The Fishers of Men: The Profits of the Slave Trade

HISTORIANS of slavery and the slave trade have often left us with the impression that the slave trade was fantastically profitable.[1] The view that it was the profits from the slave trade which financed the British Industrial Revolution and the first industrialization of the United States appears to be gaining adherents.[2] These interpretations seem plausible enough on the surface; indeed, the latter provides part of the historical foundation for the claim by black militants for reparations.[3] Black slaves, whether shipped directly from Africa, or born in the New World into slavery, served their masters against their wills in return for the subsistence allowed

The main conclusions of this essay became apparent to the authors only when they finally realized that slaves destined for export from Africa were supplied in substantial measure from markets organized like a contemporary high seas fishery and that a similar performance might be expected. The African slaver was a fisher of men. The authors wish to thank the National Science Foundation and the University of Houston which provided the financial support which made this paper possible. The authors also wish to thank, but not to implicate, the many helpful readers of early drafts of this paper: Dauril Alden, Terry Anderson, Philip Curtin, George Daly, Stanley Engerman, Robert Higgs, Tom Mayor, Joseph C. Miller, Clyde Reed, Richard Trewthaway, and Edgar V. Winans.

1 Two classic examples are Eric Williams, *Capitalism and Slavery* (New York: Capricorn Books, 1966 reprint of 1944 ed.), and Gomer Williams, *History of the Liverpool Privateers and Letters of Marque with an Account of the Liverpool Slave Trade* (New York: Augustus M. Kelley, 1966 reprint of 1897 ed.). More recent authors, perhaps unintentionally, often give the same impression. See Paul Bohannan and Philip Curtin, *Africa and Africans* (Garden City, N.Y.: The Natural History Press, 1971), p. 272; and Robert I. Rotberg, *A Political History of Tropical Africa* (New York: Harcourt, Brace & World, 1965), pp. 143-144.

2 A corollary argument over the profits of imperialism also exists. See R. B. Sheridan, "The Wealth of Jamaica in the Eighteenth Century," *Economic History Review*, 2d series, XVIII (1965), 292-311; R. P. Thomas, "The Sugar Colonies of the Old Empire: Profit or Loss for Great Britain?" and "Rejoinder" by Sheridan, *Economic History Review*, 2d ser., XXI (1968), 30-61. The profitability of American slavery has been exhaustively investigated. See A. H. Conrad and J. Meyer, "The Economics of Slavery in the Ante-Bellum South," *Journal of Political Economy*, LXVI, (1958), 95-130; R. Sutch, "The Profitability of Ante-Bellum Slavery—Revisited," *Southern Economic Journal*, XXXI (1965), 365-77; and R. W. Fogel and S. L. Engerman, "The Economics of Slavery," *The Reinterpretation of American Economic History* (New York: Harper & Row, 1971), pp. 311-341. Also by the same authors, see *Time on The Cross: The Economics of American Negro Slavery* (Boston-Toronto: Little Brown and Company, 1974).

3 *Time*, CI (March 27, 1972), 43. Also See Robert S. Browne, "The Economic Case for Reparations to Black America," *American Economic Review*, LXII (May 1972), 39-46.

them. Surely there was a substantial difference between the value of what they produced and the value of the consumption goods allotted to them to allow survival.

This essay attempts to trace what happened to the "fabled" profits of the slave trade. We will determine which classes and which groups appropriated the surplus expropriated from the estimated nine to eleven million slaves shipped out of Africa.[4] Was it the employers of slaves, the planters in the New World; the purveyors of slaves, either the European merchant or the African trader; the Africans who owned and enslaved other Africans; or the European consumer of plantation crops? In so doing we will confine our discussion largely to the British-American slave trade from its inception until it was outlawed in 1807.[5]

Our procedure will be to apply the tools of economic theory to analyze this historical experience, including some recently refined concepts relating the forms of property rights to economic performance.[6] We will investigate the market structure of each stage of the slave trade and apply the economic model appropriate to that market structure. Economic theory relates the performance of a market to its structure; a single seller or monopoly, for example, potentially earns economic profits, whereas in a competitive market composed of many sellers the marginal firm will make no economic profits.[7] This procedure allows us to draw conclusions in the absence

[4] P. D. Curtin, *The Atlantic Slave Trade: A Census* (Madison: University of Wisconsin Press, 1969), pp. 268-269.

[5] Ibid., pp. 87 and 211. Perhaps a quarter of the total Atlantic trade was carried out by the British.

[6] The authors realize that it will be difficult for some readers to dispassionately evaluate the economic analysis of the slave trade laid out in this paper. Slaves were people and slavery and the slave trade a nasty business. An analysis that treats the buying and selling of human beings as if they were a commodity may seem inappropriate in the light of the overriding moral issues involved. We acknowledge this difficulty; nevertheless, we hold to the proposition that our approach is useful and leads to insights into the economics of slavery and more particularly of the slave trade that would be lost if we did not attempt such an abstraction.

[7] In the rest of the paper, we shall use the term "economic profit" in its technical definition—being the returns to a factor of production above the returns which could be earned in the next best alternative use of that factor. "Normal profit" is the return to a factor just equal to its next best alternative use—i.e., just equal to the opportunity cost. There will be a risk premium included in "normal profits" that varies between industries of different uncertainties. Economic rents and economic profits are to be considered synonyms. "Ricardian rents" can accrue to an intramarginal firm in a perfectly competitive industry if the supply of some factor of production, like land, is not perfectly elastic in supply and the firm owns the resource.

of direct evidence on the profitability of the trade and substantially adds to our understanding of the economic consequences of the trans-Atlantic slave trade.

A PREVIEW

Our examination of the way in which the markets were organized in the seventeenth- and eighteenth-century British-American slave trade will show that inexorable market forces caused those profits to be capitalized into the price of the slave and to be passed back through the chain of successive owners to Africa. We shall demonstrate that the nature of the system of property rights in Africa, similar to the organizations of a contemporary high seas fishery, probably caused much of those profits to be dissipated or wasted. In sum, the tragic irony of the trans-Atlantic slave trade was that nobody connected with it gained very much, and even the Africans who were not enslaved may as a group have lost more than they gained. The African slavers behaved much like modern fishermen, only they were fishers of men.

In order to trace the profits of the slave trade we must examine the steps by which a slave reached the sugar, rice, indigo, or tobacco fields of America. Several of these steps were often performed by a single trader, but they are analytically distinct. The planter who employed the slave would have acquired him or her from a colonial slave trader, a retailer so to speak. The retailer, in turn, bought the slave from either a colonial slave breeder or from a slave importer. The importer acquired the slave from a shipper who had brought a cargo across the Atlantic. The shipper purchased the slave from a slave exporter in Africa. The exporter, directly or through intermediaries, acquired the slaves from the fishers of men—the ultimate enslavers. The fishers of men were almost always African and the exporters usually were African. The rest of the steps in the sequence were carried on by Europeans.

The main task of this article will be to investigate in some detail each step of the sequence of the slave trade to examine the nature of the market organization and ascertain the range of elasticities of factor supplies. The African end of the slave trade, it must be pointed out, was particularly complicated, with traditions, institutions and conditions often varying substantially from area to area and over time in each area.

Our research suggests that at every stage of the slave trade carried on by Europeans the markets were highly competitive and all of the inputs except the supply of slaves were in nearly perfect elastic supply. The "invisible hand" eliminated any long-run economic profits. These same market conditions generally obtained among the African exporters of slaves. Thus the potential profit, the difference between the value of what a slave in America produced and what the slave received, was absorbed in the price of the slave and was passed on to the original slavers—the fishers of men. Even for the fishers of men economic profits may have been nonexistent. To the degree that slaving was actually carried on as an economic activity, similar in organization to a modern fishery, these profits were likely to have been dissipated by excess entry into the industry. This is the result that would be expected with the extensive exploitation of a common property resource such as an ocean fishery.

We are convinced that the evidence on the forms of economic organization from the consumer of plantation products, to the plantations, to the slave dealers in America and in Africa, is convincing enough to provide quite strong support for the models that will be presented later in this paper. The evidence we present on the way that slaves were actually supplied from the interior of Africa is much weaker. The way in which Africans became slaves will be shown to have real importance in determining how large the actual benefits were which accrued to the enslavers. The implications of the alternate mechanisms of supplying slaves will be spelled out, but the paucity of evidence and the complexity of the problem make it impractical to try to determine the actual proportion of slaves stemming from the alternate methods of supply.

THE EMPLOYERS OF SLAVES

Black slaves came to the Americas on the heels of Columbus. From the first most of these slaves were utilized in the tropical lowlands—the Greater Antilles and the coastal areas of Central and South America. The same pattern was followed a century later by the northern Europeans when they colonized the areas the Spanish had not occupied—the lesser Antilles and the Atlantic seaboard of North America. Slaves were used largely in these areas for the production of tropical agricultural products which were in demand in Europe but which could not be cultivated as economically under European climatic conditions.

In the British plantations there were three forms of labor available: unbound labor, indentured Europeans, and African slaves. Planters were interested primarily in the latter two forms and would choose the one that was least expensive. The profitability calculation in British colonies favored indentured European labor until about 1650 when slaves began to be preferred in Barbados.[8] By 1700, slaves had largely supplanted European indentured labor in the British West Indies and were gaining favor in the plantation areas of the Carolinas, Virginia, and Maryland.[9] European indentured servants continued to be imported into these colonies after 1700, but did not provide the main source of additional field labor.

The staple crop industries in colonial America very closely approached the competitive ideal—a large number of producers, the largest among them accounting for a very small part of the total output, each producing an undifferentiated product, and entry into and exit from the industry was easy. In sugar cultivation there appear to have been economies of scale only up to approximately a 200-acre plantation, and thus the early tendency to squeeze out the smallest scale producer did not fundamentally alter the competitive nature of the industry.[10] In Barbados, for example, there were some 1225 individuals owning more than ten acres in the year 1680. Of them, 365 owned twenty or more slaves.[11] By this date, Barbados was almost entirely under cultivation, but the Leeward Isles and the much larger island of Jamaica were still largely undeveloped frontier lands. By 1786 there were some 651 sugar plantations in Jamaica alone.[12] Thus, not only was the cultivation of sugar in the British West Indies divided among a large number of individuals, but through most of the period there were available numerous acres suitable for sugar cultivation, acres which were only slightly inferior in fertility or location to those already under the hoe.[13] In Virginia,

[8] V. T. Harlow, *A History of Barbados, 1625-1685* (Oxford: Clarendon Press, 1926), pp. 338-340.

[9] U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1957* (Washington, D.C., 1960), Z 1-19 and Z 294-297.

[10] R. S. Dunn, "The Barbados Census of 1680: Profile of the Richest Colony in English America," *The William and Mary Quarterly*, 3d series, XXVI (1969), 15.

[11] Ibid., p. 12.

[12] Edward Long, *The History of Jamaica* (London, 1774), Vol. I, p. 400.

[13] Good uncleared arable land in Barbados sold at £1 per acre in 1629, less than

the production of tobacco was even more finely divided among the many producers, and the reserve of usable land was even larger. The tithe lists reveal that during the seventeenth and eighteenth centuries the number of tobacco planters increased from a few hundred to several thousand.[14]

The staple crop-producing industries in British-America fit the conditions of the competitive model. Suitable virgin land was quite elastic in supply, and its price, if not zero, was extremely low. The amount of capital needed to begin an efficient operation was small enough to be within the resources of a large number of Englishmen and, as time went on, many English colonists as well.[15] The particular skills unique to these types of agriculture were in short supply for only the first decade or so of cultivating; after that time experi-

that in the early 1640's, climbed to perhaps as high as £5/acre in the sugar boom of the late 1640's, and then seems to have fallen slightly. Jamaican land was free from 1655 through the 1670's and then rose slowly to a peak of £4 or £5/acre in 1800. Richard Dunn, *Sugar and Slaves* (Chapel Hill: University of North Carolina Press, 1972), pp. 51, 66; Richard Ligon, *A True and Exact History of the Island of Barbados* (London: Frank Cass, 1970 reprint, first pub. in 1657), p. 86; J. H. Bennett, "The English Caribbees in the Period of the Civil War, 1642-1646," *The William and Mary Quarterly*, 3d series, XXIV (1967), 372; J. H. Bennett, "Cary Helyar, Merchant and Planter," *The William and Mary Quarterly*, 3d series, XXI (1964), 61; Great Britain, *Acts of the Privy Council, 1613-1880*, Vol. 1 (Hereford, 1908), No. 1126; Long, *History of Jamaica*, Vol. I, p. 457; William Beckford, *A Descriptive Account of the Island of Jamaica* (London, 1790), Vol. 1, p. xxxi; and Bryan Edwards, *The History, Civil and Commercial, of the British West Indies* (New York: AMS Press, 1966 reprint of 1819 ed.), Vol. II, pp. 291-92. Since sugar produced per acre was worth at least £10 per year in the field, the total land rents could hardly have been as much as five percent of the gross value of the crop and usually much less. Ward Barrett, "Caribbean Sugar-Production Standards in the Seventeenth and Eighteenth Centuries," in *Merchants and Scholars*, ed. by John Parker (Minneapolis: University of Minnesota Press, 1965), p. 166. Of the five percent rent, only a small part could have been due to the cheaper labor resulting from the slave trade because Europeans would have continued to work the land in the absence of slavery at only a marginally higher cost. The same condition was also true for the Chesapeake; see V. J. Wyckoff, "Land Prices in Seventeenth Century Maryland," *American Economic Review*, XXVIII (1938), 82-88. Therefore any Ricardian rents due to the expansion of staple producing industries would be relatively small.

[14] The Virginia County Records, Virginia State Library, indicate that very few tobacco "plantations" in the seventeenth century employed more than a few slaves or indentured servants.

[15] Ligon, *History of Barbadoes*, pp. 22 and 108, stated that a large 500-acre plantation, with 200 acres in cane, complete with labor force and all equipment, cost £14,000 in 1647. Sir Dalby Thomas wrote in 1690 that a plantation of about half that size, complete with equipment and slaves, would cost £5,625 in "A Historical Account of the West Indies" (1690), reprinted in *The Harleian Miscellany* (London, 1808), Vol. II, p. 366. In 1798, a fully equipped and staffed Jamaican plantation with 200 acres in cane was priced at £30,000 by Edwards, *History of the British West Indies*, Vol. II, p. 291.

enced managers did not command large premiums.[16] The consequence of these realities was that significant economic rents were reaped for only the first decade or two after developing a staple crop. These rents attracted a flood of eager settlers, acreage under cultivation skyrocketed, the quantity of the staple which was grown leaped upwards, and the price of the staple fell until it equaled the cost of production at the margin.[17] The major factor in the production process was labor, and growers bid against one another for that factor until the value of the marginal product of labor equaled the price paid by the planters. Whether that labor was slave or indentured depended upon whether the ratio of the value of the marginal product of the slaves to their annual cost was greater than or less than the same ratio for indentures. By 1700, the ratio favored slaves in all of the British-American plantation colonies.[18] Labor still remained the most scarce factor of production and, whether free, indentured, or slave, it was the cost of labor which absorbed the potential economic profits in the staple industries.

The planters in British-America could obtain additional slaves either from traders selling blacks directly from Africa or from persons who had reared slaves in the New World. Most planters, whether intentionally or not, raised slaves. This suggests the possibility that planters could have enjoyed economic profits either from the natural increase of slaves or in the form of capital gains stemming from the difference between the earlier purchase price and the prevailing sales price. Did the owners of slaves who reproduced

[16] Ligon, *History of Barbadoes*, p. 116 said a "principle overseer" on a large Barbados plantation would earn £50/year in 1650. In 1690, overseers received £20/year in Barbados and a little more in Guadeloupe. D. Thomas, "A Historical Account," p. 366; Noel Deerr, *The History of Sugar* (London: Chapman & Hall, Ltd., 1950), Vol. II, p. 333. A century later in Jamaica, a manager of a large plantation would earn about £140 sterling. Edwards, *History of the British West Indies*, Vol. II, p. 299; and M. Craton and J. Walvin, *A Jamaican Plantation: The History of Worthy Park, 1670-1970* (Toronto: University of Toronto Press, 1970), pp. 111, 175.

[17] T. E. Anderson and R. P. Thomas, "The Economic Growth of the Chesapeake during the Seventeenth Century," Discussion Paper, Institute for Economic Research, University of Washington, 1973 (mimeographed); and R. Batie, "A Comparative Economic History of the Spanish, French, and English on the Caribbean Islands during the Seventeenth Century" (Unpublished Ph.D. dissertation, University of Washington, 1972).

[18] R. N. Bean and R. P. Thomas, "Slaves and Indentured Servants in the Seventeenth Century," Discussion Paper, Institute for Economic Research, University of Washington, 1970 (mimeographed).

capture a portion of the potential profits that competition had embodied in the price of slaves?

We have seen that the many buyers and sellers of slaves at this stage of the trade suggests that the industry was competitive. There is little doubt that, prior to the abolition of the trade, had it been less expensive to raise slaves domestically than import them, planters would have devoted considerable attention to the rate of reproduction of their slave stocks. However, during the era of the Atlantic slave trade this activity generally was not profitable. Indeed, were it not a natural adjunct to slave owning most planters would have avoided it: it simply cost more during most times and in most colonies to support the rearing of a slave than it cost to import one. The cost of raising a slave was high due to the loss of labor during pregnancy, the high risk of mortality for both mother and child, and the cost of providing subsistence and supervision during infancy.[19]

A second possibility for the planter retaining at least a portion of the profits of the slave trade was in the form of capital gains as the price of slaves increased through time. However, if such gains were expected, any gain would have been reflected in the purchase price because of competition and passed back to the prior stage of the trade. Only unanticipated price increases would have resulted in capital gains for planters. Such gains could have been only of minor significance as the price of slaves in British-America managed only to triple in the century and a half of the slave trade—an annual compound rate of three-quarters of one percent. Thus it seems unlikely that unanticipated price rises could have resulted in substantial capital gains.[20]

[19] Even in North America, where the costs of food were relatively low and life expectancies were high, slave breeding was not very lucrative in the eighteenth century. See L. C. Gray, *History of Agriculture in the Southern United States to 1860* (Gloucester, Mass.: Peter Smith, 1958), Vol. I, p. 364. This was even more true of the British West Indies. F. W. Pitman, "Slavery on the British West India Plantations in the Eighteenth Century," *Journal of Negro History*, XI (1926), 637; Richard Sheridan, "Africa and the Caribbean in the Atlantic Slave Trade," *American Historical Review*, LXXVIII (1972), 20-21; and H. J. Bennett, "The Problem of Slave Labor Supply at the Codrington Plantations," *Journal of Negro History*, XXXVI (1951), 431.

[20] R. N. Bean, "The British Transatlantic Slave Trade, 1650-1755," (Unpublished Ph.D. dissertation, University of Washington, 1971), p. 210; Stanley Dumbell, "The Profits of the Guinea Trade," *Economic History*, 2 (1931), p. 256; and Richard Pares, A *West India Fortune* (U.S.A.: Archon Books, 1968, first published in 1950), p. 152.

In summary, it must be recognized that the competitive nature of the staple crop industries in British-America precluded the long-run existence of economic profits. The price of slaves in such a market would equal the discounted expected value of the difference between the value of the marginal product of a slave and the costs of supervision and control, plus the positive or negative discounted expected value of future children of the slave. Competition between the thousands of slave owners to obtain labor bid up the price of labor until only "normal" profits were obtained from the employment of slaves.[21] Slaves to be sure were exploited, but the planters did not reap the benefits. Thus, it appears that the profits must have been passed on to the European or African slave traders, to the enslavers, or to the consumers of plantation products.

THE EUROPEAN PURVEYORS OF SLAVES

The planters in British-America at times purchased additional slaves and indentured servants directly from the ship that had imported them, but the process was usually less direct. A complex of intermediaries was soon established. The slave shippers often found it advantageous to engage a local merchant to sell on commission since the merchant possessed a specialized knowledge of local market conditions. Some agents in this manner handled quite large numbers of slaves and indentures.[22] In America, slaves were processed through much the same commercial channels as were provisions and the other normally traded commodities. Large numbers of merchants trafficked in slaves, and slave trading within the British Empire was, except perhaps during part of the monopoly period, open to any citizen of the Empire. No important barriers to entry existed, and, as a result, the industry was highly competitive.

[21] Ligon, *History of Barbadoes*, p. 112, claims that the rate of return on a Barbadian sugar plantation was over fifty percent per year in about 1650. By 1690, the rate of return on investment in sugar plantations was low, and it was still low a century later. See D. Thomas, "A Historical Account," p. 369; and Edwards, *History of British West Indies*, Vol. II, pp. 300ff. Clearly, the returns in sugar planting were little, if any, better than the next best alternative use of the capital except during the first few years.

[22] K. G. Davies, "The Origins of the Commission System in the West India Trade," *Transactions of the Royal Historical Society*, 5th series, Vol. II (1952), pp. 89-107; S. G. Checkland, "Two Scottish West Indian Liquidations," *Scottish Journal of Political Economy*, IV (1957), 127-143; Pares, *A West Indian Fortune*; P. L. White (ed.), *The Beekman Mercantile Papers, 1746-1799* (New York: New York Historical Society, 1956); L. B. Wright, *Letters of Robert Carter, 1720-1727* (San Marino, Cal.: The Huntington Library, 1940).

The returns to the slave retailing merchants, as a consequence, would have been approximately the same as in their dealings in other commodities.

After 1689, and even before then, the trans-Atlantic portion of the African slave conduit to British-America was characterized by atomistic competition: easy entry into and exit from the industry, large numbers of competitors, with no one firm large enough to dictate prices. This was also the pattern that dominated the British merchant marine of which the slave trade was but a small sector. The most usual system was for a ship to be owned by a number of partners, perhaps a dozen or so, who often included the master in their number. Investors could spread their risks by owning as little as one thirty-second of several different ships. In the shortest, best-organized routes, a ship usually acted as a common carrier, hauling other people's goods to a specified destination for a fixed fee; there the master would try to arrange a cargo back to his home port. In longer distance trades the ship was often leased by the owners to a merchant, a group of merchants, or to a chartered company, such as the East India Company. Another method which was most often found in the riskier long-distance trades was for a group of merchants to pool their resources by taking shares in a venture, buying or leasing a ship, and loading it with their own goods. The cargo was consigned to the master who was to make the best exchange at the final destination. The latter was the system which predominated in the English trade with Africa between the sixteenth and the nineteenth centuries.[23]

The British slave traders accounted for only a small part of the total British merchant marine. In 1686, 1715-17, and 1771-73 (years in which data exist), only about three percent of the total English shipping tonnage clearing from English ports was destined for Africa.[24] The proportion of the total merchant marine in the slave trade was actually somewhat larger than three percent because some of the ships on shorter routes might clear several times a year while a slaver averaged less than one circuit per year. Because the slave trade employed only a small part of the British merchant marine it

[23] R. Davis, *The Rise of the English Shipping Industry,* (London: Macmillan, 1962), pp. 81ff; B. Greenhill, *The Merchant Schooners* (New York: Augustus M. Kelley, 1968) show that the practice lasted into the twentieth century in English coastal shipping.

[24] Davis, *The Rise,* pp. 200 and 298.

is apparent that the supply of shipping services to the Atlantic slave trade must have been quite elastic. Slave ships were not of a specialized design and usually were not built particularly for that trade until after 1750. A large fraction of the shipping used on other ocean routes was readily employable in the slave trade.[25] Nor was the need for specialized skills a particular barrier to entry. Hundreds of ship officers were available at any point in time who had had experience in navigating and trading on the African coast; such knowledge was too widely held for it to command much of a premium.[26]

In summary, the shipping portion of the British trans-Atlantic slave trade was a competitive industry with a large number of separate suppliers all of which were small relative to the total number. There were no important barriers to entry, and there was always a large pool of available ships, crews and officers with the requisite special knowledge employed elsewhere, but which could easily be transferred to that activity. Thus, it was impossible for profits to be higher, on average, in the Atlantic slave trade than in the rest of the merchant shipping industry. When such profits temporarily appeared, they quickly attracted from alternative employments more resources into the slave trade, increasing the supply until the returns were equalized between trades. Furthermore, there were few barriers to entry into the British merchant shipping industry as a whole, and so returns in that industry could not long exceed average returns to capital and labor in all industries in the British Empire.

The myth that the British-American slave trade was highly profitable was a part of the abolitionist propaganda of the late eighteenth century. In relatively modern times it can probably be traced to Gomer Williams.[27] Williams published the accounts of several Liverpool slavers, all of which seemed to indicate that fabulous profits were the norm. It has been demonstrated that Gomer Williams' data did not show what it purported because he omitted part of the costs, included credits not due to the slave voyage and neglected to adjust for the fact that colonial currency did not exchange at par with

25 Ibid., p. 295.

26 Ibid., pp. 138-139, 148-149. There was some risk premium paid in the slightly higher wages of the seamen and the right of the officers to ship free a slave or so on their own account, but the premium was amazingly low in light of the very high mortality among the crews of slavers.

27 G. Williams, *History of the Liverpool Privateers.*

sterling.[28] Nevertheless, misinformation on spectacular subjects dies hard, and the assumption that substantial economic rents accrued to both the British slave traders and to the West Indian planters is the foundation upon which Eric Williams rests his conclusion that Britain's industrial revolution was made possible by the slave trade.[29]

A more general explanation of the persistence of the myth of high profits in the British slave trade stems from non-randomness in the selection of the evidence. Some voyages *were* highly profitable.[30] As we shall see below, the slave trade was a highly uncertain business with financial catastrophe lurking at many points in the process. Much depended upon fate. Near the end of the slave trade, the perils of the sea alone warranted a peacetime insurance rate, without a war-risk clause, of nearly ten percent for the full triangular voyage. Earlier in the period, and in wartime, the insurance rates were much higher.[31]

The trade on the African coast itself was highly uncertain. An interruption inland in the supply of slaves and/or the arrival of an unusually large number of slave ships would drive up the price of slaves high enough to place in jeopardy the possibility of a profit for the entire voyage. A further source of variance in the success of slaving voyages was the particular mix of trade goods carried by a slaver. This mix had to be determined by relying upon information from Africa already several months old. But the exchange ratios of the trading goods could vary rapidly in Africa and frequently bore little relation to their relative purchase prices in Europe.

The risks were not behind when the laden slaver finally left Africa, since the weather could make a big difference in the passage time. With good luck, it took five or six weeks to get to America, but with bad luck, it could be three or four months. Extended passage times meant higher death rates among the crew and the slave cargo; the profits could disappear overboard with the corpses of the slaves. Epidemics were a constant threat and, combined with weather,

[28] Dumbell, "Profits," pp. 254-257.

[29] E. Williams, *Capitalism.*

[30] F. E. Hyde, B. B. Parkinson, and S. Marriner, "The Nature and Profitability of the Liverpool Slave Trade," *Economic History Review,* V (1953), 368-377; and B. B. Parkinson, "A Slaver's Accounts," *Accounting Research,* II (1951), 144-150.

[31] G. C. Mason, "The African Slave Trade in Colonial Times," *American Historical Record,* I, (1872), 315-18; D. Rinchon, *Pierre-Ignace-Lievin van Alstein, capitaine negrier, Gand 1733-Nantes 1793* (Dakar: Ifan, 1964), p. 53; Great Britain, *British State Papers, House of Commons, Accounts and Papers,* Vol. XXIX (1790), 698; and Kenneth Davies, *The Royal African Company* (London: Longmans, 1957), p. 208.

resulted in a very large variance in the slave mortality. The average death rate in passage in British slavers gradually declined from about twenty-five percent in the seventeenth century to less than half of that rate toward the end of the period, but the variance around this mean remained high.[32]

Nor did arrival in America mean the end of risks. Not infrequently, the price of slaves in America would have changed by ten or even twenty percent from what it had been when the slaving expedition was launched over half a year before.[33] Also it was often necessary to sell slaves on credit with the attendant risk of default. The returns from the sale of the cargo usually were remitted back to England in the form of bills of exchange from the planter drawn on his account with his agent in England, or were taken in produce shipped home on speculation. Speculation in tobacco or sugar was risky, given the volatile nature of commodity markets in England, and in the eighteenth century the slavers increasingly left these fields to the specialist.[34] But even remission by bills of exchange was not risk-free because the notes might not be honored in England. If notes were not honored the slaver must try to recover the debt by a long, expensive and uncertain route through the usually hostile colonial court system.[35]

This catalog of the economic perils facing the slavers makes it clear that the existence of highly profitable individual voyages was not inconsistent with a zero *average* economic profit for the British slave-trading industry as a whole. English investors in the slave trade, knowing the odds, usually spread their risks by taking shares in several different voyages. A string of misfortunes, of course, could destroy a merchant financially and thus eliminate him from the ranks of future investors in slaving voyages. Since the records of a bankrupt merchant are less likely to have been preserved, a Darwinian selection process should give a bias toward the preservation of the records of successful voyages. Even so, there is a plethora of evidence indicating unsuccessful voyages.[36]

[32] Great Britain, *Report of Committee of Privy Council on Trade to Africa* (1789), Pt. IV, #5, Appendix B; F. W. Pitman, *The Development of the British West Indies, 1700-1793* (New Haven: Yale University Press, 1917), p. 68n; Daniel Mannix, *Black Cargoes: A History of the Atlantic Slave Trade, 1518-1865* (New York: Viking Press, 1962), p. 150; and Davies, *The Royal African*, pp. 292-294.

[33] Bean, "British," pp. 79-102.

[34] Hyde, Parkinson, Marriner, "The Nature and Profitability," p. 369.

[35] Davies, *Royal African Company*, pp. 316ff.

[36] Hyde, Parkinson, Marriner, "The Nature and Profitability," pp. 370, 374. A

If the expected return to resources used in slaving exceeded the expected return elsewhere, additional resources would have been quickly drawn out of other trades and into slaving until the added competition lowered the expected returns to the level of the next best alternative use for those resources.[37]

The organization of the European trade on the coast of Africa evolved through several forms after the trade was first opened by the Portuguese in the fifteenth century. At first, it was a tightly controlled monopoly of the Portuguese crown. However, at this time the Portuguese were seldom able to completely exclude interlopers. The challenge to Portugal's monopoly by rival European nations became serious before the end of the sixteenth century. The Dutch broke the Portuguese monopoly over the West African gold trade early in the seventeenth century and in turn also attempted, without success, to exclude all other Europeans from the West African trade.

The English response to the Dutch attempt at monopoly was to organize, in 1660, The Company of Royal Adventurers as a joint stock venture with a legal monopoly over English trade to Africa. The company was reorganized and expanded in 1663 and again in 1672—in the latter case, being renamed The Royal African Company. The Royal African Company had a *de jure* monopoly of all English trade with Africa, including the slave trade, until 1698. *De facto,* however, the company lost whatever monopoly power it had in 1689 when an unsympathetic government took control in London.[38] Prior to that, while official aid in the enforcement of the company's privileges was still forthcoming, efforts to exclude interlopers were only partly successful. Perhaps as high as one-third of the slaves imported into the English colonies during the monopoly period were brought in illegally.[39] The Royal African Company monopoly was quite unpopular with the American colonists, and local government

study of 101 Dutch slaving voyages between 1733 and 1802 shows that only 59 made even a moderate profit. Pieter C. Emmer, "The History of the Dutch Slave Trade, A Bibliographical Survey," JOURNAL OF ECONOMIC HISTORY, XXXII (1972), 743.

37 Actually, even in equilibrium the average rates of return in different industries will not be equal because the variance of returns (risk) will differ between industries. Since most investors are risk-averse, a risk premium is required to attract investors into an industry where there is a larger variance around the expected rate of return.

38 Bean, "British," pp. 79-102.

39 Davies, *Royal African Company,* p. 113; and Bean, "British," pp. 225-226.

officials often failed to cooperate with the company when it tried to enforce its privileges. The Royal African Company did act as a monopolist in the period up to 1689, but the company was a financial failure, because in spite of the monopoly power which was exercised by the company, raising slave prices and restricting slave imports in British-America, the company consistently lost money.[40] There were no economic rents in the British-American slave trade during its monopoly period.

Trading for slaves on the African coast generally fell into one of two basic patterns: ship-trade or fort-trade. In the ship-trade the captain or super-cargo of the slave vessel did his own trading for slaves, often acquiring small numbers at several different places. In the fort or castle-trade the ship captain was usually acting as the agent of some organization (such as the Royal African Company) which also operated a post on the African coast where slaves were collected. The ship merely delivered its cargo at the pre-designated point and picked up a cargo of slaves there from the agent of the company. Sometimes the ships were company owned, sometimes the ships were under contract, and after the days of the monopolies the ships were sometimes private traders. Details of the contracts varied but usually the total payment to the shipper was based on the number of slaves delivered alive in America.[41]

A third form of trading which fell between the archetypes of ship-trade and fort-trade was the case where a European or his mulatto offspring lived ashore and acted as his own agent, buying from the Africans and selling to the European ships.[42] This was the usual form in Portuguese-controlled Angola but, while less pervasive, was also found in many parts of West Africa, particularly toward the end of the slaving era.

Ship-trading was the more important of the three. The slave trade of some areas such as the Oil Rivers were exclusively handled by individual ship captains.[43] Even at the height of the period of the

[40] The reasons for the failure of this monopoly company, and those of other European nations trading to Africa, are too complex to go into here, but the prime difficulties they faced were diseconomies of scale and a "free rider" problem. Davies, *Royal African Company*, pp. 346-349; and Bean, "British," pp. 79-102.

[41] Davies, *Royal African Company*, p. 198.

[42] B. Mayer (ed.), *Captain Canot, An African Slaver* (New York: Arno Press and *The New York Times*, 1968; first printed in 1854); and E. Martin (ed.), *Journal of a Slave-Dealer 1754-1759* (*Nicholas Owen*) (Boston: Houghton Mifflin, 1930).

[43] A. F. C. Ryder, "An Early Portuguese Trading Voyage to the Forcados River," *Journal of the Historical Society of Nigeria*, I (1959), 294-321.

monopoly trading companies in the seventeenth century, the Gold Coast, the focus of the fort-trade, was the scene of considerable ship-trading by independent traders interloping upon the privileges of the monopoly companies.[44] The decline of the big companies further increased the importance of ship-trading in the last century of the slave trade.

The number of ships trading on the coast was usually substantial, with British traders bidding for slaves against each other and against traders of other European nationalities. Not infrequently there were so many ships that it took an extended period to make up a cargo and some slavers were forced to leave with only partial loads. The competitive nature of this stage in the slave conduit passed the potential profits of the trade through the hands of the European shipper of slaves to the seller on the coast of Africa.

THE AFRICAN PURVEYORS OF SLAVES

African slaves usually saw their first European only when the slaves arrived at the coast of Africa. Their fates to that point had been entirely in the hands of other Africans. This division of labor was of long standing: the Portuguese had learned in the mid-1400's that if they wanted slaves it cost less to buy slaves from Africans than it did to attempt to capture them on their own. Once at the coast, the slaves were bartered to Europeans, that is, either to sea captains or to European representatives. The commodities exchanged by Europeans for slaves were many and varied. Some of these commodities were African, not European in origin, and the Portuguese became particularly adept as middlemen and shippers in this African trade. Slaves and sea shells, for example, used as money in Africa, were shipped from Angola to the Gold Coast[45] while palm cloth acquired just north of Kongo was used to acquire these goods.[46] In the last analysis it was foreign imported goods that were used to purchase slaves. Several European nationalities traded in cowries, cotton cloth, and hardware imported from India. Cowries,

[44] W. Bosman, *A New and Accurate Description of the Coast of Guinea* (New York: Barnes & Noble, 1967, reprint of 1705), p. 89.

[45] A. F. C. Ryder, *Benin and the Europeans, 1485-1897* (London: Longmans, Green, 1969), p. 25ff; Ryder, "An Early Portuguese Trading Voyage," pp. 294-321; J. D. Fage, *A History of West Africa* (Cambridge: The University Press, 1969), p. 57ff; and Curtin, *The Atlantic Slave Trade*, pp. 95-116.

[46] D. Birmingham, *The Portuguese Conquest of Angola* (London: Oxford University Press, 1965), p. 26.

tobacco, and gold from Brazil were shipped to Africa. American rum, Dutch gin, French brandy, and Portuguese wine together made up a substantial fraction of African imports. Most important was the wide selection of European manufactured goods which combined to constitute the largest portion of slavers' cargoes. Cloth, weapons, hardware, iron and copper bars, and assorted knick-knacks all went into the trading assortment.[47]

A cargo outbound from Europe would consist of an assortment of goods chosen to fit the most recent information about consumer tastes at its destination. One of the peculiarities of the trade was that the Africans usually preferred to trade for a package of assorted goods. It was very important that the *mix in the cargo match the* preferences of the slave dealers at the planned site of trade. Sometimes the lack of some single commodity which was in high demand could be a serious handicap. This aspect of the African trade was always fraught with great uncertainties as African tastes and preferences were notoriously volatile.[48]

We are primarily concerned with examining the competitive structure of the trade at this stage. The majority of the African slaves supplied to the New World originated in a belt approximately two hundred miles deep along the west coast of Africa.[49] One possibility is that African political units, possibly with European aid, gained by regulating the trade. Within this belt however, were at least several dozen, and probably hundreds, of separate political entities.[50] Only a few of these states measured as much as one hun-

[47] Davies, *Royal African Company,* Appendix I, gives a breakdown of Royal African Company exports by commodity and value.

[48] A feeling for the forms and complexities of trading on the African coast can best be obtained by reading contemporary accounts such as B. Martin and M. Spurrell (eds.), *The Journal of a Slave Trader (John Newton) 1750-1754* (London: The Epworth Press, 1962); and those contained in Elizabeth Donnan, *Documents Illustrative of the History of the Slave Trade to America,* Carnegie Institute #409 (Washington, D.C.: Carnegie Institute, 1930-35), 4 vols.; and G. F. Dow, *Slave Ships and Slaving* (Salem: Marine Research Society, 1927). For a recent discussion by an economist see Simon Rottenberg, "The Business of Slave Trading," *The South Atlantic Quarterly,* LXVI (1967), 409-423.

[49] P. D. Curtin and Jan Vansina, "Sources of the Nineteenth Century Atlantic Slave Trade," *Journal of African History,* V (1964), 185-208.

[50] Some of these political entities were clearly states, with a hierarchical power structure topped by a hereditary king. Others were without central authority, "semi-states," and were merely kinship groupings where the demarcation between "foreigner" and "relative" was not sharp. Meyer Fortes, *The Dynamics of Clanship Among the Tallensi* (London: Oxford University Press, 1945); J. Middleton and D. Tait (eds.), *Tribes Without Rulers* (London: Routledge and Kegan Paul, 1958); M. D. Sahlins, "The Segmentary Lineage: An Organization of Predatory Expansion," *American*

dred miles in their longest dimension and most were much smaller. For example, the hundred-mile stretch of beach on the Gold Coast running east from Cape Three Points was divided among ten separate states in 1629, and a total of over forty states were within fifty miles of that beach.[51] By 1729, the number of political entities on that beach had changed little, but considerable consolidation had occurred inland; yet there were still about twenty separate states in that area.[52] Furthermore, on that one-hundred-mile stretch of beach were twenty-two permanent forts or lodges manned by Europeans. Moving up the coast, the ownership generally alternated between Dutch and English and no point (see Figure 1) was more than about ten miles from a fort of both nationalities.[53] The competition between European nations, especially the English and Dutch companies, was intense. Their numbers and locations precluded any chance of either exercising any monopsony power as buyers, but could their suppliers either individually or acting in concert act as a monopoly and gain the profits of the slave trade?

The bulk of the African commodities and slaves exported had their origins in the territories inland of the coastal groups which had direct day-to-day contact with Europeans. The inland traders had the choice of several coastal outlets and their normal tendency to seek the highest return would have tended to equalize prices all along the coast.[54] Any attempt by one European nationality or African state to force down prices at one point or levy excessive taxes would have diverted most of the trade to their competitors.

Except for the Gold Coast and the mouths of the Senegal and Gambia rivers, the rest of West Africa was almost without European forts. To the northwest of the Gold Coast, trade was generally too sparse to warrant permanent installations, and the Slave Coast to the east was unsuited politically as well as geologically for a powerful European presence. The finely subdivided mini-states of the Gold Coast could have been coerced into giving a local monopoly in ex-

Anthropologist, LXIII (1961), 322-345; and G. I. Jones, *The Trading States of the Oil Rivers* (London: Oxford University Press, 1963), p. 17.

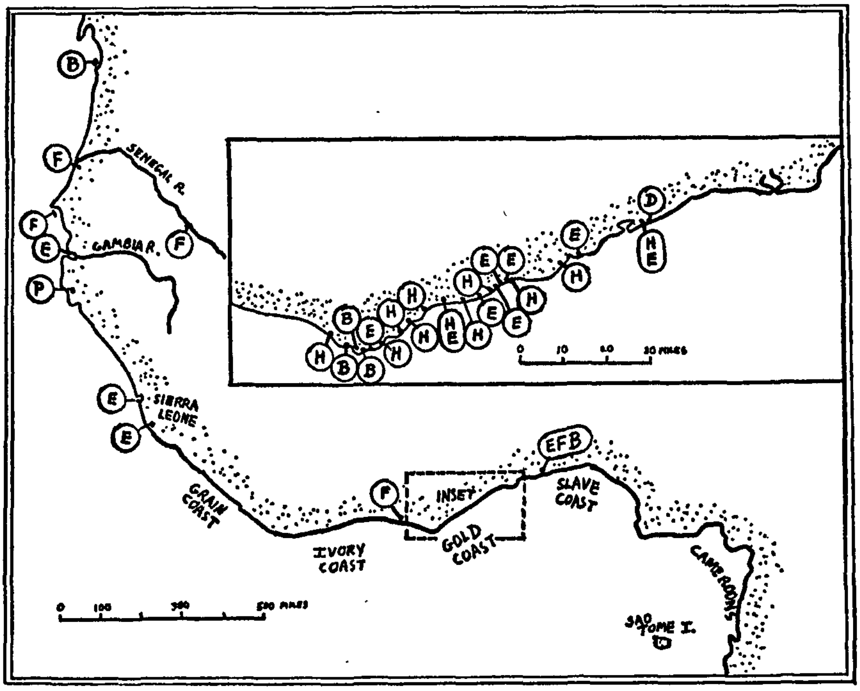
51 K. Y. Daaku, *Trade and Politics on the Gold Coast, 1600-1720* (Oxford: Clarendon Press, 1970), p. 199.

52 Ibid., p. 202.

53 A. W. Lawrence, *Fortified Trade-Posts* (London: Jonathan Cape, 1969), p. 12.

54 The persistent price differentials between areas of Africa are easily explained by the preferences of American slave owners for slaves from certain regions, such as Ghana, and by the higher transport costs from more distant sources, such as Madagascar.

FIGURE 1
MAP OF WEST AFRICAN TRADING POSTS IN 1700
BY NATIONALITY OF OWNERSHIP
(E=ENGLISH, H=DUTCH, B=BRANDENBURG, F=FRENCH,
D=DANE, P=PORTUGUESE)



Source: Adapted from A. W. Lawrence, *Fortified Trade Posts* (London: Jonathan Cape, 1967), p. 12.

change for military aid, but this was not the case for Benin or the Yoruba tributaries of Oyo. The Europeans were not allowed defensible coastal forts and no one nationality was given a monopoly.[55] Africans understood quite well that high prices for African slaves and commodities depended upon competition between the Europeans. Even the Portuguese in Angola and Kongo found their ability to dictate prices to be seriously restricted by the illicit trading vessels of northern Europeans.[56]

[55] S. Berbain, *Le Comptoir francais de Juda (Ouidah) au XVIII^e siecle*, (Paris: Libraire Larose, 1942); and I. A. Akinjogbin, *Dahomey and Its Neighbors, 1709-1818* (Cambridge: Cambridge University Press, 1967).

[56] D. Rinchon, *La traitè et l'esclavage des congolois par les europèens*, (Wetteren: J. de Meester et Fils, 1929), p. 70ff; D. Birmingham, *Trade and Conflict in Angola; The Mbundu and Their Neighbors Under the Influence of the Portuguese* (Oxford: Clarendon Press, 1966), p. 139.

African princes also spent great effort to little avail in the quest for monopoly. Since the prices of African slaves and commodities were set in a market encompassing the whole Atlantic coast of the continent, one local ruler could have scant success in enforcing a higher price. Although he might extract a higher price from the Europeans who were temporarily in his grasp, the likely consequence was that the next season would bring no ships at all. It is true, however, that the ruler of one of the larger states could extract some of the rents from inland traders by charging tolls. This exaction would be limited to the additional cost an inland trader would incur by taking his best alternative route to the sea. Since the larger the state, the larger were the costs of taking a route around that state, the opportunity to collect tolls would create returns to size among these states. This fact alone may go far in explaining the considerable political consolidation in Africa during the eighteenth century.

For the half-century centered on the year 1700, the port of Whydah was possibly the single most important source of slaves in West Africa.[57] Whydah's favorable geographic location made it a natural outlet for exports from states to the north. The king of Whydah thus probably had more monopoly power with respect to the slave trade than any other African. His principal income stemmed from port fees which amounted to the value of twenty or thirty slaves per slave ship. This was, in essence, an export duty of between five and ten percent, because cargoes there were large, sometimes as much as four hundred or more slaves in one vessel.[58] In return for these payments, however, the Europeans received substantial services, storage facilities, police and military protection,

[57] Something like ten percent of all slaves annually exported from Africa were passing through Whydah during the period of Whydah's greatest importance—perhaps as many as 20,000 slaves per year. C. W. Newbury, *The Western Slave Coast and Its Rulers* (Oxford: Clarendon Press, 1961), pp. 20-25; Karl Polanyi, *Dahomey and the Slave Trade* (Seattle: University of Washington Press, 1966), p. 138; Berbain, *Le Comptoir*, p. 50ff; Marion Kilson, "West African Society and the Atlantic Slave Trade, 1441-1865," in *Key Issues in the Afro-American Experience* (New York: Harcourt Brace Jovanovich, 1971), ed. by Huggins, Kilson and Fox, Vol. I, pp. 39-53.

[58] J. Barbot, "A Description of the Coasts of North and South-Guinea," in Vol. 4 of Churchill's *Voyages* (London, 1732), pp. 325-350; T. Astley (ed.), *A New General Collection of Voyages and Travels* (London: Frank Cass, 1968 reprint of 1745), pp. 3, 85; J. M'Leod, *A Voyage to Africa* (London: Frank Cass, 1971 reprint of 1820), p. 11; T. Phillips, *A Journal of a Voyage Made in the "Hannibal" of London, Ann. 1693, 1694,* in Vol. 6 of Churchill's *Voyages* (London, 1732), p. 227; W. J. Argyle, *The Fon of Dahomey* (Oxford: Clarendon Press, 1966), p. 103.

and very important, short "turn around" times. If the services had not been worth the fees the European slavers could have moved a few miles up or down the coast to the competing ports of Ardra or Popo.[59] The economic rents accruing to the king of Whydah would be only the difference between the revenue from tolls and duties and the cost of providing the services which made the collection of those tolls and duties possible. Thus the many European slave buyers had the opportunity of dealing with many different Africans who purveyed slaves. The forces of competition kept both the buyers and the sellers at this step in the trade from making economic profits.

THE FISHERS OF MEN

Thus far we have traced the profits of the slave trade from the plantation owner through the European slavers to Africans living on the West Coast of Africa. At each stage we have seen that little or no long run economic profits could have been retained. The inexorable hand of competition forced the transferral of the economic rents further up the chain toward the ultimate originators of the traffic in slaves—the original enslavers or the fishers of men. In this section we shall first examine what happened to the profits available to the enslavers, and then we shall look at the implications of the activity for African society.

The slaves shipped to America as we have seen above were almost always acquired by Europeans by purchase from Africans. Africans sold to European slave traders were originally obtained in different ways, and these differences are important in understanding the impact of the Atlantic slave trade upon Africa. Some unfortunates sold themselves into slavery in times of great famine.[60] These were a tiny fraction of those exported. A more significant but still small percentage were criminals, or persons with poor political judgment, who would otherwise have been exiled or executed by their own societies. Some were captives in wars that would have occurred in the absence of a slave trade and who would have been slain if there had been no commercial vent. Another category was made up of

[59] In a similar situation the loss of Old Calabar's trade to Bonny was attributed to excessive port fees, the differential then being the values of about four slaves. Capt. John Adams, *Remarks on the Country Extending from Cape Palmas to the River Congo* (London: Frank Cass, 1966 reprint of 1823 ed.), pp. 143, 245, 246.

[60] Barbot, *A Description*, p. 33.

slaves sold to Europeans because their sale price was higher than the discounted present value of their services to their owner, but who would have been slaves in any case. The final group consisted of people enslaved by force (or slaves stolen by force) who would have been unaffected in the absence of the economic incentive provided by the Atlantic slave trade.[61]

The sale to Europeans of citizens or prisoners of war who otherwise would have been executed was, in itself, a net gain to African society. It is difficult to see how these particular slaves were made worse off by the Atlantic slave trade. The increase in the real income of Africa was the sale price on the coast of those under death sentence, minus whatever resources were consumed in guarding, transporting, and selling the slave. If this had been the only source of slaves there could be no doubt that Africa gained from the slave trade. However, persons under sentence of death composed only a small part of the slaves exported.

A numerically much more important source for the slave trade was in people who would have been slaves even had there been no vent to America. There is no doubt that many African societies held slaves both before and after the era of the Atlantic slave trade. The same conditions of abundant land and scarce labor that occurred in colonial America also existed in Africa, providing an economic incentive to own men.[62] The value of the marginal product of a slave in Africa generally exceeded his subsistence and supervision costs, making a slave potentially profitable to possess, if he could be economically guarded, supervised, and protected.

The institution of slavery in West Africa differed from the institution created in America. In general, it was less "harsh" and took

[61] S. W. Koelle interviewed a large number of ex-slaves in Sierra Leone in the mid-nineteenth century. They were about evenly divided between those who were enslaved by war, by kidnapping, or by the internal workings of their own societies. Philip Curtin has observed that Koelle chose his informants in order to represent as many language groups as possible, and thus mass enslavements through warfare were underrepresented. S. W. Koelle, *Polyglotta Africana* (Gray, Austria: Akademische Druck, 1963 reprint of 1854 ed.); P. E. H. Hair, "The Enslavement of Koelle's Informants," *Journal of African History*, VI (1965), 193-203; P. D. Curtin, "The Slave Trade and Atlantic Basin: Intercontinental Perspectives," p. 86n and Marion Kilson, "West African Society and the Atlantic Slave Trade, 1441-1865," p. 50n, both in Huggins, Kilson and Fox (eds.), *Key Issues in the Afro-American Experience*.

[62] E. D. Domar, "The Causes of Slavery or Serfdom: A Hypothesis," JOURNAL OF ECONOMIC HISTORY, XXX (1970), 18-32; and D. C. North and R. P. Thomas, "The Rise and Fall of the Manorial System: A Theoretical Model," JOURNAL OF ECONOMIC HISTORY, XXXI (1971), 777-803.

on some of the mutually obligatory characteristics of European manorialism, though in this case the tie was more to the person of his owner than to the manor as was the case in Europe. The reason for this relative mildness may have been due to the necessity for the African slave owner, like the medieval lord in Europe, to obtain voluntary cooperation from the laborer. One of the benefits for an African of owning a slave was that the slave could be a valuable addition to the military power of the owner. Furthermore, the finely fragmented political nature of West Africa made property right enforcement in people difficult. It was obviously dangerous to entrust weapons to a slave who thought himself badly treated. Also, since a hostile border was never very far away in West Africa, a badly treated slave could be driven to run away and to take his chances with an enemy of his owner.[63] It should be noted that slaves not destined to become members of the enslaver's society and who were to be sold to other groups or to Europeans were treated as harshly as was convenient.[64]

If we ignore the welfare of those slaves being sold to the Europeans (they almost certainly would have been better off if they had been allowed to remain as slaves in Africa), there were obvious benefits to African society from selling to the Europeans those individuals who would have been slaves anyway. But in contrast to the case of those under a death sentence, the gain or profit is only the excess of the sale price over the discounted value of the surplus produced by the slave over his lifetime that could have been expropriated by the owner.[65] Generally, there were real restrictions against selling slaves born in a society to outsiders, and the freedom of a ruler to sell his own people to the slavers was obviously quite limited. If the citizenry felt threatened by a ruler's greed, he would probably not remain in power very long. Moreover, self-inflicted depopulation could lead to a fatal military weakness. The whole

63 This process was formalized in Sierra Leone by recognizing that a slave became the property of the master to whom he ran. C. Fyfe, *A History of Sierra Leone* (London: Oxford University Press, 1962), p. 54. This is precisely the explanation for the replacement of slavery by serfdom in early Medieval Europe presented by North and Thomas, "The Rise and Fall of the Manorial System."

64 Jones, *The Trading States*, p. 58.

65 The American demand for slaves raised the export price for slaves above their value as slaves in Africa. But the full difference between the export price and the reservation price was not all gain because part of the gap was due to a fall in the reservation price. Higher export prices meant more incentive to steal slaves, higher protection costs, and thus less incentive to hold slaves in Africa.

group might themselves become victims with the survivors sold as slaves.

A substantial fraction of the Africans sold to Europeans became slaves because there was economic incentive to enslave them. While this incentive predated European contact, and outlasted the Atlantic slave trade, the incentive was certainly intensified when American demand was added to that of prospective African slave owners. The resulting rise in the price of slaves undoubtedly increased the efforts of the fishers of men.

The fishers of men were Africans who by force turned other Africans into slaves and started these unfortunates down the commercial pipeline which eventually deposited some of them in an American plantation. The techniques of capture varied to suit the occasion, but usually were directed at people outside of the immediate political unit or kinship grouping. Most slaves were the victims of violence taken in kidnappings, netted in raids, or swept up by large military operations. It is impossible to determine exactly what fraction of African wars were a result of the economic inducements of the slave trade. Certainly it can be shown that many of them were economically induced.[66]

The manner in which African slaves were initially obtained has important implications for the economic effect the trade had upon the economy of Africa. The activities which started a large part of the slaves along their route to America were similar to a modern ocean fishery, for the right to a slave was essentially the "right to capture." To understand the economic importance to Africa of the "right to capture," it is instructive to look at the modern fishery analogy.

The fish in a high-seas fishery are common property. It can be demonstrated that resources exploited as common property result in

66 Examples of warring for profit are legion. An early one is G. R. Crone (ed.), *The Voyagers of Cadamosto and Other Documents on Western Africa in the Second Half of the Fifteenth Century* (London: Hakluyt Society, 1937), second series #80, p. 30. The classic case of the slave-raiding state is Dahomey. See Polanyi, *Dahomey,* p. 23ff. The high level of violence in West Africa after the Atlantic slave trade was ended is not really evidence that the trade was unimportant in inducing warfare, for both the ending of the trade and the nineteenth-century revolution in military technology had disrupted the old balances of power. See Martin A. Klein, "Social and Economic Factors in the Muslim Revolution in Senegambia," *Journal of African History,* XIII (1972), 419-441; K. O. Dike, *Trade and Politics in the Niger Delta, 1830-1885* (Oxford: Clarendon Press, 1956); J. F. A. Ajayi and R. Smith, *Yoruba Warfare in the Nineteenth Century* (Cambridge: Cambridge University Press, 1964).

economic waste. The individual fisherman, for example, ignores certain true costs, causing the resource to be over-utilized and the rent which the resource should earn to be dissipated in the employment of too many fishermen. The fisherman has property rights only in those fish he himself catches. Each fisherman maximizes privately by setting his marginal private costs equal to the marginal return to him of increased fishing effort. His marginal private costs are the returns he could get in using his resources in his next best alternative use, leisure, of course, being one of those alternatives. One of the true costs that the fisherman does *not* count is the reduction in the catch of other fishermen if he increases his own fishing effort. Furthermore, the individual fisherman has scant incentive to practice conservation privately. After all, if an individual fisherman uses a net with larger mesh to allow young fish to escape, most of the benefits will later be reaped by rival fishermen while the conservationist fisherman bears all of the immediate costs. So the individual fisherman does not voluntarily practice conservation, yet if he and all other fishermen did practice conservation, the aggregate benefits would exceed the costs.[67]

The crucial element causing inefficiency is the lack of any barrier to exploit the commonly owned resource. Private individuals enter a fishery when they perceive their private returns in the fishery to be greater than the returns in the next best alternative. However, after a certain number have entered, each new fisherman entering the industry lowers the catch of all the previous entrants to the industry. Entry will continue until the individual returns in the fishery have fallen to be just equal to the value of the marginal product of labor alone in the next best alternative. All of the potential economic rents (the necessary payments to the resource) in the industry will have been dissipated in overfishing. These rents disappeared as payments for the efforts of too many fishermen.[68]

In the African fishery of men there were no property rights in a slave until a human being had been captured. There were a large number of fishermen (depending on circumstances the "fisherman" might be a lone kidnapper or an army). There was also free entry into the fishery, "free entry" in the sense that an individual, kinship

[67] J. A. Crutchfield and G. Pontecorvo, *The Pacific Salmon Fisheries: A Study of Irrational Conservation* (Baltimore: Resources for the Future, 1969), pp. 11-36.

[68] Ibid.; and J. R. Gould, "Externalities, Factor Proportions, and the Level of Exploitation of Free Access Resources," *Economica*, XXXIX (1972), 383-402.

group, clan, tribe, or kingdom could and would enter the fishery of men if they perceived the expected benefits to exceed the expected costs. The possibility of selling captives attracted resources to the fishery until the expected return on those resources was just equal to their next best alternate use.[69]

Rising slave prices increased the intensity of fishing over time but the evidence indicates that much of the expanding continent-wide "catch" stemmed from opening up new areas of Africa to intensive fishing and not to increasing the production of the older areas.[70] The supply of slaves from any particular area was increasingly inelastic with respect to price as the annual capture rose. Continued exploitation at a high level of any one region may even have shifted the supply schedule backwards, indicating local depopulation. The substantial short-run variation in the numbers exported from each area is the strongest evidence other than that of Koelle (see footnote 61) that war was the most important single source of slaves.

Another possible analogy would be to imagine a modern ranching industry where the supply of all factors of production, except land, was perfectly elastic to the industry. If there were private property rights in land, and if the rancher cooperated in a cartel to limit the supply of animals, there could be substantial monopoly profits to the ranchers. If there were no cartel and the industry were perfectly competitive instead, ranch operators would get zero economic profits and all Ricardian-type rents would accrue to the owners of the inelastic factor—land. However, if there were no private property rights in land and no barriers to entry into the industry, overgrazing would dissipate *all* of the rents. That is the tragedy of the commons. Our argument is that the "no cartel" case typifies every step in the slave trade except the first step. In the first step slaves were generated for the African export market in several ways, and one of those ways matches the overgrazing analogy. To the extent that the fishers of men operated from economic motivation, and to the extent that no one fisher of men could establish a private right to a "fishery," the potential rents of the slave trade were dissipated in Africa by overfishing.

Our conclusions are that Africans received economic profits from

69 Of course there were also restraints upon the slaving activities of individuals and of political entities. These restraints resulted from ties of kinship and from fear of retaliation.

70 Curtin, *The Atlantic Slave Trade*, pp. 106, 122, 221, 240.

those slaves sold to Europeans who would otherwise have been executed, that is, from criminals and prisoners of war from conflicts that would have been fought anyway. They received a smaller profit from those slaves sold who would have been kept as slaves if not sold, because these slaves had some value to the Africans and that value must be netted out. Finally, the Africans received little or no economic profits from those slaves specifically captured to be sold to the Europeans. Certainly they could have received little economic profit from those captured in common property fisheries.

It is impossible to determine the fraction of the slaves exported who were generated under conditions similar to those in overcrowded common property fisheries. The sparse evidence that exists suggests that perhaps one-quarter were enslaved by violence in the small scale actions that best fit the fishery model. Approximately half of the slaves exported were prisoners of war. If we assume that these wars were really large-scale slave raids that wouldn't have occurred in the absence of the Atlantic slave trade, the fraction of slaves who produced no private economic profit for the slavers could have been as high as three-quarters. This high a fraction is extremely improbable, but it is also unlikely that none of the wars fit the category of large slave raids. Our paradoxical conclusion is that Africans could have reaped substantial gains from the slave trade only to the degree that the actual process of slaving was *not* a competitive economic activity. It was, and much of the potential profits—the difference between what a slave in America produced and what he received—were dissipated in Africa.

The consequences of the slave trade for Africa were immense. The economic resources of Africa were unproductively diverted into slave raiding. We have seen that too many Africans were in this industry, causing the supply of slaves to be too large and correspondingly, the price of slaves to be too low. The difference between being a slave and being a slave owner was a matter of the upper hand. Therefore, many of the resources of Africa were devoted to defense. It was not in anyone's interest to own any form of wealth that was not fairly easily protected. Imagine the consequences for a modern developed country if the inhabitants of the next town could at any moment sweep down and confiscate both your goods and your person. The existence of the slave trade itself, by increasing the inducement to violence, must have made a substantial contribution to African political instability. The unique characteristics of African society and culture are at least in part explained by the persistent pressure of the threat of violence and confiscation. Such threats were the direct result of the inability of the myriad small states and semi-states to announce and enforce an individual's personal right to his person and property. This fundamental duty of any state was, historically, not performed adequately in Africa. The existence of law and order in Africa might not have eliminated slavery, but it would at least have made it more profitable for everyone but the slaves. As it was, the increment to anarchy caused by the slave trade may have cost the practitioners far more in uncertainty and defense costs than it earned them in profits.[71]

THE EFFECT OF THE SLAVE FISHERY UPON EUROPE

It has been the purpose of this essay to demonstrate that large economic profits from the slave trade could not have existed. We would like to point out, however, one "windfall" benefit Europeans received from the slave trade. This benefit was a direct consequence of the organization of slave production as a common property resource. We have pointed out that one of the consequences of this form of organization was that the price of African slaves was too low. This being the case, it follows that the prices of the competitively produced plantation commodities were also too low. The group that benefited abnormally from the slave trade was not the direct participants of the trade, but the consumers of tobacco, sugar, indigo, rice, cotton, etc. The Europeans consumed relatively too much and paid too low a price for these goods.

How important was this? Could consumer savings have been sufficient to raise real income to the point where resulting increased savings could have financed, for instance, an industrial revolution? The answer is no! While we have not attempted to estimate how much too low the price of slaves was, and hence how much too low the prices of plantation crops were, we can provide an absurd example. Suppose we examine the entire value of tobacco and sugar imported into England in 1700 (£1,003,000) and in 1800

[71] The situation in Africa was not one of total anarchy, but of relative anarchy, and the level of property right enforcement varied sharply in Africa with time and place. Some of the larger, more centralized states seem to have done a fairly good job of protecting their citizens. Certainly the threats posed by the slave trade were a strong inducement toward political amalgamation in order to gain the potential economies of scale in defense.

(£8,289,000).[72] These figures are, respectively, two percent and a bit over three percent of British national income.[73] If a perfectly inelastic demand existed for these goods, and we assumed that the actual price in Britain was too low by half, then the total saving to the British consumer is between two percent and three percent of all final expenditures.[74] In such a case, the income of Great Britain in 1700 would have been £1,003,000 higher and in 1800 higher by £8,289,000. Deane and Cole state that over the period the ratio of investment to national income rose from three to seven percent.[75] Thus, if marginal and average propensities to invest were the same, additional investment from these supposed income increments would have been £30,090 in 1700 and £580,230 in 1800 or only two to three percent of total new investment and an even smaller part of the total capital stock. The actual impact was, of course, much smaller than this.

This finding is not too surprising in the light of the major accomplishment of the New Economic History, which has found that no single activity, development, or invention was of unusual importance. The same is true of the slave trade; in fact, the slave trade was certainly of less importance than many.

SUMMARY AND CONCLUSION

This study has traced the economic profits generated by plantation slavery in British-America. There could have been a substantial difference between the income produced by a plantation slave and

72 B. R. Mitchell and Phyllis Deane, *Abstract of British Historical Statistics* (Cambridge: Cambridge University Press, 1962), pp. 285-290.

73 Using the 1688 Gregory King national income estimate of £48 million for 1700, and a £232 million estimate for 1800. Phyllis Deane and W. A. Cole, *British Economic Growth, 1688-1959* (Cambridge: Cambridge University Press, 1962), pp. 154-167.

74 The example absurdly overstates the gains to the English both because the demand for tropical products certainly was not perfectly inelastic and because it is very unlikely that the price could have fallen by half as a result of the use of the cheaper labor. The fall in sugar and tobacco prices between 1640 and 1800 was never as large as this over any sustained period. This period saw the switch from European indentured servants to African slaves for use as field labor on British West Indies sugar plantations in about 1650 and in Virginian tobacco fields in about 1700. It also saw substantial reductions in transport and technological improvements which should have tended to lower prices. See W.H. Beveridge, *Prices and Wages in England from the Twelfth to the Nineteenth Century* (New York: Kelly, 1966), pp. 75, 383, and 429; N. W. Posthumus, *Inquiry into the History of Prices in Holland*, I (Leiden: E. J. Brill, 1946), pp. 119-120, 134-135, and II (1964), pp. 276-279, 664; and J. M. Price, "The Tobacco Adventure to Russia," *Transactions of the American Philosophical Society*, n.s., LI, pt. 1 (March 1961), 103.

75 Deane and Cole, *British Economic Growth*, pp. 260 and 263.

his cost of subsistence. However, the forces of competition capitalized these profits into the price of slaves and so the profits were passed to the European slaver. But the trans-Atlantic leg of the British slave trade was also highly competitive, except, perhaps in the 1660-1690 period, although any monopoly profits reaped by the slave shippers then were lost through the inefficiency of the monopoly companies. On the African Coast the international competition between Europeans and between the many African political groups meant that the economic profits were passed on, ultimately, to the African fishers of men. Entry into each competitively organized stage of the slave trade was rapid, and the marginal firms could have experienced only brief periods at anything but zero economic profits. The supplies of all of the factors of production except slaves were highly elastic so the most efficient firms could have done little better than the marginal firms.

In Africa much of the economic profits were finally dissipated because of the common property nature of the resource. When the defense costs incurred by the potential quarry are added in, the total net impact of the slave trade was almost certainly negative even to the Africans who remained in Africa. Thus, the employers and purveyors of slaves gained from the trade only what they could have gained in the absence of the trade. The absence of the enforcement of private property rights in human beings probably made the society of the fishers of men net losers. The only group of clear gainers from the British trans-Atlantic slave trade, and even these gains were small, were the European consumers of sugar and tobacco and other plantation crops. They were given the chance to purchase dental decay and lung cancer at somewhat lower prices than would have been the case without the slave trade.

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