business model. The three main factors for enterprise building
(1. Ownership Structure
2. Supply of labor
3. Access to credit), different for each of the 5 Empires. We will study each of them in detail.



Prosperity based on low-cost strategy

The formula of $\text{Price} \times \text{Volume}$ for plantation crops was established in terms of the product and its European demand.

The sugar as a commodity implied a low cost-strategy, for which labor was reduced to the minimum.

Other crops such as Indigo and cochineal were in a different differentiation for quality standards, but still the labor cost was reduced to the minimum.

The first places for sugar plantations were the Antilles islands. Sugar cane became the leading Caribbean crop for Spain, until the British and French took over certain Antilles territories and continued its expansion as of the 17th century.

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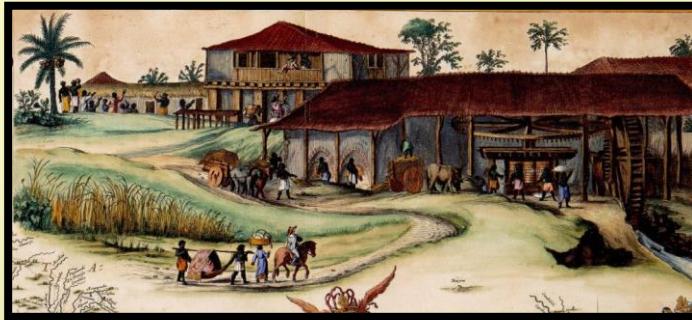


Sugar-Sugar. America Part I.

The Brazilian Business Model - the geneses

The bottom-line paradigm: There could be no sugar without slaves.

Colonial Brazil from 1500 to 1750.



Sugar mill with water wheel on a section of Pernambuco's map. Detail from Joan Blaeu, Georg Marcgraf, Frans Post, Map of Pernambuco and Tamarica, 1665. Koninklijke Bibliotheek, inv. nr. 1043 B 14.

- As soon as the Portuguese arrived at Northern Brazil, the Crown's priority was to develop the land for sugar crop development.
- In parallel to gold mining, sugar crops became the core business for Kings Manuel I and Joao III.
- Portuguese planters of Madeira and Canary Islands replicated the same model in Brazil.
- The land was flat, with good soil, excellent rainfall and fine forests for the supply of firewood and other supplies at the coast of the Atlantic ocean for transatlantic shipping.

- When the indigenous populations resisted to work in sugar cane plantations, while its annihilation occurred, the business model of sugar cane turned to African Slaves labor, in massive way.
- Let's explore the origins: The royal crown of Portugal divided the Brasil's coastline territories in 14 captaincies using the strategy of offering land grants with extensive governing privileges.
- By 1532, sugar production began in the captaincy of Sao Vicente. This entrepreneurial endeavor was under the supervision of Martim Afonso de Souza.



Images from the map
<https://www.raremaps.com/item/27437/le-bresil-dont-les-cotations-sont-divisees-en-capitaineries-dres-de-fer>

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divisees-en-capitaineries-dres-de-fer

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"A sugar mill is hell, and all the masters of them are damned"
Father Andrés de Gouvea, Bahia, Brazil. 1627



Ruins of the First Engenho of Brazil. Engenho São Jorge dos Erasmos. Established in São Vicente, 1532.

- How did the sugar crops and its factories become one of the most powerful industries of Brazil, during this period (From 1532 to 1750)? Let's see the three crucial factors for its growth:

Ownership

Initially, the Crown granted vast territories to Captaincies appointed individuals. In general, there was a lawful separation between the owner of the sugar mill factory and feudal lords of the Crown's land. The granted lands were royal property. The "señor del engenho" was the sugar mill owner who established his large residence in feudal terms as the leader of several vassals who supervised the crops.

Labor

Portugal held the best geographic access to African Slaves from the Start. To use African bonded labor was natural, because Portugal held the territories of Africa, and its Atlantic passage was shorter for transportation purposes. The low costs for establishing slave African labor as the foundation of the sugar industry started here.

Access to credit

Until the decade of 1620s, the Portuguese access to credit and capital was limited. Planters required debt to operate the upfront costs of the plantations, to buy African slaves, and keep their haciendas. European merchants provided that credit. The Dutch played an important role by providing credit to the Portuguese.

More in next slide.

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Sugar-Sugar. America Part I.

The Brazilian Business Model - the geneses

Royal control of Brazil took place in 1549.

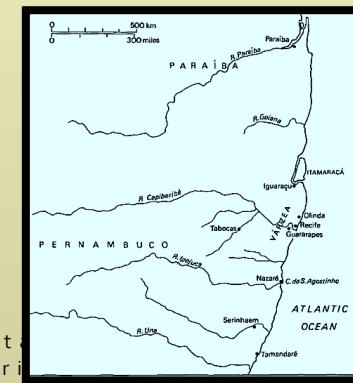
Colonial Brazil from 1500 to 1750.

Ownership

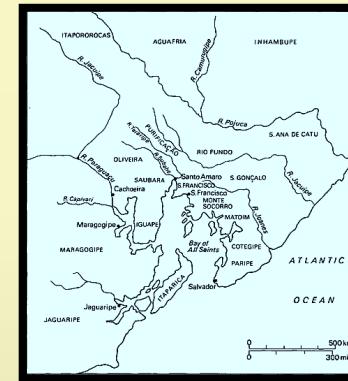
- The structure of the ownership of the Brazilian sugar industry was changing overtime, in several phases.
- The first phase lasted from Brazil's discovery by Pedro Alvares Cabral's (1500) to the end of the period of King Joao III Aviz-Aragon Castile (1557). The second phase took place under Philip II of Spain (leading Portugal), and the third phase with Dutch Brazil until 1750.
- Initially during the first quarter of the 16th century, the priority for the Portuguese crown was their factories and trading with Asia. However, as of King Joao III, he divided the Brazilian Atlantic coast territory in 15 hereditary captaincies, which were land fiefs. He favored courtiers, who were known as "donatarios" who wielded extensive rights and privileges. In 1549, Governor general Tomé de Sousa was appointed by the king to incorporate and defend the territories from the French, and to unify the inefficient donatarios under a central administration. The capital was established in Salvador de Bahia. The Jesuits accompanied Sousa's efforts, by evangelizing the natives through missions. In the process, the Jesuits acknowledged the perfect human condition of the natives and began to defend them from enslavement for the plantations.
- Sousa's state government structure allowed the flourishing of the sugar industry as it was designed by the "senhores de engenhos" (Ingenios or sugar mills). Each donatario led the sugar mill owners of his territory.
- With time, from all the captaincies, only São Vicente and Pernambuco were successfully profitable under the model of plantation societies, in which all the population involved was pivotal to the production of sugar.

- Pernambuco's coast plantations held fertile massapé soils of the flood plain of the Capibaribe, Ipojuca and Jaboatao rivers
- In Bahia, the boats for moving goods to the engenhos facilitated the logistics. The most productive mills were located at the water's edge and were powered with water.
- Since the engenhos were the economic engine core of the colonies, the ownership of them was crucial. However, each captaincy granted part of its fief in the hands of the "senhores de engenhos" or planters.
- The planters were not of high rank nobility, but Portuguese commoners who saw in sugar the "means" to wealth and upward mobility. The luxury status of their residences and lavish lives were beyond what they could attain in Portugal
- The senhores de engenhos were not from Portuguese hereditary nobility but molded a Brazilian colonial aristocracy. Their access to the royal power was difficult, only through the Church or government representatives.
- The planters were the rich of Brazil but not considered nobles in Portugal.

The
Pernambuco
Coast.
Source: C. R.
Boxer,
Salvador de
Sd and the
struggle for
Brazil and
Angola 1602-
1686 (London, S
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The Bahia's reconcavo.

The "engenhos" high productivity in Pernambuco and Bahia in Brazil during the 17th century were the result of a mix of its perfect climate and top natural fertilized lands, technical skills transferred from Madeira-Canaries, coerced enslaved labor, tyrannic management and access to European and Dutch-Portuguese Merchants capital-credit. Additionally, sugar was the core of the economy, because gold wasn't extracted until the 1700s.

The sugar mills or engenhos were the medium for Portugal to settle in Brazil. Without sugar, that region could have been taken by the French or the Dutch easily. The engenhos were the central essence of Brazilian life.

- Planters appeared to have resided in their "casa grandes", the privileged residences of their sugar states, but were moving back and forth to the port cities and the main villages.
- When the profits were good, planters invested in cattle ranches, shipping, merchant activities and urban properties. The sugar mill owners continued his commercial activities in the cities.
- There was also another group of farmers, who did not own their own sugar mills, but who supplied cane to the engenhos factories of others. These were called "Lavrador de caña". On average during the 17th century, there were 4 to 7 cane farmers for each engenho supplying cane under a variety of contract arrangements. There were also "lavradores of captive cane", that were sharecroppers working an engenho's land on a share basis or under tenancy, or under obliged indenture to the sugar mill owner to pay the credit.
- The decisive value-chain power was in the hands of the sugar mill owner.
- The establishment of a sugar mill was expensive, only through credit or loans.

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Sugar-Sugar. America Part I.

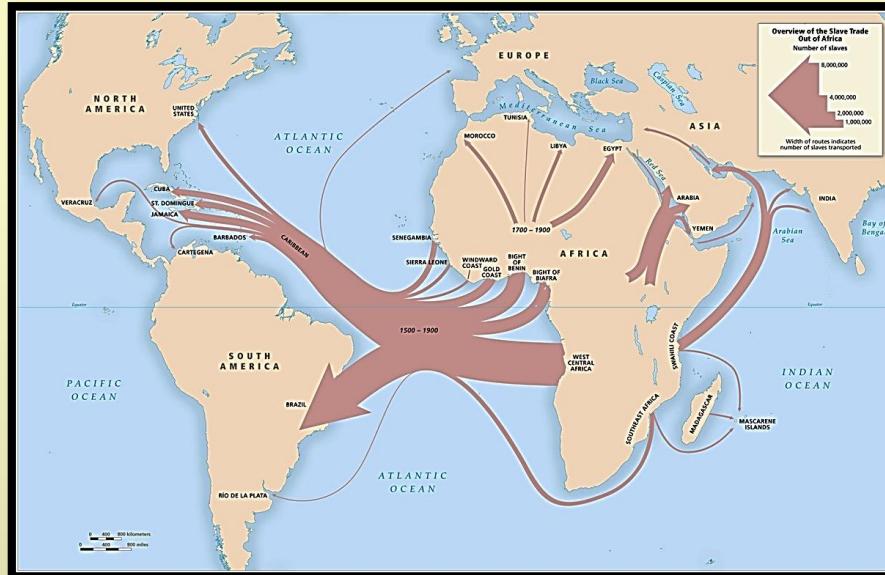
The Brazilian Business Model - the geneses

Sugar and Slaves - The Foundation of all the mess that has been perpetuated in our business models.

Colonial Brazil from 1500 to 1750.

Slave Labor

- The social organization of the plantations was founded in slavery. The process of the transformation of sugar, affected the way of hiring labor, and the utilization of African slaves. The nature of the sugar cane planting, harvesting, milling, boiling, clarifying, purging and refining of the product hardened the nature of the workforce activities.
- The sugar cycle in was determined by the safra. During the safra, the cane has to be cut at the right moment, and then must be processed immediately, otherwise the cane could be rotten and the juice ruined.
- During the safra, the work activities were arduous and shattering. In Brazil, the safra lasted from 8 to 10 months. For example, the Jesuit-owned engenho Sergipe do Conde in Bahia safra's duration lasted around 300 days on average, in comparison to the Jamaican sugar mills of 120 days.
- The high yields of Brazilian sugar exacerbated the labor conditions for the slaves: slaves had no gap time to rest. Basically, their break was only one day a week, with daily schedules from 4 pm to 10 am at the sugar mills, and all day at the fields while planting and harvesting. At the sugar fields, a pair of slaves was obliged to cut and bind 4,200 canes a day.



Overview of the slave trade out of Africa, 1500-1900. David Eltis and David Richardson, *Atlas of the Transatlantic Slave Trade* (New Haven, 2010) <https://www.un.org/en/observances/decade-people-african-descent/slave-trade>

SLAVERY 1 of 2



The sugar Brazilian planters became linked to the Slave Atlantic Trade. They rejected the idea to let the African slave families to reproduce, because raising a slave child until 14 years old was a risky investment. High levels of infant and teenager mortality occurred. They kept a marked gender imbalance to avoid natural slave population growth: Ratio of two African slave men to every woman.

- In summary, the slave's high mortality rates were explained by the nature of the activities of sugar fields plantations and sugar mills. The rhythm and pace for work was exhausting.
- Additionally, technicians of the sugar mill were required to ensure the constant level of production to build and maintain the machinery. Usually, these skilled technical workers were free-men (artisans, carpenters, managers, boilers, maintenance repairmen, etc.).
- How many slaves were employed by each engenho? It depended on the size. An average Ingenio required between 60 to 100 slaves for operations. However, a large estate producing over 100 metric tons a year, required 200 or more, only in the sugar factory facilities.
- After the demographic collapse of the Indigenous natives, the Portuguese crown was under pressure from the Jesuits to stop using Indigenous for safra.
- The transition from Indian to African slave labor, took some time as of 1570s. For example, at the Engenho Sergipe the slave force in 1574 was only 7% African, in 1591 was 37% African, and by 1638 was totally African.

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Sugar-Sugar. America Part I.

The Brazilian Business Model - the geneses

Sugar and Slaves - The Foundation of all the mess that has been perpetuated in our business models.

Colonial Brazil from 1500 to 1750.

Slave Labor

- I would like to introduce why was slavery used in the sugar plantation Brazilian Business Model.

Year	Price per arroba of white sugar (A)	Price per male slave in reis (B)	Annual value of slave output C = A x 40 arrobas	Monthly value of slave output D = C/12	Replacement life in months E = B/D
1608	1,080	30,000	43,200	3,600	8.3
1622	556	29,000	22,290	1,860	15.6
1635	812	39,000	32,749	2,730	14.3
1650	1,125	49,000	45,151	3,760	13.0
1670	1,177	45,000	47,080	3,923	11.5
1680	1,109	43,000	44,360	3,696	11.6
1700	1,600	80,000	64,800	5,400	14.8
1710	1,200	120,000	48,000	4,000	30
1751	1,400	140,000	56,000	4,666	30
average	1,006	63,888	44,850		16.6

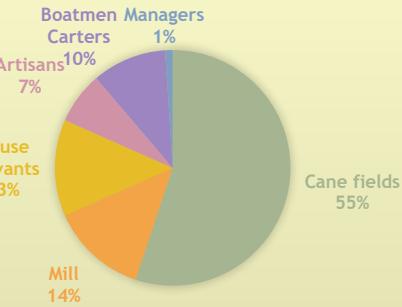
Table: Slave Productivity in relation to original purchase price (in Reis currency)
Each slave produced one crate of 40 arrobas of sugar per year.

SLAVERY 2 of 2



The sugar business model was based in profitability at the lowest possible cost. Slaves represented the higher cost of production (most of the time around the 40% of total).

- African slaves were used for all kinds of labor, not just for plantation activities. However, most of the slaves were used in the fields for planting and harvesting.
- Data from Bahia engenhos of 1728 shows the following distribution of slaves at the plantations:



- The relationship between the slaves and the managers was despotic. The master of the engenho and his administrator/supervisors held a natural hostility towards the slaves, accusing them of devils practicing witchcraft, thieves and enemies. Punishment was the norm, as much as rum was the reward.
- African slaves were owned in perpetuity, until death. African slaves who survived 3 or 4 safras, were promoted to experienced operational roles.

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The Brazilian Business Model - the geneses

Between 1580 to 1700, Brazil was the world's largest producer and exporter of sugar.

Colonial Brazil from 1500 to 1750.

Access to Capital and Credit

- It is important to understand how the royal house of Avis of Portugal accessed capital for their sugar business endeavors.
- Initially, as of the 15th century, the Portuguese royal family began a permanent base in Antwerp. The Feudal Merchants of Portugal (operating directly for the royal Avis Crown), established sugar-refineries in the vicinity of Antwerp to receive the golden-sugar loaves from Madeira and Canaries Islands.
- The disruption of the sugar last part of the value chain occurred as such: Italian refiners moved from Venice to Antwerp when Brazilian and Caribbean sugar arrived as of the 16th century. Soon the gold and ivory coming from Portugal territories in Africa followed.
- Shipping unrefined sugar from Lisbon to Antwerp was done by Genoese and Portuguese vessels. However, Bruges continued to provide access of capital.
- It wasn't until the Portuguese began to import the spices from India, that Antwerp supplanted Venice an Bruges as a financing center and wholesaler hub of spices and refined sugar (after 1510s).
- By 1508, the South German distributor merchants bought sugar and spices at Antwerp rather than Venice for distribution to Central and Eastern Europe.



Arrival of the first sugar loaves of sugar to Antwerp in 1508. H Kraemer

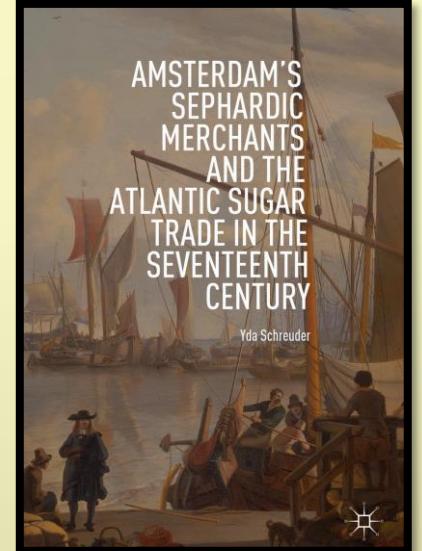
- The Seville and Lisbon-Antwerp link grew with metals and sugar exports. The top refining operations were situated in Antwerp. The financing Jewish Community of Spain moved to Antwerp, which became the dominant commercial hub for sugar financing of Brazil operations, until 1560s.
- The Spanish terror imposed by the Duke of Alba under king Spanish Philip II Habsburg-Aviz reign blocked the business activities. The sack of Antwerp by the Spanish Army in 1577 caused a stampede of flight of investor and entrepreneurs who moved to Cologne.
- At the end of king Philip II Habsburg-Aviz life, Antwerp was not financing sugar commerce anymore but Amsterdam.
- Free trade between Portugal and the United Provinces was permitted as of 1588, and Brazil began to attract the Dutch financers to Pernambuco.

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The sugar industry established in Brazil during the 16th and 17th centuries was totally for exports to Portugal (Lisbon) and then distributed, mainly to the Dutch in Antwerp.



Amsterdam remained Europe's primary sugar refining center through most of the seventeenth century and how Sephardic merchants played a significant role in sustaining the sugar trade.
<https://link.springer.com/book/10.1007/978-3-319-97061-5>

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The Brazilian Business Model - the geneses

Some relevant data about the sugar industry growth in Brazil.

Colonial Brazil from 1500 to 1750.

Captaincy	1		% growth p.a.		3		% growth p.a.		% growth p.a.	
	Gandavo	Cardim	(1 to 2)		Campos Moreno	(2 to 3)	Cadena	(3 to 4)		
1570	1583				1612		1629			
Pará, Ceará, Maranhão										
Rio Grande				1						
Paraíba				12			24	(4.3)		
Itamaracá	1			10			18	(3.5)		
Pernambuco	23	66	(8.4)	90	(1.0)	150	(3.1)			
Sergipe				1						
Bahia	18	36	(5.4)	50	(1.1)	80	(2.8)			
Ilhéus	8	3		5		4				
Porto Seguro	5	1		1						
Espírito Santo	1	6		8*		8				
Rio de Janeiro				14*	(5.8)	60	(7.9)			
São Vicente, Santo Amaro	4				2					
Totals	60	115	(5.1)	192	(1.8)	350	(3.6)			

All the information of these slides is supported and inferred from the bibliography page 19-20.

Brazil golden age of sugar ended just as that of Barbados began. We will explore this business model next week.



The first table is about the number of sugar mills per captaincy, researched by 4 scholars in 4 different timings: Gandavo, Cardim, Campos Moreno and Cadena. The last report of Cadena listed around 350 sugar mills operating in 1629.

The second table shows us the production of sugar in arrobas per year in different areas. You can observe the yields of production per sugar mill and the total per year.

Data from
<https://www.cambridge.org/core/books/cambridge-history-of-latin-america/F2EE5AAC592CFA2D4A427F11B3762643>
 Chapter 12. Colonial Brazil 1580-1750; Plantations and Peripheries.

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Sugar-Sugar. America Part I.

Dutch Brazil period, and why it matters?

Explaining the period of Dutch Brazil (1624 to 1654)

Initially, the aspiration of the Dutch by taking over the Northeast part of Brazil was in the context of the brutal war between Spain and the Dutch Republic (80 years war) and the Thirty Years war.



Map of Dutch Brazil:

https://www.researchgate.net/publication/316352787_Precursors_of_the_Botanical_Exploration_of_South_America_Wilhelm_Piso_1611-1678_and_Georg_Marcgrave_1610-1644/

All the information of these slides is supported and inferred from the bibliography page 19-20.

8/1/2026

- When Portugal was united with Spain as of Philip II Habsburg Aviz between 1580 to 1640, Brazil faced multiple attacks from Spain's commercial enemies.
- The Dutch seized Salvador de Bahia in 1624-25, but in 1630, the Dutch West India Company captured Pernambuco and kept its control for 25 years.
- The priority for the Dutch was clear: John Maurice, Count of Nassau-Siegen, was probably the best administrator of the Netherlands, and he was sent to understand how the Portuguese plantations were operating.
- Additionally, the presence of the Dutch in Portugal was a matter of an agenda under the interests of the Dutch to be free from the Spanish Habsburgs.
- This incursion of the Dutch into Brazil, allowed the Dutch to explore directly the territories, making inventories of the Botanical and Fauna beauties of the region.
- Several bankers to the Sephardic Portuguese working in the sugar value chain of sugar were linked to the presence of the Dutch West India Company (WIC) in Brazil. The success of the sugar economy was in Europe, and Amsterdam-Antwerp played a crucial role then. The Dutch WIC called the loans it had made to the Luso Brazilian planters in the past, causing a crisis.
- When the Dutch attacked Brazil, the Portuguese suffered a major disruption in their sugar industry and shipping; and the Dutch did not leave Brazil, until the 80 years war in Europe was over.

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The period of Dutch conflicts and occupation of the North-East Part of Brazil caused a tremendous harm over the sugar economy of Brazil.

- By the end of the conflict between the Dutch and Luso-Brazilians, in 1654, Brazil was recovered under the Portuguese, but the commercial map of sugar changed completely.
- The Dutch learned the best practices of the Brazilians, and invested in the Sugar production of the Caribbean, as much as the English and the French colonies of the Antilles. Increased production from these new suppliers, kept the prices low, and the market supply of sugar in Europe expanded, with fierce competition, and rising cost of slaves by the end of the 17th century.



John Maurice Nassau-Siegen.
<https://www.ebsco.com/research-starters/history/maurice-nassau>

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*Our next stopover will be the
British and Dutch sugar business
models*



Image Source:
<https://www.economista.net/actualidad/La-zafra-azucarera-redujo-su-produccion-en-Guatemala-un-7.2--durante-2021-20210729-0008.html>

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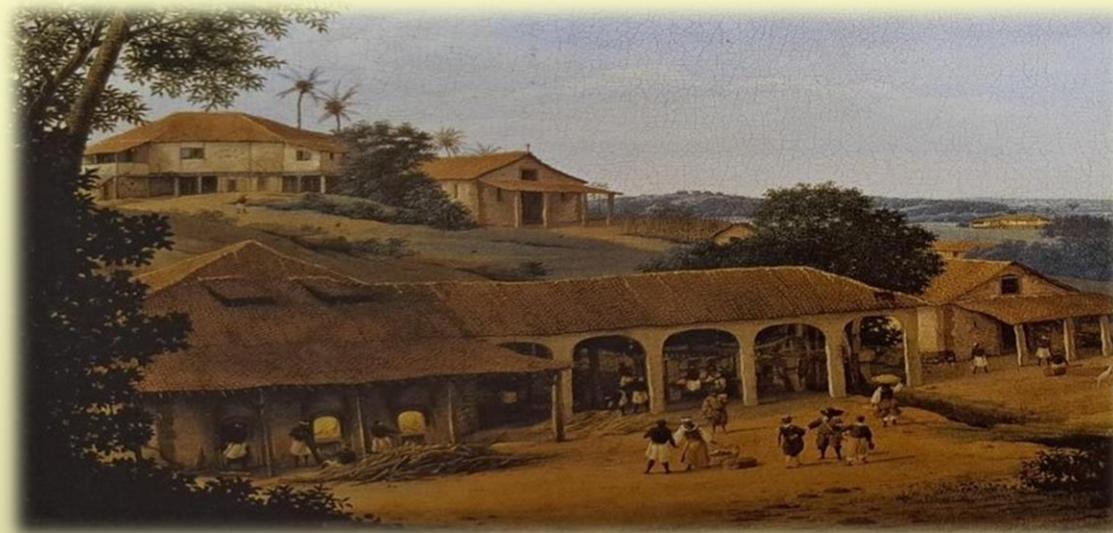


Image from <https://bahia.ws/en/engenho-de-acucar-no-brasil-colonia/>

Our next stopover will be the British and Dutch sugar business models of the Caribbean Islands



Sugar sugar in Central America 18th-19th centuries
Photo: Galería Guatecaña.

Thank you
The origin of Central America political-economy.
Period of study: From 1700 to 1900

<https://eleonoraescalantestrategy.com/>