
DEBATES

*The Atlantic Economy of the Eighteenth Century: Some Speculations on Economic Development in Britain, America, Africa and Elsewhere**

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In recent years we have learned a great deal more about the various Atlantic economies in the eighteenth century. There have been considerable amounts of new data — qualitative and quantitative — made available, and both this new as well as the surviving old data have been placed within new or different interpretive frameworks. Not surprisingly, at least to those with a historiographic bent, these new facts and new frameworks often still remain consistent with earlier interpretations, particularly earlier moral views, of historical developments. Further, even the widening of geographical and chronological perspectives — to include interactions with other areas of the world as well as going back into earlier times to seek the origins of change — often leads, not to a broader overview of the process of historical change but rather, given the specific interests of the scholar, to a narrowing of the particular historical questions asked.

In the past decades what has generally been discussed as the Atlantic economy, at least in the British and United States literature, has expanded somewhat. From the nineteenth and early twentieth century's primary focus on white settlements and political events between England and New England, and between England and those whites in the Chesapeake regions of Virginia and Maryland, attention has shifted to examinations of the role of slavery in European settlement of the Americas and of the impact of the transatlantic slave trade on Africa, the Americas, and western Europe. Moreover, the interests in the role of the slave trade, and in the production and marketing of colonial

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agricultural crops and the mining of gold and silver, has meant greater concern with the roles of Spain, Portugal, France, and the Netherlands in influencing British and United States development. This attention to the impact of slavery clearly represents a significant shift in the historian's focus of attention. Slavery, and the ensuing slave-based New World colonies, are no longer regarded as an isolated, peripheral aspect of the development of the modern western world, but as something that played a central role in its economic, social, intellectual, cultural, and political changes.

These revisions clearly provide a more reasonable view of the past but, as I shall speculate, it may sometimes lead to an overstatement of the role of some factors for some historical questions, at least in some particular times and places. To suggest this, I have organized my speculations around three interrelated questions concerning the Atlantic economy and economic growth in the eighteenth century: (1) how did slavery and the slave trade influence the various areas involved, and was the possible gain for one area necessarily an equivalent (or perhaps larger) loss to another?; (2) what were some of the possible "causes" of the British Industrial Revolution, including those that imposed costs upon various groups within Britain as well as upon groups in other parts of the world that were affected by contact with the British? and (3) what patterns of chronology could be expected between the growth of the slave trade, the expansion of the slave economies, and the development of the Industrial Revolution in Britain?

1. The Effects of Slavery on Europe, Africa, and the Americas

The central labour problem of the modern world was clearly described in 1767 by the mercantilist writer, Sir James Steuart¹. Steuart had at least as good an understanding of labour institutions as did his contemporary, the anti-mercantilist Adam Smith. Indeed, on the basic empirical question of the relative effectiveness of non-free labour, Steuart perhaps should be given higher grades. (Of course, as in many examinations, this might depend upon who the grader was). To Steuart, for economic growth to occur people would, in effect, have to become "slaves" to their wants, and thus be willing to increase their work effort, or else it would be necessary to have some become "slaves" to others, which could be the more frequent pattern if the need was for unskilled labour, such as labour on plantations. This suggested pattern of division of labour among labour institutions does reflect the basic situation that emerged in the transatlantic economy in the eighteenth century, with the growth of new consumer wants (or perhaps, some would argue, it was the development of new forms of labour coercion short of slavery) driving the

¹ See Steuart (1966, Book I). For a recent survey of the discussion of some of the issues raised by Steuart, see Engerman (1992).

increased labour supply in the metropolis, with slavery being important overseas in various colonies².

The interaction among four continents involved with the slave trade and slavery had long led contemporaries to question the balances of gains and losses to each, but it was with the 1944 publication of the book, *Capitalism and Slavery*, by Eric Williams, later to become the first prime minister of the newly independent country of Trinidad and Tobago, that more scholarly attention was given to the role of the slavery in the settling of the Americas and its effect upon the magnitude and nature of British economic growth³. A few years earlier a similar point had been raised, albeit more briefly, about the effect of French colonial slavery upon French economic change, by another Trinidadian scholar, C.L.R. James, in his *The Black Jacobins*⁴. The impact upon Africa was not, at these times, of as central scholarly concern to Williams (or to James) but, with the subsequent emergence of extensive African and anti-colonial historical writings, the presumed links between the transatlantic slave trade and the weakening of the African economy were often spelled out, most precisely by Walter Rodney in 1972⁵.

Britain, it might be noted, was only one of several large slave-trading nations, and not the largest, although its share of slaves carried exceeded the share received by its colonies, due to the efficiency of its slave shipments⁶. Indeed, overall, Portuguese Brazil received about the same numbers of slaves as did the British and French areas together, due both to its early start and its long continuation of the slave trade (into the 1850s). Even in the long eighteenth century (to 1810), Brazil received more slaves than did either of the British or French colonies, although post-1740 there did emerge some relative British advantage, a point that, some argue, anticipates its subsequent industrial development⁷. The numbers of slaves received in the French West Indies in the eighteenth century (to 1790) was nearly equal to those going to the British West Indies although, despite the French government subsidy, the British carrying trade in slaves exceeded that of the French. Nevertheless, in 1770, the total output of the leading plantation crops — sugar, coffee, indigo, cotton, and

² For discussions of the role of increased consumer wants, see, e.g., Brewer and Porter (1993) and Shamma (1990). For the suggestion that the changing labour supply reflected rather more coercive factors, see Thompson (1963).

³ See Williams (1944). For a collection of papers dealing specifically with Williams and his arguments linking change in the Caribbean and in Britain, see Solow and Engerman (1987).

⁴ See James (1963, Ch. II). For a later examination of this issue, see Boule (1972).

⁵ See Rodney (1972). For recent discussions of the effect of the slave trade on Africa, see Thornton (1992), Manning (1990), and Inikori and Engerman (1992), and the numerous works cited by these authors.

⁶ See, for example, the estimates in the pioneering work of Curtin (1969) and in the more recent works by Lovejoy (1989) and by Eltis (1987).

⁷ See Richardson (1989) for data on the eighteenth-century slave trade.

cocoa — from the French West Indies exceeded that from the British by about forty percent, and accounted for over one-half of the total Caribbean output⁸. And, in the eighteenth-century slave trade, the largest single decadal total for any one colonial system was that to the French West Indies, primarily Saint Dominigue, in the 1780s. This was, of course, followed by its most rapid decline, in the next decade. Yet rather than promoting French or French colonial growth this extensive inflow led instead to a massive slave revolt and the loss of the wealthiest part of the French colonial empire, while the French Revolution and the subsequent British blockade also helped to limit French economic expansion.

Clearly, in regard to both those countries whose colonies began to receive slaves early, such as Portugal, and, those that received slaves only much later, based on what may seem misguided (from some perspectives) metropolitan policy reasons, such as Spanish Cuba, there seems no direct connection between slavery, slave-produced sugar, industrialization, and economic growth. Why, then, do we expect to find the unique outcome in the British case? If it is that the British were the first successful industrialized nation, unlike the other European countries, why should one element in its past, one that it shared with these others, be singled out as the primary cause? Slaves were used in many parts of the New World, not just the British Caribbean and mainland colonies.

In the Americas, slaves did all types of work and did so in many areas, from Argentina to Canada, in rural as well as urban areas⁹. Yet the major reason for slave labour was its use in the production of certain crops on plantations (large-scale units, frequently using labour in gangs) for sale in distant markets — generally overseas in Europe. The main slave-produced crop was sugar. Other crops of importance, in different regions, were rice, tobacco, cotton, coffee, and indigo. On the North and South American mainlands mining of various types was also important, generally using African slave, as well as Native American, labour.

Here I shall not go into the effects on the Native American societies, and the impact on their economies, of the now-called re-settlement of the Americas. So great was the demographic disaster that it clearly overshadowed any economic decline¹⁰. The pre-Columbian population of what would be called the Western Hemisphere was not small, being about four-fifths that of all Europe. This population was located predominatly in the area south of the United States,

⁸ This is based on the estimates made by David Eltis (forthcoming).

⁹ For overviews on the use of slave labour, see Klein (1986) and Fogel (1989).

¹⁰ For discussions of the Native American population prior to the arrival of Columbus, with comments on the subsequent depopulation, see Denevan (1976). For a differing interpretation of conditions in Mexico, see Brooks (1993). The debate on the magnitude of the pre-Columbian population is of importance for several reasons, including its implications for the extent of productivity in Native American societies and their degree of social and economic complexity.

a pattern that was to be reversed in the subsequent centuries of white and black settlement. So severe was the initial Native America depopulation upon European and African contact that it may be that even five centuries later, the pre-1492 populations of the Americas have barely been re-achieved.¹¹ This depopulation helped lead to the introduction of African slavery, when the demand for colonial labour expanded. By the nineteenth century a quite distinct geographic pattern of residence between North and South America had evolved, the British and French dominating in the mainland Atlantic regions of the former, and Spain dominant in Mexico, Central America, and South America, except for Portuguese Brazil.

Patterns of slavery in the New World varied with climate, crops, and technology. The British and French West Indies were 90 percent slave relatively soon after settlement, as were the West Indian colonies of the Dutch and the Danish, and these islands have continued to maintain the same ratio of blacks to whites. The United States South, Brazil, and Cuba were generally 30 to 40 percent slave, while there were smaller shares of slaves in the population in the United States North, Canada, and most of South and Central America¹². In these later areas, Native Americans, despite the demographic disasters at the start of European settlement, still provided a large part of the rural, agricultural population, under various non-slave forms of controlled labour organization.

The sugar plantations were very large by the standards of time, often averaging over 100 slaves, and plantations for producing other crops were larger than the family farms that characterized most free-labour agriculture in the predominantly white societies. With their labour organization and controls, these larger producing units tended to be highly efficient (or productive) in obtaining outputs from the available labour. The organizational innovations of these "factories in the field" did not, however, seem to have led to many direct spill-overs into other sectors, including those factories based on the use of free labour. Slaves produced crops to meet many of their needs, such as foodstuffs, shelter, and clothing, in addition to producing the main staple crops, although in some areas, particularly parts of the British West Indies, there was a reliance upon mainland North American producers for needed foodstuffs¹³. This necessitated food imports, generally from New England and the Middle Atlantic states, to permit increased specialization upon the production of sugar¹⁴. Although slave labour, on and off the plantation, performed numerous tasks, it seems clear that it was the importance of the exports of sugar, as well as of

¹¹ Estimates of the changing population are presented in McEvedy and Jones (1978), although these need some modifications based upon more recent estimates.

¹² On the population of the Caribbean, see Engerman and Higman (forthcoming); for Latin America, see Klein (1986) and Rout (1976); and for the United States, see U.S. Bureau of the Census (1975).

¹³ See Higman (1984).

¹⁴ See, e.g., the discussion of this trade in Richardson (1991b).

cotton, tobacco, coffee, and the other plantation crops, that explained the magnitude of the rise and expansion of New World slavery. Nevertheless, even in those areas specializing in sugar and other staple production, less than one-half of the labour time of slaves went directly into production of these crops¹⁵.

In addition to supply considerations, including the question of the number of labourers potentially available (this being influenced by the nature of the production organization), it is necessary to consider the sources of demand for slave-produced crops. There were growing European demands for sugar and tobacco, in particular, over these centuries¹⁶. Whether these demands reflected new tastes as a result of the new trading networks, or else were mainly a shift of demand from other goods or from the same goods previously purchased from elsewhere, is still unclear, but if European consumers, whether from the upper, middle, or lower classes had not wanted to consume sugar, tobacco and coffee, or to wear clothing produced from cotton textiles, slavery would not have been such a favourable institution for those not enslaved and it would, no doubt, have been a less profitable proposition for slaveowners.

Clearly the magnitude of the population expansion in colonial America was heavily influenced by the imports of slaves from Africa. For the Americas as a whole, down to the early nineteenth-century, the transatlantic movement probably saw somewhere up to five times as many Africans as Europeans arrive (although the measured ratio may narrow slightly as we learn more about Iberian migration)¹⁷. Only the favourable demographic patterns in the more temperate mainland areas, to which most whites went, obscures this point, since the tropical slave, as well as white, populations often failed to reproduce themselves. It is estimated that, because of these locational differences (particularly in regard to the United States, which received only about six percent of the transatlantic shipments of slaves and 30 percent of whites before 1820) that even in the early nineteenth century the white population of the New World exceeded that of blacks¹⁸. In 1820, about three-fifths of the New World blacks were on the mainlands, as were about ninety percent of whites, two-thirds of those being in the United States. White indentured labour for migration to the Americas, mainly from Britain, but with relatively smaller numbers coming from France and the Netherlands, soon became limited in

¹⁵ This estimate is based upon an analysis of the Newton Plantation on Barbados, using data collected by Jerome Handler. For examinations of other aspects of the Newton Plantation, see Handler and Lange (1978). For related studies of labour use, see Higman (1984) and Fogel and Engerman (1974).

¹⁶ See the data drawn together in Shammas (1990, Ch. 4).

¹⁷ See Eltis (1983), for one set of estimates. Some new data have been presented in Emmer and Mörner (1992) and Altman and Horn (1991).

¹⁸ See Eltis (1983). See Galenson (1981) and Gemery (1980, 1984) for estimates of British emigration to the New World.

supply, due to the economic expansion in England and elsewhere in Europe, while as described above, the Native American population had declined sharply in numbers, due primarily to the diseases introduced at the time of settlement.

Slave labour became a primary basis of European settlement, particularly in the tropical areas. In the absence of slaves from Africa it is probable that the colonial populations of the Americas would have been smaller, and undoubtedly there would have been less New World production of sugar than occurred. The demographic and economic patterns in the Caribbean would have been most dramatically different. The population levels in the United States South, where slavery did not expand in importance until after the first decades of the eighteenth century, and where white indentured servitude had been important, and Brazil would probably have been changed considerably less. The population of the United States North and most other European colonies would have been least affected, since relatively few slaves had settled there. The indirect effects on the United States North were also limited, since at the peak the amounts of foodstuffs sent to the West Indies represented a relatively small proportion of that region's total output.

The expected nature of the effects in the absence of slavery are suggested by the developments after slave emancipations, a set of demographic and economic developments consistent with those indicated by the patterns of settlement. Over the course of one century slavery was ended in the Americas, starting with the United States North in the last quarter of the eighteenth century, to French Saint Domingue between 1791 and 1804, the British possessions in the 1830s, the Danish, Swedish, and remaining French islands in the late 1840s, the Dutch Caribbean in 1863, Puerto Rico in 1873, and Cuba and, finally, Brazil in the 1880s. Typical of areas where slaves had not dominated the population is the adjustment in the United States South where, after slave emancipation in 1865, there occurred a very dramatic shift to white farmer production of cotton, albeit on units smaller than were the antebellum plantations¹⁹.

A pattern similar to that of the United States South, of white labour production, here of coffee, occurred in post-emancipation Brazil, on the basis of labour newly arrived from Italy, Spain, and Portugal. The probable effects on sugar production in the Caribbean if slavery had not existed can be seen in the virtual disappearance of sugar plantations, and the sharp declines in sugar

¹⁹ See the discussion in Engerman (1986), and the citations to the relevant literature. See also the studies in McGlynn and Drescher (1992). Another indicator of the interrelation of inter- and intra-national population movements is that it was only when European immigration into the United States was curtailed with World War I and its legislative aftermath that the large-scale movement of blacks from rural areas of the southern states to the urban North accelerated. This is a reminder of the arguments about trade-offs in migration made earlier, in various places, by racist anti-slavery movements, wanting to end the slave trade to permit more whites to enter, thus influencing the racial composition of the nation.

production, in most West Indian islands after emancipation, most dramatically in Haiti, but also elsewhere in the British and French West Indies. Those Caribbean areas which, after some time, retained plantation production of sugar, did so on the basis of contract labour imported from a number of different areas, mainly from India²⁰. Before the twentieth century small-scale production of sugar was limited. Whether or not such a technology permitting small-scale production could possibly have been invented earlier (if necessary) is, of course, a rather difficult question: Based on major crops, technologies developed, and availability of immigrants, there were quite different outcomes to emancipation in the Americas, suggesting the different adjustments that might have occurred earlier if slavery had not been permitted. And, however to be explained, those areas in which the numbers of slaves were relatively smallest were those that were to have the highest incomes in future years.

The examination of the effect of the slave trade upon African demography and economics remains an issue with major debates, in part because of the diversity of impacts of the slave trade in different parts of Africa²¹. The relatively rapid response throughout West Africa to the transatlantic demand for slave labour suggests that this form of trade, even if in only limited amounts, had an earlier development. While the overall out flow of slaves over the centuries of the slave trade, in both the transatlantic and the possibly equivalent in numbers (though over a longer period) trans-saharan and Arabian slave trade (these slave trades also having had rather limited economic and social impacts on recipient areas), may seem to represent a relatively small part of the total African population, the impact on specific areas might have been considerably more pronounced. The trade in captives meant that the costs of raising those who became slaves was borne in Africa, but the fact that the slaves were sold for goods meant that some offsetting returns from the loss of labour were obtained (even if not the full costs or by those who had the faced the costs of rearing)²².

In some smaller areas the population effect may have been due directly to the numbers carried in the slave trade, while in other regions it could have reflected the particular age-sex composition that characterized the trade in slaves, a pattern that varied somewhat among regions and, within a given region, over time²³. Relatively few children were carried in the transatlantic slave trade (although the share did rise in the nineteenth century). There were generally about three males transported for each two females. (This sex ratio was not unlike that for many free white migrant populations, although with an obviously quite different set of causes.) But, in explaining the particular ratio,

²⁰ See, e.g., the discussion of this movement in Emmer (1992).

²¹ See, most recently, Manning (1990) and Thornton (1992).

²² See, for example, discussions in Curtin (1981) and Evans and Richardson (1992).

²³ For data on the age-sex composition of the slave trade, see Eltis and Engerman (1992, 1993). See, however, Inikori (1992), for a different view.

the determination of the relative nature of differential demands for the sexes in the Americas and within Africa, and how these affected the particular sex composition made available in the transatlantic trade by the African suppliers, remains uncertain. Whatever the causes, however, these age-sex patterns left an impact on African marriage and childbearing structures as well as on labour force patterns, with much of the field work being undertaken by women. The age-sex patterns also had significant impacts upon the demographic experience of slaves in the New World, at least in the initial stages of settlement, before factors in the areas of settlement became the dominant influences.

In the earlier stages of the slave trade, at least, the imports into Africa of European commodities in exchange for slaves represented only a very small part of the consumption of most of these goods²⁴. African economies were capable of producing a large range of agricultural and manufacturing goods, including varieties of those manufactured goods imported. African imports from Europe throughout the era of the slave trade were not large relative to the production of goods in Africa, and African imports and exports remained low in per capita terms compared to their magnitudes of international trade elsewhere. In Africa, the economies produced considerably more outputs than slaves for export to Europeans. Moreover, as with other long-distance trades, the goods received from Europeans were consumer goods, most typically textiles (as were the goods in the trade of Europeans with Native Americans at this time)²⁵. Over the course of the eighteenth century reductions in European costs of production were passed on to African purchasers, while at the same time the prices paid for slaves in Africa were rising²⁶. Slave prices rose quite dramatically at the start and at the end of the eighteenth century, with the expanding European demand for sugar and other slave-grown products²⁷. The increase in the price of slaves at the end of the century, a time of great increase in the numbers of slaves shipped as well, suggests a substantial inflow of goods into Africa, but we still know little about who benefited from these imports and how these benefits were distributed within Africa.

The large number of European purchasers of slaves, due to the presence of shippers coming from many different European countries as well as of numerous traders coming from each, and the large number of African sellers, meant that there was some effective competition in the slave-trading markets. The rising demand for slave-produced products from the New World, and thus for slaves from Africa, meant increasingly favourable prices for this African

²⁴ For discussions of these patterns, see Eltis and Jennings (1988) and Thornton (1992).

²⁵ For details on the composition of goods traded with Native Americans, see White, (1991), pp. 137-141), Usner (1992), pp. 259-268, and Axtell (1992), Ch. 5, entitled «The First Consumer Revolution». For the changing composition of the Dutch-Asiatic trade, see Glamann (1981), most concisely, pp. 13-14.

²⁶ See Gemery, Hogendorn, and Johnson (1990), and Curtin (1975), Ch. 8.

²⁷ See Richardson (1991a).

export. Debates remain on the extent to which the trade in slaves meant a distorted production pattern with Africa. Higher slave exports, it is argued, were being used, in effect, to force substitution for domestically-produced manufactures, thus lowering the potential for future African industrial growth. In addition, these rising prices for slaves had longer-term effects on the African political balance, because the costs of slave capture and the returns from slave-trading had significant impacts upon differential economic prospects within Africa.

It seems clear that this form of trade in people had some negative impacts on Africa, but given the presence and magnitude of the non-slave sectors with extensive internal production and the importance of internal trade within Africa, the specific links are not always easy to determine. This is reflected, perhaps, in the intellectual shift, caused by the demonstration of the increasingly favourable terms-of-trade for Africa, from arguments of costs to Africa based on the burdens of simple exploitation (of Europeans buying at low prices and selling at high prices) to arguments of a negative impact on Africa resting on variants of dependency theory, with the longer-run costs generated by Europeans buying slaves at high prices and selling textiles, guns, and other goods, at low prices, presumably in order to influence the African production structure.

Understanding the economic patterns in Africa that emerged after the ending of the transatlantic slave trade also poses significant issues. Whether or not it required the development of slavery in the Americas to generate the expanded use of slave labour in Africa, ending the transatlantic slave trade saw a significant increase in the use of slave labour throughout most of Africa²⁸. Moreover, there are some indications that the large relative (if not absolute) declines in African incomes compared to those of North America and western Europe came, not during the period when the transatlantic slave trade was at its peak but afterwards, in the later part of the nineteenth century and in the twentieth century²⁹.

It has been argued that the profits of the slave trade and of slavery, and the demands by slaveowners for European-produced commodities, played a central role in the onset of the industrialization of Europe. Eric Williams, for example, argued for *a* (if not *the*) key role of slavery in producing the Industrial Revolution within England. Clearly other slave traders and slave-owning nations — Portugal, Spain, France, and even the United States North before 1810 — did not experience such a process of extensive and widespread industrialization, even during periods of large-scale movements of slave labour and increased outputs of slave-produced commodities.

The French Caribbean colonies, for example, had almost as many slaves as did those in the British Caribbean. They generally outproduced the British

²⁸ See, e.g., Lovejoy (1983).

²⁹ See Manning (1982) and, suggestively, Bairoch (1981).

West Indies in sugar and coffee in the second half of the eighteenth century, until the sharp declines of both sugar and coffee production for export from Saint Domingue after 1791, and the virtual ending of sugar exports after 1804³⁰. The British domination of the world sugar market was to last only from the last decade of the eighteenth century until their emancipation of slaves after 1834, when Spanish Cuba then rose to dominate cane sugar production³¹. Unlike the British, the Dutch obtained more benefits from their East Indian colonies than they did from those in the Americas, or, at least, the East Indies were always considerably more important in trade (possibly by a factor of five around 1750) and were more resource-demanding (including that for white labourers) than were their West Indian settlements³². Nevertheless, these developments in the Dutch East Indies did not provide a great spur to Dutch industrialization while, after the establishment of the British Navigation Acts beginning in the middle of the seventeenth century, the centrality of Dutch commercial developments declined. The extensive commercial developments within Britain may have been what made Britain unique in the eighteenth-century world, not its involvement with slavery and the slave trade.

While there may have been some relatively large gains to England from the slave trade and the colonial use of slave labour the issue remains, based on the overall expansion of the British economy, whether the magnitude of its slave-based trades alone were sufficient to be seen as lifting what some would claim would otherwise have soon been a stagnant economy to its leading position in the economic and political world. It may be that France, also with an extensive New World empire, one which almost matched that of the British in the Caribbean (though not on the mainland), should have had similar prospects for growth, as would the large Spanish-American and geographically-widespread Portuguese empires. Indeed, recent discussions suggest that in the eighteenth century, down to the 1780s, French per capita income and foreign trade had grown at least as rapidly as did the British, while in the 1780s there was an even greater expansion of production and population in the French Caribbean than occurred in the British³³. The relative absence in the eighteenth century of a French Industrial Revolution again suggests the importance of considering forces mediating between colonial slavery and metropolitan industrialization.

As the result of recent research on the Atlantic slave-based economies, the question of the reasons for the ending of the slave trade and of slavery have been reopened. These debates also relate to the argument that slavery had been

³⁰ See the data in Drescher (1977) and Leyburn (1941).

³¹ This is based on data in Deerr (1949-1950).

³² See estimates in Emmer (1991), Steensgaard (1990), and Lucassen (1991).

³³ See Crouzet (1990) and Richardson (1989). See also Stein (1983) on French colonial trade before 1790.

profitable at one time, and had earlier contributed to British economic growth, but at a later stage became a drain on the economy. For a long time it had been argued that, by at least the end of the eighteenth century, slavery had led to a backward, inefficient, and unprofitable economy, one that soon would have toppled of its own weight and thus could be ended without political or military actions. As has been shown, however, many of these depictions of slavery as declining and unprofitable everywhere, and with a presumed limited future, are somewhat misleading as the basis of an explanation of events, and they cannot account for the basic pattern of trade in the Atlantic economy in the eighteenth and nineteenth centuries.

The arguments for a major role of slavery in the Industrial Revolution would suggest that, at least at an early stage, slavery was profitable and an ability to generate economic expansion should have then existed. Nevertheless, as we have now seen, even at its later stages, slavery was productive and profitable to the whites, expanding until the third quarter of the nineteenth century in the United States, Cuba, and Brazil, with slave prices rising to all-time peaks in each of these regions³⁴.

Wherever New World slavery ended it was not because slavery became unprofitable to owners, but rather because of political intervention by colonizing or local ruling powers, by military intervention (as with the American Civil War) or by slave uprising (as in Haiti). Without such interventions the slave economy appeared to have been economically viable, and this could possibly have persisted for rather long periods of time on strictly economic grounds. It is, perhaps, not surprising that when slavery was ended and/or when sugar production developed in the second half of the nineteenth century in areas where slavery could not be either introduced or reintroduced, it was frequently on the basis either of contract labour drawn from afar or some other form of controlled labour system used for plantation labour.

Those explanations linking the end of slavery to economic, as contrasted with religious and political, factors now focus, not on the profitability (or rather lack of it) of slavery, but on the economic concerns of those responsible for the political or military ending of slavery³⁵. Perhaps, as in the Eric Williams version, slavery, after having helped launch the Industrial Revolution, had now become less important, or less necessary, to the British economy, so that the interests of slaveowners could more cheaply be overthrown in the interests of the rising industrialists. Even Adam Smith, in describing the policies of the Quakers of Pennsylvania in limiting slavery, had posited a downward-sloping demand curve

³⁴ See Moreno Fraginals, et al. (1983), and the sources cited there for slave prices in Cuba, the United States, and Brazil. For a more recent study of Cuban slave prices, see Bergad (1990).

³⁵ See, e.g., Davis (1975), Drescher (1987), and Fogel (1989). See also the «Introduction» to Solow and Engerman (1987).

for morality³⁶. In this revision of one variant of the Williams thesis, slavery could still be seen as profitable, at the time of abolition, but now that the rest of the economy had grown sufficiently it was possible, for political or for ideological reasons, that overseas slavery be abolished — but not everywhere, since emancipation in Africa and Asia was to come only later. Or, perhaps, as others argue, it reflected a move to harm other nations by forcing an international ending of slavery, or, perhaps, it was a new ideology, using new political methods, that ended the slave trade and slavery, with there being only a minimal direct economic connection. In any event, it is doubtful that it was ending slavery that led to any subsequent economic expansion, either in the colonies or in the metropolis, whatever impact slavery had had earlier and whatever people had made the basis of claims in arguing for emancipation.

The recent studies of the economics of the slave plantation have also served to pose important questions, not just for this examination of the causes of slave emancipation, but for the study of what happened after the slaves achieved freedom. Then, in almost all cases, there was a decline in measured crop output, particularly of the plantation staples produced by the ex-slave population, a finding that brings us back to a familiar question, one asked, in effect, in the earlier literature on colonial settlement and economic development: what is so good about measured economic growth? These post-emancipation changes, quite similar in all ex-slave states and colonies, point out the significant role that slavery and the slave trade played in the settlement of certain areas and in the production of certain crops. They need not, however, indicate that slavery played the central role in the building of an industrial Britain, or even that it contributed as much as did other factors.

2. The Causes of the Industrial Revolution: A Morality Debate

In discussing the “morality” aspect of the causes of the Industrial Revolution I will briefly describe several different arguments that have been made in the literature, including one presenting a broader view of Britain’s development than a focus on only the Atlantic economy and one a narrower one. There are obviously many more causes discussed in the literature, usually suggesting key initiating economic, social, or cultural changes, sometimes also leading to an impression that the resulting economic changes were somewhat favourable in their effects upon the population. I want, here, to note three arguments, resting ultimately on a strong moral view of both the causes and the consequences of the Industrial Revolution, suggesting that economic growth

³⁶ Smith (1976), p. 388, comments that: «The late resolution of the Quakers to set at liberty all their [N]egro slaves, may satisfy us that their number cannot be very great. Had they made any considerable part of their property, such a resolution could never have been agreed to».

was, from the nation's or the world's perspective, a zero-sum or even a negative sum outcome. These are: the immiseration of the British working class; the role of the slave trade from Africa and of slavery in the Americas; and the impact of the "drain" on India. There are several structural similarities in these arguments; for example, the linking of the process of British industrialization to the deterioration of economic conditions elsewhere, and the linking of profits made from foreign trade and/or from exploiting British workers to the financing of an increased necessary level of investment in British industry. Proponents of these arguments have paid almost exclusive attention to one exogenous change in some factor that presumably led to the triggering of industrialization, with limited attention given to changes in those other forces that permitted the system to respond in the "successful" manner which it did. (These, of course, do not exhaust the list of important "moral" contributors to British economic growth; see, for example, the debates on the impact of the colonization of Ireland over several centuries.)

Before saying more on these three arguments it will perhaps be useful to note the range of problems that confront any attempt to analyze such economic questions, points on which agreement has seldom been reached and, perhaps, little might ever be expected³⁷. These include the following questions: what were the possibilities for alternative resource utilization; what were the nature of inducement mechanisms and linkage effects; what type of threshold and/or leverage effects were there linking small changes to large outcomes (or the inverse); how can we understand the meaning of specific magnitudes (e.g., is one percent a large number and eighty percent a small number for the purposes at hand?) — all those things that lead some readers to feel a shell game has been played, making all possible causes disappear, and other readers to wonder why a change of a fraction of one percent can be demonstrated to explain ninety-five percent of what happened. Further, given current arguments about the dating of when long-term economic growth began, even in England, how can events that occur after the process began be described as fundamental causes of the basic economic changes? All of these questions are familiar and unresolved (if not unresolvable), and I note them here only to avoid a continued repetition when discussing questions of specific relationships.

It is not necessary to go into the details of the standard of living debate, and the frequent argument that it led to an increased share of profits for British capitalists, thus providing the basis for increased British investment in industry and related sectors³⁸. Stated with great vigour by Karl Marx, the theme of the exploitation of the workers had preceded his presentation and remains, with some occasional newer, if minor, variants, a central aspect of one view of the

³⁷ For discussions of this set of issues, see O'Brien and Engerman (1991) and Thomas and McCloskey (1981).

³⁸ See, most recently, Lindert (1994) and Engerman (1994), as well as Williamson (1985).

Industrial Revolution today. (Indeed, some had earlier strengthened this argument by contrasting, unfavourably, the living standards of the British workers with those of the American slaves). While, of course, a worsening standard of living need not have implied a shift to profits (overall incomes could have fallen) nor would increased profits necessarily have led to more investment by their recipients (since what might be considered conspicuous consumption and wasteful expenditures no doubt occurred), this is the most general presentation of the basic economic connections. According to recent estimates there was probably both increased per capita income and higher shares of investment in the eighteenth century³⁹. Most measures now suggest that per capita incomes grew in the eighteenth century, accelerating sometime around 1780 (after the presumed weakening of British Caribbean slavery due to the American Revolution and its outcome), but not rising to the dramatic new levels of growth until after 1800, while the investment share of income possibly doubled over the course of the eighteenth century.

For those accepting the argument that it was the immiseration of workers that increased the return to capitalists, the problem arises that this would have limited the growth of the home market for British goods. Thus a subsidiary debate has emerged, concerning the relative importance of the home and of the foreign markets in generating the demand for British production, particularly for manufactured goods. And, among the foreign markets, the relative contribution of the European, of the American, and of other markets remains a further source of controversy. The pessimists in the standard of living debate argue that foreign markets provided the major source of increased demand for British goods since, to them, the initial changes in incomes in the home market were too limited. Thus, given the absence of any appropriate increases in overall British consumption, particularly among the large and, due to population increase, growing number of low-income labourers, it is argued that an upsurge in foreign demand, from other countries or from overseas colonies, was needed to provide the markets for the new goods of the industrial era and to spur the process of economic growth. Correspondingly, attention to increasing domestic demand for commodities coming from the mass of the home population is more compatible with the views of the optimists in the standard of living debate, with their argument that the higher domestic incomes from economic expansion were generating greater demands in the home market, and there was less need for producers to rely on stimuli from foreign markets. While the share of exports varied throughout the eighteenth century, it was quite sensitive to war periods (as also were the particular sources of the foreign demand), and probably averaged below ten percent for the century⁴⁰. The impression of a greater expansion is attributable to the unusual circumstances of the 1790s,

³⁹ See Feinstein (1978) and Crafts (1985). The pattern of wage changes in this period is less clear.

⁴⁰ See the estimates presented by, among others, Crafts (1985) and Davis (1979).

since the export share was high in that decade, but then falling for the next three decades⁴¹. Even then, the late eighteenth-century export shares generally were below the magnitudes of Britain's mid-nineteenth century levels, and were so by a considerable margin.

Further, high export demand may reflect, as Deane and Cole have suggested, the outcome of initially high import demands coming from Britain, enabling the markets in the colonies and elsewhere to increase their profitable production⁴². In some sense, of course, it was the European demand for tropical "groceries" that permitted profits from the settlements in the Americas and in Asia, and the eighteenth century saw large increases, particularly in Britain, of per capita consumption of sugar and tea (but not of tobacco, the demand for which had risen earlier and remained relatively stable between 1700 and 1800)⁴³. Deane and Cole indicate the difficulties of trying to make sense of the separate patterns of imports and exports, an important consideration given the frequent lack of balances in bilateral trade among trading regions, and the importance of tracing through the various balancing arrangements, such as multilateral trade patterns, gains from invisibles, and movements of specie. Moreover, as Malthus argued, imports may themselves have had an impact on work-leisure decisions of the British, inspiring new tastes and wants, for both lower and upper classes⁴⁴. This focus on the diffusion of demand throughout the social system, with its implications for economic growth, provides another mechanism to argue for a central role for international trade in British economic growth. The share of expenditures on these "new" commodities, however, was still rather limited in most consumer budgets, and the implied labour supply elasticity would have had to have been quite large for this small share of expenditures and limited increase in real income to have had such a significant effect⁴⁵.

If the key foreign sector serving as the cause of British trade expansion were in Europe, then the range of arguments would be quite different from those arguing on behalf of that foreign sector that has become the focus of recent scholarly concern — the American areas producing commodities on the basis of slave labour⁴⁶. In *Capitalism and Slavery*, Eric Williams presented an argument

⁴¹ See Crafts (1985) and Deane and Cole (1969).

⁴² Deane and Cole (1969), Ch. 2.

⁴³ See the data presented in Shammas (1990), Ch. 4.

⁴⁴ Malthus (1836, p.403) stated that: «One of the greatest benefits which foreign commerce confers, and the reason why it has always appeared an almost necessary ingredient in the progress of wealth, is, its tendency to inspire new wants, to form new tastes, and to furnish fresh motives for industry».

⁴⁵ See Shammas (1990), Ch. 5.

⁴⁶ No doubt each European nation could have its adherents as being central to British growth. For the case of Russia, for example, see Kaplan (1986) and Wallerstein (1989), pp. 141-142, who also points to Russia's role in the economic development of Scotland and the United States.

that it was the profits arising in the slave trade from Africa to Britain's North American colonies, and the profits from the sale in Britain of slave-produced commodities from the New World, that provided much of the capital that went into the production of British manufactured goods. This has subsequently been extended by others to argue for the role of the colonial market, based on slavery, as a key source of demand for British-produced goods.

The role of the slave colonies suggested, to Williams as well as to various subsequent scholars, a necessary link between slavery and the Industrial Revolution, one that indicated not only the importance of the foreign sector to British development, but also the critical role of this one specific geographic area, type of trade, and labour institution for British production. This argument has been further broadened by linking the demands of the West Indian islands for foodstuffs from the mainland provisioning colonies, mainly those in the New England and Middle Atlantic regions, thus providing a slavery-based sector even in those regions with relatively few slaves⁴⁷. And, it is argued, not only did the presence of slavery-based colonies lead to growth in Britain, British North America, and the British Caribbean but, because of the presumed pernicious economic effects of the slave trade, to the weakness of economic and political development within Africa (whether this relative decline was attributed to basic economic exploitation resulting from Europeans paying low prices for slaves and charging high prices for manufactured textiles and other exports in exchange for the slaves, or, rather, due to its inverse). The relative share of these markets before 1780, a conventional dating for the start of the Industrial Revolution, makes such a significant impact as argued for doubtful, however, while the argument for the post-1780 period will be discussed below⁴⁸.

Historians of India point to the relation of the presumed "drain" of capital out of India to Britain, as a result of the colonial relationship, to British economic development. As in the other cases, British growth is seen to rest on the contribution extracted from foreign sources and, it is further argued, British growth meant the relative (and absolute) decline of the Indian economy.⁴⁹ In the eighteenth century India ran large surpluses of exports over imports (including specie), particularly with Britain, but did not seem to add much to either its specie stock or to its ownership of foreign capital. Part of this was, no doubt, because of purchases of invisibles, and part due to political transfers to the British — the "drain." This, it is argued, helped lead to Indian backwardness, as well as being a major contributor to Britain's economic growth. The rough estimate of the gross "drain" for the early nineteenth century described by Angus Maddison suggests a low order relative to overall British income, but there remains much uncertainty (plus or minus) as to the

⁴⁷ For an expansion of this argument, see Solow (1991).

⁴⁸ See the data in Deane and Cole (1969) and Davis (1962, 1979).

⁴⁹ For some discussion of these arguments, see, e.g., Maddison (1971), pp. 63-65, R. Dutt (1956), R. P. Dutt (1949), Chaudhuri (1968), and Marshall (1976), pp. 255-256.

accuracy of these estimates.⁵⁰ While estimates of the so-called "drain" for the eighteenth century are rather uncertain (it is estimated to have been higher in the nineteenth century), the range of the estimated magnitudes relative to national income in both Britain and India do not suggest that, alone, they could have had dramatic effects on British investment. Nor are the estimated orders of magnitude of the «drain» large enough to suggest a significant impact on either British or on Indian economic development. In a similar type of argument, linking the colonies and the metropolis, clearly the Dutch generated relatively more income from their East Indies colonies than did the British, although also without generating an unusual rate of metropolitan growth.⁵¹ Some debate remains, however, concerning the impact of the East India Company's trade policy upon the development of India's manufactures in the eighteenth (and nineteenth) century, and thus the possibility of some indirect effect on British manufacturing profits due to changing competition (or its lack) in international markets.

There are some interesting similarities in the political and moral points raised in these two colonial arguments regarding the nature of slavery and/or the "drain" in causing the Industrial Revolution. Eric Williams provided an "economic study of the role of Negro slavery and the slave trade in providing the capital which financed the Industrial Revolution in England and of mature industrial capitalism in destroying the slave system."⁵² R. Palme Dutt, in a more explicitly political tract, but one which reflects much of the writings of Indian nationalists as well as many Indian historians, argued that "the spoilation of India was the hidden source of accumulation which played an all-important role in helping to make possible the Industrial Revolution in England," and that "once the Industrial Revolution had been achieved in England with the aid of the plunder of India, the new task became to find adequate outlets for the flood of manufactured goods. This necessitated a revolution in the economic system to the principles of free-trade capitalism."⁵³ Thus we find some apparent structural agreement in West Indian and East Indian arguments regarding both the nature of the causes of British industrialization and its subsequent economic and ideological consequences on trade policy.

There had been earlier linkings of American slavery and India in the contemporary and historical literature. Williams had been sensitive to arguments about the role of India in British economic growth, stating that the "serious exploitation of her India possessions" by Britain did not begin until after 1783, with the loss of the American colonies. This raises some questions

⁵⁰ Maddison (1971), p. 63. For estimates for a later period, see Maddison (1989), p. 27. See also Chaudhuri (1968).

⁵¹ See, e.g., Maddison (1989). For a reevaluation of the literature on the «drain» from Indonesia for a latter period, see van der Eng (1993).

⁵² Williams (1944), p. 3.

⁵³ Dutt (1949), p. 108.

about the post-1780 timing of the contribution of the West Indies to British economic growth argued for by some of his followers.⁵⁴ Williams also linked the East India interest with the British abolition movement, claiming that some abolitionists argued against slavery in the West Indies in order to then permit expanded production by nominally free, but very lowly paid, labour in India. This became an issue in contemporary debates about legal versus economic concepts of slavery and forms of coerced labour. An influential, and still frequently cited, mid-eighteenth century economic pamphleteer, concerned with the relative importance of Africa, the Americas, and India to the British and the rest of western Europe, was Malachy Postlethwayt.⁵⁵ While quoted for his arguments concerning the perceived significance of the African trade to British growth, he had also made somewhat similar remarks linking Britain and Europe's commercial growth to the expansion of the East Indies.⁵⁶ In an interesting (albeit curious) counterfactual argument, while not understating the economic contribution of the Americas, Postlethwayt relates the settlement of the Americas to the search for India, solving (for him) the problem of evaluating the importance of the East Indies.⁵⁷ He further argued that if the trade with Africa had been for legitimate goods, not slaves, the African trade would have been many times larger and it would have done more for the British economy.⁵⁸ Perhaps, though, as Adam Smith had argued: "Europe, however, has hitherto derived much less advantage from its commerce with the East Indies, than from that with America." Smith, however, attributed this differential mainly to the presence of companies with "exclusive privileges" in the East while there existed "free commerce" in the Americas, not to any inherent differences in economic potential in the different areas.⁵⁹

⁵⁴ Williams (1944), p. 209.

⁵⁵ See Darity (1987) and Johnson (1937), Ch. X, on Postlethwayt's background.

⁵⁶ See Darity (1992). Postlethwayt (1967, 1968) also commented on the contribution of the African trade to French economic growth and, indeed, found French and Dutch trade policies superior to that of the British. In regard to the East-India Company trade, Postlethwayt (1971) argued that: «it seemed evident that our commerce to the East-Indies is one great wheel that moves many others,» and that «this nation has grown infinitely more considerable, in comparison of other parts of the world, than it was before we engaged in this commerce».

⁵⁷ Postlethwayt (1971), comments: «how came these [America and the West Indies] to be discovered? Was it not by searching out a new passage to the East-Indies? If, therefore, by carrying on the commerce of the East-Indies, we have fallen upon another commerce, which has not only supplied silver sufficient for the East-India trade, but likewise brings in annually an immense treasure besides, there can be no pretence for imagining that Europe in general has been, or ever can be, a loser by carrying on this trade».

⁵⁸ Postlethwayt (1971), in his discussion of the English African Company. See also Postlethwayt (1968), dissertation XXV.

⁵⁹ Smith (1976), pp. 448-449.

These political and moral arguments about causes of the Industrial Revolution are of obvious importance and remain central for numerous historical debates. While it is unclear exactly what to make out of the structural similarities of arguments made at different times and places, the similarity of contentions does suggest the need for more explicit analysis of the relations argued for. This focus on imperial and international connections also serves to return attention to those aspects related to the colonial process, as well as to intra-Europe developments, recently stressed by Patrick O'Brien in the costs of war, defence, and military protection.⁶⁰ Parts of these military costs were essentially made to protect Britain and to fight rivals on the continent but there were also costs of acquiring and maintaining colonies, leading to wars fought in the Caribbean, on mainland North America, and on the Indian subcontinent. The costs of these wars, as well as the interwar military costs, provide some financial and real resource offsets to the gains of empire and the presumed expanded investible surplus. On the issue of India, for example, Karl Marx presents a rather revisionist picture, if for a later period, arguing that the costs of "military and naval expenses," "the expense of Burmese, Afghan, Chinese and Persian Wars," the "late Russian war," and "the career of endless conquest and perpetual aggression in which the English are involved by the possession of India," make it doubtful that the benefits of this empire will ever exceed its costs.⁶¹

Perhaps fighting wars was inevitable, and paying any price to gain economic and political power very worthwhile (even Smith accepted this in principle), but all this meant, for the British, an unusually high tax burden for the time, as well as what can be described as a postmodern magnitude (greater than one) of government debt. To further throw in the costs and benefits to the British of economic warfare, as seen, for example, in the effects of the Navigation Acts in raising shipping costs, particularly early in the colonial era, and the consequences of the protection of colonial production by tariffs on goods produced in foreign colonies in order to support British colonial goods, may be only to mention the negative side of a necessary and positive economic and political policy, but without their consideration the implicit financial statement of empire looks at only one side of the net flow of private and public funds.⁶² What should be included, of course, depends upon exactly what is the question being asked, but it is of interest that studies of the benefits of the control of its slave-colonies by the British and of the benefits to the British of the Navigation Acts imposed on the North America mainland present results somewhat similar to those studies of imperialism in the late nineteenth century, indicating small, if any, national benefits to the British, but with some considerable amounts of redistribution among individuals in the

⁶⁰ O'Brien (1991).

⁶¹ Marx (1972).

⁶² See the early discussion of these questions by Harper (1939).

metropolis.⁶³ The ability to support a large national defence commitment with colonial expansion may provide some political and social benefits to the metropolis, but its economic value might be a rather different issue.

3. The Expansion of the 1790s — and before

While the British settlement of the Americas began in the early seventeenth century, the nature of the colonization effort as well the magnitude of resources devoted to it, and the mix of plunder and legal activities, varied over time. The earlier century was marked by a larger ratio of white to black immigrants, even to the West Indies, than was to occur throughout most of the eighteenth century.⁶⁴ Among the major colonizing powers, the British had the highest share of white to black population in their settlements, although the Spanish possibly had a higher ratio of whites to blacks among the arriving immigrants.⁶⁵ The Spanish settlements were often in areas with more Native Americans than there were in the colonies of the British. Yet despite this long history of settlement, much of the discussion linking slavery to the Industrial Revolution relates to the second half of the eighteenth century. Perhaps this should not be too surprising, given the dating of the Industrial Revolution as well as the timing of the increased share of exports in British income, the rising share of New World trade in total British trade, and the developments in the cotton textile sector, all of which expanded dramatically during the years of the Napoleonic Wars.

The second half of the eighteenth century also saw extensive military and economic warfare everywhere, including the British attempts to maintain the mainland North American colonies during the American Revolutionary War. The subsequent severing of the mercantilist ties with the United States affected trade with the mainland and, more important for the Eric Williams argument, the West Indian colonies in the last decades of the eighteenth century.⁶⁶ Britain's main rival, France, suffered from internal revolution, the loss of its most important overseas colony, and, finally, a blockade and defeat in the Napoleonic Wars. Indeed, this period of English growth comes so late after the beginnings of slave settlement, at a time after some proponents of the link of slavery and industrialization had already proclaimed that slavery's role in economic growth had ended and that slavery was now in its period of decline,

⁶³ See, for the latter period, Davis and Huttenback (1986). For a summary of the literature on the burdens of the Navigation Acts to the American colonies, see Lee and Passell (1979), Ch. 2.

⁶⁴ See Galenson (1981).

⁶⁵ Calculated from the data in Eltis (1983).

⁶⁶ See Shepherd and Walton (1976) and Coatsworth (1967).

that it makes clear that there have been two distinct arguments relating American slavery and British industrialization.

The pattern of late eighteenth-century economic developments in Britain, the British West Indies, and the United States was somewhat unexpected for those believing in the presumed benefits of colonial trade to the metropolis and a heavy "burden of the Navigation Acts" on the colonies.⁶⁷ Perhaps it was not a surprise to those, such as John Lord Sheffield, who maintained the first point without the second, and who also believed that colonization was costly to the metropolis.⁶⁸ Contrary to the expectations of many, the United States, which presumably bore much of the burden of the Navigation Acts and of the home-country's mercantilism, did not experience rapid economic growth when freed, but rather experienced a period of stagnation, with little if any overall increase in per capita income between 1774 and 1805. And, the costs of independence seemed initially greatest in that region, the South, that was apparently most negatively influenced by the Navigation Acts.⁶⁹ Severe economic dislocations came with American independence, and there were large problems in creating an integrated internal market. And the United States citizens now had to bear the impact of the redistribution of the costs of colonial defence previously borne primarily by Britain.⁷⁰

Clearly, the Revolutionary war period led to a decline in British exports to the United States. They did not recover pre-war levels until about 1790, nor further accelerate until about 1795 (after which they then basically plateaued for one-half century).⁷¹ The United States market did ultimately regain, by the late 1790s, the share of British trade it had achieved between 1750 and the early 1770s. In both the 1750 to 1770s period and in the 1790s, the high United States share represented a substitution for the sharp decline in European markets due to warfare on the continent.⁷² The shifting British trade patterns in the eighteenth century demonstrated the ability of British merchants to move among markets, depending on military and defence considerations.

Similarly, the share of the British West Indies in British exports increased only after the middle of the eighteenth century, and hit sustained heights after the 1790s, about the time that its share of British imports also rose to its

⁶⁷ Clearly British growth expanded after its loss in the American Revolutionary War. For the British West Indies there was probably some expansion, while the United States underwent a decline, possibly taking several decades to recover earlier levels of income. See Crafts (1985), McCusker (1988), and Gallman (1992).

⁶⁸ Sheffield (1784), pp. 135, 152, 187, 239.

⁶⁹ See the trade data presented by Shepherd and Walton (1976), comparing prewar and postwar patterns.

⁷⁰ See this point in Davis and Huttenback (1982).

⁷¹ Mitchell and Deane (1962), pp. 309-311.

⁷² Estimated from Mitchell and Deane (1962), pp. 309-312, and Deane and Cole (1969), p. 87.

peak.⁷³ These late dates for measured trade importance reflect not only upon the debated role of these colonies as a "cause" of the Industrial Revolution, but also on the arguments linking a presumed lessening importance of the British West Indies to the loss of foodstuffs from the mainland colonies after the American Revolution. Rather, after United States independence, these British islands increased in importance, as reflected in both production and in slave prices, despite the fact that the United States, in the years 1790-1792, now exported more than twice as much to the foreign West Indies as it did to the British West Indies.⁷⁴ The value of imports from the mainland to the British West Indies fell by nearly one-half from the period just prior to the Revolution to the early 1790s. No doubt the British West Indian export and import expansion of the 1790s reflected the opportunities made available by the demise of trade from French Saint Domingue, which alone had represented nearly 30 percent of the transatlantic sugar market in 1787.⁷⁵ Whether, as had been earlier argued, this French-produced sugar had been lower-cost sugar, so that trade restrictions had raised the costs to British consumers, is still at issue, but it appears suggestive that French sugar re-exports in 1790 were more than three times those of the British, with these re-exports going mainly to Holland and Germany.⁷⁶ It is, again, the lateness of the British domination of the sugar market that is of note for the continuing debates.

The examination of late eighteenth-century British foreign trade is made somewhat confusing because of the presence of frequent wars and the ensuing rapid shifts in the geographic structure of British trade. If, for example, we focus on the decades of the 1770s and 1780s, the major expansion in British exports went to European markets, and the expansion in the Indian market exceeded that in the American markets.⁷⁷ This latter pattern was reversed in the 1790s when the exports to European and Indian markets declined, and those to the British West Indies and North America rose sharply.⁷⁸ Earlier in the eighteenth century, there had been a spurt in British exports to the Americas, coming only in the 1760s and early 1770s, just prior to the Revolution, ending with a credit crisis and then the American Revolution. This increased share for the Americas was at a time of reductions in the absolute level of demand in the European markets.⁷⁹ What these variations suggest is that none of the markets, colonial or otherwise, maintained a continuously dominant

⁷³ Deane and Cole (1969, p. 87) and Mitchell and Deane (1962), pp. 309-312.

⁷⁴ Shepherd and Walton (1976).

⁷⁵ Drescher (1977), p. 48.

⁷⁶ See, e.g., Postlethwayt (1968), p. 161. On the British and French sugar trades, see Sheridan (1973) and Stein (1988).

⁷⁷ Deane and Cole (1969), p. 87. For an excellent discussion of British trade in this period, see Crouzet (1986).

⁷⁸ Deane and Cole (1969), p. 87.

⁷⁹ Deane and Cole (1969), p. 87 and Mitchell and Deane (1962), pp. 309-311.

role for the British, and that the trading patterns reflected considerable flexibility in the metropolis. A pattern rather similar to that of exports is seen for imports in the period between 1770 and 1790, with large increases in the European and East Indian, not American, markets. In regard to imports, there was also a quite large expansion of goods coming from India in the 1790s, exceeding even that decade's increase of goods coming from the West Indies and mainland North America.⁸⁰

Even in the one export commodity that has been considered the leading sector in the Industrial Revolution, cotton textiles, economic expansion was extremely late for the importance of a role of the slave trade, coming in the very last years of the British slave trade. Not until near the start of the nineteenth century did the official value of exports of cotton manufactures exceed those of woollen manufactures at about the time that the share of exports in cotton production exceeded the share for woollen production. It was only then that the amount of cotton textiles exported continuously exceeded the production for domestic consumption.⁸¹ The decade of the 1790s possibly saw a total of the official value cotton textile exports twice that of the preceding ninety years of the eighteenth century.⁸² Previously, relatively few cotton textiles were exported to the African market, where Indian textile exports continued to be important until the early nineteenth century, and in only three post-1780 years did cotton exports to Africa equal as much as one-half of those going to Europe.⁸³ While the share of the American markets was relatively large, particularly during the Napoleonic Wars, the amount of cotton textiles going to the Americas generally remained less than that sold within domestic markets.⁸⁴ Thus, while both output and exports expanded rapidly after the 1780s, the role of cotton textiles in industrialization is most significant at a rather late date in the era of the slave trade.

4. Conclusions

The paper has been intended mainly to draw out some of the implications of recent research into various aspects of the Atlantic economy in the eighteenth century. It is suggested that in regard to arguments presenting overall linkages among the different areas there remain problems in establishing the specific timing and mechanisms in the formulations of Eric Williams. The necessary

⁸⁰ Deane and Cole (1969), p. 87 and Mitchell and Deane (1962), pp. 309-311.

⁸¹ See Mitchell and Deane (1962), pp. 293-295; Deane and Cole (1969), p. 185, and Davis (1979), Ch. 2, 5.

⁸² Mitchell and Deane (1962), pp. 293-295.

⁸³ Davis (1979), p. 15 and Edwards (1967), p. 243.

⁸⁴ Davis (1979), pp. 15, 66.

magnitudes for his arguments seem too small, without there having been the appropriate internal British economic response, to explain Britain's lack of uniqueness in regard to slavery and the slave trade and its uniqueness in regard to economic growth and industrial development. Nevertheless, any student of the subject and period must, of necessity, deal with William's work. Based on a vision linking several continents and a sense that economic change has both gainers and losers, Williams's work was suffused with a sense of history as a sequence of dynamic, dramatic, and interrelated changes, a vision that can be applied also to economic changes elsewhere. Williams represents a move away from an Anglocentric approach to British economic development, a shift that has also independently influenced other recent scholars. However limited Williams was in his attention to other parts of Europe, their colonies around the world, and the other politically independent areas influenced by European expansion, this broader view remains a very useful starting point for many questions. Fifty years after publication, Williams must still be given his appropriate due, even if to do so does not mean agreement with his central hypotheses.

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