Trade and the colonial economies: 1500–1828

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16.1 Introduction

Economic historians have placed commercialization at the centre of Europe's early modern capitalism, emphasizing the importance of domestic and international trade, shipbuilding and concomitant industries, the financial sector and urbanization. As the Iberian polities extended geographically to Africa, Asia and the Americas during the early modern period, trade, whether domestic, international or colonial, had a critical effect upon economic development. However, as we will see, the economic impact of colonial expansion was uneven across Iberia. There is now a consensus among economic historians that in Iberia commercial exchange associated with the overseas empires produced surprisingly few backward and forward linkages in the European national economies (O'Brien & Prados de la Escosura, 1999; Costa et al., 2015). The question this chapter seeks to address is thus to what extent and how Iberian trade, especially colonial trade, supported or hindered economic development in the early modern period.

The general trends and cycles of economic and commercial expansion are clear. As seen in Chapters 10 and 11, the Iberian Peninsula emerged from the economic and demographic setback brought about by the Black Death (1347–1351) into a period of territorial and maritime expansion. In 1415 the Portuguese conquered Ceuta in Morocco. By 1500 the Portuguese population had recovered to pre-plague levels despite recurrent famines (see Chapter 11). Population growth picked up across the peninsula over the sixteenth century accompanied by an increase in agricultural output, the development of a significant manufacturing sector, and the Christian conquest of the last southern Islamic polity, Granada, coinciding with the early conquests in the Americas. In the last quarter of the sixteenth century, however, gradual changes in geographies of international trade and subsequent processing in the supply chains led the Iberian kingdoms first to stagnation, and then to a period of decline that found its nadir in the 1630s.

The Portuguese economy subsequently followed a path of gradual expansion of population and per capita income from the 1630s to the 1755 Lisbon

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earthquake (with the exception of years of the War of Spanish Succession, 1701–1714). This was followed by a slow-down during the second half of the eighteenth century. Spain recovered more slowly from the crisis in the seventeenth century. Overall the population grew from the 1640s onwards, with the highest annual rates occurring in the eighteenth century. In the aftermath of the post-1590s crisis a significant shift saw the centres of economic gravity move permanently from the interior to the coastal regions in the two largest reigns, Castile and Aragon (see Chapter 11 and Álvarez-Nogal & Prados de la Escosura, 2007b). The end of the eighteenth and beginning of the nineteenth century witnessed a relative decline of the Iberian economies, culminating in the French invasion and the ensuing Peninsular War (1807–1814), a conflict that seemed to confirm Portugal's and Spain's place as economically backward nations of the European periphery.

Recent research stresses the significant divergence in impact of colonial and intercontinental trades between Spain and Portugal. Without the empire, Portugal's per capita income may have been at least one-fifth lower (Costa, et al., 2015). Nevertheless, the assistance provided by the empire to the domestic economy was not sufficient to offset Portugal's relative decline in relation to Europe's advanced nations. Salary levels began to fall behind from the seventeenth century onwards and, after a recovery in the eighteenth century, worsened significantly at the beginning of the nineteenth century. Spain's domestic economy owed far less to colonial trade at any point in the early modern period. In macroeconomic terms the colonial empire had little weight in the great cycles of the Spanish economy. And yet 'the Indies were a vital cog in an institutional and economic system that shaped interregional relationships in the period of formation of a [Spanish] national economy' (Yun-Casalilla, 1998: 148).

In order to assess the importance of European trade and the empire in the development of the Iberian economies, this chapter starts by exploring the early geographies and main trading routes of the Iberian commercial expansion in the Atlantic World, Asia and the Pacific, including the rise of the transatlantic slave trade (Section 16.2). Section 16.3 looks at the institutional set up and the protagonists of the expanding extra-European trades. Section 16.4 analyses the eighteenth century reforms to the colonial political economy. Finally, Section 16.5 deals with the goods traded to and from the colonies. We conclude by examining the mutual economic impacts between the Iberian metropoles and their colonies, and between Iberia and Europe.

16.2 Iberians from Europe to the Atlantic, Indian and Pacific Oceans: First Steps

Since antiquity, the location of the Iberian Peninsula in south-western Europe, between the Mediterranean and the Atlantic Ocean, and close to the African continent, allowed its kingdoms and regions to participate in important

international trading routes in the north and south of Europe, and the eastern Mediterranean. Geography is critical to understanding Iberians' head start in setting up transoceanic exchanges from the late fifteenth century onward. Grain-deficient coastal areas of the peninsula, especially in Portugal, sought supplies from beyond the sea. At the same time, the late medieval economic recovery coincided with the beginning of Ottoman control of both the eastern Mediterranean and the major overland routes that connected Europe and Asia. Iberians were to capitalize on both developments, and the Atlantic World was the natural arena for their commercial expansion.

The agricultural sector stood at the core of late medieval and early modern Iberian societies, with a focus on the production of wine, fruits (fresh, salted, in jam or dried), olive oil and grain, accompanied by extractive activities like salt extraction, timber, collection of cork, or iron winning and metallurgy, and last but not least shepherding. These products, produced or extracted domestically, were exported to other European countries; by the sixteenth century in particular to the Low Countries (north and south), England, France and the Italian peninsula. Return cargoes consisted often of specialized textiles and foodstuffs, in many regions grain, and from the later sixteenth century onwards large quantities of dried fish.

For Castile, wool exports to the Low Countries, France and Italian territories were particularly important in terms of their backward linkages in the domestic economy. Castilian merchants, particularly from Burgos, but also from other regions such as the Basques provinces, established themselves in Bruges and other major European commercial hubs (Casado Alonso, 1996; Priotti, 2005). Until the third quarter of the sixteenth century, the trade was carried in Iberian ships, departing from the different kingdoms in the Peninsula. However, the participation of vessels from the Spanish regions in European trade declined dramatically with the war interruptions of the late sixteenth century and would only become important again in the eighteenth century. Economic warfare repeatedly led to redirections of trade flows, such as the relative rise of English markets for Spanish wool in the mid-seventeenth century (Grafe, 2005).

Portuguese merchants also had an important presence in the main north-western European and Mediterranean ports. Yet, domestically produced exports took second place behind the redistribution of overseas products that arrived from the empire as soon as the 1450s. The demographic expansion post-Black Death, the need for redistributive rents and lands for a growing nobility, and the economic incentives associated with a Papal Bull of Crusade led to the Portuguese conquest of North African strongholds after 1415. Aiming at participating and reaping the outputs of the east–west Saharan caravan trade, the Portuguese looked for cheap and readily available sources of grain to feed a growing population, military and religious posts for the nobility, and the rights and rents of plundering and enslavement associated with the Bull (Mendes, 2016).

Portuguese North African conquests stood as an extension to the discovery and settlement in the Azores Archipelago and Madeira, from where further expansion southwards along the West African coast ensued and came to include the Atlantic Archipelago of Cabo Verde and São Tomé. The Castilian monarchy meanwhile brought the Canaries Archipelago under its control in the late fifteenth century. Famously, Castilian armies in 1492 conquered the Kingdom of Granada, while Columbus's expedition reached the Caribbean, ushering in the conquest and colonization of the Americas. In 1497, the Portuguese Vasco da Gama sailed around the tip of Africa and along the eastern coast of Africa to reach India, and, in 1500, a Portuguese fleet commanded by Pedro Álvares Cabral arrived in Brazil.

Simple conquest quickly gave way to colonial exploitation and redistribution with the initiation and rapid increase of sugar production in the island of Madeira after 1455. Sugar became a cornerstone of Iberian colonial trade in the sixteenth and seventeenth centuries. Portuguese investors expanded sugar cultivation and the plantation complex in São Tomé and, after the 1520s, in Brazil as seen in Table 16.1. Their Castilian peers introduced the same practices in the Canaries. Sugars from Madeira, the Canaries, São Tomé and Brazil competed in the same Iberian and international markets, but consumers in Northern Europe apparently favoured the sugar from São Tomé and were willing to pay a premium. In order to impose its production, Brazilian sugar often initially had to be sold as if it originated from São Tomé. But, notwithstanding the cunning of Brazilian producers, Brazilian sugar began to dominate European consumption by the end of the sixteenth century mostly because of continuous slave revolts in São Tomé. The threats revolts posed to production together with the notoriously high death rates on the island, where malaria

Table 16.1 *Sugar production in the Portuguese colonial empire, 1515–1617 (*arrobas*).*

	Madeira	São Tomé	Brazil
1515–1525	200,000	100,000	
1527–1529	123,170		
1535–1536	135,860		
1550	40,000	150,000	
1578		175,000	
1581–1584	38,000–40,000	200,000	350,000
1610			735,000
1617			1,000,000

Source: Costa et al. (2016: 78).

is endemic to this day, provided a competitive advantage to Brazilian sugar production in detriment to that of São Tomé or Madeira.

As island sugar lost out to Brazilian production, Madeira and the Canaries turned to wine cultivation to first complement then substitute sugar. Early imports from the Spanish colonial territories in the Caribbean and the mainland were more varied than those from the Portuguese islands. Plantation production would not become an important part of the Spanish American economy until the late eighteenth century. In contrast to the early Portuguese expansion, Castilian colonizers focused mostly on the control of labour resources in America and the expansion of the 'domestic' American market, rather than production for export to the peninsula. The early expansion of the Spanish American economy was therefore less export driven. Cochineal and indigo dyes, hides, pearls, cocoa, non-plantation produced sugar and various other products made up the list of Iberian imports until silver production from Potosi (today's Bolivia) and Zacatecas (Mexico) took off after the mid-sixteenth century. Silver quickly began to dominate imports to Castile, if not in terms of volume certainly in terms of value. After 1572 imports of Asian textiles and porcelain were trans-shipped via Manila and Acapulco to Seville, though a significant part of the cargoes in fact remained in the Americas and found their way to the major consumption centres of the viceroyalties of New Spain and Peru (Bonialian, 2020).

For Portugal, commodified sugar was joined early on by gold imports from Castelo da Mina (today's Ghana), which increased significantly between 1480 and the 1560s to *c*. 25 million *réis* per annum (Godinho, 1982–1984, I: 286). This abundant and continuous influx of gold stimulated conspicuous consumption on the part of the Crown, increased the income of the Exchequer through taxation and, above all, provided Portugal with enough specie to pay for foreign imports, particularly from Flanders, to supply Portuguese consumption of northern manufactured goods. Though gold imports from Castelo da Mina declined by the last quarter of the sixteenth century, a second cycle of Atlantic gold ensued after the discovery of gold mines in Brazil by the end of the seventeenth century. Following a similar trading circuit as sugar, and certainly before large-scale sugar production, brazilwood became a major colonial import in the Iberian Atlantic. The dyewood, in high demand in the textile producing areas of the Low Countries, England and Italy, became a significant source of wealth for the Portuguese Crown and a major colonial export onto the European domestic markets (Antunes et al., 2016: 26). It was the dyewood that stood as collateral for the conspicuous consumption of the Portuguese Crown at the Portuguese Factory of Antwerp and as guarantee for Portuguese public debt in the Antwerp market.

The Portuguese so-called Cape Route to Asia was originally organized as a yearly fleet, the *Carreira da Índia*. The fleet sailed from Lisbon to Goa with some European products, but mostly administrative, military and church

personnel, as well as convicts and emigrants. On the return voyage, the *Carreira* transported luxury goods (pepper, nutmeg, cinnamon, textiles, precious stones, etc.) from Goa to Lisbon, which were also re-exported to European markets. Cotton textiles and silk grew in importance towards the end of the sixteenth century as other Europeans entered the Indian Ocean exchanges and competed in the pepper trade (Godinho, 1982–1984, III: 17, 21, 24, 49; Boyajian 1993: 203). Throughout the sixteenth and seventeenth century, Asian trade was of enormous importance for Portugal and for Portugal's economic relations with the rest of Europe. After 1572, the Manila galleon from Acapulco to Manila was the purest expression of a global pattern of trade, in which Europeans had few goods but silver to offer to Asian markets in exchange for mostly luxury manufactured goods, such as porcelain and silks, which were highly sought after in the Spanish American and European markets.

The degree of integration and overlap between Castilian and Portuguese Atlantic trading routes differed by region and product. On the whole, in Asia separate interests were jealously guarded, though economic actors often ignored them. Yet, from the start, one new trade depended on the closest cooperation between the Iberian reigns. First the Caribbean islands and then the densely populated areas of Meso- and South America experienced an unprecedented demographic collapse throughout the sixteenth and early seventeenth centuries (Livi Bacci, 2008). As the arrival of European epidemic diseases dramatically increased mortality, conquest-related social, cultural and economic dislocation and labour exactions decreased fertility. The land–labour ratio increased dramatically, resulting in an ever-growing demand for labour, which from the start was overwhelmingly met by the forced migration of enslaved Africans. In the Spanish territories, enslaved people were employed in urban households, small farms, cattle raising, non-plantation sugar production and as skilled labour in the crafts. Silver mining in Mexico and the viceroyalty of Peru relied mostly on paid free and coerced indigenous labour (*mita*) and interestingly only marginally on enslaved labour. In 1597 enslaved Africans might have accounted for 14% of the labour force in New Spain's mines and the share fell thereafter (Tutino, 2018). Only the small gold mining sector in today's Colombia drew heavily on enslaved labour among Hispanic American mining centres. By contrast, in Brazil plantation production and later mining dominated the demand for enslaved labour throughout. Portuguese sugar imports relied heavily on a circuit of trade in enslaved Africans that grew concomitantly to the increase and expansion of the sugar production in the Atlantic.

Portuguese access to the African coasts especially on the Gold Coast and in Angola, combined with Portuguese shipping and Spanish and Portuguese capital and a trans-Iberian legal and contractual structure drove the initial expansion of the transatlantic slave trade. The first cycle of cross-Iberian

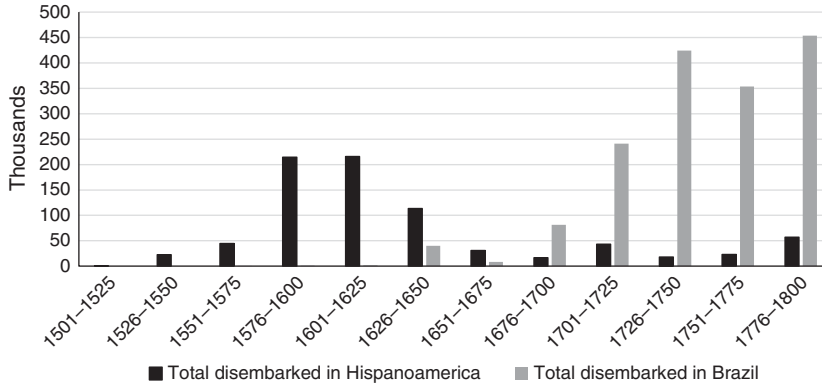

Figure 16.1 Number of enslaved Africans disembarked in Iberoamerica, 1500–1800. Source: Trans-Atlantic Slave Database (www.slavevoyages.org) (accessed March 2018).

collaboration in the slave trade collapsed after 1640 partially due to events in West Africa, partially due to the Portugal's War of Restoration (Rodrigues, M. G., 2019). By then more than half a million enslaved Africans had been taken to the Spanish territories. The total number of enslaved people arriving in Brazil thereafter, though expanding rapidly, would not exceed that in Spanish America until the early to mid-eighteenth century, when the trade in humans experienced another dramatic acceleration as seen in Figure 16.1.

The first transatlantic trade in enslaved Africans dated back to the fifteenth-century colonization of Madeira, Cabo Verde and São Tomé by the Portuguese. Patterns developed here were expanded and adapted to the trade with the Americas from the start. Thus, what we now refer to as the transatlantic slave trade was created in the fifteenth, sixteenth and early seventeenth centuries in the Iberian Atlantic (Borucki et al., 2020). It was the only trading circuit that in various forms persisted during the Iberian early modern colonial period, extending still into the nineteenth century with Portugal, Brazil and Angola as by far the largest traders, in demographic terms and voyages, of the transatlantic slave trade, according to the recent findings of the Trans-Atlantic Slave Database. Spanish American demand for enslaved Africans would rise again in the late eighteenth century and the early nineteenth, when also for the first time, Spanish, especially Andalusian and Catalan, investors would be important participants in the trade to Cuba and Puerto Rico.

16.3 Institutional Foundations and Actors

In the Iberian empires the control over maritime and colonial expansion was a royal prerogative and, as such, Iberian Monarchs claimed sovereignty over territories and maritime frontiers overseas (*mare clausum*).

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However, the capital to be invested in the new colonial territories was entirely private in the Castilian case and overwhelmingly so in Portugal. Hence the distribution of rights over labour services to be performed by subject indigenous populations, the taxation of subsoil natural resources, trade and consumption, and the deployment of jurisdictions (religious, military, mercantile, civil and criminal) were almost always commodified as a way to provide income and redistributive capacity to the colonial polity as part of royal prerogative. The institutional implementation of such revenue-raising powers took a variety of forms, from proper economic monopolies, to licensing structures, different forms of public–private partnerships and, later on, joint-stock enterprises.

As conquered territory, the Spanish *Indias* became politically subject to the laws of the conqueror and were incorporated into the Castilian monarchy. While Spanish conquerors and settlers recreated familiar political organizations through the foundation of towns, the monarchy rolled out a structure of viceroyalties (initially Peru and New Spain), *audiencias* and regional treasuries in an attempt to curb the power of the *conquistadores*. The Portuguese expansion in the Atlantic World and Asia combined territorial control over Brazil and to a lesser extent Angola with a much more complex, dynamic pattern of trading routes across Asia. Brazil was first divided into donatary captaincies, which included religious, military and administrative jurisdictions, bestowed upon donatary captains as reward for their service to the Crown. Since the Portuguese presence on much of the west coast of Africa, in the brim of the Indian Ocean, the South China Sea, the Straits of Malacca, the Indonesian Archipelago, China and Japan rarely went beyond more or less urbanized strongholds on the coast and some land exploitation in the hinterlands, municipal and urban institutions stood at the forefront of colonization. In those areas where Portuguese control was more consolidated, the Crown named the highest officials, such as viceroys (Goa, the seat of the administration for the *Estado da Índia*), captain majors (Macao, Castelo da Mina, Cabo Verde and São Tomé) or governors (Brazil, Angola).

In their own minds, Iberians' claim of sovereignty over conquered territories was at least partially justified by a duty to convert indigenous populations transferred to them by the papacy. In that sense, monarchs had the right of *Padroado* or *patronato*, meaning the jurisdictional right to appoint clergymen in the empire and carve a societal space for religious courts, including the Inquisition. The latter, however, had no jurisdiction over the indigenous population in Spanish America, which was considered under the tutelage of the monarchy. As a consequence of that legal conception, which likened indigenous people to minors, the enslavement of indigenous populations was legally banned in the 1540s in Spanish America (though the practice never totally disappeared in the remoter parts of the empire). Recent research suggests that the legislation for Brazil by contrast was kept deliberately

ambiguous. As Portuguese settlers and Jesuits vied for control of indigenous labour in the interior, the former captured and traded large numbers of indigenous people declared unwilling to bow to colonial rule until the mid-eighteenth century, while the latter restricted indigenous people's movement by binding them to the land (Perrone-Moisés, 1992; Zeron, 2011).

The political economy of the Portuguese empire was based on an institutional principle of exploitation that had royal exclusive rights at its core, which were often referred to as monopolies. Contrary to the modern economics usage of the word, royal monopolies provided Portuguese kings mostly with the exclusive right to extract, ship, trade or export a specific product. Legally akin to the right to subsoil mineral resources, which in continental Europe since the high Middle Ages was a royal right, this exclusive right was very often transferred to a selective choice of private entrepreneurs by means of a royal privilege, license or contract. The Crown outsourced the costs and risks of colonial exploitation, but also reserved it to its subjects. In this determination of subjecthood stood implicit the exclusivity of the empire for the Portuguese subjects (colonial exclusive), whether they resided in the Peninsula or abroad, and whether the latter were European or non-European by birth. This premise also implied that 'foreigners' were automatically excluded from colonial exploitation. However, royal exemptions and privileges allowed many Italians, Germans, Dutch and Englishmen to heavily and continuously participate in Portugal's colonial enterprises (Costa, 2002a).

From the perspective of the entrepreneurs, being associated with the state increased social capital and boded well for social upward mobility, while also offering significant profit opportunities. The Portuguese king was thus a manager of incomes accruing from the colonial riches rather than a direct operator. This management was effected through a hierarchy of institutions in Lisbon and the main administrative centres of the empire. The *Casa da Índia*, in Lisbon, functioned as customs, clearing and administrative house for the overseas possessions, while Praia (Cabo Verde), Luanda (Angola), Bahia (Brazil), Ormuz (Arabian Peninsula), Goa (India), Cochin (India) and Malacca functioned as customs houses and taxation offices. More often than not, the revenues controlled by these institutions were also farmed out to (local) private traders and entrepreneurs who became entangled with the Portuguese empire as subjects of the king, although not always part of the empire, particularly in Asia.

Even if the *Carreira da Índia* was created as a royal monopoly, very soon privileges were given to private merchants to transport their own goods in the bottoms of the fleet against the obligation to declare all imports to the *Casa da Índia* (Customs House for Overseas Trade) in Lisbon. The high returns in these exchanges and the intensification of the *Carreira* offered the king an opportunity to share risks and gains with a privileged minority of businessmen in Lisbon and, at the same time, enforced a monopoly for the Crown on

specific products, especially pepper. The *Carreira* transitioned thus from a general royal monopoly to a public service bestowed upon private entrepreneurs who were expected to respect the royal monopoly over specific products. It was quite efficient in including all Portuguese (and some foreign) merchants trading to Asia. The supremacy of the fleet was only challenged in the beginning of the seventeenth century. The entry of the Dutch and the English East India companies to the Cape Route was, however, not the only reason why the *Carreira* declined. The *Carreira* was already sending fewer ships by the end of the sixteenth century. Simultaneously, Dutch and English competition resulted directly in heavy losses in the trade in spices, especially pepper, for the *Carreira.* But textiles and dyestuffs remained extremely profitable endeavours for private merchants transporting their imports in the *Carreira* bottoms.

Beyond the *Carreira* there was a Portuguese inter-Asian system of trade that was only slightly linked to it. The *Estado da Índia* claimed control and as such imposed taxes on specific Portuguese strongholds and maritime mobility throughout the Indian Ocean, But Goa was unable to control all Portuguese subjects in Asia and their endeavours. Many served Asian polities and later European competitors, some chose to be only slightly or remotely connected to the *Estado*, as was the case of Macau or Malacca, while others opted to form alliances with local interest groups, like those involved in the raiding and trading of Bengali slaves together with the Arakanese. Others still, invoked their loyalty to the king (instead of to the viceroy in Goa) as a pretext to have privileged access to the *Carreira*, as was the case of the naturals and residents of Cochin. In this interconnected world of mobility and exchanges, the Portuguese interests were as important and strategic as the interests of the different Portuguese or Luso-Asian communities dispersed throughout the Indian Ocean, the South China Sea or the Pacific. In this sense, most investments, gains and losses by subjects of the Portuguese king in Asia were raised, accumulated or paid in Asia.

The degree of enforced exclusivity of trade also differed across trades and over time in the Portuguese East and West Atlantic. The production and commercialization of sugar, for example, was unregulated for much of the early modern period. But with the Dutch occupation of the north-eastern captaincies of Brazil between 1630 and 1652, the conquest of Luanda between 1641 and 1649, and the definitive conquest of Castelo da Mina, King John IV opted to form the *Companhia Geral do Comércio do Brasil* (1649–1663). The company had the monopoly of brazilwood imports. Meanwhile, merchants trading to and from Brazil were forced into a convoy system, which continued to exist until 1769, long after the *Companhia* had ceased to exist, and after Dutch pressure in the South Atlantic had disappeared. The convoy was supervised by the Junta do Comércio, under the jurisdiction of the royal *Armazens and Terecenas* (Costa, 2002b).

Similarly, the trade in gold from Mina, and the extraction and trade of brazilwood were officially royal monopolies, and the latter became increasingly regulated during the late sixteenth and early seventeenth century. But these regulations were often trespassed by private traders as was the case of the gold from Mina, where estimates place about 20% of the total imports in the hands of private investors (Godinho, 1982–1984, I: 58). In the case of dyewood, although a royal monopoly, it was only seldomly exploited directly by the Crown as more often than not it was auctioned as contract to private businessmen or given as payment for a different colonial contract (e.g. for the provisioning of the Portuguese forts in North Africa).

Portuguese colonial trade was carried by three types of actors. The metropolitan European traders, concentrated in Lisbon, and with few chronological exceptions in Porto, Viana do Castelo and Vila do Conde for the Atlantic trades can be separated into contractors (*contratadores*), wholesalers (*mercadores de grosso trato*) and retailers (*mercadores*) (Costa, 2002a; Polónia, 2007). The contractors were responsible for the central tax farming (over colonial products) and the logistics of maintenance of colonial settlements and supplying fleets. The wholesalers were often wealthy merchants who were responsible for the import of colonial products, cash crops and agro-industrial products for the domestic markets and their re-export to the Northern European and Mediterranean markets. This group often overlapped with the contractors or worked in close partnerships with them. Finally, the retailers were responsible for the supply of the urban and rural markets in Portugal and across the border to Spain. At times, they also participated in specific inter-European trade, but did so when in partnership with wholesalers or under contract with the contractors. Contractors and wholesalers were particularly important in colonial transactions as they were not only a bolt in the exchanges of colonial and European products in the Lisbon and European markets, but they were also responsible for the financial remittances, for private traders and the Crown, from the colonies to Portugal, from there to the colonies and in-between the colonies.

Beyond an exclusive metropolitan elite, Portuguese colonial trade was mostly carried within local systems by merchants born or long-settled in the overseas sphere (Alencastro, 2007; Bohorquez, 2020: 32). The development of the South Atlantic complex took place through joint initiative of traders born and/or settled in Brazil, Angola and Cabo Verde, whereas a circuit for the exchange of products and people ensued. Although this system of exchanges and transfers often took place without the heavy intervention of metropolitan traders, financial support, remittances and large tax farming remained in the hands of metropolitan firms, while local tax farming, credit and the bridging of production outlets and consumption markets remained in the hands of local investors. In the case of traders born in the South Atlantic, they reflected the principles of the societies of *métissage* whence they came. Similar cases developed in the Indian Ocean, the South China Sea and the Malacca Straights.

The third group of traders operating within the Portuguese empire was that of the non-Europeans. Some of these traders were considered by the Portuguese authorities as subjects of the Portuguese king, although many were not. Africans (especially in the areas between the Senegal and the Gambia rivers), the Loango and Benguela Coast, the Island of Mozambique, Arab traders in Ormuz, Hindu merchants in Goa, Araknese slave raiders and traders in Bengal, the Chinese of Macau or the Catholic Japanese of Nagasaki functioned as parts of the Portuguese empire and multiple spheres of influence in terms of trade, credit and long-term commercial and productive exchanges (Winius, 2011).

The large array of participants in Portugal's colonial exchanges resulted in three phenomena. On the one hand, a sharing of economic interests between Portuguese authorities and non-Europeans who were crucial to the success of different settlements or spheres of influence of the empire, even when the systemic intervention of Portugal as a colonial power decreased. The Portuguese *Estado da Índia* after the 1620s is a case in point. At the same time, the partnerships between non-Europeans and members of local Portuguese societies (either born in Portugal or locally) designed spheres of economic interest that often diverged from those of the empire as such (Halikowski-Smith, 2010: 12; Machado, 2014; Radhika Seshan, 2016: 351). For this reason, the local economic logic of empire superseded the general goals of the Portuguese Crown, with colonial trade feeding colonial markets and traders without intervention from Lisbon. The case of the South Atlantic or the exchanges between Goa and Brazil illustrate this. Finally, the overall nexus of the empire was kept intact through a localized, systemic and centralized system of tax farming (over production, trade and access to natural resources) that framed the empire as such, but accommodated greatly the interests of the other layers of the system. In such a context, sovereignty was a theoretical perception emanating from Europe, as authority was continuously (re-)negotiated ad hoc.

Following Columbus's first return to Spain from the Indies in March 1493, the Castilian monarchy considered creating a state trade monopoly similar to the one established by the Portuguese king to trade with Africa and Asia. But the idea was discarded at the turn of the century. On the one hand, to exert total control over the exchanges with and exploitation of the vastness of the conquered lands in the Americas, as opposed to a number of ports without much hinterland, required a bureaucratic apparatus that far exceeded the monarchy's capability. On the other hand, as the richness of silver deposits in Mexico and Peru became evident, it seemed obvious that the sinews of transatlantic trade (its routes, frequency and tonnage) were to be specifically designed to connect the metropole with the two main bullion-producing American regions. From the start, the Spanish kings left the daunting task to organize these transatlantic trades in the hands of private individuals, though they always kept a close eye on their activities.

The system of regulation that would become known as the *Carrera de Indias* eventually combined three well-known commercial institutions of its time: a staple port system, convoys and control over the trade in the hands of a merchant guild. The monarchy decided that both communications and commercial exchanges with the New World would be conducted exclusively from Seville, an important commercial hub located 52 miles up the River Guadalquivir in western Andalusia. The *Casa de la Contratación* or House of Trade was established here in 1503 to control trade, navigation and migration (Fernández-López, 2018). It granted licences to passengers, merchants and vessels, kept records of all the cargoes shipped to the Indies, and collected taxes, among other things. It also had a court of law to deal with all cases emanating from transatlantic communications and exchanges. In 1524 the Castilian Monarch created the Council of the Indies, the supreme governing body of the Spanish empire for nearly three centuries. It formulated and implemented policies concerning every aspect of life in the New World, from government and defence to trade and the administration of justice (Schäfer, 2003). In the tradition of Castilian governance (see Chapter 12) most regulations emanated from adjudication *ex post* between different interests, since it also served as the highest court of justice in all matters related to the Indies.

Similar to the Portuguese policy of creating a colonial exclusive, non-Castilians were legally forbidden from travelling to and establishing themselves in the Indies, and transatlantic trade was to be carried out exclusively by Castilians. The policy was first adopted in 1501 and reaffirmed in 1518, 1522, 1530 and 1539 to ensure that the colonies would be free of 'heretics' such as Jews, Moors, Protestants and their descendants (Martínez, 1983: 37–39). Yet, the status of 'Castilian subject' did not exist. In the peninsular reigns of the Spanish monarchy it was up to urban corporations to bestow that right on newcomers (Herzog, 2003), making it legally impossible to establish a colonial exclusive (Grafe & Pedreira, 2019) no matter the political intentions. Willing migrants to the Spanish Americas generally found a more or less legal way to board a ship and not return. Foreigners turned to *testaferros,* Spaniards who acted as representatives for their business to ship their goods.

As transatlantic traffic grew, the *cargadores* or merchants trading with the Indies in 1525 demanded a merchant court and guild similar to the Burgos *Consulado* (f. 1494), which had been the first of its kind in Castile to follow the model of the Mediterranean *consolats de mar* of Valencia (founded 1283) and Barcelona (founded 1347). The *cargadores* argued that the House of Trade's court was unable to deal with sufficient celerity with the increasing number of commercial litigations. In 1543 the monarchy finally allowed them to create a court specialized in mercantile matters whose three judges (a *prior* and two *cónsules*) would be elected among merchants trading with the Indies (Fernandez Castro, 2014). The court/guild's official name was *Consulado de Cargadores*

a Indias. Gradually, along with the House of Trade, it became the other central institution governing transatlantic exchanges. Its functions were mirrored in Mexico City and Lima, where *consulados* were created in 1592 and 1613 respectively, indicating *criollo* merchants' maturity and independence from their peninsular counterparts (Hausberger & Ibarra, 2003).

The function of the wholesale merchants established in the viceregal capitals of Mexico City and Lima was to intermediate the trade in bullion and a few other colonial products for manufactured goods, mostly textiles, from their Peninsular counterparts. While the emerging mining centres articulated large interregional trade networks within the Americas (Assadourian 1982), inter-colonial maritime trade was often forbidden or greatly hampered for fear that bullion would escape the official transatlantic channels, which it often did. Innumerable royal decrees and regulations issued by the Spanish monarchy were precisely intended to bolster a trading system meant to assure that bullion exports should reach Spain rather than other American or European destinations. Yet, silver mining was a private activity, and most bullion shipped was private and hard to control.

By the 1560s the Spanish Atlantic trading system had been laid out in the form of two armed commercial fleets departing from Seville and, due to increasing problems of fluvial navigation, the nearby Andalusian ports of Sanlúcar de Barrameda and Cádiz: one fleet destined for Veracruz (the main seaport of New Spain) and the other for Tierra Firme (the northern coast of the South American mainland). The merchandise and Peninsular merchants travelling in the latter would meet the Peruvian merchants and their silver (who would have previously come in another fleet sailing northwards from Callao along the Pacific rim) in the Isthmus of Panama, where a fair would take place on its Atlantic side at Nombre de Dios or, after 1597, at Portobelo. On the homeward leg, both fleets were meant to rendezvous at Havana before crossing the Atlantic (Stein & Stein, 2000: 8–19).

The number of merchant vessels that would form a fleet was not predetermined. For each fleet a total tonnage was put forward by the *Consulado* for the House of Trade's consideration and approval (García-Baquero, 1992: 88–104). Once the fleet's tonnage was sanctioned, two thirds of it were allocated to the *cargadores* of Seville and the remaining third to those of Cádiz. Total tonnage was also divided by type of cargo: two-thirds were for manufactured goods and re-exports, and one-third for domestic agricultural products such as wine, olive oil and brandy. As a result, the size of the fleets could vary greatly. In the mid-sixteenth century they were made up of 15 to 20 ships. Towards the end of the sixteenth and beginning of the seventeenth centuries fleets were comprised of 30 to as many as 70 vessels. The increasing size of the vessels themselves and the decline of the transatlantic trade (at least when measured in total tonnage and frequency of exchanges) brought the number down to 10 to 20 ships after

1650. Both fleets were meant to depart annually, but their frequency became erratic in the second half of the seventeenth century, with gaps of several years.

Other means of transatlantic communication remained marginal at best until the 1740s. Seville merchants in the sixteenth century had already started to send *navíos de registro* (single register ships) to the regions outside the regular fleet system (to places such as Buenos Aires, Caracas, Campeche and Honduras), although the *Consulado* always opposed these ventures. A royal licence was required to fit them out. Up to 1650, these vessels amounted to barely 15% of all the ships and 8.4% of total tonnage crossing the Spanish Atlantic (Chaunu & Chaunu, 1955–1956, VI-1: 404–409). From 1650 to 1700, at a time when transatlantic traffic shrank considerably, *navíos de registros*' share decreased even more, comprising 6.8% of all the ships bound for the colonies (García-Fuentes, 1980: 172, 211–213).

Economically speaking, neither the *Consulados,* nor the staple, nor the convoy system constituted a monopoly. There were hundreds of merchants fiercely competing with each other at any given time. Many were members of the guild and membership probably created costs typically associated with guild membership. However, it is important to stress that, for most of the colonial period, participation in trade was de facto not restricted to guild membership (Heredia Herrera, 2004: 179–180). The *Consulado*'s members enjoyed exclusive rights over the exchanges with the Indies from 1730 to 1742 only (García-Baquero, 1992: 275). Before and after that brief hiatus, ship registers show that any Spaniard, born in Iberia or the Indies, man or woman, could ship goods to and from the colonies. Nevertheless, the most important merchants gathered around the Seville/Cádiz, Mexico City and Lima *Consulados*. They would remain the single most important representative body of commercial interests of elite merchants until the end of the eighteenth century (and in some cases beyond the end of empire).

Spanish trade with Asia relied almost exclusively on intermediation via the Spanish-held port of Manila (Bjork, 1998), notwithstanding a small number of direct shipping ventures from both Peru and Mexico to Asian markets in the early and mid-sixteenth century. Since 1572 a regular and regulated galleon sailed between Mexico and the Philippines. The presence of Spanish colonial institutions in Manila remained weak, and the colony depended almost entirely on both local and a large Chinese population, which articulated exchange with the Chinese markets. Recurrent outbreaks of violence, which often resulted in massacres of and among the Chinese population, were followed by the re-establishment of trading relations. The Manila Galleon was quantitatively important for the flows of bullion in the early modern global economy and for luxury consumption in Mexico and Peru, but the trade expanded only modestly over time. It did, however, represent in many ways the global dimension of Iberian trade in the sixteenth to eighteenth centuries.

The regulatory frameworks in the Iberian colonial trades were not monolithic superstructures as has sometimes been suggested. There were important legal differences between Castilian and Portuguese commercial institutions. While the latter relied more strongly on a legal notion of royal monopoly, the outsourcing of most activities to private investors created de facto different forms of licencing systems that resembled fiscal rights rather than direct production by the Crown. On the Spanish side the Castilian colonial exclusive was always legally weak. De facto the regulatory framework was guild-run and managed fiscal resources for the monarchy. A traditional staple in turn served fiscal enforcement and monitoring purposes. But there was also diversity within each system. The Manila Galleon created in the 1570s gave economic rights to the Euro-descendent residents of Manila. Trade to the Rio de la Plata either escaped regulation or was opened to other forms of access quite often (Moutoukias, 1988). The merchants of Lima and Mexico City were a match for those in Seville, though the role of large Asian merchant houses in the Portuguese *Estado* had no equivalent in the Atlantic trades. In general terms, the Iberian Crowns did not issue proper monopoly charters to private companies, as opposed to what became common practice in the American and Asian expansions of their British, Dutch, French and Scandinavian counterparts in the seventeenth century. However, there are a few noteworthy exceptions. Portugal issued several charters in the seventeenth and eighteenth centuries, although the majority were short-lived. Also in the eighteenth century, a small number of monopoly companies would be active in the Spanish territories. Most of these were part of reform attempts, to which we will return below.

16.4 Eighteenth-Century Reforms and Their Impact on Colonial Trade

During the War of Spanish Succession (1701–1714), Spain lost control over a significant portion of its colonial trade. Transatlantic communications came to a virtual halt, with the French taking advantage of the Spanish monarchy's weakness. During the peace negotiations, however, the British were awarded what they believed to be two important concessions that were passed to the South Sea Company: the *asiento de negros* or monopoly on importing enslaved Africans into the Spanish colonies (which had previously been in the hands of Portuguese, Italians, Dutch, Spanish and, since 1701, French contractors) and, included in the contract, the right to send to either Veracruz or Portobelo a 500-ton merchant ship carrying British goods every year. After the war, the new Spanish Bourbon monarchy made efforts to regain control from foreigners and revitalize transatlantic exchanges. Trade was, in fact, one of the first targets of the so-called Bourbon reforms, which gradually were to encompass virtually all spheres of imperial administration and economy throughout the

eighteenth century. Reforms affecting colonial trade were both proactive and reactive, war being the main driver of the latter (Kuethe & Andrien, 2014).

In 1717 both the House of Trade and the *Consulado de Cargadores* were relocated to Cádiz, which had become the official port of departure of the Indies fleets in 1680. In 1720, the old fleet system was bolstered by the publication of the *Proyecto para Galeones y Flotas*, a piece of legislation which, with minor tweaks, was to regulate transatlantic shipping and taxation until 1778 (García-Baquero, 1976, I: 195–215). Although very little was changed regarding the organization of trade, there were clear signs of recovery after 1720. A novelty was introduced in 1728 with the creation of the first Spanish joint-stock privileged trading company, the Royal Guipuzcoan Company of Caracas. It obtained a proper trading monopoly for Venezuela in 1742 that would last until 1784, with a clear mandate to recover from Dutch interlopers the control of cacao exports (Gárate Ojanguren, 1990). The king's decision to approve an initiative led by a group of Basque businessmen pursued another goal: to reduce the smuggling of colonial commodities (mostly tobacco) entering Castile from the Basque provinces.

The Caracas Company encouraged the production of crops such as cacao, tobacco and cotton, and constructed both war and merchant ships. Its relative success prompted the creation of other privileged companies, such as the Royal Havana Company (1740–1790), and the Royal Barcelona Trading Company to the Indies (1755–1785). Rather than monopoly rights they were awarded substantial tax cuts. The privileged companies were never seen as an alternative to either the fleet or single ships systems. Instead, they were a means to exert more control over and develop the economies of peripheral American regions or trades. From 1730 to 1778, approximately 20% of all the transatlantic voyages were carried out by ships belonging to these companies (García-Baquero, 1976, I: 136–137).

In that sense the first real break in the organization of colonial trade came in the 1740s, when war compelled the Spanish monarchy to suspend temporarily the departure of the Indies fleets. It allowed *navíos de registro* to depart from Cádiz for any American destination, including the major ports of Veracruz and Callao (Lima's seaport, which was now directly reached, for the first time, by sailing around Cape Horn). Freed from the time-consuming, costly preparations that fitting out a whole fleet entailed, transatlantic exchanges became far more frequent and dynamic, providing colonial consumers with a more extensive assortment of European goods at lower prices. Though trade (and competition) grew significantly under the system of single ships, yielding increasing fiscal income to the Crown, the government succumbed to the pressure from the Cádiz merchant elite (whose interests were aligned with those of the foreign merchant communities) and agreed to resume partially the traditional system in 1754: fleets would be resumed for the exchanges with New Spain, whereas the single ships system was permanently adopted in the trade with

Peru as well as with other destinations such as Buenos Aires, the Caribbean and Central America (Lamikiz, 2010: 81–94). The *flota* was meant to depart for New Spain every two years. The first fleet set sail for Veracruz in 1757. But before the system was finally abolished in 1778, only five additional fleets would depart from Cádiz in 1760, 1765, 1768, 1772 and 1776. These final fleets have gathered great historiographical attention, but de facto roughly 80% of Spanish transatlantic trade's total tonnage was carried by *navíos de registro* between 1755 and 1778, while the fleets to New Spain accounted for just 13% of the tonnage (García-Baquero, 1976, I: 173).

Insofar as their headquarters and trading routes fell outside the orbit of Cádiz, the privileged companies gradually began to undermine the long-held idea that the whole colonial trade should be conducted from a single Iberian staple port. By the 1750s, a growing number of government officials thought that transatlantic trade should be deregulated and opened to more ports on both sides of the Atlantic. The first major step in that direction was taken in 1765, when nine peninsular ports were allowed to trade directly with the Spanish Caribbean islands. In 1768 the permission was extended to Louisiana, and in 1770 to Yucatán and Campeche. This gradual liberalization of colonial trade culminated in October 1778 with the promulgation of the so-called *comercio libre* or free trade regulations. Colonial trade was now opened to 13 peninsular and many more American ports, though it was not applied to Venezuela and New Spain until 1788 and 1789, respectively (Baskes, 2013: 69–86).

Foreign participation remained banned. But *comercio libre* greatly simplified both taxation and the administrative paperwork to get a licence to cross the Atlantic. Its goal was to 'restore agriculture, industry, and population' in the Spanish empire. Although it led to commercial expansion, a new body of scholarship has demonstrated that the real growth of trade was a small fraction of that which historians have traditionally indicated (Cuenca-Esteban, 2008). At any rate, *comercio libre* was short-lived. It was only fully implemented after the war with Britain ended in 1783 and, although the *Carrera de Indias* would continue to exist until its final abolition in 1828, the 1797 British blockade of Cádiz marked the beginning of the end for Spain's colonial trade system. During the French Revolutionary, Napoleonic and Spanish American Independence wars, the Spanish monarchy had no option but to allow neutral foreign ships to carry out Spain's colonial trade. It was a desperate attempt to get access to the much needed American bullion and keep commercial lifelines open (Marichal, 2007).

Reforms in Portuguese colonial trade also started in the earlier eighteenth century. The Brazil convoys were heavily in debt and in 1720 taken into the Crown's general stores. A new small tax on gold imports from Brazil was used to deal with its financial liabilities and to finance the protection of the convoys. As the century progressed, measures multiplied to push back against the

operation of single ships sailing outside the fleets and the presence of foreign ships on the Brazil run, driven in large parts by the dependence on British goods and merchants. As in the case of Spain measures to try and keep the bullion trade in Portuguese hands were of limited success. Ships travelling to the East were permitted to stop over in Brazil, but relatively few did so. At the same time, the growing trade in enslaved Africans became a South Atlantic direct trade dominated by Brazilian and Angolan interests (Florentino, 1995, 103; Candido, 2013; Lopes, 2015: 56).

The second half of the eighteenth century witnessed a wave of administrative reforms associated with the intervention of the Marquis of Pombal, minister of King Joseph I. Pombal's interventions were diverse and their impact domestically and in the colonial sphere were broad and deep. Commercially, Pombal sought to push back against British influence in Portugal's colonial trade through stricter controls on the shipment of staple products from Brazil and the creation of chartered monopoly companies. The Portuguese East India Company, the Portuguese Company for the Commerce with Brazil, the Company for Trade in Chacheu and the Company for Pernambuco and Grão Pará are but a few examples of these chartered companies. Most of them were created to emulate foreign developments, to work as means of protection for a specific territory, or as means of capital lock-in for the capital market in Lisbon. Those for the north-eastern region of Brazil did in addition transform the agricultural sector and trade significantly.

Perhaps the two most important reforms in economic terms were the attempt to develop a national textile manufacturing sector for the purpose of import substitution and the confiscation of the properties owned by the Society of Jesus in Europe and the empire. Pombal's measures to develop Portuguese metropolitan industries, in particular the textile industry, met with mixed success. The idea behind the policies was the substitution of imports of textiles from Great Britain into the metropolitan and Brazilian markets by nationally produced textiles, while at the same time Brazil was legally restricted to producer of primary products and the production of manufactured goods on a larger scale was outlawed. The Portuguese textile industries responded quickly and successfully to the Pombaline incentives, but, in practice, metropolitan textiles did not substitute British textiles. Both British and Portuguese textiles were bought in Portugal and exported to Brazil. De facto they served different segments in the consumption markets. Furthermore, the expansion of economic outputs in the interior of Brazil beyond the mining outputs and the usual cash crops, enlarged the markets that were being serviced by these Pombaline textiles (Costa et al., 2011).

The decision to supress the Society of Jesus in Portugal and its colonies in 1759, and force the return of its properties to the Crown, is one of the most notable political and economic achievements of Pombal's administration. Its extinction met with echoes throughout Europe, and Spain followed suit in

1767. However, the benefits of the confiscation of the assets of the order were less straightforward. Even if the Portuguese Crown confiscated all landed properties of the Society of Jesus in Europe and overseas, these assets were often sold below market value or rented out to local businessmen or civil servants. The returns to the Crown were thus short term and of little impact in the state's or imperial finances (Serrão, 2014: 13). In Spanish America the expropriation of the Jesuits led equally to a mixture of a sell off of their large-scale investments in real estate, *haciendas*, and large numbers of enslaved Africans owned by the Society, on the one hand, and increasingly desperate attempts by the appointed administrators of the former Jesuit property, the so-called *temporalidades*, to collect on the myriad of loans that Jesuit institutions had lent to Spanish Americans from all walks of life, on the other. The process foreshadowed the financial havoc that the disentailment policies of the late eighteenth century would wreak on the credit sector in Spanish America (Grafe, 2020).

16.5 Commodities

Up to the eighteenth century, there were two main differences between the structures of colonial import and export trades in Portugal and Spain. First, Portugal imported both agricultural commodities (spices and sugar) and manufactured goods (silks and ceramics) from its empire, and colonial trade had a large impact on the Portuguese economy and treasury. In Spain, by contrast, a single colonial import, bullion, had dominated colonial trade since the 1550s. Mercantile profits were mostly the result of re-exports of European manufactured goods to the Americas and the impact of the trade was more circumscribed, both because the internal Spanish American markets were more important and because less of the colonial taxation found its way into the peninsular treasuries (see Chapter 12). Second, Portugal's trading system was multipolar and Asian (and African) trade was initially much more important than transatlantic exchanges. Spain's trade was almost exclusively concentrated on the Americas. The Manila trade was not only a very distant second, but de facto controlled from New Spain.

Portugal's multipolar colonial trading system initially integrated three circuits of overlapping commodities. The first linked the colonial world to the metropolis. Lisbon imported refined and unrefined cash crops and natural resources from the South Atlantic (sugar, tobacco, coffee and brazilwood) and re-exported most of these goods to the European markets, before or upon their processing. This import and re-distribution system was also applied for the spices and luxury products (dyestuffs and textiles) imported from Asia. The second circuit linked western Africa to Brazil and the rest of the American continent. Merchants born in Portugal, Brazil, the Atlantic Islands (mostly from Cabo Verde) and Angola were active in the export of enslaved

Africans from different points on the west coast of Africa, but with particular intensity from Loango and Angola, to Brazil and the Spanish West Indies. African authorities tended to impose the rules for bartering for enslaved Africans, which meant merchants needed to bring cotton textiles with specific patterns, cowry shells, tobacco, alcoholic beverages and, at times, gold as means of exchange. They were supplied in a third circuit met by Portuguese, Brazilian, Cabo Verdian and Angolan traders who imported, sometimes via Bahia and Rio de Janeiro, textiles from Goa, cowry shells from Angola to other points on the west coast of Africa, tobacco, gold and *cachaça* (a type of rum) from Brazil.

By the eighteenth century, however, the differences between Portugal and Spain became less obvious. The ongoing difficulties in Asia caused by European competition and the discovery of gold in Brazil led Portugal to refocus its attention to the Atlantic World and to the export of staple commodities to be re-exported to the rest of Europe. Recent research has stressed that Goa remained a vital part of the Portuguese commercial network, but in relative terms Brazil became the tail that wagged the imperial dog. This also meant that Portuguese colonial trade became less diversified and more dominated by the cycles in particular commodity trades, such as gold and sugar. At the same time, Spain, though always giving priority to bullion, tried to expand non-bullion staple imports from the colonies. It also established direct trade with the Philippines from 1765 onward.

In terms of the commodities traded by the eighteenth century, Brazilian trade was dominated by the staples of tobacco, sugar, gold and cotton, while rice, hides and other products were also increasingly important. In some of these commodities clear cycles appear, most notably with regard to gold. Others were subject to less obvious swings but also to sometimes significant changes in terms of the regions that produced them. Thus, Bahia remained the main source of Brazilian tobacco in the eighteenth century, which was a crucial product in the exchanges for enslaved Africans. Alden suggests that in the mid-eighteenth century exports of Bahian tobacco to the Mina Coast almost matched those sent to Portugal for consumption in the metropolis and re-export to the rest of Europe (Alden, 1987: 632–633). Sugar production had expanded over the seventeenth century from maybe 700,000 *arrobas* to a high of 1.3 million *arrobas* in 1710, and fell back a bit thereafter (Schwartz, 2004: 168). A significant part of that production was transhipped directly to the Netherlands between 1635 and 1650 (Edel, 1969). Sugar production expanded again in the eighteenth century to an estimated 1.6 or 1.7 million *arrobas* by 1807, especially in Rio de Janeiro and Bahia, while Pernambuco's production probably stagnated (Alden, 1987: 630–631). Coffee, too, took off in the 1770s.

The two commodities that have attracted most attention with regard to their impact on the Portuguese colonial economy as a whole in the eighteenth century were gold and cotton. Gold-mining was important in both Spanish

America and Portuguese Brazil as seen in Figure 16.2. Yet, the discovery of gold in Brazil had a dramatically larger impact on the economy of Brazil and that of peninsular Portugal (see Chapter 13) than the Spanish American production. In the 1690s, prospectors and explorers from São Paulo found placers on several rivers in Minas Gerais. In 1718, *Paulista* prospectors discovered gold in the Mato Grosso. In 1725, significant deposits were also found in Goiás though Minas Gerais remained the most productive of the three regions throughout the eighteenth century, with 72% of the total output. Brazilian gold mining from the start was part of the slavery complex. Gold production rose from 4,327 kilograms in the 1690s to an all-time high record of over 145,000 kilograms in the 1740s. Then it dropped gradually to 38,000 kilograms in the first decade of the nineteenth century. Gold deposits were superficial and widely scattered. As a result, colonial gold mining was small-scale, transient and permeated with fraud and smuggled goods. The circulation of unregistered, un-assayed gold was widespread in Brazil, with the most realistic estimates placing it at above 50% of total output (TePaske, 2010: 23).

Just as gold production declined a new sector expanded, especially in Maranhao and Pernambuco, driven in part by the policies of the new Companies created by Pombal's reforms (Figure 16.3). Cotton stood for a new exchange that would see Brazil integrated into the expanding European cotton industries, and not only the English one, from the late eighteenth century onwards. Portuguese intermediation in the sector was key, as were its links with the ever-expanding trade in enslaved people.

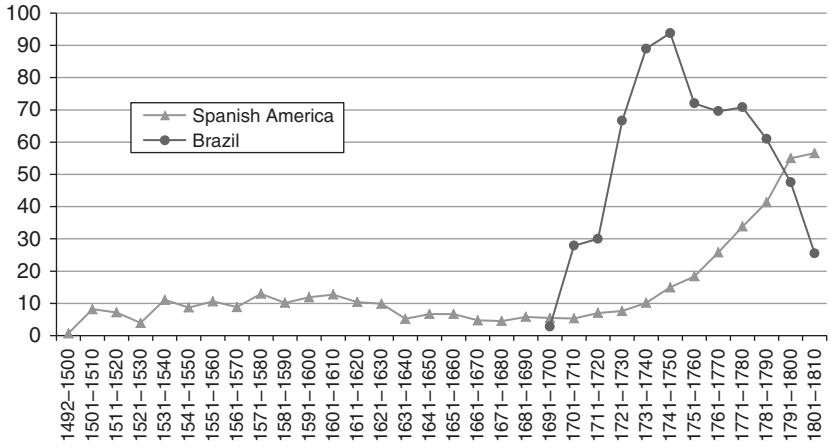

Figure 16.2 New World gold output, 1492–1810 (by decade, in millions of pesos of 272 *maravedís*).
Source: TePaske (2010: 54–55).

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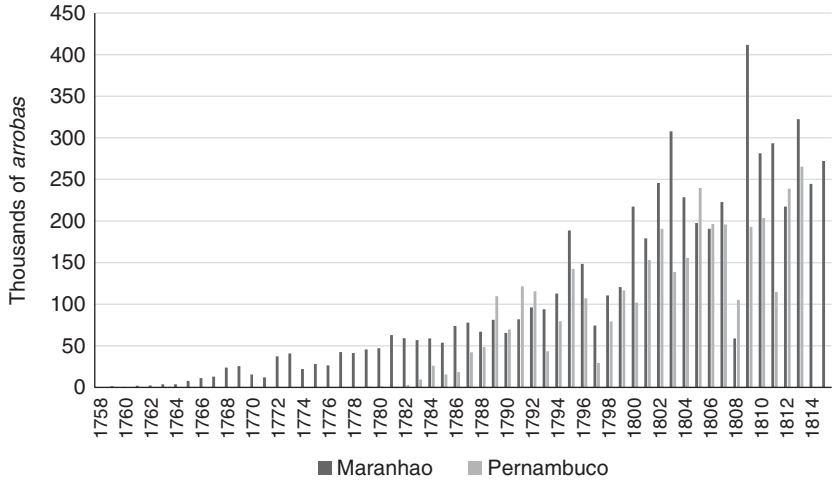

Figure 16.3 Cotton exports from Maranhao and Pernambuco, 1758–1815 (in *arrobas*). Sources: Melo and Martins (2022; 2023).

However, one ought to be careful not to see too simple a link between staple productions in Brazil and slavery: Melo & Martins (2022; 2023) show that slavery was crucial for the expansion of cotton in Maranhao, but not in Pernambuco.

The Spanish American imperial trade was, by comparison to Portugal, always mainly focused on the attempt to contain, control and tax transatlantic trade within the strict routes and parameters of the two commercial fleets of the *Carrera* system. As we have seen, the system was rarely completely closed to the prescribed routes and procedures. Nevertheless, the staple feature and the irregularity of the fleets had severe consequences for the colonial economy. By definition, vast regions were initially outside the main channels of exchange via new Spain and Portobelo/Lima. This encumbered regional specialization and made vital imports more expensive. Still, until 1630, the regularity of the fleets meant that secondary American areas not too distant from the transatlantic routes could still export part of their agricultural output to Spain. Thus, Central American indigo production and trade enjoyed significant prosperity from 1580 to 1620. Two or three vessels of the New Spain fleet would call at the main Central American ports and provided the means to export indigo and other commodities to Seville with acceptable regularity, notwithstanding Guatemalan complaints about insufficient tonnage. However, as the fleets became less frequent and carried smaller tonnages after 1630, indigo exports stagnated, even though indigo was a low bulk and high unit value commodity. In the second half of the century, the *cabildo* (municipal council) of Santiago

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de los Caballeros (present-day Antigua Guatemala) repeatedly complained that the by then irregular fleets included virtually no ships bound for the Gulf of Honduras (MacLeod, 2008: 199–200). However, it is difficult to generalize. Other regions, such as the Rio de la Plata, fared better and regions underserved by the fleet found ways around the problem, as we will see.

Silver dominated value but not volume. From 1560 to 1650, bullion and non-bullion commodities made up 82.2% and 17.8%, respectively, of the total value of Spain's colonial imports (Chaunu & Chaunu, 1955–1956, VI-1: 474). Unfortunately, there is no reliable data on cargo value for the second half of the seventeenth century, so we must turn to volume measures. These show that the total movement of gross register tonnage (i.e. ships' total internal volume) that criss-crossed the Spanish Atlantic shrank precipitously after the 1630s, as seen in Figure 16.4. The total tonnage of the 1700s amounted to less than a tenth of that of the 1610s (García-Baquero, 1992: 324–325) although the contraction of the outward tonnage was not as acute, as can be seen in Figure 16.4, probably due to the fact that between 1660 and 1708 registration of goods shipped to Spain was not compulsory. It stands to reason that this spectacular decrease reduced even more the share of non-bullion commodities, which occupied most of the shipping space even if we have little knowledge about how the qualities and prices of the shipped goods might have changed.

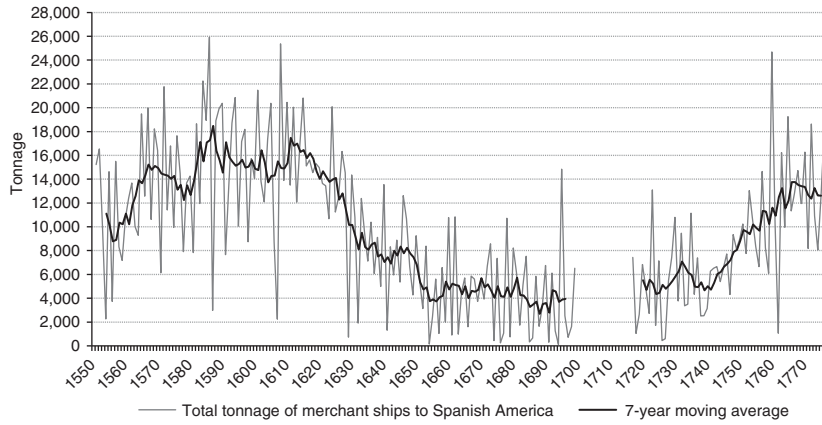

Figure 16.4 Total tonnage of merchant ships sailing from the western Andalusian ports (Seville, Sanlúcar and Cádiz) and the Canary Islands to Spanish America, 1550–1778 (tons of 1.376 m^3).
Sources: Chaunu and Chaunu (1955–1956, VI-2: 384–391), García-Baquero (1976, II: 126–128) and García-Fuentes (1980: 211–213, 224–225). The *tonelada de arqueo* used in the Spanish colonial trade (a ton that refers to a ship's cargo-capacity) had 1.376 m^3. For a discussion on tonnage measurements see García-Baquero (1976, I: 248–250).

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The fall in trade was not caused by a fall in production of exportable agricultural commodities (bulky crops such as sugar, cacao, tobacco and dyewood trees, among others, but also less bulky ones such as indigo and cochineal) and cattle ranching (hides, tallow and dried meat) in the Spanish colonies. Instead, the Spanish American economy of the seventeenth century not only diverged from developments in Brazil, but also from English, Dutch and French Caribbean models. The latter began to develop plantation economies (alongside smuggling with the Spanish colonies), which by definition had a very high reliance on trade. Meanwhile, the Spanish colonial economy became even less trade dependent, with growing regional market integration within rather than between the two main viceroyalties (Assadourian, 1982). Paradoxically, the stronger development of Spanish American internal markets reinforced the role of bullion as the primary driver of Spanish commercial policies and thus the tensions between commercial regulations and the interests of regional elites in the Americas.

The prosperity of colonial elites was one of the driving forces of an increasing illegal integration between the Spanish colonies and the Dutch, English and Portuguese colonies in the Americas and towards the end of the eighteenth century between the Spanish islands and the USA. In the seventeenth century some regions began to specialize in exportable commodities that were then sold to foreign interlopers. Mexico continued to produce and export the most precious of all American dyes, cochineal, which had high unit value and therefore occupied little shipping space (in the 1630s cochineal was worth 30 times more than an equivalent weight of sugar) but it is unclear how much of it reached Seville. Cuba had perfect soil and climate for sugar and tobacco, but it soon became apparent that Cuba could not compete on price with the plantation sugar produced in English Jamaica, French Haiti and Portuguese Brazil, so it reduced sugarcane cultivation (which would regain importance only after the 1780s) and concentrated on tobacco throughout the seventeenth century. However, a large part of the tobacco was smuggled to non-Iberian European markets, since consumers considered it superior to that of Virginia. Likewise, cacao production (but also tobacco and hides) in Venezuela and parts of the viceroyalty of Peru expanded in the seventeenth and early eighteenth centuries. Dutch smugglers operating from Curaçao and Bonaire initially dominated the former, Spanish trading circuits the latter.

After the War of Spanish Succession, the Bourbon administration tried to curtail smuggling and promote colonial agriculture with the aim of increasing fiscal revenue. In the case of Cuba and Venezuela, the strategy adopted was to turn the production of tobacco and cacao into monopolies run by either the state or a privileged trading company such as that of Caracas. The increasing use of *navíos de registro* after the 1740s also had a positive effect on the overall volume and value of colonial non-bullion goods arriving in Spain. But, despite those efforts, overall agricultural and ranching exports likely remained lower

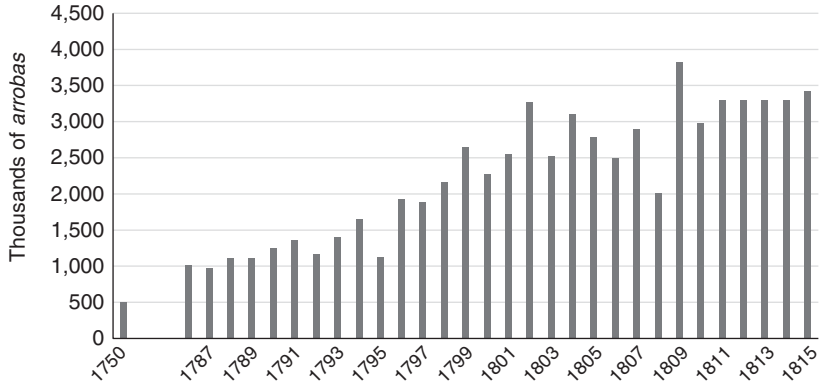

Figure 16.5 Sugar exports from Cuba, 1750–1815 (in *arrobas*).
Sources: Sims Taylor (1970), Klein (1975) and Bosma and Curry Machado (2012).

than they would have been had transatlantic trade been open to more American and Iberian regions or if Spain had copied Portugal's eighteenth-century policies of turning the colonies into producers of primary products dependent on European manufactured goods.

The so-called free trade regulations of the last third of the eighteenth century (particularly those of 1765 and 1778) finally removed the trade restrictions. The abolition or at least restriction of the triad of staple, convoy and guild power together with the deregulation of the trade in enslaved people (and the fall of French sugar production after the Haitian Revolution 1791) accelerated a shift to plantation production in Spanish America that had started around the 1760s. The main sites of this fast-expanding Spanish American plantation complex were Cuba and Puerto Rico. In Cuba, the economic model changed significantly after the shock of the short-lived English occupation of 1762. Between mid-century and 1800 the island began to develop a coffee producing sector for the first time. Tobacco production doubled between 1750 and 1800. Yet, the most dramatic transformation was the creation of a sugar plantation complex, which by the late eighteenth century exported almost 3 million *arrobas* of sugar annually, almost twice as much as the main sugar producing regions in Brazil (see Figure 16.5).

Although the peacetime existence of the new trade regime was relatively brief (1783–1796), it further contributed to expanding Spain's agricultural imports from the Americas. As Figure 16.6 shows, the gap between bullion and non-bullion commodities had begun to close from mid-century onward even though mining output grew very fast, too. From 1747–1750 to 1791–1795, the total value of Spain's colonial imports grew 83.8%, despite set-backs caused

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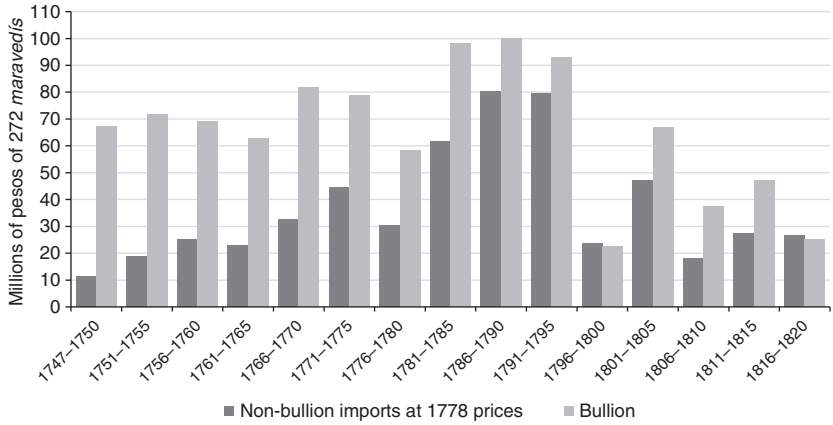

Figure 16.6 Spanish private imports from the Indies, 1747–1820 (by quinquennium in millions of pesos of 272 *maravedís*).
Source: Cuenca-Esteban (2008: 349).

by Spain's participation in both the Seven Years' War (1761–1763) and American Revolution (1779–1783). In 1747–1750, non-bullion commodities amounted to 14.4% of the value of Spain's colonial imports, a percentage slightly below the 17.8% estimated for the period from 1560 to 1650. By 1791–1795, the quinquennium that preceded the collapse of 1797, the value share of non-bullion commodities had steadily increased to 46%. After 1797 imports followed a downward trend (except for a 14-month respite during the Treaty of Amiens in 1802–1803), but the share of non-bullion commodities remained high as the Wars of Independence brought three centuries of colonial trade with the Spanish American mainland to a close.

The increasing importance of non-bullion imports in the second half of the eighteenth century translated into the expansion of shipping, particularly after the effective implementation of the free trade regulations in 1783, once the peace with Britain was signed. Even though Cádiz lost exclusive access to colonial trade, it still retained 84% of the total value of Spain's colonial imports between 1778 and 1796 (far behind Cádiz were La Coruña with 6.8%, Barcelona with 3.8% and Santander with 2.6%, which were the other important importers of colonial goods). Unfortunately, the existing literature provides no data on the evolution of tonnage during those years. There is, however, data on the total number of ships that participated in the transatlantic exchanges, showing that the previous record of 1608 (283 outward and return voyages) was now greatly surpassed (785 voyages in 1792). Between 1778 and 1796, a total of 4,102 ships sailed from Spanish American ports for Spain, of which 2,141 (or 53.4%) entered Cádiz, a percentage far lower than their share of the

total value of imports (Fisher, 1985). The discrepancy in the percentages is presumably explained by both the presence of more substantial quantities of bullion in the ships bound for Cádiz and the larger average tonnage of those ships.

Figure 16.7 provides a long-term view of the total shipping movement (outward and inward) between the western Andalusian ports (the ones that held the exclusive right to trade with the colonies since the early sixteenth century) and Spanish America. Following the seventeenth-century collapse and similar to the evolution of tonnage, shipping began a steady recovery after 1715. However, it was the 1778 opening of trade to many more ports that catapulted its numbers to 7,821 ships in the years leading to the 1797 blockade. Figure 16.7 shows the 3,382 ships that departed from or arrived at Cádiz (Fisher, 1981; 1985). That shipping grew far more than the value of the cargoes can only be explained by the lowering of prices and transport costs (the consequence of more competition), a wider range of manufactured goods traded and the growing importation of non-bullion commodities (including those with low unit value).

With the benefit of hindsight, economic historians see clearly the importance of non-bullion goods for commercial development. However, there were good economic reasons why silver production and circulation remained at the forefront of commercial policy. In 1545, the richest silver deposit the world has ever known was discovered at the Cerro Rico de Potosí (present-day Bolivia), located at an altitude of over 4000 m. In New Spain, rich silver lodes were

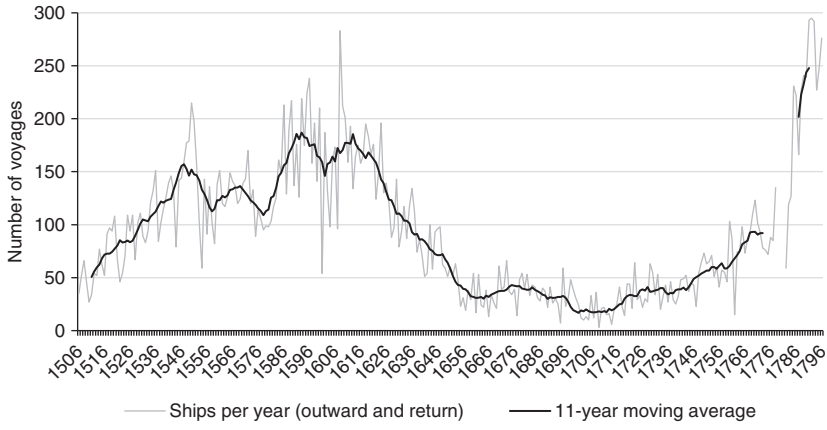

Figure 16.7 Total shipping movements between western Andalusian ports (Seville, Sanlúcar and Cádiz) and Spanish America, 1506–1796.
Source: Trans-Atlantic Slave Database (www.slavevoyages.org) (accessed March 2018).

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discovered in the Zacatecas area (1546), Guanajuato (1550) and elsewhere. In the 1550s, miners in New Spain developed the amalgamation process, a cheap method of refining large amounts of pulverized low-grade silver ore by blending it with mercury or *azogue*. At the time there were only three known sizeable mercury deposits in the world. Castile had two of them, by far the largest ones, at Almadén (in Castile) and Huancavelica (in central Peru), in its realm (the third was in Idria, modern Slovenia). As a result, silver output took off in the second half of the sixteenth century. New veins and the abandonment of old ones, as well as the need for investment, would drive the familiar mining cycle of boom and bust originated precisely from the combined effect of the nature of the ore deposits and, at times, insufficient capital resources to counter their impact.

The two main silver producing regions, those of central and northern New Spain and Upper Peru were strikingly different and evolved rather dissimilarly. In New Spain, silver deposits were scattered over seven important *reales de minas* or mining districts. By contrast, in the viceroyalty of Peru production was highly concentrated at Potosí (and its district of Charcas). Excavation methods were also to some extent different. In New Spain the dimensions of shafts and adits were more substantial, the use of underground cartridge blasting more common, and the whims to keep the shafts drained had more capacity than in the latter – 'to construct a deep shaft cost as much as to build a factory or a church' – and the trend of increasing capital investments continued up to the end of the colonial period (Brading & Cross, 1972: 549). By contrast, in the Upper Peruvian mines, shafts were less profound, and the use of whims reduced. Since ore deposits were located in conical peaks, adits provided the best access for extraction. Most of these tunnels only allowed two miners to work with picks at any given time.

Differences between the two main silver producing regions also extended to refining. By the early seventeenth century the bulk of New World silver was yielded by amalgamation, and this continued to be so until the second half of the nineteenth century. However, smelting did not disappear and at times, when mercury was scarce (particularly in the seventeenth century), its share of total production could grow significantly. The type of silver extracted at Potosí, silver sulfide compounds, could be refined using either smelting and amalgamation. Aside from silver sulfide, New Spanish deposits also contained another type of silver, argentiferous galena, which could only be refined by smelting. As a result, the viceroyalty produced about a third of its silver by smelting. Mercury production and distribution was one of the very few proper state monopolies in Spain. Hence, the royal treasury could estimate, for taxation purposes, the silver that was produced using the method of amalgamation. But production by smelting was harder to control and estimate for the royal officials and, thus, it left more room for unregistered output. This appears to have been the case in the second half of the seventeenth century,

particularly in New Spain. Half of the silver presented for taxation at the *Real Caja de Zacatecas* from 1670 to 1705 had been obtained by smelting (Bakewell, 1971: 248).

The temporary surge in smelting has profound ramifications for assessing real output and exports during the second half of the century, a period for which there are intensely contrasting historiographical interpretations. A shortage of mercury and the surge in smelting could explain, at least in part, the enormous amounts of unregistered silver reaching Spain at a time when the New World mines were officially producing less (Morineau, 1985; TePaske, 2010: 312). But then again, fraud in the Andean mines also appears to have been widespread in the same period, despite the fact that over there smelting was less important than in New Spain for the simple reason that the large quantities of fuel that smelting required were harder to come by in sites at extremely high altitudes.

For most of the colonial period, Upper Peruvian and New Spanish silver production also differed in fiscal pressure. As in continental Europe, subsoil resources were considered a royal domain. Exploitation was left to private initiative, for which the Crown levied a tax called *real quinto* (royal fifth or 20%). However, across different mining districts the actual tax applied differed between 5% and 10% de facto, as is clear from an evaluation of the tax receipts of different mining regions. Following the introduction of mercury amalgamation in 1573, Potosí's annual output went from 1 million to 7.6 million pesos in 1585. Between 1580 and 1650, its yearly output never fell below 4.2 million. But after the mid-seventeenth century production slipped steadily until it reached its nadir in the 1720s at about 1.1 million pesos a year (see Figure 16.8). There were several reasons for the decline: among them the exhaustion of silver ores and deepening of mines, and a contraction in the supply of mercury from Huancavelica.

Though initially smaller than the Peruvian production, Mexico overtook Peru in the late seventeenth century. Up to 1627, Mexico's mining industry grew at 2.5% a year. Over the eighteenth century, Spain used its mercury monopoly deliberately to support silver production (Dobado & Marrero, 2011). New silver deposits were discovered and exploited in the northern part of the viceroyalty, such as at Sombrerete, Bolaños and Santa Bárbara. By the end of the colonial period, from 1790 to 1810, it was refining 200 million pesos of silver per decade. Meanwhile, a tax reduction in 1736 brought about a revival of Potosí and other Upper Peruvian mines such as Pasco, Porco and Oruro, and was re-enforced here too by the significant lowering of the price of mercury. In the 1780s, total Peruvian production (including Upper and Lower Peru and Chile) reached the record output of the early seventeenth century (Garner, 1988: 903). Thus, the later eighteenth century was a phase of expansion in silver mining.

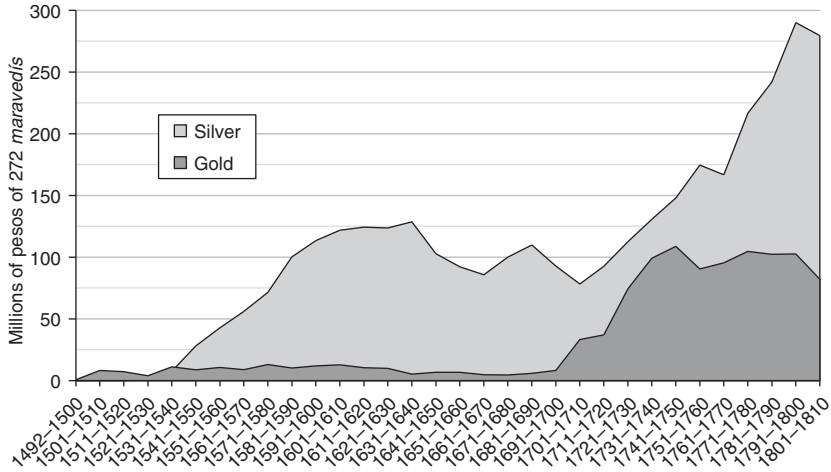

Figure 16.8 New World silver and gold output, 1492–1810 (by decade in millions of pesos of 272 *maravedís*)
Source: TePaske (2010: 20).

The same was true for gold, which had traditionally been marginal for Spanish America. By the end of the sixteenth century three main gold-mining regions had been identified in the northern Andes, in Nueva Granada (present-day Colombia): the drainage basin of the Cauca River, the upper Magdalena River, and the Pacific coast and lowlands. There were both vein and placer deposits in these regions, and also important differences in the timing of exploitation. The richest mines of Antioquía, in the Magdalena valley, saw their heyday in the late sixteenth and early seventeenth century, by which time most of them had been depleted. In the seventeenth century production dropped notably. In the eighteenth century, though, the Chocó and other mining districts of the Pacific coast increased total gold output considerably, to a large extent thanks to the importation of enslaved Africans.

Before 1810 total registered bullion output in the Indies adds up to 4.53 billion pesos or 113,000 tonnes of silver equivalent (i.e. silver plus gold expressed in silver value at a 1:16 ratio), 96,816 of which correspond to the Spanish colonies. These silver and gold estimates are conservative because they have no fraud percentage factored in. Illicit unregistered production was significant and it affected gold more than silver mining (TePaske, 2010: 52–53). Thus, other estimates, which include unregistered bullion, place total New World production before 1800 at between 130,000 and 150,000 tonnes of silver equivalent (Barrett, 1990: 237). These higher estimates suggest that the New World contributed more than 80% of the silver and 70% of the gold produced

in the world between 1550 and 1800 (Cross, 1983: 397). More conservative estimates for the same period put those figures at 70% and 47%, respectively (TePaske, 2010: 67, 140).

The majority of the New World bullion was shipped to Iberia, but the relationship between stocks of bullion produced and flows of bullion to Europe, Africa and Asia changed over time. By the late eighteenth century the Spanish American economy was larger than the peninsular one, and more and more of the silver production remained within the Americas, as reflected by extremely high nominal prices and wages in many parts of the Americas (Grafe & Irigoin, 2012). Also, bullion remittances (see Chapter 13) were subject to fraud and the official records are often unreliable. Portuguese gold went mostly to England, its main trading partner. Around the second third of the eighteenth century gold accounted for between half and two-thirds of the value of Portuguese imports from Brazil even though production began to fall in the 1750s and about 80% of Brazil's gold production found its way to England (Fisher, 1971; Cross, 1983: 418).

However, the single largest difference between the flows of silver towards Spain and gold towards Portugal was likely their impact on the fiscal receipts from the colonial sphere on the peninsular polities. Around 40% of Portuguese revenue in the mid-eighteenth century derived from taxes on Brazilian trade, which included gold prominently; by the 1760s and 1770s the share was still above 20%. On the Spanish side, the same proportion of American revenue accounted for about 12–13% of royal receipts across the eighteenth century, of which silver taxes accounted only for a fraction (Irigoin & Grafe, 2008; Grafe & Pedreira, 2019)

16.6 Conclusion

It is impossible to understand the economic history of early modern Iberia without taking stock of its trade, and in particular its imperial expansion. Imperial trade contributed to a dramatic increase of openness of the peninsular economy, quite opposite to the image sometimes painted. The regulatory frameworks used for much of the period by Spain and Portugal differed significantly. Yet, neither constituted a monopoly in the modern economic sense or indeed in the sense of Dutch and English seventeenth-century trading companies. The legal basis for a colonial exclusive were stronger in the Portuguese case, but only in the later eighteenth century could reformers create the conditions for the metropolis to reap more of the benefits of such an exclusive. Generally, the benefits of empire for peninsular Portugal with its smaller European economy and larger empire were substantial, especially in fiscal terms. In Spain, the proportions were inverted, and the process of colonization of a large territorial mass with increasing internal markets meant the room for an 'imperial subsidy' was always modest. In addition,

there was simply no legal basis for a colonial exclusive. The rents from the exploitation of indigenous and enslaved Afro-descendent labour in Spanish America went mostly to Spanish American elites, not to the metropolis until the late eighteenth century (Grafe & Irigoin, 2012).

Economic conditions account for some of the differences in the development of the two empires over the three centuries under consideration. It should be noted that even during the union of Crowns the regulatory frameworks for trade remained separate though in particular in the trade in enslaved Africans collaboration and inter-imperial trade drove the expansion to 1640. It is an interesting counterfactual to think how commodity flows might have developed had the Portuguese War of Restoration not raised the barriers between the hispanophone and lusophone regions of America. The orientation towards England in foreign policy in the case of Portugal shaped the eighteenth-century empire. In the case of Spain, the alliance with France made much less of a difference to American trade, though re-exports of French textiles to the Americas were one factor. One fact that is too rarely acknowledged is that the Iberians created the transatlantic slave trade long before the Dutch, English, French and other Europeans partook. It was the poisonous fruit of intra-Iberian cooperation first and foremost. But neither commodity cycles nor trade conditions would seem sufficient explanations for the very different role that enslaved people played in either empire until the late eighteenth century.

The Achilles heel of both empires was that exports to the Empire mostly consisted of re-exports of northern European manufactured goods. That limited the backward linkages of the trade, though there were impulses to shipbuilding and a large array of services from the start. Agriculture in the peninsula benefitted in the earlier periods. It is even harder to understand the forward linkages. Commodity re-exports were lucrative for Portuguese merchants, but to the extent that they depended on foreign finance the benefits were shared. Silver imports into Spain lubricated trade, but they also contributed to financial conditions that led to urban indebtedness and high local taxation (see Chapter 13 and Grafe, 2012). From the early seventeenth century onward, when primarily north-western European merchants took control of Iberia's international trade and the manufactured goods coming from their countries of origin flooded into Spain and Portugal, the bulk of the bullion arriving in Seville and Lisbon from the Iberian empires began to be increasingly reshipped to Antwerp, Amsterdam, London, Nantes and other ports. This feature of Iberia's international trade would continue unabated until the end of the colonial period.

A pattern of trade that had bullion at its core had massive ramifications for both European and global trade. A large part of the bullion was used to offset Western Europe's chronic trade deficits with three areas: the Baltic (whence basic commodities such as grain, timber, hemp, flax, wax, leather and potash

were imported, a trade dominated by the Dutch and English), the Levant (which was primarily in the hands of French, Dutch and English merchants), and Asia or the Orient. The latter was the main destination of the American silver, and the two main players in that trade in the seventeenth and eighteenth centuries were the English and Dutch East Indies companies (Barrett, 1990: 250–253). The purpose of shipping silver to Asia was not only to offset Europe's trade deficit. Equally important was the price of silver itself.

The fact that more silver than gold was mined in the New World meant that the exchange or price ratio of silver to gold changed significantly. From the mid-sixteenth to the mid-seventeenth century the value of silver fell 60% relative to gold, setting the bimetallic ratio in the Spanish Empire at around 16:1, where it remained until the later nineteenth century. This meant that silver's purchasing power in the Spanish Empire decreased during the colonial period. But the silver to gold ratio differed substantially around the world, a fact that had implications in shaping not only commodity flows in the Atlantic World but also global trade. Differences in the bimetallic ratio gave rise to commercial exchanges between countries and continents. In the late seventeenth century, for instance, in north-western European ports the price of silver relative to gold was as much as 10% higher than in Spain. Similar differences generated trade between Spain and the rest of Europe, greatly contributing to draining silver away from Iberia. However, the most substantial exchange discrepancy was between the Spanish Empire and China. The relative price of silver to gold in China was about 8:1, that is, twice that of the Americas. This meant that Chinese goods such as silks and ceramics could be sold for silver in the New World or Europe at double the price paid for them in Asia, though transport costs reduced some of that difference. Such a price gap was a major force in generating trade between Europe and Asia via the Cape of Good Hope, and between Spanish America and Asia via the Pacific and the Philippines. As a result, a significant part of the New World silver ended up in China (Cross, 1983: 399–401).