

THE EUROPEAN ORGANIZATION OF THE SLAVE TRADE

The Atlantic slave trade was one of the most complex economic enterprises known to the preindustrial world. It was the largest transoceanic migration in history up to that time; it promoted the transportation of people and goods among three different continents; it involved an annual fleet of several hundred ships; and it absorbed a large amount of European capital invested in international commerce. The trade was closely associated with the development of commercial export agriculture in America, and Asian trading with Europe. It involved complex capital and credit arrangements in Europe, Africa, and America and was carried on by a very large number of competing merchants in an unusually free market. Finally, it was the largest movement of workers to the Americas before the mid-nineteenth century.

How did this extraordinary trade develop in Europe? What mechanisms were used to get this system into operation and what were the relative roles of the state and of private capital? How was the trade financed and what were the goods used to purchase the slaves? What types of ships and crews were involved in the transport of these slaves and how were they purchased in Africa and how were they sold in America? What were the profits generated by the trade and what was their relative importance within the expanding European economy? These are some of the issues I will deal with in this and the following chapter on the African part of the trade.

Given the high entry costs to trading, and the initial lack of detailed knowledge of the various African and American markets, the earliest period of the slave trade was one in which the state played a major role. Though slaves were shipped off the African coast by private European traders from the 1440s onward as part of general exports of gold and

ivory, the organization of an intensive slave trade took several hundred years to develop. Africa was a modest source of slaves for southern Europe until the beginning of the sixteenth century, and it was only the opening up of America to European colonization that slave trading finally turned into a major economic activity.

Although the Portuguese were rich enough to allow private contractors to develop some part of the early trade, both they and all the Europeans who followed used heavy state control in the form of taxation, subsidization, or monopoly contracts to get the trade going and control its flow of forced workers to America. In almost every case, the state was needed to subsidize the trade in order to get it organized. The Spaniards even declared it a monopoly from the very beginning to the end of the eighteenth century. Though the Spanish contract holders subcontracted to private or foreign monopoly company firms, the trade was still heavily controlled by the state, and even the Portuguese finally resorted to state monopoly companies in the eighteenth century to get the trade going to colonies that were underdeveloped and lacked the capital to finance the trade.

The relative ability of the American importing colonies to pay for their slaves determined whether a slave trade could develop. In the case of Spain, the silver and gold mined by the Indians would pay for the forced migration of African slaves from the earliest days of the conquest. The trade was a very controlled one, but only for state taxing purposes, as private individuals from all over Europe were given exclusive contracts to carry slaves to the American colonies (the so-called *asiento*) in return for paying the Crown a fixed fee and taxes on each slave delivered. In the case of the Portuguese, their early dominant position in African trade gave them a decided advantage in the slave trade by lowering their costs of entry. In turn, the very rapid development of a sugar plantation economy based initially on American Indian slave labor in Brazil permitted them to generate the capital needed to import African slaves. But all other trades required some use of monopoly companies to provide slaves to those American colonies that did not have the capital or credit to pay for the imported slaves.

From the fifteenth century until the early sixteenth century the Portuguese held a monopoly position in Africa carrying on an exclusive trade in gold, ivory, and slaves. They were also able to establish an effective settlement in Angola and a major trading post at São Jorge da Mina (Elmina). To these continental positions were added several Atlantic African islands, of which the most important were São Tomé

and Principé off the coast of the Bight of Biafra. By the early seventeenth century, between their own American needs and their supplying the Spanish American colonies, they were probably shipping some 3,000 to 4,000 slaves per annum. But this monopoly situation was challenged as early as the late sixteenth century by the French and then the British. French and then British free traders intermittently visited the African coast from the middle decades of the sixteenth century, but they and the Dutch did not become a major presence with forts and permanent trading links until the seventeenth century. For all of these early northern European traders, it was gold and ivory that were the primary products taken from the African coast, with slaves only a secondary concern. So long as the northern European powers had no major American colonies, their trade in slaves was confined to illegal smuggling to the Iberian colonies. In fact, until 1700, for all traders, gold and ivory were predominant exports over slaves. It is only after that date that slaves become Africa's most valuable export.

It was the Dutch who first seriously challenged the Portuguese monopoly in African trading. As part of their grand rebellion against Spain at the end of the sixteenth century, they eventually challenged Spain's dependent ally, the Portuguese. In 1621 the Dutch West India Company was established with designs on Portugal's American and African possessions. Initially, it concentrated on destroying their opponents and seizing their resources and spent their early efforts attacking Portuguese and Spanish shipping. It was reported by the company that in a fourteen-year period beginning in 1623 it had captured 2,336 slaves from Iberian ships and sold them in America. But it soon moved from piracy and haphazard trading in Africa to creating a systematic presence on the African coast. As early as 1624, it sent fleets to capture both the northeastern Brazilian sugar region of Bahia and the Gold Coast fort of São Jorge da Mina. Though both attempts failed, the Dutch were now committed to obtaining an American colony out of Portuguese America and of making themselves a presence in the slave trade. In 1629 a new fleet seized the Brazilian sugar province of Pernambuco and soon moved to gain direct access to slave supplies in Africa. This African campaign finally achieved its first success in 1637 when the Dutch seized Elmina on the Gold Coast and effectively eliminated the Portuguese from trading in this region. Then in the early 1640s they temporarily seized the coastal forts of the Portuguese in Angola. From the 1630s to the 1650s the Dutch West India monopoly trading company, the WIC, was unquestionably the dominant European slave trader in Africa.

The company had reduced the Portuguese presence everywhere and at the same time still faced no serious competition from other northern European nations in the African trade. In the late 1630s and early 1640s it was delivering some 2,500 slaves per annum to America, and in 1644 it peaked with a purchase of almost 6,900 slaves on the African coast. Half of these slaves came from the Lower Guinea Coast and half from the Loango-Angola region.

Once opened up by the Dutch, the French and the English were not far behind. Long-term trade links were established by the French in the Senegambia region of the African coast from the 1660s, while the English slowly staked out the Sierra Leone or Upper Guinea Coast in the middle decades of the century as their own area. The Dutch for their part concentrated on the Gold Coast. But however much a given European power tried to dominate a region, in the end, everyone traded almost everywhere. In the late seventeenth and eighteenth centuries, for example, numerous European nations, including even the Danes, built forts on the Gold Coast east and west of Elmina. Though all Europeans tried to create a monopoly trade with their slowly developing system of fortified forts or unfortified trading factories, it was only the Portuguese who effectively settled any region of Africa. But even the Portuguese in Angola had to operate in the context of African state politics and were just one element in the total picture – often forced to join forces with various local states to preserve their position. In all other cases the forts and factories were more expressions of claims to exclusive trade against other European powers than statements of monopoly over local African suppliers.

Given the fierce European competition and the generalized African knowledge of this competition, African suppliers had little interest in accepting a trade monopolized by any one European nation. Constant trade created zones of influence, but no coast was the exclusive zone of any nation. Africans traded with whom they wished even in the Congo and Angola regions, and no fort or factory had influence more than a few miles inland. All such European outposts were maintained to keep trade links open to Africans and guarantee continuity of trade rather than creating national or colonial enclaves. Even when monopoly companies were established, the respective nations had difficulty in maintaining their control against challenges not only from other Europeans but even from interlopers from their own nations.

From all this experience, toleration became the norm after the seventeenth-century fratricidal wars among the monopoly companies.

Most slavers traded on the coast with little fear of attack from other European nations in times of international peace, and even cooperated in trading. Moreover, there was room even for smaller trading nations to develop their activities. A Danish West India Company formed in 1625 and a Swedish African Company founded in 1647 all traded on the African coast and set up small establishments. Even the German state of Brandenburg built a fort on the Gold Coast.

But the costs of entry into the trade was so high that only some kind of government support and a corresponding monopoly arrangement seemed capable of opening up a continuous and successful trade. In this case, the Europeans had in view the extraordinary success of the Dutch and English East India models. It was thought that this was the way to develop the trade. Between 1620 and 1700 every slave-trading nation but Spain and Portugal experimented with joint-stock monopoly trading companies. All achieved some initial success, often opening up systematic trade for the first time, but all would eventually fail and be replaced by free traders from their respective nations. Though ultimately replaced, these companies bore the costs of opening the trade and creating the contacts, credit, and shipping practices that would eventually be the norm for all free traders who followed them.

While French interlopers had involved themselves in the Atlantic slave trade from early in the sixteenth century, serious French participation began only with the development of the monopoly trading companies in the second half of the seventeenth century. After many partial and incomplete attempts, the French finally organized a monopoly *Compagnie des Indes Occidentales* in 1664, which was granted trading rights in America and Africa. But this largely state-financed effort was already granting licenses to private traders by the end of the decade. Nevertheless, French state interest was strong, and a French fleet took many factories from the Dutch in Gorée and the Senegambia region in the 1670s. Then, in 1672, the French government offered a bounty of ten livres per slave transported to the French West Indies. This offer encouraged the establishment in 1673 of a new and separate African monopoly company to control the French trade to the northwestern African coast known as the *Compagnie du Sénégal*. By 1679 the Senegal Company had twenty-one ships operating in the trade. Although successful in establishing several trading factories on the African coast and even fighting wars with other Europeans, this and subsequent monopoly companies that followed eventually faltered. Even with active state participation and support, trade for the French company was still too risky

an adventure, and it could not raise sufficient private capital to maintain its power. By the 1690s most of France's African trade was in the hands of private entrepreneurs, though it was not until the 1720s that free traders finally succeeded in definitively breaking the company's control over trading.

The use of both monopoly companies and later free traders was part of the French government's efforts to promote viable plantation economies in the West Indies, and followed a pattern similar to the English. Colonizing the islands of the Lesser Antilles in the first half of the seventeenth century, the French, with the aid of Dutch technology, capital, credit, slaves, and markets, began to develop a thriving sugar export economy by the second half of the century. With the successful development of Martinique and Guadeloupe, the French sugar empire in the Caribbean received a major impetus and, from then on, never ceased its growth and expansion.

The Dutch West India Company was initially the most successful of these early monopoly companies, the one most involved in delivering slaves to colonies of the other European powers, and the one that shipped the most slaves to America. From its founding in 1621 it operated both as a commercial company and as a military institution with quasi-statelike powers. It seized major territories from the Portuguese, becoming in the process a sugar producer in Brazil and a major slave trader in the Gold Coast and Angola. It even made war on the Spaniards and succeeded in capturing one of the American silver fleets. But by the 1670s it was reduced to a few American possessions and to its Gold Coast forts, with the Portuguese having retaken most of their lost possessions. At this time the company was reorganized and lost most of its trading monopolies, with complete free trade coming to the Dutch African regions in the 1730s. Nevertheless, from the 1620s to the 1730s, it moved some 286,000 slaves from Africa, whereas free traders moved just 256,000 slaves from the 1730s to 1803. In the period of its monopoly, the Dutch West India Company even competed for the Spanish *asiento*, and overall from the seventeenth century until 1729 some 97,000 of the slaves that it shipped to America were delivered to the Spanish colonies in America.

The last major company established in the seventeenth century was the English Royal African Company, which, like the Dutch company, was based primarily on private capital. It grew out of a series of earlier English monopoly companies and was put together in 1672. It was modeled along the lines of many such joint-stock incorporated companies in England and would enjoy monopoly control over the English slave trade

and England's trade with Africa in commodity goods. It also actively transported sugar and other products from the West Indies to England. Like all such African adventures, it was required to invest heavily in fixed costs, such as forts and armaments. The English probably started trading with Africa in the 1550s and tried some slave trading to the Spanish colonies in the 1560s. But without major American tropical colonies of its own, there was relatively little incentive to enter the trade. This of course changed with the expansion into the Lesser Antilles in the early 1600s and the taking of Jamaica in the 1650s. By the 1630s the British had their first fort in Africa, on the Gold Coast, and were regularly trading in slaves. By the 1660s several companies had been established and forts settled, and open warfare with the Dutch on the Gold Coast had become the norm. Thus, even before the final company was established, an active trade had developed. With the Royal African Company in operation, the trade became brisk. From 1672 until 1713 the company transported over 350,000 slaves to the English colonies of the West Indies. Nevertheless, the pressure from the free traders was such that the company gave up its monopoly on slave trading in 1698, though it continued to maintain its forts and charged the free traders a fee for their services.

Thus, by the first decades of the eighteenth century free trade in slaves had come to most nations. In all cases the basic infrastructure had been well established largely by the respective monopoly companies, and free traders could now use these well-established routes with low risks. Although direct trade between Africa and Europe was often still a monopoly trade, by the eighteenth century individual entrepreneurs who organized one or several voyages had become the norm in the trade from Africa to America. Even the closed Spanish colonial market, which allowed only contract providers to participate, was largely supplied by free traders obtaining subcontracts from the original *asiento* holders. In turn, this system was eventually abandoned in 1789 when the Spaniards decided to turn their West Indian islands into sugar-producing colonies and opened up the slave trade to their American colonies to all nations.

The last experience with monopoly trading companies was the late eighteenth-century Portuguese use of such companies to develop the far northern regions of Brazil. Although the Crown retained a large part of the African commodities and mineral trade to Europe, the slave trade had been a free enterprise trade from the sixteenth century. It had been heavily taxed from the beginning but was open to all Portuguese or Brazilian merchants. But the marquis of Pombal in the second half of

the eighteenth century wanted to develop new plantation and slave economies in Brazil's northern Maranhão and Pernambuco colonies and decided that monopoly companies were the only solution. To get the capital needed, he agreed to give the Portuguese merchants who invested monopoly rights in the exports from these Brazilian provinces and even subsidized some of the African trade. The two companies were set up, in 1755 and 1759, respectively, and their object was to promote the development of the respective regions. Both companies were given the exclusive rights to import slaves into these two colonies. Of the two companies, the most important as far as Angola was concerned was the Pernambuco and Paraíba Company. Of the grand total of 49,344 slaves this company shipped to Brazil between 1761 and 1786, 85 percent came from the port of Luanda. For the Grão Pará and Maranhão Company, 68 percent of its 28,083 slaves came from the Upper Guinean ports of Cacheu and Bissau. These two companies accounted for a quarter or more of the slaves leaving the major trade port of Luanda, Angola, in this period, as well as the majority that the Portuguese took from the ports of Cacheu and Bissau. Given the infrastructure already in place in Luanda it is not surprising that the slaves were cheaper and the costs of shipping them to Brazil were less from Angola than from Cacheu-Bissau. With the disappearance of the Maranhão and Pará monopoly companies, the movement of slaves from Africa to the northern ports of Brazil temporarily declined, though eventually free traders picked up the flow again as these regions continued to grow with slave-produced cotton and sugar becoming important.

Although the monopoly companies varied as to organization and function, they all failed. This mostly had to do with their high fixed costs in forts and ships or their obligations to deliver a fixed number of slaves into a given region no matter what the demand or the costs – obligations that were often too expensive to maintain. They usually tied up too much capital for too long a period and found it increasingly difficult to raise new funds. In the free-trade era these companies were universally replaced in all trades by temporary associations of merchants who joined together to finance individual voyages. Thus, merchants in the sending port committed their capital to relatively short periods or spread it over many different slaving voyages. Moreover, they delivered slaves only in the quantities demanded in the New World and to zones that were capable of paying for them with cash or exportable products that could be sold for a profit in Europe.

Although some formal joint-stock companies were established, it was more common to form a trading company as a partnership of from two to five merchants. If it was two partners, both usually worked actively in the enterprise, but if it was more than this number, there was usually an active partner who organized the expedition and a group of more or less passive partners. Interestingly, most of these associations engaged in other trades as well as that of slaves, indicating the diversification of risk of the entire transaction. The contract that the partners signed, or which founded the joint-stock company, was usually for seven years' duration, which was the time needed to completely close the books on a slaving expedition. Kinship and friendships were among the major ties that brought partners together.

But given the high costs of entry into the trade, many of the partnerships or joint-stock companies offered stock or shares in the individual voyages they financed. Thus, while one of these slave-trading companies might undertake several voyages, each voyage attracted a different set of investors. The owner and outfitter of the ship (called an *armateur* in French) sold parts of the expedition or the ship to outside investors. In so doing he thus formed a minicompany that handled just that one expedition. In the premier French slaving port of Nantes in the late eighteenth century, for example, an armateur typically sold slightly over 60 percent of the ship and its cargo to outside investors. Often these investors were other outfitters, and it was common for the principal company or association itself to invest as a temporary shareholder in ships outfitted by other companies. Some 20 percent of such temporary shareholders in Nantes were in fact other *armateurs*, and another 25 percent were local merchants, many of whom were in colonial trade. Some 10 percent of the shares came from investors from all over France and the colonies. To attract investors, many of the outfitters published brochures promising returns of 30 to 50 percent. The remaining shares in an expedition came from the captain and the crew who often were allowed to invest on their own account. In over half of the expeditions mounted from late eighteenth-century Nantes, captains invested and typically held 10 percent of the shares in the expedition. On rarer occasions, the crew was also given rights to invest and subsequently to trade in slaves. Finally, outfitters sometimes paid for part of their cargoes in shares in the expedition rather than in cash. Often these shares were sold to third parties, especially on ships mounted by the largest and most successful companies.

The actual purchase of the ship, collection of the cargo, and the arrangement of final papers and insurance typically took some four to six months to arrange. After the owners, the second most important participant was the captain. Whether he bought shares or not, most captains were given 2 to 5 percent of the sale of all slaves he delivered in the Americas. Successful captains could obtain a respectable fortune in just two to three voyages. They could well earn 20,000 livres per voyage, representing 10 percent of the total value of the outbound cargo taken to purchase slaves. It was the captain who had the most responsibility, being in charge of both sailing the ship and doing all the trading in Africa. Many captains and crew carried out repeat voyages, although there were great risks involved. Among the 186 Dutch captains employed by the Dutch West India Company in the seventeenth and early eighteenth centuries, the average was for 1.4 voyages per captain – but this was highly concentrated since two-thirds of the captains made only one voyage. Moreover, captain, crew, and slave mortality was high, with the latter averaging 11 percent per voyage. Clearly, these mortality rates were related to lack of knowledge of local disease environments and other hazards of the trade, for by the eighteenth century these mortality rates had dropped. Thus, in the case of the 310 free-trader Dutch captains making the slaving voyage in the late eighteenth century, the mortality on the entire trip was just 7 percent and the average was 2 trips per captain, with only 49 percent making just one trip.

A large complement of subofficers and skilled persons was needed aboard the ship, including a ship's doctor, a carpenter, and a cooper or barrel maker. The doctor cared for the slaves and crew but had really few skills with which to combat disease except the basic rudiments of hygiene. The carpenter was the highest paid nonofficer on the ship and the person who designed the holds for the slaves when they were collected. Just below him in status and wages was the cooper, who was in charge of the crucial water casks. The average French and Dutch slaver in the seventeenth and eighteenth centuries took from 30 to 40 sailors for its crew, the majority of whom were poorly paid common seamen. In the eighteenth-century French trade, three months of the crew's wages were paid before the voyage and the rest when they landed. For a variety of reasons, slave ships were unusual in the number of sailors they carried. Between the needs of coastal trading in Africa and the potential for violence and the need for tight security on the African coast and in the Atlantic crossing, all slave traders carried double the number of crew that a normal merchant ship of their tonnage would carry.

Slave ships clearing for Africa were a third to a half the tonnage of regular ships clearing directly for the West Indies from Liverpool in the 1780s, and in those engaged in the similar *droitue* or direct West Indian trade from Nantes in the same decade. But despite the size advantage of West Indian trade ships, they carried much less crew than the typical slaver. Thus, the crew per ton ratio of some 252 ships that left Liverpool outbound for Africa between 1785 and 1787 was 0.17 crewmen per ton, whereas the 249 ships leaving for the West Indies from this same port carried half that number, or 0.09 crewmen per ton. Nor was this much different from the French slave trade. In Nantes, between 1749 and 1792 on the 870 slave ships outfitted for trade with Africa the average slave ship carried 0.18 sailors per ton, compared with 0.10 crew per ton on the 3,140 cargo ships engaged in overseas trade. From a larger sample of slave ships in the period from 1750 to 1799 in which the tonnage has been converted to a modern uniform standard, these same patterns hold as well, with the average crew per ton ratio for over 4,000 English slavers leaving Europe being 0.19 sailors per ton, and for the close to 1,000 French slavers that left Europe for Africa in the same period the ratio was 0.16. Except for fishermen (which averaged 0.30 crewmen per ton) and privateers and warships (which averaged 0.77 crewmen per ton in Nantes), the slave trade used the largest crew of any trade in the merchant marine. This high usage of sailors was, of course, related to both the demands of sailing, and the need to trade for and guard the captured slavers. Given the length of time on the coast to purchase slaves, and the necessity for the captain and other officers often to trade from small cutters and other boats sent out from the main ship, a large demand for sailors existed even to purchase and oversee the slaves on land. Whatever the pattern of slave purchases on the African coast, however, there was always a need for a large number of sailors to control the slaves once aboard the ship. In the second half of the eighteenth century, French ships on average carried a crew of 36 and the British one of 30 – the difference being that the French ships were a third larger than the English ships – but in fact they both had about the same high ratio of 6 tons for every sailor.

Given the fact that fewer sailors would have been needed to man these ships had no slaves been carried, it is no accident that problems arose with the crew once the slaves had been sold. One of the major findings of the late eighteenth-century English Parliamentary Commissions examining the slave trade was that slaver captains with regularity discharged a large number of their crewmen in the Caribbean and paid

them off in devalued colonial sterling. This ill-treatment of sailors, in fact, was one of the most important issues used by the abolitionists to discredit the slave trade. Even as the number of slaves per ton declined in some of the early nineteenth-century trades, the number of sailors still remained quite high and usually did not decline. It is clear captains considered a minimum number of crew absolutely essential for survival and safety when handling slaves.

Nor were these needs unique to the British trade. In all slave trades where the data are available on crews, tons, and slaves, there is the same high correlation between the numbers of slaves carried and the number of sailors manning the ships. Even where tonnage cannot be made comparable, there is the same difference seen between slavers and regular merchant ships. Thus, for some 12 ships engaged in the slave trade to the Spanish Indies in 1637, the average of 7.7 slaves per sailor for these seventeenth-century Spanish American ships was quite similar to a sample of 525 French slavers from the first half of the eighteenth century, which carried 7.5 slaves per crewman. Moreover, as was to be expected, in all the slave trades the number of slaves per crewman kept rising over time, reflecting an increasing efficiency of the slave ships, reaching the 9.5 range for almost 1,500 slavers in the second half of the eighteenth century. But however efficient these ships became, all slave ships on average needed twice the crew size to man their vessels as the West Indian cargo ships of their period.

Clearly, ships of the same tonnage or larger than the slavers did not need one crewman for every 6 tons simply to man the ships. Half that number was sufficient. Equally, crew-per-ton ratios on slavers behave exactly like slave-per-ton ratios, both diminishing sharply as the tonnage of ships increases – further proof of the lack of ship's size, as expressed in tonnage, from being the primary factor influencing the number of sailors needed to man the slave ships.

Unique to the Brazilian trade was the large number of American slaves who made up the crews of the slave ships. As was indicated in the standard registers, the use of Brazilian-purchased slaves to make up crew complements was always justified by the lack of free sailors. This crisis in sailors must have been considerable since 42 percent of the 350 slave ships arriving in Rio de Janeiro from Africa between 1795 and 1811 indicate slaves in their crew. The average number of Brazilian-owned slave sailors in the crew for the 148 vessels that had them on arrival was 14. This meant that the slave crewmen probably made up between one-third to one-half of the crew in these slave ships if the total number of

sailors the Portuguese were carrying was approximately the same number of crewmen as the French slavers at the peak of the eighteenth-century trade. This would have meant an average of 35 sailors per vessel. Clearly, these slaves were used to man the ship, while the free sailors of whatever color must have been employed to guard the slaves.

Despite these crew sizes, and the special nature of these slave ships, the biggest outfitting expense was always the cargo, which averaged between 55 and 65 percent of total costs. This made the slavers unique in almost all the major commodity trades. In France, which has the best data on costs, the cargo accounted for two-thirds of the total costs, and the ship and its crew a mere one-third. There was some variation depending on whether or not the ship was newly built, but, in general, most ships were bought used for operation in the trade, and the cargo costs were between 55 and 65 percent of the total outfitting expenses. The relatively cheap costs of the small cargoes being taken to the West Indies by regular cargo ships explains why the average value of the outfitted slaver per ton was six times the average value per ton of the much larger direct trade ships. This comparative difference in cost was not due primarily to the ships themselves, which were quite comparable in price between the West Indian and African slave trades, but to the cargo. In an evaluation of French ships captured by the English in the Seven Years' War, 8 ships in the *droiture* or West Indian commodity trade were worth 144 livres per ton, compared with 137 livres per ton for the 9 slave ships captured during this same period of 1755–66.

It was African demand for sophisticated imported goods for their slaves that made these cargoes so costly. One estimate has put the average value of the cargo at 200,000 livres. But this may be on the low end. The Nantes slave ship *Reine de France*, weighing 150 tons and with a 47-man crew, transported 404 slaves from Guinea to Saint Domingue in 1744. For this trip it purchased some 247,000 livres of trading goods. The African consumer market was unusual in that the Portuguese, the French, and even the English had to import foreign goods to make up their cargoes. Top on the list were East Indian textiles, which were made up of cotton cloths of white, solid blue, and/or printed design. Also from Asia came cowry shells produced in the Maldivé archipelago just off the south coast of India and purchased there and at transit ports in Ceylon and India. Important as well were armaments, which were sometimes produced at home, but often purchased abroad, and Swedish-produced bar iron used by African blacksmiths to make local agricultural instruments. Knives, axes, swords, jewelry, gunpowder,

and various nationally and colonially produced rums, brandies, and other liquors were also consumed along with Brazilian-grown tobacco. No one nation could produce all these goods and over time purchases shifted from nation to nation. Early on the French tended to buy English arms, the English preferred cheaper Dutch produced arms, and everyone bought their cloths from the Dutch, French, and British traders on their return from Asia.

There is little question that textiles were the primary product used to purchase slaves. In five selected years (1767, 1769, 1771, 1774, and 1776) slave ships from the port of Rouen shipped a total of 3.9 million livres tournois worth of goods to Africa. Of this figure, 1.4 million livres consisted of Indian textiles. Not only were the Indian cloths the single most valuable commodity being shipped, representing 36 percent of the total value of all trade goods, but they also represented 63 percent of the value of all cloths, European and East Indian combined (with the total textile value coming to 56 percent of the 3.9 million figure). The reason for this great demand for East Indian textiles had to do not only with the brilliance and quality of the colors, but also with the durability of these colored cloths and their ability to hold their color through numerous washings and in hot climates, at least according to a French commercial analysis in the eighteenth century. But Africans also purchased large quantities of cloths produced in Europe and North Africa. The Portuguese had discovered in their Gold Coast trade in the sixteenth century that the Africans often took the simple white cloths and linens they imported from Europe and used their own dyes to color them to local taste. But both colored and white cloths from Europe and North Africa were a standard part of African textile imports through the end of the trade, always complementing the Asian imports.

In a major study of African trade in the seventeenth and eighteenth centuries, it has been estimated that textiles made up 50 percent of the total value of imports into Africa in both periods. Next in importance after textiles came alcohol at 12 and 10 percent, respectively; manufactured goods at 12 and 10 percent; guns and gunpowder between 7 and 9 percent; tobacco between 2 and 8 percent; and bar iron between 2 and 5 percent. Even in the nineteenth century when textiles, though still dominant, dropped to a little over a third of the value of all imports, their volume was impressive. It was estimated that in the 1860s, sub-Saharan western Africa imported 57 million yards of cloth, or enough to provide at least 2 yards for every person in the region.

Even when Europeans used African products to purchase slaves, these in turn were bought with European or Asian or even American manufactured goods. All these goods were purchased by traders for hard currencies. Not only did Europeans purchase African produced beads, textiles, special food, or other products wanted by their African customers, but they imported Pacific Ocean products from textiles to such items as cowry shells, which were an important medium of exchange in many African societies. Unlike most of Europe's colonial trades, the African trade required the purchase of a large quantity of nonnationally produced goods – everything from Brazilian tobacco and Silesian textiles to Swedish bar iron and Dutch furniture. Thus, the trade was often the most costly of overseas trades for all European nations since a very large share of the goods used to purchase slaves in Africa had to be purchased outside their own metropolitan economies with hard currencies.

So important was the East Indian textile component of the trade, that it explains the rise of the chief African slave-trading ports in the French and English trades. Whereas La Rochelle and Le Havre had been major slaving ports in the seventeenth century, by the beginning of the eighteenth century Nantes rose to be the primary port, much as Liverpool would be later in the eighteenth century. Like Liverpool, this dominant position was due to the close ties of the two premier ports in Europe's East Indian trade. Unlike Liverpool, however, Nantes also enjoyed several other advantages that encouraged its very early and active involvement in the slave trade. It was already one of France's leading ports in the seventeenth century, and had developed close ties with the Dutch and other northern European capital markets. This promoted its general interest in Asia as well as the New World trade, even before Africa was opened to its merchants. Finally, Nantes enjoyed special tariff arrangements that gave the Nantes merchants further advantage over their competitor ports. Because of all these factors, Nantes established majority control over the French slave trade as soon as that trade was first opened up to free traders in 1716, and while competition grew in the latter part of the century, it remained the primary slave trade port into the nineteenth century. It is estimated that of the 3,709 slaving voyages outfitted by the French during the course of the trade, half came from Nantes with no other port organizing even a third of its slave-trading voyages. In contrast, Liverpool, though England's largest slave-trading port, accounted for only 39 percent of the 7,642 known

British voyages and was closely followed by London and Bristol, which together outfitted 61 percent of these slaving expeditions.

The trip out from Europe to Africa took anywhere from three to four months. Many ships stopped at other European ports for more cargo on the outward leg, or temporarily stopped to provision in the southern European ports or the Canary Islands. Moreover, the length of the trip also depended on which area of Africa was to be the prime trading zone. Reaching Gorée, a major trading zone in the Senegambia region, for example, left another trip as long again to reach Angola.

The region selected for trade by each European national depended on local and international developments. By the eighteenth century, rough spheres of influence had been established, with the English, Dutch, and the Portuguese most dominant as residents on the African coast with their permanent forts or factories. But no African area was totally closed to any European trader, and there was an extensive published contemporary literature and general European knowledge on the possibilities of local trade everywhere in western Africa. The local forts maintained by some European powers were not military centers, but were commercial stations that facilitated local commerce with the Africans and had little inland activity. Many of these forts would allow foreign traders access to their resources. Even the Portuguese, who were the Europeans most likely to concentrate on a limited set of regions in southern Africa, would conduct trade in other quite open and competitive regions. In the eighteenth century, for example, Portuguese and Brazilian shippers took over half a million slaves from the Bight of Benin where Portugal had no permanent settlers or outposts, at the same time as they took 1.3 million slaves from their controlled ports of Angola.

Of all the major European traders, the French were the most catholic in their selections. They established the fewest permanent establishments on the African coast, with those at the Senegal River and Whydah on the Gold Coast being the most important. Otherwise, the French Atlantic port free traders essentially operated out of seasonal or quite temporary locations all along the coast from Senegal to the Congo, and were even extraordinarily active along the East African coast. The French even became serious competitors to the Portuguese in the Mozambique region and carried on a thriving slave trade from East Africa throughout the eighteenth and into the nineteenth century. Unlike the Portuguese, however, the French East African traders did not carry their slaves to America but rather to a series of Indian Ocean

islands off the African coast where they developed thriving sugar and slave plantation colonies.

Even in the areas where these forts existed and which therefore served as well-known local markets for slaves, there was no major “bulking” or warehousing of slaves. The costs to the Europeans of maintaining slaves was prohibitive, and would have made final costs quite high. For example, the fort that the French maintained at Fort Saint Joseph in the 1750s had a capacity of only 250 slaves. But there was little agricultural activity around the fort, and it was virtually impossible for them to maintain slaves in storage once the majority of the slave ships had left for America. On the other hand, hinterland traders could easily absorb slaves into their own agricultural or industrial production as they waited for the return of the slave ships. It is estimated that feeding a slave on the coast for a year would have increased his or her price by 50 percent.

In the overwhelming majority of cases it was the Africans who controlled the slaves until the moment of sale to the captain. Only occasionally in the era of free trade did a local European purchase slaves on his own account for resale to the slaver captains. This had been more common in the earlier age of the monopoly companies, but even then had accounted for only a small volume of sales. Given the lack of arrangements for holding slaves on the coast until late in the nineteenth century, there were few cases when a captain could buy a large number of slaves from any one African buyer even where the local state or its officials controlled the trade. In all the accounts of the trade, as will be seen in the next chapter, it was the norm for slaves to be purchased in relatively small lots directly from the African sellers. Finally, though the African purchase origins were the same, some captains in the eighteenth century were able to buy slaves from each other. Especially if a slave ship had been on the coast a very long time and was trading near recently arrived vessels, it was common to pay a premium and make quick trades among the captains so that the long-trading ship could finally leave the coast.

In almost all cases, African slave traders came down to the coast or the riverbanks in a relatively steady and predictable stream to well-known trading places. The cost of moving the slaves in caravans to the coast was relatively cheap – only the costs for food for the slaves and the salaries of the guards, and the costs of purchase for any slaves lost in transit because of death or escape (a loss for which we have no systematic data for any African interior trade route). The slaves also could be used to move goods at no cost, with each male slave carrying up to twenty-five

kilograms of goods and women up to fifteen. It has been estimated that the total ivory exported from Gambia in 1741 could easily have been moved free of charge by the slaves who were shipped to the coast for sale in the Atlantic slave trade. This low cost of transport and free “ballast” of goods that could be carried reduced the costs of delivery of slaves from the interior to the coast. It also promoted an ever deeper penetration of the interior for ivory husks as the coastal elephant population became depleted. Also, given alternative local uses of slaves, inland traders arriving by caravan could respond to low European prices by holding these slaves off the market and using them as workers in agriculture or industry for any time period needed until prices rose again. Equally, they could be sold to local consumers at any time on the trip, and, from the few eyewitness accounts, this seems to have been a common experience. Eventually, many of these slaves would then be resold into the Atlantic trade if demand was strong.

The lack of bulking facilities for slaves on the coast meant that all European traders tended to spend months on the coast or traveling upriver gathering their slaves a few at a time. Even the ports of Luanda and Benguela, the only African centers that maintained a large resident white population, still required a stay of several months for ships going to Brazil to complete their complement of slaves. In a study of 84 Brazilian slave ships coming from the port of Rio de Janeiro between 1827 and 1830, the average stay in the Central African ports was 5 months. It was typical in almost all trading areas for the captain to leave the ship in one spot and take small craft to trade inland, leaving another officer in charge of the ship. He usually was accompanied by the ship's doctor, who then examined each slave for disease before allowing the purchase. On average, it would take several months to fill the ship. In most cases, the slaves were held ashore as long as possible to prevent the outbreak of disease on the ship, but even so death rates were relatively high for this “coasting” period. The best records for this mortality experience come from some 58 Dutch free-trader slave ships in the 1730–1803 period. On average, they spent six months trading on the coast and lost close to 5 percent of the slaves they purchased before sailing to America. Typical of the free-trade eighteenth-century experience was the Dutch vessel the *Vergenoegen*, which reached the Loando coast on 5 September 1794. After the usual gift giving to local African officials, trading began, with the captain remaining on shore during the whole period and sending between 2 to 7 slaves across to the ship every day. The purchase of 390 slaves took a relatively rapid four months to accomplish, but serious

illness occurred with an outbreak of smallpox. A rather high percentage, some 26 slaves, died on the coast along with the captain, even before the ship finally sailed for America.

But there were some very well-organized trading zones where local African factors or merchants purchased slaves from the arriving inland traders and then arranged their sale to the ship's captain. This allowed the vessel to stay at one place instead of wandering along the coast and rivers. This pattern was typical in Luanda, Benguela, Elmina, and other well-established trading centers with a powerful local merchant center. But even in these fixed-position trading places, the average time on the coast was measured in months because most purchases were still in relatively small lots.

Good data are available on the "coasting" experience from the Dutch, French, and English trades. The seventeenth-century Dutch West India Company ships averaged 100 days on the coast picking up slaves, which was comparable to 34 British vessels in this period who averaged 95 days on the coast. Time trading on the coast seems to have increased in the course of the eighteenth century. Thus, Dutch free traders in the early eighteenth century averaged 200 days trading in Africa, some 230 French traders needed on average 143 days to complete their purchases in the 1726–58 period, and some 587 independent British traders averaged 173 days at midcentury (1751–75). In the 1763–77 period, another group of 224 French slave ships averaged 168 days of trading, with the Loango coast as usual being above the average, at 173 days for the 55 ships which took on slaves on this West Central African coast. The increasing time needed to purchase slaves is partly explained by the reliance on the forts and local company men to do purchases prior to the arrival of the slaver in the earlier period, which helped reduce the time to an average of just over three months. Equally, the fact that several ships were coming from the same European company meant that often ships traded among themselves to move the earliest ship out faster. Thus, an arriving captain might sell some of his first slave purchases to a departing captain so as to more rapidly complete the latter's loading. But the free traders usually worked for companies or associations that sent out few ships and could not rely on the cooperation of fellow captains.

While accumulating their slaves, the Europeans also took on freshwater supplies if they could from the local coast. During the dry season in many areas and in some African coastal regions at all times, water supplies were simply not available. This led some of the traders to stop at the Portuguese African islands of São Tomé or Príncipe to obtain the

large quantity of water that was needed. Others stopped earlier on the African coast in regions known to have abundant water supplies. They also purchased food supplies for the voyage at this point or before the trading had begun in other parts of the coast.

In provisioning for the voyage, all traders used common African foods and condiments along with dried foods and biscuits brought from Europe. They also brought with them lime juice for combating scurvy. The Europeans all tried to supply standard foods that local Africans could consume, though this varied from region to region. Most used European- or American-produced wheat flour or rice to produce a basic gruel, which would then be seasoned with local condiments and supplemented with fresh fish and meats as well as dried versions of these foods. Regional taste differences also showed up in food supplied for slaves taken from different regions. In the Sahel region, African-produced millet was preferred to rice, whereas slaves from the delta of the Niger and Mayombe preferred yams. In all trades, whatever the base used for making the gruel, almost all the condiments used came from Africa including the palm oil and the peppers, and all trades provided biscuits for both crew and slaves.

Even in the earlier seventeenth- and eighteenth-century trade when much more European dried foods were used, Dutch slave captains purchased fresh vegetables and small livestock on the African coast, along with the ever necessary supply of fresh water. To the earlier Portuguese provisioning acts of the late seventeenth century, which most concerned water rations, the governor and captain general of Luanda in 1770 decreed a more complete law on provisioning for the slave ships. He demanded that all slave ships be thoroughly cleaned and aired out before they took on slaves. He also demanded that shippers buy the more expensive dried fish as well as the cheaper fresh fish, and that any fresh fish purchased for the slave diet be consumed in the first days of the voyage before it rotted. Beans were to be cleaned before storage. Palm oil, vinegar, salt, and other seasonings were to be provided in their daily rations of flour (most probably Brazilian imported wheat flour) along with a small quantity of rum. Also, along with the fish and occasional vegetables, the slaves were to get some dried beef and be given tobacco on a steady basis. In the French trade, a freshly prepared quart of soup composed of rice and beans was provided at the two meals per day. Corn meal, peppers, and salt were also occasionally given with the soup and here as well some rum or brandy was occasionally supplied. The British in the eighteenth century also provided two meals a day with the first

made up of African foods, mostly rice and yams, and the second a gruel made of barley, corn, and biscuits, with meat sometimes added. Fish stock and garnishings of palm oil and pepper could be added to either meal.

The British slave ship the *Brothers* in a fifty-day Atlantic crossing in 1789 provided the slaves with a per diem ration of three pounds and ten ounces of yam, two ounces of flour, three and a half ounces of beans, and ten ounces of biscuits, along with salted beef. On three out of five days the slaves also got a plantain and an ear of corn. Finally, a mouthwash of lime juice or vinegar was provided to each slave in the morning to prevent scurvy. A typical French slaver of 280 tons that carried some 600 slaves for a two-month voyage to America needed some 200 kilograms per slave for their food supplies, which consisted of 40 kilograms of biscuits, beans, and rice, along with other rations. This was calculated to mean a consumption of a little over 2,000 calories per day for each slave during the crossing – a figure lower than that provided for contemporary sick sailors aboard French royal naval vessels (2,385 calories).

As important as food was the water. The French estimated that they needed one cask or barrel of water for every person aboard ship and all traders gave drinking water three times per day, even when meals might only occur twice a day. The ship carrying the 600 slaves for a two-month voyage would thus need one water cask per slave (weighing between 65 and 66 kilograms per cask), which meant that some 40 tons of water casks were loaded for the slaves alone. On some coasts, water was not readily available and often had to be obtained in regions far from where the slaves were obtained. Finally, the maintenance of the casks and the guarantee of their quality was an important part of the responsibility of the captain and the carpenters. The governor of Angola in 1770 formally ordered the checking and cleaning of the water casks and copper caldrons of all slavers leaving his region, and demanded that drinking water not only be stocked in the abundance already ordered by royal decree, but that it not be put in the rum casks. For their part, the French traders, before crossing the Atlantic customarily took their final water supplies from the Portuguese African islands of São Tomé and Príncipe rather than from the African coast on which they traded because of the excellent quality and abundance of the local waters.

Aside from maintaining a steady and clean water supply, almost all slave traders housed and organized daily life of the slaves in the same manner. The decks usually were divided into three separate living quarters, one for males, one for grown boys, and one for women and children.

Sick slaves were usually isolated in their own compartment. Depending on the number taken, and the number ill, these compartments could be expanded or reduced. Slaves were usually shackled together at night to prevent rebellion and movement, but were then brought up to the deck during the day. On deck they were forced to exercise, often accompanied by African musical instruments. In the Dutch trade, for example, all captains purchased African drums so as to force the slaves to dance as a form of exercise. Usually, the Africans stayed the entire day on deck and had their meals there if the weather permitted. At this time the crew went into their quarters and cleaned them out, often using vinegar and other cleansing agents. While all females were given simple cloths to wear, in some trades the males were left naked if the weather permitted. All slaves were washed every day with seawater.

As is obvious from these details, it was the aim of all traders to keep the slaves and their quarters as clean as possible since there was a generalized awareness of the correlation between cleanliness and disease. Beyond this, all slave trades carried a ship's doctor to care for the slaves and crew and their illnesses. Nevertheless, the details given of the medical cabinets of these "doctors" show little of value for fighting the standard diseases that struck both crew and the slaves. Mortality and morbidity were high among the slaves and little beyond maintaining clean food and water supplies provided any effective remedy for these diseases.

Once arriving in America the slaver had to clear local customs and health registrations and then the slaves were immediately sold to local planters. Among the French it was the custom for the captain to sell his slaves directly, using a local agent who took a commission on all sales. The local agent announced the arrival of the ship via posters and by mail and the sale usually began immediately upon docking, or within a week of landing. Slaves were either sold directly from the ship or brought to a special market on land. Usually the slaves were sold one at a time, with occasional sales of several to one buyer. Thus the French *Duc de Laval* that arrived in the West Indies in 1775 sold its 365 slaves to 72 different purchasers from all walks of life, going from royal officials and leading merchants to artisans buying 1 or 2 slaves.

In the eighteenth-century French West Indies, all able-bodied slaves were usually sold within two or three weeks of arrival. In Barbados in the late seventeenth century, sales from Royal African Company ships appeared to be much more rapid. Thus the *James* that arrived in May 1676 sold 351 of its 373 slaves within the first three days of beginning its sales, but did not sell the rest for another two weeks because of the

poor health of those not sold immediately. What is evident from this experience is that if the American demand was strong, most of the healthy slaves could be sold in just a few days, with sales going longer to include those recovering from disease. There is even the practice of some free colored women in eighteenth-century Saint Domingue buying the sickest slaves at bargain prices at the end of several weeks in order to nurse them back to health and then sell them to local buyers at healthy slave prices. All sales were deemed final and it was the responsibility of the new American owner or his agent to move the slave to his new place of residence.

The great problem for the ship's captain and the original outfitter and owner of the expedition was the terms of sale. Once agreeing on the price, usually only about 25 percent down payment was made and the rest was to be paid for in eighteen to twenty-four months. Moreover, even when payment was made it was often in colonial goods and not in cash, which was always scarce in all American colonies. Also, collecting on these promissory notes was very difficult and involved endless conflict between the merchants and the purchasers. The agent determined the creditworthiness of the local purchaser and was required to collect the final payments. He was also required to obtain a return cargo for the slave ship if this were possible. More often than not, the ship was sent off with only a limited cargo and finally would return to Europe some fifteen to eighteen months after having left Europe.

Thus, despite the myth of the so-called triangle trade, the leg of the slaving voyage between America and Europe was the least important part of the slaving voyage and slave ships were not a significant element in the transportation of slave-produced American goods to the European market. This myth assumed a tight relationship between the shipping of European goods to Africa for slaves, of slaves to America, and slave-produced American products being shipped to Europe all on the same ship. In fact, most of the West Indies goods were shipped to Europe in boats specifically designed for that purpose and were both larger than the typical slaver and were exclusively engaged in this bilateral trade. Since many among the crew were supernumeraries after the slaves were sold in America, and the ship's cost was a relatively minor part of the original expenditures of outfitting the slaving voyage, it often happened that slavers ended their voyage in the New World and the captain and a few crewmen returned to Europe on their own. Even when they did return to Europe, they waited only a short time to return and made no effort to wait for the availability of American goods. If a cargo was available,

then it would be taken, but more often than not such ships returned in ballast. Thus, of the 195 Dutch free-trader slave ships that arrived in America in the eighteenth century, 65 returned to Europe in ballast – carrying just sand and water – and another 52 carried a small or token cargo. Only 69, or just over a third, came with a full cargo of American products for sale in Europe. There is little question that this trade can be considered to have had a triangle-style relationship, but the slave ships, for all intents and purposes, really made a significant impact only on the outbound to Africa and the Africa to American legs of the trip.

Once in Europe, the captain made his report, and the crew was given its back wages in cash – often necessitating the immediate outlay of 100,000 to 200,000 livres in cash. The *armateur* then immediately sold the imported sugar or other goods to local shipping merchants who handled such trade and then proceeded to concentrate on obtaining all the remaining funds due him for the credit sales of the slaves. This sale of the goods brought back on his slave ship brought the outfitter usually no more than one-third of his original outlay. For the rest of his return on slave sales, it usually took three full years to complete, with the merchant constantly needing to sell the constantly arriving colonial goods (by which most of the slaves were paid for) to local importers. The bulk of the credit sales were completed by the end of six years, though outstanding bills sometimes were never paid. It was the last three of the six years when the profit of the trade was made. Apparently, the period in which the debts were paid off was shorter in the British trade, with one study estimating that at the end of the eighteenth century it was completed in about two years.

The size and amount of the profit generated by the slave trade has been an issue of intense debate for some time. There is little question that the thousands of ships that sailed for Africa to engage in the slave trade did so because it was profitable to European merchants to invest in such a commerce. Thus, despite the very long-term nature of these investments, there was always a large number of European and American merchants and others willing to invest their capital in this enterprise. The trade was also profitable to most of the coastal African states exporting slaves. There was always a supply of slaves brought to the coast by African slave traders who found it profitable to do so, and most African nations resisted attempts by the British after 1808 to close their trades. Even when the more valuable palm oil trade became a major export after the 1820s, these same African palm-oil-exporting regions were still willing to trade in slaves.

But the question remains how profitable was the trade to the Europeans and to the Africans who controlled it and what were its larger social and economic costs? The traditional literature saw the trade as a European monopoly from which the Africans received little compensation and in which slaves were bought for worthless goods at illusory prices and shipped at modest cost across the Atlantic. Profits were therefore assumed to be extraordinary by the standards of the time, and it was then suggested that they were so large that this slave trade profit combined with the profit generated out of slave-produced goods traded from America generated the capital to finance the Industrial Revolution.

But just how profitable was it for the Europeans? The polemics have been intense about the overall economic benefits of the slave trade to the Europeans themselves. These debates began with Eric Williams and have continued on into the most current journal articles. The discussion can be divided into three general questions: was the slave trade profitable at the firm level and were these profits excessive; what impact did the slave trade have on the economic growth of Europe; and, finally, what impact did the slave trade and slave labor have on American economic growth?

From the work of the European economic historians, it is now evident that slave trade profits were not extraordinary by European standards. The average 6 to 10 percent rate obtained was considered a very good profit rate at the time, but not out of the range of other contemporary investments. But if profits were not "astronomic," was the trade an open one, or a restricted one that created concentrated oligopolistic profits that could then possibly serve as a fundamental source for capital investments in the European economy? It has been suggested that high initial costs of entrance, plus the long time period needed to fully recover profits (up to five years or more on a typical slaving voyage), meant that only highly capitalized firms could enter the trade. Most merchants spread their costs around by offering stock in slaving voyages and otherwise trying to insure themselves against catastrophic loss on one or more lost voyages. But the costs of entrance, the experience of contacts, and the international nature of the complex negotiations suggest that there were limits on the number of merchants who could enter the trade. While this specialization seems to have taken place (and there are cases of quite major houses operating in both England and France), it is also impressive just how many independent merchants participated in the trade and how many ships were outfitted for the trade in any given year. At the height of the trade in the 1780s, for example, some 260 or so

ships, almost all with different owners, were needed to move the 79,000 slaves per annum who were sent to America.

There have been numerous studies on profitability of the trade at the level of the individual firm. Earlier English research by Anstey and others estimated a gross profit of 10 percent per voyage. In a recent analysis of the eighteenth century French trade, Gullerme Daubin, using modern economic accounting found the internal rate of return to be 6 percent. This, he estimated was also the average for most overseas commercial trades, and in fact the French slave traders were much less specialized than the British, with most of the biggest slave traders also actively engaged in other more normal trading ventures. In turn he asked if there were better rates of return to local capitalists in land rents, private credit arrangements or public bonds, and found that both the slave trade and all overseas trades produced higher average returns of between 2 and 5 percent. Surprisingly the slave trade and general commercial voyage investments were less risky and more liquid (that is capital could be extracted) and needed less time to garner returns than all other forms of possible investment in the eighteenth century. But given the high risks of all overseas voyages risk itself was controlled by buying shares in multiple voyages. This need to control for high market wide risk meant that there were barriers to entrance into the trade. To be profitable an investor had to have committed a large volume of capital. Information barriers also existed because of the need to have good contacts and knowledge about the quality and experience of individual voyage organizers. The result was that most of the investors were in fact wealthy merchants and were local to the port where the ship voyages began.

It has also been argued that the credit mechanisms used to finance the trade were among the most sophisticated employed in long-distance trading. Though this is correct, it turns out that most of the credit mechanisms implemented by the traders and their suppliers and customers were in place before the trade fully developed. Thus, while the slave trade was unusual in its very high use of credit, of which the British made the most use, such credit sales were not unique to this trade nor did their use alone foster the evolution of English or continental credit institutions considered so crucial to the evolution of modern economic society. It is interesting to note, however, that English credit facilities would be intimately involved in the slave trade even long after British direct participation ended in 1807.

This debate on the relative rates of merchant participation and control and of the sophisticated use of instruments of credit has generated

a lively analytical literature. In this debate, however, no current scholars have been able to show that the gains from the trade were directly invested in the earliest industrial enterprises of Great Britain. All the studies of the sources of industrial capital in England suggest local origins from agriculture and/or European commerce. Nevertheless, the thesis first developed by the historian and former prime minister of Trinidad and Tobago, Eric Williams, which had suggested such a linkage between slave trade profits, profits from slave-produced sugar, and the capital used to promote the Industrial Revolution in England, has come in for some support. Thus, French scholars have suggested the important role played by Africa as a market for European manufactures, especially of the more basic sort. It has been suggested that the French armaments industry was completely dependent on the African trade (which was paid for by slave exports) during times of European peace. Several other industries on the continent and in England can also be shown to have been highly dependent on the African market. Since much of early industrial activity involved production of cruder and popularly consumed products, it can be argued that the African market played a vital part in sustaining the growth of some of Europe's newest infant industries. Thus, while the more extreme position that Williams suggested has not been supported, scholars have suggested various linkages between European industrial production and the African market.

Another area that has yet to be explored is that of the use of the capital generated from the slave trade within America itself. In many trades, American owners and investors participated along with Europeans in the Atlantic slave trade. The West Indians, the North Americans – Virginians and, above all, the New Englanders – and the Brazilians clearly were an important group of owners within the trade. In terms of volume and capital generated, there is little question that few American regions compare with those of Bahia and Rio de Janeiro. The number of ships provisioned for the African trade in these areas suggests a major involvement of local capital. The capital dedicated to the Brazilian slave trade came from many sources. Merchants in Angola outfitted and paid for numerous voyages, and capital was invested from Portugal itself. But a large share of the financing came from merchants in the port cities of Rio de Janeiro and Salvador de Bahia. Given the unusual importance of Brazilian produced goods in African importations – above all, tobacco, alcohol, and arms and ammunition – and the complex wind and current conditions of the South Atlantic that made any potential triangular trade extremely difficult, Brazilian resident merchants had a

higher participation ratio in the slave trade than any other American merchant class. For example, of some 42 slave ships which were involved in legal issues before the *Junta do Comércio* (commercial court) in Rio de Janeiro, 10 were owned by Portuguese African-based merchants, one by an English merchant and the rest pertained to Rio merchants. Moreover, even European or African owned vessels probably had shares sold to Brazilian capitalists. And the slave trade merchants of Rio de Janeiro had extensive contact with Luanda merchants who operated as either co-owners of their slave expeditions or as their agents. Although Brazilian-produced goods were to be found in every outbound slave ship going to Africa, only an estimated 14 percent of early-nineteenth-century slavers carried only Brazilian produced goods for purchase of slaves. The most valuable part of the trade, even in Brazil, was Asian-produced textiles, which had to be imported from Goa, either via Lisbon or delivered directly to Luanda from India. Thus, the Brazilian trade, like all others, involved a complex amalgam of metropolitan, African, Indian, and American capital. But equally it is clear from studies of merchant records that Rio de Janeiro merchants either as organizers of voyages, owners of the slavers, or even as insurers of the ships and their cargos had a major capital investment in the Atlantic slave trade, and were probably the single largest American investors in the slave trade. What happened to this Brazilian capital tied to the slave trade after 1850 is difficult to assess. Thus, the end of the slave trade to Brazil in 1850 involved a major reallocation of local capital. It has been suggested that all this capital went into consumption of imported goods or financial speculation, but that is doubtful. It is most likely that most of the capital went into coffee, the internal slave trade, the construction of new steam mills for sugar and the beginnings of infrastructural investments in railroads and tramways, all of which experienced major growth in the next three decades. A similar process of alternative deployment of slave trade capital may have occurred in other American importing zones after the abolition of the trade.

Whatever the revisions that can be expected in our knowledge of the economics of the trade, there is little question that the basic outlines are well established. The older popular literature that stressed the cheapness of slaves, the passivity of the Africans, and the extraordinary profitability of the trade has been thoroughly challenged by the available documentation. It is evident from all the studies of provisioning costs in the trade and of the organization of the African market that slaves purchased in Africa were not a low-cost item. The goods exported to Africa to pay

for the slaves were costly manufactured products or high-priced imports from other countries or even other continents, and were the single most expensive factor in the outfitting of the voyage, being more valuable than the ship, the wages for the crew, and food supplies combined. An officer in the Royal Navy presented a typical cost estimate to Parliament in the late 1780s, which noted that the cargo taken on board a typical slaver leaving Liverpool was close to double the combined costs of the ship, its insurance, and the wages of the crew for twenty months. Even when all the final commissions to the captain, other officers, and agents from the final slave sales, the interest on loans, and the port fees were included, the costs of the outbound cargo used to purchase the slaves still represented the single largest expense incurred by the owners and over half of total costs for the entire enterprise. Two-thirds of the outfitting costs of the French slavers in the eighteenth century were also made up of the goods used to purchase the slaves.

Along with the myths about the cheap cost of slaves, the popular literature stressed the dependent position of the African merchants in the trade. It was thought that prices demanded for slaves were low and invariant, that the trading was all dominated by the Europeans, and that the Africans were passive observers to the whole process. These issues will be examined in more detail in the following chapter, but at this point it is worth noting that all studies show that the mix of goods that went to make up the price in each zone tended to vary over time and reflected changing conditions of demand and supply. Thus, African merchants adjusted their demands for goods in response to market conditions. Africans were also astute and persistent in preventing the Europeans from creating monopoly conditions. The European forts in West Africa and even the Portuguese coastal and interior towns in Southwest Africa were ineffective in excluding competing buyers from entering the local market. The forts exercised dominion for only a few miles inland and were more designed to fend off competitors than to threaten suppliers. As for the unique Portuguese settlements, these were unable to prevent the French and English from obtaining Congo and Angolan slaves on a massive scale. Yet these were supposedly domains totally monopolized by the Portuguese.

Finally, even if the "triangle trade" idea is essentially incorrect, the Atlantic slave trade was one of the more complex of international trades that existed in the modern period. It intimately tied cowry and textile exports from Asia to African imports and involved massive movements of people across large land masses and great oceans. It tied up European

capital, ships, and crews for long periods of time and involved very complex credit arrangements for the sale of American crops in European markets. Thus, while an actual “triangle trade” may not have existed as a significant development for ships in the trade, the economic ties between Asia, Europe, Africa, and America clearly involved a web of relationships that spanned the globe. At the heart of this system was a Europe committed to consuming American plantation crops at an ever expanding rate, crops that ranged from luxuries to basic necessities within the European population. Until European immigrants replaced them in the late nineteenth century, it was African slaves who enabled this consumption revolution to occur. Without that labor most of America would never have developed at the pace it did.

THE AFRICAN ORGANIZATION OF THE SLAVE TRADE

Did a market for slaves exist in Africa, and were slaves purchased in an economically rational way? These seemingly innocuous questions have created enormous debate as some writers have even denied the existence of such a market, assuming that all slaves were taken by piratical seizure of European traders. Thus, the first question to ask is, Did a market exist? The answer from all known sources is that all African slaves were purchased from local African owners and the exchange of goods for slaves represented a real market by anyone's definition. Although early in each European trade there are cases of ignorant slave captains seizing local Africans who appeared before them on the coast, these practices stopped quickly. European buyers were totally dependent on African sellers for the delivery of slaves. European traders never seriously penetrated beyond the coast before the late nineteenth century because of the military power of the African states and the threat of disease. The coastline itself was often lightly populated and had few slaves. Slaves in numbers sufficient to fill the holds of the slave ships only arrived to the coast via African merchants willing to bring them from the interior. The complexity of this exchange was such that it explains why slaves were purchased in such small numbers on the coast and why Europeans took months to gather a full complement of them for shipment to America. Given this balance of resources and power relations, the Europeans quickly discovered that anything but peaceful trade was impossible. Those who did not adapt were rapidly removed from the trade, sometimes by force.

Aside from a commitment to peaceful trade, Europeans had to deal with the special demands of established states if they wished to purchase slaves. Almost all traders paid local taxes for their purchases and

otherwise dealt with the African traders as autonomous and powerful foreigners who controlled their own goods and markets. Everywhere, Europeans quickly adapted to local trading practices. It was estimated that in the Kingdom of Whydah on the Slave Coast in the late seventeenth and early eighteenth centuries, European slave traders had to pay the equivalent of 37 to 38 slaves (this cost valued at £375) per ship in order to trade for slaves in the kingdom. These costs included a royal tax on the right to trade, payments for royal officials handling the movement of slaves to the ships, the costs for African government interpreters – one for each of the foreign lodges then trading on the coast who knew English, French, Dutch, and/or Portuguese – and even a privileged first sale of a small number of royal slaves before all others could be purchased. Then came a final export tax. Such taxes and payments for the right to trade existed on virtually all coasts. The European observers on the African coast record all these taxes without comment, taking them as the normal cost of dealing with powerful foreign states, and only complaining of what they thought of as corrupt or arbitrary practices favoring one group over another.

In an unusual arrangement, the same Whydah government guaranteed a standard price for all slaves sold to one ship – a practice clearly favoring the European traders – but even here it varied that price from ship to ship depending on supply and demand factors, and would even work out different standard prices for ships of the same nation trading at the same time. Though European traders constantly petitioned the Whydah king for a fixed price for all ships, the government refused all such demands. More common in most trades was for prices to vary for each slave sold, and there were constant complaints by traders that prices of slaves tended to rise toward the end of their trading, as Africans knew that they were anxious to complete their sales and leave. The Europeans were even required by the Kingdom of Whydah to use a given set of African brokers who arranged all trade and received a sales commission fee beyond the taxes and port fees, a practice rather common not just on the Slave Coast of the Bight of Benin.

Aside from these costs, since Europeans had to remain on the coast for several months, they had to purchase all their water and supplies from local merchants in whatever currency or goods demanded. There even developed a very active credit market, with Europeans giving goods to local officials or merchants to purchase slaves for them in the interior, as well as Europeans obtaining slaves on credit with the promise of goods. This led to conflict and judicial proceedings, with the African

governments often holding resident European merchants captive, or expelling them from the coast for failure to pay debts. The existence of these powerful and independent local states was in fact a guarantee for the Europeans of a steady trade relationship. This explains why Whydah and Dahomey (which conquered Whydah in the 1720s) provided some of the largest numbers of slaves for the Atlantic trade.

Nor was all of this trading in slaves something unknown to the Africans. Both an internal and international slave trade existed in Africa before the arrival of the Europeans, and Europeans found it convenient to adjust to well-established local African markets and trading arrangements already in place. In many cases, the Europeans only deepened preexisting markets and trade networks. Africans were also quick to respond to European needs beyond the slaves themselves. Coastal Africans developed specialized production to feed and clothe the slaves arriving at the ports and to supply provisions for the European trading posts and their arriving ships. New trade routes were opened up as European demand increased beyond local coastal supplies, and with it more long-distance trading became the norm everywhere. It was said that white and black Muslim traders from the Saharan region finally began trading at Whydah at the beginning of the eighteenth century, as the complex Saharan routes were now linked to the European Atlantic ones in the so-called Benin gap – the open savanna lands in the Lower Guinea Coast.

Coastal trading states got their slaves from the interior, purchasing them with both their local products such as salt, dried fish, kola nuts, and cotton textiles, as well as European goods. Unusual trade routes opened by Europeans were often developed as well by the Africans. The Dutch initiated direct oceanic trade on a systematic basis with small coastal yachts between the Gold Coast and the Slave Coast in the seventeenth century in order to purchase African products demanded on the Elmina markets for gold. Africans in oceangoing canoes soon followed and created a major new cabotage trade for regular African commercial goods between these two coasts for the first time. This in fact explains the origins of the settlement at Little Popo on the Slave Coast, which was a portage stopping point for Gold Coast canoes transferring from the ocean to the inland lagoon shipping channels. At the same time new American foodstuffs that were imported by Europeans for their own needs were quickly adopted by African producers. These imports included such fundamental crops as maize and sweet potatoes, along with manioc (casava), coffee, and cacao. Already by the 1680s the Slave

Coast communities were supplying maize to the European slave ships. The Europeans also introduced pigs and such unfamiliar Asian products as citrus fruits. Many of these crops slowly replaced or supplemented traditional African foodstuffs, often permitting denser and healthier populations. Although some of these products were integrated into traditional food production arrangements, others became the basis for new local industries. There was even the case of imported European woolen cloths being unraveled for their thread and rewoven by Slave Coast weavers to produce new-style cloth for consumption on the Gold Coast. This is aside from the well-known importation of Swedish bar iron, which was used by African blacksmiths to produce agricultural instruments for clearing bush and planting crops. Nowhere on the coast were the Africans incapable of benefiting from European trade or the introduction of new products and using them to their own ends and needs.

A thriving market economy with specialization of tasks and production and a well-defined merchant class, in existence before the arrival of the Europeans in most areas of Africa, goes a long way toward explaining the rapidity and efficiency of the African response to European trade. Gold and slaves had been exported from Africa for centuries. From the Saharan caravan traders of the western Sudan to the stone cities and gold fairs organized by Swahili Islamic traders in East Africa, Africans were well accustomed to market economies and international trade well before the arrival of the Portuguese on the West African coast. This does not mean that these were necessarily full capitalist markets, since local monopolies, kinship, and religious constraints, along with state intervention, often created unequal access and restricted markets here as they still did in most of Europe in the fifteenth century. But in general, prices defined in whatever currencies, units of account, or mixes of trade goods fluctuated in response to supply and demand across the entire continent. Nor were traders reluctant to expand their markets or adopt new technologies.

Thus, Africans had little difficulty in dealing with Europeans and trading with them from the beginning. An extensive slave market already existed before the arrival of the Europeans, and though domestic slavery in Africa would be substantially different from commercial slavery in America, the whole process of seizing war captives, enslaving criminals and debtors, taxing dependent groups for slaves, and even raiding defenseless peasants constituted well-known market activities. Slaves were purchased by local groups and individuals throughout Africa and

were also shipped north and east to satisfy Middle Eastern and Mediterranean markets. Thus, Europeans were able to tap into already developed supply markets. Moreover, long-term contact with the Islamic states in North Africa and the Near East, and even longdistance trade between Asia and East Africa prior to the arrival of the Europeans, meant that Africans could negotiate from a reasonable knowledge of international markets what items of European or even Asian production most appealed to them.

If African markets existed and slaves were marketed throughout Africa prior to the European arrival, and if Africans were definitely not passive economic actors, what about the price they received for their slaves? What did a slave cost on the African coast and did this price change over time? These remain fundamental questions in dealing with the economics of the slave trade. To determine the price for which slaves were sold in Africa to Europeans is a very complex calculation. For the Europeans the price was the European cost of goods that they needed to purchase and offer in exchange for obtaining a slave. This European cost of goods was called the "prime" price. On the African coast, these goods were often doubled in value when sold to the Africans, and these prices were called the "trade" price. Almost all the European accounts when estimating their own costs used the "prime" price. But even using the trade price for what the Africans had to pay is a complex calculation. The actual mix of goods used in any purchase was expressed in both European currencies as well as in African monetary accounts, which included such monies as cowry shells, copper wires, or even palm cloth, or was defined in such units as a trade "ounce," which originally meant the value of an ounce of gold, "bundles," and other arbitrary units. These African currencies or units of account were not uniform across Africa. Cowry shells, for example, were a primary money used in the Gulf of Guinea, but not on the Congo-Angola coast. The "ounce" was very common in the Gold Coast and associated areas, but not used elsewhere, while a "bundle" of goods was common in the trade to the Loango and Angolan coast. Silver coins minted in Spanish America were used in the Upper Guinean ports and on both the Gold and Bight of Biafran coasts in the eighteenth century and they were carried by all Brazilian slave ships going to East Africa to purchase slaves in the nineteenth century. Gold dust was used to purchase slaves in many regions, but especially in the Bight of Benin. Thus, Europeans were often required to spend their own currencies directly in their commerce with the Africans.

Finally, to determine an average price on a ship filled with 450 slaves is also complex, since there was not a uniform price paid for all slaves in a given port at a given time. Prices varied quite widely based on the age, sex, and health of each slave. Women were on average 20 percent cheaper than men, and children were even cheaper still. Moreover, "prime-age" males were 20 percent more expensive than older males, and so on. Thus average prices varied depending on the slaves purchased, though in general between half and two-thirds of any group of slaves carried off the coast were made up of prime-age men. Slave prices also varied depending on local trading competition and supply conditions and even varied over the time of trading for an individual voyage. This variation in "average" price per slave is well reflected in the records of Dutch free traders in the eighteenth century. Thus, the slave ship *Nieuwe Hoop* that traded at Senegambia three times between 1767 and 1771 averaged a different price each time, going from 262 guilders per slave on one voyage to 325 guilders per slave on another. The *Philadelphia*, which made five successive voyages to this same coast between 1753 and 1760, also paid a different average price per slave on each expedition, going from a low of 230 guilders to a high of 337 guilders per slave. This pattern of variation was common throughout Africa and no two Dutch ships ever averaged the same price. Moreover, the actual prices paid for each slave varied quite considerably from this mean, since each purchase was made with a variety of goods of markedly differing costs for the Europeans. Thus, one English observer calculated that though the average price per slave on a given group of slaves was £3 15s., those purchased with cowry shells cost £4 each, those with beads and iron bars cost only £2 15s, and those sold for pieces of Indian cotton goods were valued as high as £6.

Nor were the goods sold by the Europeans over the several centuries of the trade of the same quality, quantity, or price. Nor were the products that the Africans wanted for their slaves the same over time and place. While beads and brass bracelets did well in the seventeenth century, the number needed to purchase slaves increased to such an extent that they were worthless in such exchanges in the eighteenth century, as African sellers no longer expressed interest. Moreover, while gold was mostly exported from Africa, there was even the case of the Portuguese obtaining large numbers of slaves on the Slave Coast in the early eighteenth century by buying them with Brazilian gold. Portuguese traders also used Spanish American minted silver coins, the famous pieces of eight (a peso worth eight reales), in trade on the Upper Guinea Coast

in the seventeenth century, which were used by local African buyers as currency and for making jewelry. The last thirty years of the eighteenth century also saw the need of the English to purchase the slaves sold by the Asante with gold, since they refused to accept British goods for these purchases, at a time when the Dutch had no trouble trading their European goods for slaves in the same markets. Nor were European goods or East Indian textiles or Indian Ocean cowries the only products used by the Europeans to purchase slaves. There were also large quantities of American goods imported including Brazilian tobacco and North American rum. Often, African goods were also employed. Cotton textiles of African make, salt, dried fish, kola nuts, various woven cloths, and other local coastal products were also used to purchase slaves in the interior markets, along with European goods. On the Senegambia and Upper Guinean savanna coast north of the forest areas, there were even imports of horses brought by Portuguese vessels from Arab sources in North Africa that were used to purchase slaves, gold, and ivory. In the Cross River zone of the Bight of Biafra it was necessary to buy local copper rods to be used to purchase slaves and in the Loango Bay north of the Zaire River and on the river itself it was customary to purchase locally produced palm cloth of the Vili group of Loango Coast to pay for slaves in the early centuries of the trade from the Congo and Angolan regions.

Finally, some regions eventually found little interest among the goods offered by the Europeans. It has been suggested that the limited level of participation of the ports of Senegambia in the Atlantic slave trade in the eighteenth and nineteenth centuries had little to do with declining supplies of slaves and mostly to do with the increasing disinterest in the European goods offered in trade and the ability of Senegambian groups to supply most of their needs through North African trade. Even in their earliest contacts with the Portuguese, local traders demanded North African cloths. This was an ideal region for European traders: it was the closest to Europe, had the shortest sailing times to America, and was the zone that produced the highest ratio of prime male slaves of any in Africa. But limited demand for European or East Asian goods, and high slave prices and limited offerings because of competitive North African markets, guaranteed that this would be a minor European zone of slave trading.

Despite all of these variations there were some long-term trends evident in the selling of African slaves to the Europeans. Almost everywhere slave prices remained low or even declined from the early period

to the end of the seventeenth century, suggesting that the growing supply exceeded any increased demand in most cases. Though American demand for slaves was on the increase, especially after the middle of the sixteenth century, the steady level of African wars due to state expansion and the European exploitation of new areas of the coast more than satisfied American needs. Slave prices on the Slave Coast, for example, which only developed as a prime source for slaves in the early seventeenth century, saw average prices decline for most of the century until the 1690s, when they began a long but steady period of growth. Thus, an average price for a slave (in this case considered the totality of the slaves bought for any single ship and including about two-thirds males and 80 percent adults) in terms of "prime" prices went from £3 per slave in the early 1680s to £10 in the mid-1730s. In a detailed survey of English prices, this trend of rising prices is clearly evident everywhere the British traded. A plateau seems to have been reached in the 1690s to the 1750s period. Although there was wide annual and decade fluctuations, prices for slaves remained relatively steady at levels achieved late in the seventeenth century. But a longterm secular rise in constant prices began at midcentury with only modest pauses until the nineteenth century. By the early 1760s, constant prices were double those in 1700 and then took off at an even more rapid pace, being four times those of 1700 by the late 1790s and five times higher in constant British pounds by the early 1800s.

This rising trend in prices represented the dual impact of growing American demand outpacing increased supply, and the overabundance of European goods in African markets forcing down prices of imports. Thus the number of bars of iron needed to purchase a slave increased far more than average prices expressed in European currencies. Also, the constant and unrelenting competition of the Europeans kept prices rising, as they could never monopolize any trade zone for long. The constant theme of all African states trading with the Europeans was to maintain open competition, always favoring newer arrivals for fear of becoming dependent on traditional traders. Though the Portuguese were excluded from the Gulf of Guinea by the Dutch in the early seventeenth century, for example, the local states, which had often been hostile to them in their monopoly days, welcomed their return and allowed them to trade despite strong northern European opposition. At the same time, the Kongo Kingdom south of the Congo River often shipped its slaves north of the river to be exported from the Loango coast in order to escape Portuguese monopoly control in its own area

of trading. There are cases not only of local kings forcing traders to remain neutral while their mother countries were at war, but also of their engaging in international diplomacy. Thus the king of Allada on the Slave Coast in the late sixteenth century sent an official emissary to the French court to encourage France's entrance into the local slave trade to counterbalance English and Dutch influence. At the same time, the Kongo king Afonso II sent an embassy to Rome demanding an autonomous bishopric be established in his kingdom separate from the one at the Portuguese island of São Tomé.

In short, the Africans were neither passive actors nor peoples innocent of the market economy, and were able to deal with the Europeans on the basis of equality. They were already well integrated into a market economy and responded to market incentives as well as any peoples of western Europe. They also fought against European attempts to place monopoly constraints on their trade and, in turn, were able to limit the more excessive demands placed by the Europeans on their local trading arrangements. Though their consumption demands may have been different from the Europeans', these demands were determined by different economies, ecologies, and social organizations. Even some of their seemingly more quaint customs, at least to contemporary Europeans, made good economic sense to modern-day economists.

Nowhere is this more evident than in the use of Indian Ocean shells as money, above all in equatorial Africa. To modern readers this may seem a primitive instrument of exchange that marks the backwardness of the Africans of the time. But, in fact, cowry shells had a history of use as a money in Asia long before their implantation in Africa. They were used in China until the thirteenth century and were a common currency in Bengal and other parts of India until the nineteenth century. Cowries were used throughout the Pacific islands and even appeared in Hudson's Bay among the Indians of North America.

The choice of cowries as money was a more than reasonable one. They were produced in relatively fixed amounts from one unique source, they were durable and could be stored indefinitely, and they were easily identifiable and impossible to falsify. Nor were these shells the only form of money in use, but were commonly used alongside gold, silver, and copper. In both India and Africa they were used as the cheapest form of payment and would eventually be replaced by copper coins or paper money.

Cowries were a floating currency with no fixed exchange rate and would vary in worth by time and place, influenced by their intrinsic

value (the cost of producing and transporting them) and the demand and supply for them. The only unique feature of cowries is that the Europeans who used them on the African coast as money refused to accept them as payment for anything they themselves produced – at least during the era of the slave and palm oil trades when Africa was independent. In the late nineteenth and early twentieth centuries, however, cowries were accepted as money for taxes that the Europeans collected in some of their new African colonies and they continued to be used up until the 1920s in some areas.

Moreover, European traders were not the only ones not to use cowries as money. For in fact, the region within Africa in which cowries were used was a limited one. It included essentially the region of the Bight of Benin and the Niger River basin. This cowry zone ranged from the western part of the contemporary state of the Ivory Coast to the western edge of present-day Cameroon and included Ghana, Togo, Benin, large parts of Nigeria, and southern Mali. But it was not used as money in the area northwest of the Bight of Benin (from Liberia to Senegal), or to the south (from the Bight of Biafra – at least in the earlier period – south to Angola). Thus, while it included one of the most important of slave-exporting zones, it did not encompass all or even most of western Africa.

The cowries were first introduced across the Sahara by Muslim traders before the opening up of the coastal trade by the Portuguese in the fifteenth century. They came from the Maldiv Islands, a series of atolls, just off the south coast of India. Though the animal that produced the shells could be found throughout the Pacific region, including East Africa and Zanzibar, it was the variety called *moneta* that was most heavily concentrated in these Pacific islands. These produced the smallest and most distinctive shell. These snail-like animals were taken live from the sea, allowed to die on shore, and their shells were then cleaned and gathered together and shipped to both Ceylon and India. Like all things Asian imported into Europe, these shells were first a Portuguese monopoly trade, then a Dutch one, and finally dominated by the English. Though the islands remained independent of all foreign domination and were under their own sultan, the key regions that traded with them were Ceylon and India, and it was European domination of these regions that guaranteed their respective monopolies.

After being cleaned and sorted, the small shells were packaged in coconut-leaf baskets containing a standard 12,000 shells and this so-called *kotta* was then shipped by local or Indian traders to Ceylon and

India. These shells were usually exchanged for rice and other foods not produced on the atolls. Europeans purchased these shells with gold and silver coins, but found that they made ideal ballast – as opposed to sand or other noncommercial materials – for ships sailing to Europe. Thus, they were almost a costless item to transport.

These shells were brought by the Portuguese in the 1510s to the western African coast, where they were already in use as money. The Portuguese, in contrast to other Europeans, traded directly with the Pacific island producers and could transport their shells from the Pacific to Africa or Lisbon. But the Dutch who replaced them in the early 1600s had difficulty with the producers and bought their shells from local shippers in Ceylon or India, as did the British who followed them. The Dutch and English then shipped their shells directly to Europe. There the shells were cleaned and sorted once again and put into casks, for in the African trade using them as ballast would have made it difficult to access them quickly as trade goods. Amsterdam and London became the big markets for cowries, and to these markets came all the Europeans who traded with Africa, from the Swedes to the Portuguese. By the peak of the Atlantic slave trade in the eighteenth century, the Dutch and English alone were importing some 40 million shells per annum in a normal year, and it is estimated that the two imported 10 billion shells in the 1700–90 period.

In Africa, the shells were either bagged or pierced and put on strings. The basic unit was a string of 40 shells called a *toque* (or tokky), which like all the units was a Portuguese word or a corruption thereof. Five toques made up a *galinha* of 200 shells and 20 *galinhas* made up a cabess (or *cabeça*) of 4,000 shells – though a “small” cabess was also used of only 10 *galinhas* of 2,000 shells. By the eighteenth century, the English translations for these terms were “string” for *toque*, “bunch” for *galinha*, and “head” for cabess – though meaning the small cabess of 2,000 shells (here considered to be made up of fifty strings). Ten “heads” made up one “bag” of 20,000 shells (weighing around fifty pounds) which is what one man could carry on his head. The prime means of moving cowries within Africa was by “headloading” – meaning on the heads of human porters.

The value of the cowries varied by time and place, with a “head” of 2,000 shells averaging around one pound sterling in the early eighteenth century in Whydah. In the course of the eighteenth and nineteenth centuries there was a steady inflation of values because of the massive importation of shells and the relatively slower growth of the local and

regional economies. Thus the price of a slave in cowries varied considerably, going from 10,000 to 30,000 shells in the 1680s, to 40,000 to 50,000 of them in the 1710s, to 80,000 cowries by the 1760s, and double that number a decade later. Most transactions included other goods along with cowries as the price for a slave.

Within their trading zones cowries were used as money, though everywhere in Africa and even in Europe they were used in jewelry. They often circulated with other currencies from gold dust produced in Africa to American silver coins minted in Potosí. Everywhere they were the small change and used for the simplest transactions. Moreover, given their weight, they often did not travel great distances in exchange transactions. Often they were used as money of account and items were paid for in other currencies or goods, such as salt, kola nuts, livestock, or slaves.

If the shell currency used by the Africans made economic sense, their import demands also reflected a sophisticated buying public which experienced major local changes in consumption and fashion over time. Thus, on the Slave Coast, guns and gunpowder were a minor item of trade for slaves in the seventeenth century, but became a major item in the eighteenth century as local states revolutionized their armies and manner of undertaking warfare. Indian cottons were in great demand in the seventeenth century, to be replaced by German-produced linens from Silesia in the early decades of the 1700s as the prime textile import. Brass bracelets went out of fashion by the 1690s, to be replaced by brass basins, which were cut up by local artisans to make their own jewelry. While liquor in general and American rums in particular were never important on this coast, French brandy became a significant import for a while in the eighteenth century. With Brazilian gold suddenly abundant after 1700, the best prime slaves were purchased by Portuguese traders only for gold. Although Bahian tobacco had been known in the trade from the earliest days, it only became a mass consumption item on this coast in the mid-eighteenth century.

What occurred on the Slave Coast occurred everywhere in Africa. The reports of the Europeans are filled with constant news of changing market demands and the need to respond to them. There is a never-ending effort by the Europeans to introduce new wares, some of which became high-demand items and others that failed to attract any customers. All of this reinforces the idea of a relatively complex and ever changing African market driven by basic economic and social factors common to all market economies of the period. Since no European

nation ever totally dominated any slave market, competition was the rule. Africans fought all attempts at monopolizing their markets, and no nation could offer goods that were not in demand. Lack of quality goods led to a decline in trading. Though some writers have suggested that Africans were seduced by shoddy goods and enthralled into permanent dependence on the trading of slaves, the history of European imports everywhere shows unique local markets with constant changes in demand reflecting changing tastes, as well as changing abundance of goods. Moreover, the entrance as well as the exit of various regions from the overseas slave market showed that volition existed on the part of the Africans in terms of participation, at least for the sellers of slaves. In short, the Europeans alone neither created this market, nor did they dictate the goods used in the trade.

If determining the supply of foreign imported goods to this market was difficult, equally complex was estimating the supply of African slaves. Their origin and the manner in which they were obtained are among the more difficult areas to detail. It is evident from most sources that coastal peoples were able to supply sufficient slaves from groups close to the sea for the first century or so of the trade. By the eighteenth century, slaves were being drawn from interior groups far from the coast. But who these groups were and how far from the coast were they situated is an issue difficult to resolve. Much of this difficulty is due to the ignorance of the European traders of the interior developments within Africa. They had only the vaguest notions of the names of interior groups or of their placement and relative importance. In fact, in order to determine the African origin of the slaves, African historians have had to rely mostly not on the European traders who visited the coast, but on lists of slaves produced by American officials and planters, which were taken from the origin names the slaves themselves provided. They have even had to resort to the lists of slaves captured on the high seas by the British navy in the post-1808 era of embargo. Otherwise, no ship's manifest lists the ethnic origin of the slaves it carried to America, just their port of purchase.

Most commentators have suggested that the slaves taken to America in the first two centuries of the trade came from the coastal areas probably no further than a few days' march from the sea. Densely populated regions along the Senegambian, Guinean, and Congo coasts were a major and constant source of slaves over very long periods of time. But it is assumed that slaves were coming from much further inland by the second half of the eighteenth century as the trade expanded and intensified.

Some diminishing of coastal slave trading must have occurred as local groups either were incorporated into more powerful states and obtained protection from raiding and enslavement or migrated out of range of the slave hunters, thus forcing local traders ever deeper into the interior. But even in the late eighteenth and early nineteenth centuries the majority of the slaves in most zones still came from relatively close to the coast, despite often cited European notions that peoples were arriving from hundreds of miles from the interior. Thus, for example, the major exporting ports of the Bight of Biafran coast – Bonny and New Calabar (in the Niger River delta) and Calabar (in the Cross River delta) – took the majority of their slaves from the Igbo and Ibibio language groups who were densely settled between the Niger and the Cross Rivers quite close to these ports. This was the pattern from the earliest days until the trade came to a close in the 1830s and 1840s. Though Hausa, Nupe, and Kakanda peoples far to the north passed through these ports, they were definitely a minority. What occurred in this major exporting zone was probably typical of what occurred in most regions. Traditional areas, if they were still exporting, were still the major source for slaves, and these were mostly located close to the coast. The one exception to this rule seems to be the movement of slaves to the Loango and Angolan ports. Although these coastal states continued to supply local slaves, as early as the eighteenth century, interior slaves began to arrive in significant numbers to these coasts along major caravan routes that stretched several hundred miles into the interior.

Of course, long-distance movement was inevitable, especially in the case of war captives. In no known instance did warfare not lead to the sale of slaves. Some captives might be killed, especially the elite, but most were enslaved. While the Dahomean kings, for example, liked to display the heads of their enemies, it was only the kings and nobles that gained this status. The women of the defeated enemies became domestic slaves within Dahomey and the commoners were enslaved, both for local purposes and for shipment into the international slave trade. Among the Asante in the eighteenth century the state even supplied gunpowder to subordinate officials making war in the expectation that they would be repaid with captured slaves. Thus, war-captive slaves were a common commodity throughout Africa, and inevitably war captives even from deep in the interior would arrive on the coast. Moreover, given the universality of domestic slavery, it was not uncommon for captured or kidnaped slaves to serve as slaves in a local situation until such time as transport could be arranged for shipment to the coast. They could also

serve as porters for moving other goods from the interior to the coast just as they themselves were being sent there to be sold.

The percentage of total slaves leaving Africa as war captives is difficult to estimate. All studies agree that there were numerous ways to enslave peoples. Aside from captives taken in war, there was largescale raiding for slaves along with more random individual kidnaping of individuals almost everywhere, especially on the poorly defined frontiers of the larger states. Common to most societies was the judicial enslavement for civil and religious crimes and indebtedness. Larger states often required dependent regions to provide tribute in slaves, which could then be shipped overseas. One estimate suggested that the Asante in the 1820s taxed their people in gold and in slaves when gold was not available, and thus produced some 2,000 tribute slaves for the central government annually. There were even suggestions that the Aro merchant communities of southeastern Nigeria used their oracle and religious institutions to enslave peoples, though this use of religion was rare and may not have been the case even among the Aro.

The magnitude to be ascribed to each of these factors has caused ongoing debate among scholars and led to little consensus because of the paucity of records, written or oral. There is little question that warfare was extremely important in generating captives. Though most scholars stress local motives for military conflict, and show how wars often disrupted markets and trade, there was no question that enslavement "facilitated" war and made it more economically viable. The possibility of selling captives in wars, no matter what their origin, made warfare even more attractive than just the possibility of gaining more lands, vassals, or markets. Even well-defined religious wars, the most famous being the conflicts among Muslims in the eighteenth and nineteenth centuries in West Africa, produced slaves for the American markets. There is also no question that some wars were related directly to control of international trade and thus to the impact of the Atlantic slave trade. The long conflicts between the Allada, the Whydah, the Dahomeans, and the Oyo kingdoms on the Slave Coast were clearly related to control over the slave trade and European commerce as well as about local markets and production. Sometimes the effects of these conflicts were counterproductive. This is well illustrated by the rise of this same Kingdom of Dahomey. It destroyed the peaceful trading states of Allada and Whydah to seize control over the trade, and in so doing badly disrupted normal slave trading for some time in the Bight of Benin. Full-scale war could only last a short time, without seriously disrupting

traditional trade routes and bringing slave markets to a complete halt. This often happened on the coast when one or more states went all out to destroy their neighbors, and this resulted in what contemporary European accounts reported as “closing the paths” or traditional routes to the coast and, thus, stopping all commerce.

Aside from religious or trade wars, the absolutist nature of many of these states and the large number of royal pretenders due to polygynous royal marriages meant dynastic conflict was a constant in all major states and this often led to civil wars. Even in those kingdoms that had councils of elders that selected monarchs, such as in the Kongo Kingdom south of the Congo River, dynastic struggles were a constant occurrence. The Mali Empire in the Upper Niger region was fairly unique in its use of a powerful royal household to select the monarch and this is often cited as one of the reasons for its unusual centurieslong longevity. Given the relatively poor communications within Africa, the lack of a professional royal bureaucracy in most regions, the failure of some authoritarian rulers to respect traditional local rights, and the fact that most states only had part-time armies because of agricultural constraints meant that increasing state size also led to increasing rebellion at the periphery. In short, Africa was in many respects at the same level as medieval Europe in terms of its state organization and administrative coherence. All this led to a fair amount of civil warfare at all times even in the best-managed states. Some of this warfare, if it represented rebellions of outlying local groups against a relatively secure central power, could lead to a major increase in slave trading without a disruption of traditional networks and markets.

But in the cases of full-scale disintegration of central states, the effect on slave trading could be more negative than positive. In such times of state disintegration, migrating groups forming new states would often go through a phase of banditry. Although such banditry would produce slaves by constant raiding, it ultimately made the trade routes unsafe for travel and destroyed traditional market networks. This was the case with Little Popo on the Slave Coast that was set up by defeated people coming east from Accra. For some time after its foundation, the people of this port city were more a group of bandits than a formal state. Some of this banditry paid off in slave sales, but Little Popo did not become a significant trader with the Europeans until it moved out of the banditry stage and became an essentially peaceful and law-abiding trading society.

Different types of warfare provided varying numbers of slaves for the Atlantic slave trade, but sometimes at a cost to the effective functioning of the slave trade. But Africa was not constantly at war in all places and at

all times. A small but steady volume of slaves from essentially peaceful regions was necessary to maintain the trade. Clearly, raiding/trading expeditions mounted by the coastal traders or interior traders was one possibility. Small armed groups of merchants both traded and captured farmers in quick raids. This is what an English observer saw when he visited Old Calabar in 1787. He joined such a raiding/trading fleet made up of some twelve canoes with armed rowers. Going up the Cross River, he noted that:

in the day time we called at the villages we passed, and purchased our slaves fairly; but in the night we made several excursions on the banks of the river. The canoes were usually left with an armed force: the rest, when landed broke into villages and rushing into the huts of the inhabitants, seized men, women and children promiscuously. (Donnan, *Documents*, 2: 572)

Obviously, this type of activity was more successful in the densely populated but small village systems common among the Ibio in this region. Such raiding would also have been common on the frontiers of larger states where well-integrated multicomunity states did not exist, as well as in more amorphous states where central authority was only lightly exercised at the local level. But in well-integrated states with professional soldiers, constant raiding by outsiders would have been difficult.

It would also be surprising for this type of raiding to go on for too long without a reaction from the local people, either in terms of banding together to protect themselves, or in migrating away from poorly defended places. That these Old Calabar canoe raiders were still using this method on the Cross River after a century of heavy slave trading in this zone seems highly unusual. To both trade and raid in the same area could only occur in places where raiding had not previously occurred on any major scale.

Individual acts of kidnapping in all regions are reported, and these less well-organized and smaller acts of capture were difficult to control even in the most powerful states. In many communities, in fact, kidnapping was considered a crime punishable by enslavement and was considered as serious as murder and adultery. It is also obvious that kidnapping could easily pass over to more structured raiding and that in times of crisis this activity was common.

Given the lack of formal jails, all crimes were either punished by physical acts or enslavement. Officials, royal pretenders, and rebel leaders

were often executed. The Europeans reported with some regularity, for example, how the Dahomean king executed his local governors for malfeasance in office or because they represented a threat to his autocratic rule. In 1754 three successive viceroys of the Dahomean king in the port of Whydah were executed, along with two other lesser officials – all during times of internal peace. Murderers, and others considered to have committed vile acts against the community or the local religion, would be killed. But all the more common crimes such as theft, adultery, kidnapping, blasphemy, and witchcraft were usually punished with enslavement. Also, there appears to be enslavement for indebtedness. Though almost all states held that such judicially created slaves were to be used only as local domestic slaves, these judicial proceedings were abused in places, and such slaves were often sold to traders who removed these slaves from their home communities.

The relative importance of each of these means of enslavement must have varied by time and place. In a few well-defined cases, such as the complex trading and regional market network set up by the Aro peoples in what is today southeastern Nigeria between the Niger and Cross Rivers, it was evident that judicial activity with some low-level raiding was the prime source for slaves. In this, the most densely populated zone of West Africa, the Aro created a very complex market through the establishment of small colonies of peaceful traders among large groups of non-Aro peoples. They developed this network from the early seventeenth century to move slaves into the Atlantic slave trade, peacefully linking themselves with other trading networks to the north, east, and west and using other intermediaries to the south to move their slaves to the Biafran coastal ports. Though they employed mercenaries from time to time, the Aro traders worked in an essentially peaceful environment from the seventeenth to the nineteenth century. Here, there were no states, just small landholding communities, and there was little formalized warfare over state construction, dynastic conflicts, or control of trade. This trading network easily moved from slaves to palm oil in the nineteenth century and was still a vibrant and powerful force until British colonial occupation at the end of the nineteenth century. Moreover, it was a reliable organization that delivered a steady volume of several thousands of slaves per annum over decades to the ports of the two Calabars and Bonny on the coast.

This same type of steady trading in local markets has also been reported from the Gold Coast where both the Fante and the Asante got most of their slaves from interior groups at well-defined markets within

their own territories. These warrior states also taxed, imprisoned, and fought wars in which slaves were a major booty, but at the same time they peacefully traded for slaves with their neighbors.

As this survey demonstrates, there was no one dominant source of enslavement even in a given region, though force was ultimately the basic instrument used everywhere to obtain slaves. The fact that almost all African states recognized domestic slavery meant that enslavement was an accepted institution within the continent and that the cost of transportation and security of slaves was much less than otherwise would have been the case. The slave coffers coming to market were respected by local peoples, so long as their own members were not affected, and slaves were found in almost all internal markets as well as coastal ones.

Equally, it is evident that since force was required and trading involved many communities and states, the costs of entrance into the slave-trading business were relatively high. Merchants had to organize porters, buy goods for trade, and have extensive personal, kin, or religious contacts over a wide area so as to guarantee peaceful passage, and they clearly needed soldiers or armed followers to protect their purchases from others or prevent their slaves from escaping. In turn, those who raided for slaves had to outfit well-armed and mobile groups, which also needed to be able to resort to peaceful markets as well. All this meant that only relatively wealthy individuals, or well-defined associations of small merchants (found everywhere from Nigeria to Loango), could engage in the slave trade. These merchants had to be skilled in determining local market conditions and to be able to trade with the Europeans, along with using and obtaining credit from all their contacts, including the Europeans, all of which required long-term training and extensive knowledge. Though managed state trading existed in some places, and kings and royal officials traded on their own everywhere, the market for slaves was dominated by merchants, who are reported to have been major actors everywhere, even in such royally dominated trading kingdoms as that of Dahomey. But all studies of the economics of the trade suggest that these merchants never had a monopoly of the market. Europeans were free to trade anywhere on the coast and often refused to trade in areas where prices were too high. In turn, the Africans refused to be confined to any one trading nation and actively fostered competition among buyers. The result was that slave prices varied according to supply and demand and tended to be uniform across all the coastal regions of West Africa.

Moreover, it should be recalled that the African slave trade was ultimately a trade made up of relatively few slaves sold in small groups everywhere. Even with the best organization, and the availability of secure and steady sources for slaves, the purchasing of slaves took time and was done in relatively small lots. Thus, fifty-seven Dutch slavers between 1730 and 1803 spent, on average, 200 days (or over six months) on the African coast purchasing slaves and, on average, bought less than 2 slaves per day. Even in the best of conditions, purchases were usually of small groups of slaves. Thus, for example, the best “loading rate” was 8 slaves per day achieved by the ship *Pins Willem V*, which in 1759 went to Loango Bay and loaded 478 slaves in 60 days, whereas the worst rate was that of the *Zanggodin*, which went to the Guinea Coast in 1773 and took 377 days to load 127 slaves. The longest stay on the coast for any of these Dutch free-trader ships was the *Geertruyda & Chistina*, which also went to the Guinean Coast and took 508 days to load just 276 slaves. Though earlier Dutch West India Company ships trading from 1687 to 1734 at the fixed fort locations at Elmina took on average just 100 days to load their slaves, they still purchased less than 5 slaves per day.

What occurred for Dutch free traders as well as earlier Dutch monopoly company ships, whether trading on the Gold or Slave Coasts in Guinea or the Loango coast north of the Congo River, was common to all trading ports for all Europeans. Thus, the Portuguese ship *Nossa Senhora da Agua de Lupe e Bom Jesus dos Navegantes* took over three months to purchase 410 slaves in Luanda in 1762–63. Even though most of the slaves purchased were from Portuguese middlemen traders who had time to accumulate slaves on the coast, it took 74 individual transactions averaging just over 5 slaves per transaction to accumulate this number of slaves. The largest purchase was of some 43 slaves, but the modal transaction was just 1 slave per day. Thus, even in the best of conditions, the movement of slaves to the coastal ports was still done in relatively small lots, which makes it even more difficult to determine their origin in terms of warfare, raiding, kidnapping, or judicial enslavement. In fact, the small-lot slave trading would also suggest multiple sources for the slaves in terms of the type of captures accumulated.

Even when European merchants were resident on the coast, their purchases were in small groups. Thus the English merchant Richard Miles, who was governor at the English Cape Coast Castle in the late 1770s and purchased slaves on his own account for later sale to arriving ships, needed 1,308 separate purchases to obtain 2,218 slaves between

1772 and 1780. These slaves were purchased up and down the coast from Accra in the west down to the Cape Coast Castle in the east and were often kept by him for several weeks before the arrival of visiting ships. His ability to “bulk” the slaves – to accumulate them and hold them in pens – enabled him to sell them in large groups to the Europeans at higher than the going prices. His average cost per slave was sixteen pounds sterling worth of goods and he sold them to the arriving ships at twenty pounds sterling worth of trade goods. Most captains were willing to pay this commission in order to load their ships more rapidly and thus cut down on all the costs associated with remaining for long periods on the coast, from local anchorage charges to increasing disease and death. Although he could sometimes make significant purchases of slaves from big local traders, the majority of sales were from unknown merchants for a few slaves. It would also appear that he advanced goods on credit to local African merchants for purchasing slaves in the interior.

This type of what is called “bulking” the slaves in rather large groups for a onetime sale was typical of the early monopoly trading companies. This resulted in much faster turnaround times. This is why the Dutch West India Company ships in the late seventeenth and early eighteenth centuries were able to purchase all their slaves in just over three months, or in half the time that it required a free trader to load his slaves later in the eighteenth century. But such a system required major capital outlays in fixed properties such as forts, and full-time resident merchants, common on the Gold and Slave Coasts and in Angola but rare elsewhere. This was ultimately too expensive a proposition, and in the end free traders dominated in most regions and they abandoned these fixed-cost arrangements for cheaper though longer-term temporary boat trading. It was only under the pressure of the British blockading navy in the mid-nineteenth century that Cuban and Brazilian merchants returned to this practice on the African coast. Needing to load slaves quickly to escape detection by the patrolling British warships, the post-1830 traders set up permanent barracks on the coast for buying slaves over a long period of time so as to load them in a few days when the slave ship arrived from America. But this was an exceptional experience.

If the trade was a normal market arrangement, and particular African merchants obviously profited in the exchange, what were the costs of this trade to the African societies and economies in general? In short, what were the macroeconomic consequences of the slave trade to Africa? This question really raises two fundamental issues: did the goods purchased with slaves add to or detract from African economic development, actual

and potential; and, second, what was the demographic impact of the loss of such a large population, both in local and continental terms?

The question of the European imports and African economic growth turns on the issues of the type of goods imported – consumer or capital goods – and their relative impact on local African industrial activity. This is not a simple or easy question to answer. To give just one example, iron bars were a major import throughout Africa and were used by local blacksmiths to produce tools, weapons, and utensils of all kinds. But the importation of this high-quality northern European iron had a negative impact on the African iron mining and smelting industry, since the imported product was cheaper and possibly better than the African made one. It is also argued by some scholars that the East Indian cotton goods were a deterrent to the local textile industry in many parts of West Africa. These were often used as wraps and not processed in any way by local seamstresses. They were also thought to replace coarser locally made cotton and palm-leaf cloths. But in all regions of Africa, local artisanal textile production continued into the post-slave-trade era, which suggests that local cloth was probably quite competitive with European imports at the lower end of the scale, at least until the British were able to introduce their coarser cloths in the late nineteenth century on a massive scale.

The consumer goods introduced by the Europeans obviously led to increased consumption but had a varying impact on the local production of competing goods. Liquor, for example, was already produced in Africa before and during the trade. Palm wine and various grain beers were consumed by the Africans, who also now consumed American cane-produced rum or European brandies. European traders did not introduce this form of consumption, nor did these imported goods eliminate local production, which continued on through the period of the slave trade. Even tobacco imports had some positive effects. Brazilian and American-produced tobacco was a new item introduced into the African market, creating a demand that led to some local tobacco production within Africa itself.

Sumptuary items such as beads and jewelry were clearly imported by upper-status individuals and tended to mark elite distinction from the masses. Some of these sumptuary items were incorporated into traditional dress and furthered artisanal activity, and some of it replaced traditional jewelry and bead production within Africa itself and led to the decline of local industries. The importation of large quantities of cowry

shells was in fact a positive feature since it promoted the monetarization of the West African economy, which in turn deepened traditional markets and encouraged regional specialization and market integration of previously subsistence agriculturalists in many parts of Africa. All of this market activity greatly stimulated local production, either in terms of expanding traditional industries from fishing and hunting to farming and mining, or creating new local industries that long survived the end of the Atlantic slave trade.

The slave caravans also opened up new complex trading links and new local markets, thus integrating the Mediterranean with the Guinean Coast markets far to the south, or linking together most of Central Africa from ocean to ocean. These roads and paths were opened to domestic trade as well as slave trading, which in turn further monetarized the continental economy and increased the level of exchange, trading, and production. Finally, many slaves were purchased with African goods or were fed with African-produced supplies, thus fostering a major agricultural growth, which was spearheaded by the European introduction of American crops, above all, maize and cassava (manioc). But even with all these new goods entering the local markets, their impact was small. Even at the height of the importation of European goods in the late eighteenth century, European imports only reached £2.1 million sterling of goods per annum, which probably represented less than 5 percent of the total West African income for the 25 million or so resident population.

Although prior to 1700 Africa could export large quantities of ivory and gold, which found ready markets overseas, and would produce palm oil for export from the 1820s to the 1860s far outdistancing the value of slave exports, from 1700 to about 1820 the primary export was human beings. While the loss of these people was probably not as great in relation to resident population as the loss of emigrants to the resident populations of such classic emigration countries as Ireland or Portugal in the eighteenth and nineteenth centuries, there was a fundamental difference. To produce those slaves, violence was used and it did have a cost in terms of economic growth. Though there are conflicting ways in determining African population growth or decline, there is enough evidence to show local population decline on the western coast as a result of wars and banditry and the abandonment of viable agricultural lands because of the fear of slave raiding. It was especially this negative economic factor and its accompanying diversion of resources to military activity that most negatively affected the West African economy.

After numerous attempts at estimating the African populations – none of which was officially counted in the slave trade era – historians and demographers have come to a rough consensus that the population exposed to the Atlantic slave trade numbered some 25 million in 1700. This was about half of the total population of sub-Saharan Africa. At most, this population was growing at around 0.5 percent per annum. This growth estimate is based on the calculation of a very high crude death rate of 35–45 per thousand, and a high crude birthrate of some 40–45 per thousand population, leaving an approximate positive growth of 5 per thousand in most years. Though all African women married and experienced fertility early, long lactation periods and various cultural practices kept the spacing between children to some three years and resulted in lower numbers of children being born than otherwise might have occurred in this natural reproductive environment. This crude birthrate is greater than the crude birthrates among slaves in the West Indies, but lower than the 55 per thousand births reached among North American continental slaves. Death rates were quite high due to serious ecological problems within Africa that in many regions led to drought and famine, but also to a very severe disease environment. Even though Africans had a less violent response to many of the diseases that were fatal to Europeans, malaria and other tropical diseases were killers and kept mortality rates high.

If one accepts a 0.5 percent rate of growth for a population of 25 million, this would give a hypothetical increase of some 125,000 new persons every year. If at the height of the slave trade some 80,000 persons were being forced to enter the trade, they represented almost two-thirds of the potential growth and would have reduced that growth rate from 0.5 percent to a barely positive rate of less than 0.2 percent. Even those who challenge this model accept that the ratio of out migrations was probably no higher than 2–3 per thousand in this period. This is obtained by estimating an average of 60,000 persons being shipped across the Atlantic from the mid-eighteenth century to the mid-nineteenth century. If one accepts an even lower growth rate of 0.3 percent per annum, which could be reasonably accepted as a possible lower-bound estimate, then the 75,000 surplus population barely exceeded the out-migration of slaves, especially if the eastern slave trade migrations are included.

A more radical estimate of the impact of the slave trade on African populations recently has been proposed by using a controversial approach of backward projections from known contemporary regional

populations. It is argued that the population of western Africa actually declined by 2 million between 1700 and 1850. The estimate is that the western African population declined from a projected 25 million to 23 million in this 150-year period. Had the population grown at a conservative 0.3 percent per annum in the same period, it would have reached 39.3 million in 1850. Thus, the Atlantic slave trade could have cost a total loss of 16.3 million Africans in 1850 – the 2 million less in 1850 than were estimated to have been resident in 1700, and the 14.3 million potential persons who would have been added had the population grown at 0.3 percent per annum from 1700.

Whatever these various estimates of loss, it cannot be denied that the transatlantic slave trade did have an impact, at the very least, in slowing African population growth considerably, if not in bringing on an actual decline. Unquestionably, the estimated 4.3 million slave and free persons of African descent who were resident in America in the 1790s would have made a significant contribution to the growth of the African population had they remained in Africa.

If total West African population changes cannot be fully assessed, there is little question that detailed studies of local regions have suggested quite important population declines. The 1 million or so living in Senegambia in 1700 suffered their most severe population losses in the early eighteenth century but seem to have recovered positive growth in the post-1750 era. In contrast, the 2.5 million or so in the Upper Guinea Coast did well before 1750 and only experienced declining population in the second half of the eighteenth century. The 2 million plus of the Gold Coast, because of the late beginnings of the slave trade, apparently suffered the least, with perhaps no decline in the resident population. The over 4 million in the Bight of Benin, of which the Slave Coast was the most important part, suffered the most severe decline of any region in western Africa. From the 1690s to 1850 its resident population was in constant decline from probably close to 4 million persons to about half that number in the worst estimation model. Moreover, documentary evidence seems to support this conclusion. It was reported from the Slave Coast, for example, that elephant herds were repopulating the coast in the early nineteenth century after their virtual extinction from this region in the early eighteenth century, which argues for a decline in local human hunting populations. The Biafran coast and its 4 to 5 million people did well until the last decades of the eighteenth century and then probably experienced a decline in population until 1850. To the south, the close to 4 million people in the Loango coast

region experienced a steady decline from 1700 and do not seem to have reached positive growth rates until well after 1859. In contrast, the negative impact in Angola was far less with its over 5 million population growing until 1750 and then recovering in the midnineteenth century well before that of neighboring Luanda. Finally, the very late start of the Mozambique trade meant that its 3 million or so peoples did not experience negative growth rates until the middle decades of the nineteenth century and then recovered relatively quickly.

What does this pattern of growth mean? Clearly, it is comparable with, if less intense than, the experience by such major out-migration countries as England, Ireland, Italy, and Portugal in the eighteenth and nineteenth centuries. But it would appear that the Atlantic emigration of Europeans, which finally passed the volume of the slave trade in the 1840s, had a much higher amount of out-migration within a higher rate of population growth, thus bringing its impact closer to the African pattern. These countries were either underdeveloped or developed with little relationship in and of itself to the intensity of out-migration and population loss. Population loss alone does not necessarily lead to economic decline even if the resident population suffers a long-term pattern of negative demographic growth. But unlike the European migrants, close to half of whom returned to Europe, there was very little return migration of Africans, nor was there any repatriation of immigrant savings to the Old World, which was so important to the economies of Ireland, Italy, and Portugal. Thus, the loss of these young workers was total for Africa, with no inflow of savings possible. This loss, coupled with the violence expended to enslave these workers, makes the negative impact of population change obvious and important in the African case. Moreover, the Atlantic slave trade was not the only out-migration of slaves from Africa in this period. It is estimated that roughly 18 million Africans were exported from Africa from 1500 to 1900, but only 11 million of them were shipped into the Atlantic economy. These other slaves were shipped into the Indian Ocean or across the Sahara to slave markets in the East, and they also became permanent losses to their countries of origin.

One lasting impact of the slave trade within Africa was the growth of the internal slave trade. Although slavery within Africa preceded and accompanied the Atlantic slave trade, it would now become even more important after the Western trade in slaves ended. It has been estimated that at the height of the slave trade, there were as many slaves held domestically within Africa as there were in America – probably

on the order of 3 to 5 million. As these international slave trades declined, local slave prices declined and slavery within Africa actually increased, so that by 1850 there were more slaves in Africa than there were in America – probably now numbering close to 10 million. Slaves were now used by Africans to produce new exports such as palm oil and rubber for world markets. They also became a basic component in local agricultural production and an important element in the transport network of porters and canoeists. Though free farmers and producers remained a major component in both the local and export markets, slavery now played a much more important role within the African economy until the very end of the nineteenth century. Thus, the end of the Atlantic slave trade did not bring an end to enslavement within Africa.

THE MIDDLE PASSAGE

Having been purchased on the African coast, the slaves destined for America would cross the Atlantic in a journey that became known as the “Middle Passage.” The manner in which these slaves were carried and the mortality they suffered have been one of the most notorious issues in the study of the Atlantic slave trade. A popular literature has painted this part of the slave experience as uniquely evil and inherently more inhuman than any other of the horrors of the slave life. This has a great deal to do with the early abolitionists who found that this part of the African enslavement process was the most easily attacked. The merchants of the trade could be opposed with impunity, whereas the American slave-owning class could not be attacked as easily. A group of eighteenth- and early nineteenth-century British propagandists developed their portrayal of the trade out of the belief that the entire transportation experience was an unmitigated disaster. But even one of the most important of these early writers, Thomas Fowell Buxton, argued that only some 18 percent of the mortality suffered in the trade occurred aboard ship, and that almost 71 percent occurred in the transportation of the slave to the coast, and the rest was due to the adjustment to New World conditions after landing. To put the so-called Middle Passage in context, it should be recalled that the water crossing on average took a month from Africa to Brazil and two months from the West African coast to the Caribbean and North America. But most slaves spent at a minimum six months to a year from capture until they boarded the European ships, with time waiting on the coast to board the ship alone being on average three months.

Nevertheless, for European and American writers, the Middle Passage has tended to capture the popular imagination and absorb the

moral outrage directed at the whole slave experience. As to why this occurred may be explained not only by the initial interest of the abolitionist, but by the fact that it is the part of the slave trade system that provides the best recording of information dealing with the numbers of slaves involved and their mortality in transit. The European practice of detailed record keeping and of government regulation of the transatlantic traffic in slaves provided abundant information on this leg of the trip, compared with the little known internal movement of slaves within Africa. Finally, there is the undoubted importance of the European involvement in the Middle Passage.

Thus, shipboard mortality became the focus of many of the debates in western Europe regarding the slave trade, and there was concern with both the mortality of slaves during the transatlantic passage and the deaths of the crew. While the shipboard mortality of slaves was used to demonstrate the harshness of the trade, it was the high mortality among the crew that was used by the British abolitionist, Thomas Clarkson, in his arguments to end the slave trade. To those who supported the slave trade as a "nursery for seamen," Clarkson argued that, to the contrary, the rates of mortality of the crew on slave ships were considerably higher than for crews on other routes, including the commodity trade with Africa.

Although these earlier abolitionist writers were familiar with the trade and did not make the argument that slaves were almost costless to the Europeans, this became a major theme of later writers. It was assumed in this popular literature that the low cost of the slaves made it profitable to pack in as many as the ship could hold without sinking and then accept high rates of mortality during the Atlantic crossing. If any slaves delivered alive were pure profit, then even the loss of several hundred would have made economic sense. But if the slaves were not a costless or cheap item to purchase, then the corresponding argument about "tight packing" also makes little sense.

In previous chapters, it has been shown that the purchase of slaves on the African coast was not a costless transaction, nor were the African middlemen passive bystanders. The African market was well connected to the world market and Africans demanded Asian, European, and American goods for their slaves. The more European demand developed for slaves, the higher was the African charge of trade goods that went to make up the slave price. If these goods were expensive items for the Europeans to purchase – and, as noted, two-thirds of the cost of a slaving expedition was made up by the cost of goods used to purchase

slaves – then any loss of slaves en route would directly affect the ultimate profitability of the voyage. In fact, high slave mortality on the crossing resulted in financial loss on the trip. It has been estimated for the eighteenth-century French slave trade – which has the best information on costs – that each transatlantic slave death on a ship carrying 300 slaves would reduce profits by 0.67 percentage points. Thus, a mortality rate of 15 percent could reduce trading profits by as much as 30 percent.

Clearly, losing slaves in the Middle Passage meant losing profit on the trade. Does this mean that the Europeans provided slaves with unusual accommodations and/or amenities for the voyage? Far from it, since slaves were carried in the most dense configurations of any group transported by Europeans across oceans in the sixteenth to the nineteenth century. But it does mean that the manner of carrying slaves, however “tightly packed” they were in the ships, did not create any increased mortality. Slaves had less room than did contemporary troops or convicts being transported. In almost all the trades, the average-size ship was small by contemporary standards – usually half the size of a normal cargo ship of the period. The Liverpool slavers clearing for Africa in the late 1790s averaged 201 tons per vessel, with two-thirds of the vessels being between 177 and 241 tons. These slavers carried 1.6 slaves per register ship’s ton, with 5 to 7 square feet of deck area given to each slave. Most of the ships were outfitted with partial decks and platforms in the space below the main deck and above the second or ’tween deck. All of these ships had been specially modified for service in the slave trade. A typical ship of 200 register British tons (which in fact was close to the alternative Burden ton figures) would have a keel length of 68 feet, a beam of 24 feet, and a hold about 12 feet deep.

In terms of internal arrangements, this space aboard slave ships was left open and would be divided into different decks depending on the number, age, and sex of slaves to be carried and the registered tonnage of a vessel. For the ships of 250 tons and above, it was usual to construct between 2.5 to 3.5 decks, and for the smaller ships 2 to 3 decks were the norm. Clearly, all but the very smallest ships were converted with partial deck platforms and other spaces for transporting slaves. Drawings of internal arrangements for slave spaces are extant for the *Brooks*, an English slave ship operating in this period and pictured in all the subsequent studies of the trade, and also for *La Vigilante*, a French ship from earlier in the century. For the *Brooks*, 4 decks were used with partial platform decks above the second deck and above the main deck. The *Brooks* weighed 300 tons, and the drawings show about 609 slaves.

This arrangement gives a deck area estimated at over 3,000 square feet, which provided an average of just under 7 square feet per slave. *La Vigilante* is shown at 240 tons with 347 slaves and probably marks the lowest bound estimate with a deck area that results in 5.6 square feet per slave. For some British slave ships measured by Parliament in 1788, the average space allotted was between 6 and 7 square feet. These results agree very closely with data for many other English and French ships in the late eighteenth century at the height of the trade, and before the various English acts regulating space were enacted – the one of 1799 calling for 8 square feet per slave aboard ship.

Given these temporary deck arrangements and the basic internal space available, it is evident that increasing tonnage did not greatly increase space available for slaves. Also, the smaller the ship, the larger the deck space available for the slaves. Taking two extreme examples from the eighteenth-century trade to illustrate this point, we can see how it functions. What is the difference in space available for each slave in a vessel of 400 tons taking on 600 slaves (or 1.5 slaves per ton, which was close to the average) and a 100-ton vessel carrying 300 Africans for a very high ratio of 3 slaves per ton? The latter ratio of slaves per ton would seemingly indicate very crowded conditions. But in fact the 400-ton vessel contained only two-and-a-half times more deck area (not four times the deck area) than the 100-ton vessel. Thus, the smaller ship was able to carry 3 slaves per ton compared to just 1.5 slaves per ton with little significant difference between actual space available. The impression is that the larger ship provides much more space per slave with reduced crowding. By the ratio of deck areas, however, only 21 percent more space is available on the larger ship. This is not very significant as the smaller ship provides 5 square feet of deck area as compared with the larger ship's 6 square feet.

In fact, for a large sample of eighteenth-century English slave trade vessels, smaller ships usually stuck close to the average of 1.6 slaves per ton and thus consistently had much more deck space available for slaves. Thus, with all ships averaging close to 1.6 slaves per ton, those ships weighing 101 to 150 tons offered an area of 5.8 square feet per slave, for those from 151 to 250 tons the area was 5.5 square feet per slave, and the over 250 tons provided an average of 5.1 square feet per slave. But whether giving 5 or 6 square feet per slave, or carrying 1.6 slaves per ton or above, in no large collection of slave voyages currently available is there a correlation between the manner of carrying slaves (either using a tonnage or space indicator) and the mortality they suffered. So,