COINS AND COMMERCE: SPECIE AND THE SUCCESS

OF THE EARLY MASSACHUSETTS ECONOMY

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COINS AND COMMERCE: SPECIE AND THE SUCCESS OF THE EARLY MASSACHUSETTS ECONOMY

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CHAPTER I:

INTRODUCTION

"There are two fundamental causes of madness amongst students: sexual frustration and the study of coinage."—(G.K. Helleiner, late Professor and Distinguished Research Fellow at the University of Toronto, Canada)

On August 3, 1639, Governor John Winthrop convened a jury inquest concerning the death of Peter Fitchene. Twelve men viewed the body found recently in a saltwater marsh near the home of Mr. Rainsford. The jury determined that Fitchene was guilty of his own death, basing their ruling on the following facts: the death occurred in the daytime, the depth of water was not great, the marsh was not near any path, Fitchene had attempted to take his life during his recent passage over to the colony, and the fact that "he had layed by his hatt, & coat & 30 s in money."¹ The facts of Fitchene's passing do not disclose the reasons that led him to take his own life, but they do speak to the complicated relationship that the English colonists had with their money. Even in the depths of whatever depression plagued him, Fitchene took the time to lay aside his money and, in so doing, preserved it. Moreover, while thirty shillings does not sound like a lot of money, it was nearly two weeks' wages for an unskilled worker in the young colony, a rather substantial amount.²

¹ Peter Fitchene, Probate Inventory, 1639, Suffolk County Probate Records (microfilm, GS#0584127, Vol. 2, p. 5, Genealogical Society of Utah, Salt Lake City, personal copy).

The colonies experienced a constant scarcity of specie. Or so the mantra goes. One would be hard pressed to find a work on the English colonies in North America that does not make that claim.³ Gordon S. Wood states that prior to 1750, the colonies as a whole possessed, "no readily available circulating medium of exchange." Margaret Ellen Newell asserts that, "the dependent colonial economies faced chronic shortages of specie." In defining the Bay colony as "pre-capitalist," Stephen Innes points to the absence of "a reliable currency in the colony." Daniel Vickers roots Essex County's farming and fishing practices in a combination of labor and capital shortages. Bernard Bailyn claims that, "the limited money supply of New England flowed into" the hands of the wealth merchants. In her discussion of competency in Massachusetts, Virginia DeJohn Anderson declares that, "little currency circulated within the colonial economy." John J. McCusker claims that all of the New World colonies, regardless of their imperial affiliations, experienced a shortage of "money within the confines of the local economy." While Curtis P. Nettels devoted an entire book to the subject of colonial currency problems.⁴

² Daniel Vickers, *Farmers and Fishermen: Two Centuries of Work in Essex County, Massachusetts, 1630-1850* (Chapel Hill: The University of North Carolina Press for the Omohundro Institute of Early American History and Culture, 1994), 53.

³ The works containing references to specie scarcity are too numerous to list. For some examples, see: Curtis P. Nettels, *The Money Supply of the American Colonies Before 1720* (Madison: University of Wisconsin Press, 1934; reprint, Clifton NJ: Augustus M. Kelley Publishers, 1973), 162-178, 202-277 *passim*; Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca, NY: Cornell University Press, 1998), 118; Herbert L. Osgood, "New England Colonial Finance," *Political Science Quarterly* 19, no. 1, (1904): 81; Frank Fenwick McLeod, "The History of Fiat Money and Currency Inflation in New England from 1620 to 1789," *Annals of American Academy of Political and Social Science* 12, (1898): 57; Joseph B. Felt, *Historical Account of Massachusetts Currency* (New York: Burt Franklin Press, 1968), 13-15, 17-19.

⁴ Gordon S. Wood, *The Radicalism of the American Revolution* (New York: Vintage Books, 1991), 65; Newell, 116; Stephen Innes, *Creating the Commonwealth: The Economic Culture of Puritan New England* (New York: W. W. Norton and Company, 1995), 42; Daniel Vickers, *Farmers and Fishermen: Two Centuries of Work in Essex County Massachusetts, 1630-1850* (Chapel Hill: The University of North Carolina Press for the Omohundro Institute of Early American History and Culture,

The belief that the colonies lacked a sufficient quantity of money serves many ideological purposes. If the scarcity was due to English regulations, it becomes an indictment of colonialism. Possibly scarcity came from over-consumption driven by nefarious early capitalists. Or the lack of an adequate supply of specie was yet one more hurdle that the colonies, and later the United States, overcame due to their historical exceptionalism. Despite the constant descriptions of a cash strapped economy, several questions remain unanswered. How scarce were coins in the English colonies? Were coins scarce throughout the colonial period? Were coins equally scarce throughout all the British colonies? Colonial specie was scarce compared to what? Why did England refuse to address the colonies' concerns over the amount of money available? Finally, how did the search for specie affect the development of English America?

This work attempts to answer some of these questions by examining the legislation in Massachusetts addressing money in the colony, the existence of money substitutes and their purposes, and seventeenth-century probate records of two Massachusetts counties—Essex and Suffolk. By cataloging the amount of money held by the decedents in those counties, it will be possible to establish an estimate of how much currency circulated in the colony. Determining the quantity of money in Massachusetts will then allow a comparison with England's per capita currency. Furthermore, when the data is broken down to decades, any patterns of increasing or decreasing stock becomes apparent. In turn, the *pattern* of specie accumulation will suggest the effectiveness of the

^{1994), 6, 8, 32, 43-46, 47, 76, 79, 82-83, 86, 115-116;} Bernard Bailyn, *The New England Merchants in the Seventeenth Century* (Cambridge: Harvard University Press, 1955), 98; Virginia DeJohn Anderson, *New England's Generation: The Great Migration and the Formulation of Society and Culture in the Seventeenth Century* (New York: Cambridge University Press, 1993), 164-165; John J. McCusker, *Money and Exchange in Europe and America, 1600-1775: A Handbook* (Chapel Hill: The University of North Carolina Press for the Institute of Early American History and Culture, 1978), 116-117; Nettels, *Money Supply*.

various schemes and policies employed to draw specie into the colony. Ultimately, this quantitative knowledge will shed new light on the reason(s) for Massachusetts issuing its first paper money in 1690.

Specie, or silver and gold coins as opposed to those metals in bullion, served a number of purposes. Specie was not only a circulating medium easing both internal and external trade, it also represented capital, a store of wealth, and a commodity in its own right. A study of specie accumulation is more than just a study of economic gain; it is also a study in market behavior. The desire to increase the amount of coins in the colonies was not simply motivated by a demand for an increased amount of circulating medium, but also for its effect on price levels, personal wealth, and as an encouragement to investment.

Money in Massachusetts was both a community and an individual concern met with community and individual solutions. The colonists could have forgone importing more than they exported and gained specie. Instead, on the individual and community level, they constructed a commercial system that supplemented their stock of specie with other forms of circulating mediums such as book credit, commodity exchange, and notes of hand (IOUs). The local and colonial governments attempted to ease the capital-related problems of a supposed scarcity of specie by using grants and tax abatements to encourage local investment in internal improvements. The General Court, early in the colony's history, even legalized the use of farm commodities for the payment of taxes.

Not all decisions made by the colonists reflect an all-encompassing desire for specie. The colonists showed a preference for silver as commodity over silver as money, evidenced by the increasing amount of silver plate that they purchased from abroad. One modern observer has suggested that the colonists preferred commodity silver over coin as a store of wealth because silver bullion and plate offered clearly identifiable markings that would make those items more easily recovered than coin if they were lost or stolen. Another explanation for the accumulation of silver is that it offered a visible measure of a persons' creditworthiness.⁵

One thing is certain regarding the economic situation in Massachusetts in the middle decade of the seventeenth century: the colony began to seek an increase in domestic manufacturing. The Saugus Ironworks presents the most famous example of the desire for greater domestic industry, and also presents some evidence of the state of capital in the colony. Even as the probate records display an increasing amount of specie inventoried at death, the colonists could not supply the ironworks with adequate capital to survive. The 1650's also saw an increase in legislation designed to establish various lighter industries in the colony. Though the legislative injunctive to produce import substitutions in the form of wool and linen production began in the previous decade, the legislature repeated and broadened its efforts in the fifties. The traditional interpretation of the import substitution legislation is that the General Court was seeking to decrease the amount of English goods brought into the colony. Despite the best efforts of the assembly, however, the colonists never lost their lust for English manufactures. In fact, imports likely grew over the century, even as domestic manufactures increased.

The government of the Bay Colony may have had an additional goal in pursuing import substitution. The English minister of trade feared not only the decrease of woolen exports to Massachusetts that would result from the success of the General Court's

⁵ Hermann Frederick Clarke, "The Craft of Silversmith in Early New England," *The New England Quarterly* 12, no. 1 (1939): 69; Craig Muldrew, "'Hard Food For Midas,' Cash and its Social Value in Early Modern England," *Past and Present* no. 170 (2001): 100.

dictates, but the decrease of woolen exports to the English colonies as a whole. By this time, Boston and Salem acted as the hub for much of the English New World trade. Had Massachusetts succeeded in establishing woolen and linen industries, Boston merchants would have been in a prime position to meet the clothing needs of much of English America.⁶ Bounties for cloth manufacturing were clearly an example of Massachusetts overstepping its colonial bounds that may have succeeded but for lack of capital. Government fiat can only accomplish so much in a market society, and in the case of Massachusetts, it failed to create a textile industry to rival England.

At the same time, the fact that such import substitution was not widely embraced, even with legislation behind it, disturbs the image of the colony as money poor. Traditional thinking holds that, in a cash-strapped society, households seek to diversify their production in order to reduce outside dependence. However, the available evidence does not suggest that the colonists vigorously pursued diversification during the seventeenth century. For, as Gloria L. Main has discovered through her investigation of probate records in Massachusetts and Virginia, spinning wheels do not gain widespread distribution until the early eighteenth century, decades after the colonies' money situation became so desperate that they resorted to the printing of paper money.⁷ The explanation offered above for the official encouragement of cloth production, as an attempt to compete with English industry and merchants, likely explains other colonial regulations touching on manufacturing, such as the encouragements for glass, iron, and hemp

⁶ E. A. J. Johnson, "Some Evidence of Mercantilism in the Massachusetts-Bay," *The New England Quarterly* 1, no. 3 (1928): 381-385.

⁷ Gloria L. Main, "Gender, Work, and Wages in Colonial New England," *The William and Mary Quarterly* 3rd ser., 51, no. 1 (1994): 49-56.

production. The importance of the rhetorical phrase "want of money," and its possible misinterpretation is the focus of chapter one.

As far as a trans-generational store of wealth, money was less important in the New World than in the Old. Land represented the most important store of wealth in the colony, and Nettles has suggested that the desire to inflate land prices was most likely behind the cries of scarcity.⁸ Despite the great scholarship of Dr. Nettels, this explanation is less than ideal. In the first place, the colonists could not have been so ignorant of the results that past currency inflations had had on all prices. Secondly, inflated land prices would have mainly benefited land speculators. For if the colony was indeed short of money, land would have been an inferior collateral for loans relative to shipping, which held the potential for returns in currency. Only following the creation of the land bank in the early eighteenth century would artificially inflated land prices be of interest to all landholders. Finally, it appears that the most important factor affecting land prices in the seventeenth century was the amount of improvements done to the land.⁹

As can be seen by the above, brief examples, the question of whether the colony was short of money is difficult to answer. The extensive use of various forms of personal credit seems to indicate that there was a shortage of money in the colony. However, Angel Reddish suggests an alternative interpretation for credit in the colonies. In Reddish's explanation, a shortage of small change, and not an overall shortage of currency explains a number of colonial money substitutes, and in particular, credit

⁸ Nettels, 321.

⁹ John Frederick Martin, *Profits in the Wilderness: Entrepreneurship and the Founding of New England Towns in the Seventeenth Century* (Chapel Hill: The University of North Carolina Press for the Institute of Early American History and Culture, 1991).

instruments. Most transactions in the colonies were small and therefore hampered by a lack of pence and the fractions thereof. In this model, credit instruments served to facilitate commerce by allowing daily transactions to add up to the point that they could be discharged with the larger coins that were more available.¹⁰ Reddish's argument is particularly interesting in light of the fact that the Massachusetts mint did not produce coins below three pence in value. Reddish's theory is intriguing as it addresses one form of money substitute with an explanation that does not require a total lack of currency, just a lack of currency in one form.

These are just a few of the traditional arguments for a shortage of money that are complicated by a thorough review of the attitudes of the colonists as viewed through their possessions. One remaining characteristic of specie provides the most compelling explanation of the colonists' quest for coin: specie as capital. If the colonists were going to transform New England into something like old England, they needed significant capital. The colonists had to construct dams, mills, roads, bridges, wharfs, and public buildings in the "virgin land." During the first decade of settlements, these improvements were underwritten, in part, by the influx of coin brought by the new settlers themselves. The colony's coin sailed eastward across the Atlantic to purchase the capital goods required to civilize the land. Yet the colony was not quite economically developed enough to replace their money supply by trade in the first few years of colonization. The amount of coin in the colony was decreasing at an alarming rate during those early years. Consequently, the local and colonial governments experimented with non-fiduciary means to encourage individuals to make the necessary internal

¹⁰ Angel Reddish, "Why Was Specie Scarce in Colonial Economies? An Analysis of Canadian Currency, 1796-1830," *The Journal of Economic History* 44, no. 3 (1984): 713-728.

improvements. These improvements, in turn, enabled the colony to interact more effectively with the Atlantic World by reducing the high transport costs originally associated with moving goods from the interior out to the ports for export, allowing the colony a more profitable external and internal trade.

Massachusetts did benefit from these original internal improvements.¹¹ By the middle of the seventeenth century, Massachusetts merchants were exporting to the West Indies and the Chesapeake, as well as trading with the Dutch in New Netherlands, and the French in New France. By all indications, Massachusetts should have experienced a measurable increase in the amount of specie in circulation at this time. It was precisely then that the General Court authorized the opening of the mint in Boston under the direction of Capt. John Hull. The expressed reason for opening the mint was the lack of circulating specie in the colony—a justification seemingly at odds with the evidence of an increasingly profitable foreign trade. One possible explanation for this apparent contradiction lies in the nature of the coin brought home.

Like the mainland colonies, the English holdings in the West Indies had a limited amount of English coins in circulation. However, thanks to a booming trade with the Spanish in the region, the islands (Jamaica in particular) were awash in a sea of Spanish silver. The Spanish coins were of varying heaviness and therefore, one possible explanation of the mint was that it was to standardize the coins in circulation. Perhaps a more important reason for the establishment of the mint was that the coins were foreign to the Massachusetts colonists. Not only were the coins Spanish, but they bore the mark

¹¹ One new work explains the development of Massachusetts as driven primarily by internal improvements. According to this interpretation, the export trade was the product, and not the goal, of domestic development. James E. McWilliams, *Building the Bay Colony: Local Economy and Culture in Early Massachusetts* (Charlottesville: University of Virginia Press, in press).

of a Catholic monarch. Since the act specifically called for the colonists to bring in and melt down their pieces of eight, the motive for the mint may have been more nationalistic and anti-papal than reflective of specie depletion. One final non-inflationary reason for the creation of the Boston mint was that the court was attempting to bring the value of the silver in their mint closer to the international price of silver than the overvalued shilling. The General Court attempted this re-valuation by decreasing the silver content of the Bay's coins, while maintaining their traditional English unit of account. Chapter two presents alternate explanations for money substitutes and the mint in the context of prevailing seventeenth-century economic thought.

The relatively widespread appearance of bullion, silver plate, and even broken pieces of silverware in the probate records presents yet another complication to the traditional vision of the colony as money deprived. Following the creation of the mint in 1652, colonists could bring their silver to the mint and receive coin in return. The fact that the colonists did not rush out to melt down their silverware or even their bullion in exchange for coins suggests that there was no more demand for silver coins than there was for silver spoons. We then face the possibilities that there was no significant shortage of coin (which would have increased the demand for coin over the demand for silver finery), that the colonists were content with their *ad hoc* monetary solutions, or that the colonists valued luxuries more than coin—all viable explanations.

The traditional arguments for the scarcity of money in Massachusetts often conflict. In order to establish whether the colony was indeed money deprived, a quantitative analysis is necessary. One way to accomplish this task is by cataloging the amount of specie held in estate. This approach is clearly less-than-perfect as it fails to identify the total cash in the colony for a given year. Due to the imprecise nature of the probate process, this method also fails to determine the total amount among decedents in a given year. However, the judicious applications of certain hypotheses and the occasional use of "best guesses" should provide some idea of the state of Massachusetts currency over the period of 1640-1690. Chapter three will examine the probate data in order to determine the patterns of specie accumulation for decedents and what those patterns may have meant for the colony as a whole.

Finally, this work will present a brief explanation of the reasons behind the first emission of paper money in the colony of Massachusetts. The Bay colony undertook its most novel monetary experiment due largely from a sudden demand for money on a cashstrapped treasury. Over the course of the eighteenth century, the other colonies followed Massachusetts' lead in printing fiat money, with controversial results. Over the course of the next three hundred years, the debate begun in Massachusetts in 1690 would continue to play out. Hard-money purists frequently clashed with those who demanded cheap money. Jackson's veto of the Bank Bill, the greenback agitation of the post-Civil War period, the free-silver movement and the birth of the People's Party, and the monetary policies of the New Deal all, in some way, reflected this debate. Proponents of both sides have looked to the paper money experiments of the eighteenth century colonies to defend their respective positions. This study helps to identify the suitability of such comparisons.

CHAPTER II:

COMMANDING THE COIN?: Re-Interpreting the Monetary Policies of the Massachusetts Bay General Court

Concerning the Evil or want of Silver, I think it hath been, and is a general disease of all Nations; and so will continue until the end of the world; for poor and rich complain they never have enough. —Thomas Mun, *A Discourse of Trade*, 1621.

While the standard history of the English colonies in the New World references the scarcity of coin in the colonies, it fails to put that claim into the perspective of the larger seventeenth-century Atlantic World. Short-term interruptions in trade, especially during war, disrupted the flow of money and goods. The decrease in the velocity of money coming into the country resulting from these interruptions would have felt like a loss in the quantity of money to the average observer. Other participants in the Atlantic World voiced concern over the quantity of their currency, yet the English colonies are the only ones labeled constantly cash-strapped.¹ The identification of the English mainland colonies as specie-poor results from a too-narrow interpretation of the rhetoric used to advance economic legislation in the colonies.

¹ J. H. Elliot, *Empires of the Atlantic World: Britain and Spain in America, 1492-1830* (New Haven: Yale University Press, 2006), 94-95.

Numerous tracts appeared in England in the seventeenth century that sought to address the "want of coin" in the country.² Typically, these tracts conveyed a number of policy prescriptions designed to enhance the country's trade. In the context of the ebb-and-flow of seventeenth-century commerce, the complaint of a "want of coin" referred to downturns in international trade, fluctuations of the international exchange rate, actual specie outflows, and perhaps most commonly the observation that trade could be improved. While the ambiguity contained in the English complaints are recognized, any expression concerning a shortage of money in the colonies is likely to be taken at face value. This ambiguity calls into question that this chapter will challenge.³

By examining the actions of the General Court of the Massachusetts Bay with an eye to the arguments of the English writers, a new explanation for the Court's actions comes to view. While the Court referred to a scarcity of specie in many of its proclamations, the accompanying legislation was not altogether different from that advocated by the mercantilists across the Atlantic. In this context, the purpose of the phrase "want of coin" shows its true colors. In the seventeenth century, "want of coin"

² Among other tracts, the reader may consult the following: William Potter, *The Key to Wealth: Or, a New Way for Improving Trade: Lawfull, Easie, Safe and Effectuall* (London: R.A., 1650); Capt. Samuel Chappel, *A Diamond or Rich Jewel, Presented to the Common Wealth of England, for inriching of the Nation; being necessary for the use of all Marchants and Tradesmen, and advantagious to the poor* (London: John Clowes, 1650); John Bland, *Tade Revived, Or a Way Proposed To Restore, Increase, Inrich, Strengthen and Preserve the Decayed and even Dying Trade of this our English Nation, in its Manufactories, Coin, Shipping and Revenu* (London: Thomas Holwood, 1659); G. M., *The Citizens Complaint For want of Trade, or The Trades-mans Outcry for Lack of Money* (London: n.p., 1663); Bethel Slingsby, *A Discourse of Trade, Wherein is Plainfuly discovered the true Cause of the great want of Money,, in the Trading Stock Of This Nation* (London: n.p., 1675).

³ This work is largely the result of one small line appearing un-cited in Edwin J. Perkins, *The Economy of Colonial America*, 2d. ed. (New York: Columbia University Press, Second Edition, 1988). Perkins' work is still used as a primer on British colonial economies, and is in its second edition. The line is as follows, "The supply of specie was not deficient in North America" (164).

was tantamount to saying want of trade. When the Bay colony declared a desire for more money, it was calling for more trade, not decrying a lack of specie. The colonies in the West Indies and the Chesapeake fit well into the mercantilist world view—they supplied goods to the metropole for re-export, and consumed English goods in return.

Consequently, the staple-crop colonies were engaged in a balance-of-payments world, where the phrase "want of money" was literal. On the other hand, Massachusetts did not fit into the metropole-periphery model of mercantilism. The New England colonies produced many of the same goods as the home isles, and early in their existence began to compete directly with England for markets. During the seventeenth century, Massachusetts began to experiment with the emerging model of free trade. Those in England who advocated freer trade used the phrase "want of money" to call for measures that improved trade irrespective of the apparent balance. The colony of Massachusetts therefore employed "want of coin" in both a literal and figurative sense. In Massachusetts the use of rhetoric implying a dearth of coin did not necessarily mean that the colony actually lacked sufficient currency.

The misinterpretation of colonial rhetoric results from divorcing the North American colonies from the home isles. The colony of Massachusetts, lacking an exportable commodity that would distinguish it from England, shared many similarities with the parent country. In fact, many of the legislative measures that at face value seem to indicate that the colony lacked a sufficient circulating medium (thus making it money poor compared to across the Atlantic) were actually local variations of suggestions offered by English authors to address their own "ills." Arising from the suggestions provided by many of the English authors was the system known as mercantilism. In the words of Curtis Putnam Nettels, mercantilism "encouraged the merchants, shippers, and manufacturers by conferring benefits upon them and by identifying their private interests with the highest interests of the state." This working definition of mercantilism, the knitting together of trade and empire, is necessarily loose, for mercantilism did not have a single definition or model. To put it bluntly, mercantilist policies were "an expression of accord between landowners, and merchant-capitalists in alliance with the Crown."⁴

Some of the colonial practices offered as evidence of a dearth of specie reflect a too narrow understanding of the political economy of contemporary England. On the western shores of the Atlantic, polices such as accepting corn payment for taxes, restrictions on wages and apparel, protective tariffs placed on foreign shipping, and inflating the value of the local currency have been seen as signs of an insufficient stock of money.⁵ On the eastern shores of the Atlantic, similar policies have been seen as encouraging agriculture and domestic industry, protecting the social composition of aristocracy and the exercise of royal prerogative—collectively called mercantilism. When the merchants of Massachusetts and their representatives in the General Court fretted over the lack of coin, it is quite plausible that they were relying on rhetoric that was commonly employed in England to introduce mercantilist—and as the century wore on—free trade policies, rather than literally lamenting a lack of coin.

⁴ Curtis P. Nettels, "British Mercantilism and the Economic Development of the Thirteen Colonies," *The Journal of Economic History* 12, no. 2 (1952): 6.

⁵ Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca, NY: Cornell University Press, 1998), 118; Herbert L. Osgood, "New England Colonial Finance," *Political Science Quarterly* 19, no. 1, (1904): 81; Frank Fenwick McLeod, "The History of Fiat Money and Currency Inflation in New England from 1620 to 1789," *Annals of American Academy of Political and Social Science* 12, (1898): 57; Joseph B. Felt, *Historical Account of Massachusetts Currency* (New York: Burt Franklin Press, 1968), 13-15, 17-19. While the majority of the scholarship that specifies these political actions as primarily economic originated in the nineteenth-century, where they likely were influenced by the currency arguments of the day, their spirit thrives even in the contemporary histories that look to a more Puritanical motivation.

The goal of mercantilist polices was the enrichment of the state. With riches came power. Despite Holland's small size it was widely regarded in the seventeenth century to be a powerful state.⁶ Because mercantilism put the interests of the home state first, it also reinforced national identity. Mercantilism accomplished this bolstering of national identity by marrying the interests of the merchants with those of the state. Initiation of mercantilist policies in Massachusetts therefore presented not only a chance to increase its stock of money, but also to develop an identity distinct from England.⁷ The solutions proposed to augment the colony's specie, whatever their effect on that problem, began to affect the colonists' identity early in their history. It is in this respect that the governmental actions regarding money had far-reaching consequences. So long as the colony maintained an us-versus-them mentality towards their balance of payments with England, their loyalties were divided.

In the ten years between 1630 and 1640, the Great Migration deposited over thirteen thousand English souls in the Canaan known as New England.⁸ In the purses of these migrants traveled coin to purchase the necessities for taming the land. During the first decade of the Bay colony money was plentiful and inflation rampant.⁹ This

⁶ Thomas Mun, A Discource of Trade, From England unto the East-Indies: Answering to diverse Objections which are usually made against the same (London: Nicholas Okes, 1621); Henry Robinson, Englands Safety in Trades Encrease (London: E. P., 1641), 1.

⁷ E. A. J. Johnson, "Some Evidence of Mercantilism in the Massachusetts-Bay," *The New England Quarterly* 1, no. 3 (1928): 371.

⁸ Virginia DeJohn Anderson, *New England's Generation: The Great Migration and the Formation of Society and Culture in the Seventeenth Century*, (New York: Cambridge University Press, 1993), 15. Newell places the number as high as twenty-one thousand in *From Dependence to Independence* 54.

⁹ Anderson, 131; John J. McCusker and Russell R. Menard, *The Economy of British America* 1607-1789 (Chapel Hill: University of North Carolina Press for the Omohundro Institute of Early American History and Culture, 1991), 94; Bernard Bailyn, *The New England Merchants in the Seventeenth Century* (Cambridge: Harvard University Press, third printing, 1982), 32, Newell, 52.

condition was not to last. Improving social conditions in England, brought about by the convening of the Long Parliament meant many potential migrants elected to stay home.¹⁰ As the flood of immigrants slowed to a trickle so too did the influx of currency. "This year there came over . . . few passengers (and those brought very little money) . . . so as now all our money was drained from us," John Winthrop complained in 1640. The colony had not yet developed an economy sufficient to replenish its capital stock by trade, and ships continued to bring English manufactured goods and sail east with the colony's money. Prices collapsed, and a depression set in. With the depression came the first cries of a want of money. "Corn would buy nothing now," Winthrop lamented in 1641. "A cow which cost last year £20 might now be bought for [£]4 or £5, etc., and money gone out of the country, so as no man could pay his debts."¹¹

The economic legislation of colonial Massachusetts that followed may be divided into three categories in order to evaluate whether the legislature was responding to a capital crunch or, as it is more likely, simply applying mercantilist measures at home. The first category consists of the legislation that early historians interpreted as stemming from a lack of cash. More recently, scholars have placed these laws in better historical context. Despite the newer interpretations, however, the older conclusions drawn about what these laws meant regarding specie levels haunt the field like the specter of King Hamlet. The legislation in this group consists of restrictions placed on wages and profits and sumptuary laws. The second set of legislation clearly represents mercantilist intents,

¹⁰ Anderson, 131; Newell, 54.

¹¹ *The Journal of John Winthrop 1630-1649*, Richard S. Dunn, James Savage, and Laetitia Yeandle, eds., (Cambridge: Belknap Press of Harvard University Press, 1996), 328; Newell, 52-54; James E. McWilliams, "New England's First Depression: Beyond and Export-Led Interpretation," Journal of Interdisciplinary History 33, no. 1 (2002), 1; Journal of John Winthrop, 353.

albeit ones that play to the specie-scarce thesis as they addressed the perceived unbalanced trade of the colony. This set includes laws designed to encourage and protect domestic industry and trade. The final body of statutes continues to be identified with a dearth of ready money. It includes commodity money, inflating the value of foreign coin, and the creation of the Massachusetts mint.¹²

Only the most economically focused history presents wage-restriction legislation in Massachusetts as indicative of currency shortage, rather than as an attempt to enforce traditional social hierarchies.¹³ In August 1630, the Court ordered maximum wages for laborers. The order was repealed in March the following year with the injunction that wages, "shall now be left free and at liberty" for men to agree upon.¹⁴ Wage legislation was not unique to the colonies. Caps on a common laborers' wages existed in England as well. In fact, the wages in the 1630 law were higher than contemporary caps in England. Wage restrictions were one way to enforce social hierarchy and in Massachusetts they worked to discourage unscrupulous workers from taking advantage of their neighbors in an environment poor in labor.¹⁵ During the depression of the forties, however, the Court explicitly linked wage controls to the colony's economic difficulties. The prelude of an act of June 2, 1641, reads in part, "This court having taken into consideration the scarcity of money." The act then instructs wage earners to, "be content to abate their wages

¹⁴ Records of the Governor and Company of the Massachusetts Bay in New England Printed by Order of the Legislature Nathaniel Bradstreet Shurtleff ed., (Boston: W. White Printer to the Commonwealth), 1853, 1:74, 1:84. Hereafter cited as *Records*.

¹⁵ Daniel Vickers, *Farmers and Fishermen: Two Centuries of Work in Essex County, 1630-1850* (Chapel Hill: University of North Carolina Press, published for the Omohundro Institute of Early American History and Culture, Williamsburg, VA, 1994), 27-28, 53.

¹² Newell, 54; McCusker and Menard, 181-182; Bailyn, 33; Curtis P. Nettels, *The Money Supply of the American Colonies Before 1720* (New York: A. M. Kelley, 1964 (reprint of 1934 edition)), 208; Osgood, 81; McLeod, 229, Felt, 16, 18.

¹³ Nettels, *Money Supply*, 204.

according to the fall of commodities," and to "partake now in the current scarcity, as well as they have had their advantage by the plenty of former times."¹⁶ From that point forward, the General Court was silent on the issue of wages, an indication of happier economic and monetary times.

Connected to the Bay's wage restrictions were the regulations touching on profits. In November 1633, with wage restrictions already in place, the Court restricted the profit that could be taken. With the exceptions of cheese, wine, oil, vinegar, and "strong waters," no person was allowed to take above four pence in the shilling as profit. This restriction on profits was a direct response to the earlier regulation of wages "lest the honest and conscionable workmen should be wronged . . . by excessive prices."¹⁷ The legal level of profit was set at thirty-three percent. By 1643, early in the process of recovery, and less than two years after lamenting the want of coin, the Court instructed the widow Stoughton to sell her husband's goods at 4d in the shilling profit.¹⁸ Twenty-three months was likely too short a time for the colony's economy to recover from the sudden loss of currency imports, yet there is no mention in this legislation of any scarcity of money, or of the workers' plight in paying excess prices, thus suggesting an adequate money supply.¹⁹

¹⁶ *Records*, 1:326.

¹⁷ *Records*, 1:111. The English colonists utilized the same units of account as those back home. This system of account consisted (prior to decimalization in 1971) of three primary units—pence (d), shilling (s), and pound (£). The pence was further broken into farthings, or quarters of a pence. There were twelve pence (12d) in one shilling, and twenty shillings (20s) in one pound. There were no pound coins, the pound existing solely as a unit of account.

¹⁸ *Records*, 2:39.

¹⁹ James E. McWilliams, "From the Ground Up: Internal Economic Development and Local Commercial Exchange in the Massachusetts Bay Region, 1630-1705," (PhD diss., The Johns Hopkins University, 2001), 167, 180, 189.

While the Court may have been favoring business over labor, other factors might have been at play. One possibility is that the legislature was employing the rhetoric of specie scarcity in order to control colonial wages yet again. The other possibility is that since the term "scarcity of money" only appears in the 1641 wage legislation, and the court re-approved the pre-depression profit level after two years, the colony's troubles were short-lived. The evidence provided by colonial wage and price legislation, either for or against specie scarcity, is hardly definitive. Lacking further corroboration for either proposition, the most likely explanation is that "excess" was at best a relative term. The Court's concern over excess wages and profits does not necessarily imply an inadequate money supply.²⁰

Sumptuary laws provide another source that may help determine the role that the colony's stock of money played in shaping legislation. Joseph B. Felt attempted to tie sumptuary legislation to currency when, in 1839, he described those laws as an attempt to reduce imports.²¹ Felt's interpretation clashes with the comments of a colonist who, while rejoicing over the increase in goods available in 1642, also lamented that "assuredly the plenty of clothing hath caused much excess of late in those persons, who have clambered with excess in wages for their work."²²

Much like the shifting language of the wage and profit legislation, the language surrounding sumptuary legislation suggests an occasional connection to the volume of money in circulation. For, in 1622, Edward Misselden advised his fellow Englishmen

²⁰ Stephen Innes, *Creating the Commonwealth: The Economic Culture of Puritan New England* (New York: W. W. Norton & Company, 1995), 166-167.

²¹ Felt, 21.

²² Edward Johnson, *Johnson's Wonder-Working Providence*, *1628-1651*, edited by J. Franklin Jameson (New York: Barnes & Noble, 1910 (reprinted, 1959)), 211.

that the domestic cause of England's want of coin was, "the great excess of this Kingdom, in consuming the commodities," specifically by those who, "live above their callings, and promiscuously step forth . . . into one another's ranks."²³

In 1634 the Court addressed "the great superfluous and unnecessary expense" of excess consumption before it banned gold, silver and silk lace. Five years later, the Court declared that the wearing of lace provided nothing other than "the nourishing of pride and exhausting of men's estates." Come 1651, the Court was still concerned that excess dress led to the "consumption of estates."²⁴ Up to this point the Court was not just concerned with ensuring the proper, sober attire befitting the "City upon a hill." The rhetoric of the Court instead indicates that the deputies were concerned with the financial well being of the colonists. Felt was right: economic considerations supplied at least a part of the General Court's motivation.

By decreasing the demand for luxury goods inside the colony, the Court may have hoped to decrease the outflow of specie. As Stephen Innes has pointed out, Puritanism and profits were not mutually exclusive. In fact, the Puritan restraint of consumption aided the accumulation of capital.²⁵ In the above acts the motivation appears to be twofold, and may have been in response to a perceived need to conserve capital. The sumptuary legislation passed on May 7, 1662, was different. Gone was the concern over the expense of frivolous fabrics. Instead, this last act reads as one would expect Puritan legislation to read. The law states, in part, "Whereas excess in apparel amongst us,

²³ Edward Misselden, *Free Trade or, the Meanes to Make Trade Flourish. Wherein, the Causes of the Decay of Trade in this Kingdome, are Discovered: And the Remedies also to remoove the same, are represented. Propertius, nautia de ventis, de tauris narrat arator: Enumerat miles vulnera, pastor oues* (London: John Legatt, 1622), found at: http://socserv.mcmaster.ca/econ/ugsm/3113/misselden/freetrad.txt.

²⁴ *Records*, 1:126, 183, 274; 3:243.

²⁵ Innes, 37, 40, 55, 59.

unbecoming a wilderness condition, and the profession of the gospel, whereby the rising generation are in danger to be corrupted and effiminated."²⁶ The shifting language used by the General Court, and Misselden's earlier caution to his countrymen indicate that social and economic concerns were often intertwined in seventeenth-century legislation. However, the absence of an economic justification for the 1662 legislation suggests that the colony's money troubles were behind it, and its supply of coin sufficient.

While wage, price, and sumptuary legislation employed the rhetoric of currency deficiency during the early years of the colony, such legislation soon faded from the limelight. It was in the encouragement of trade and industry that the Bay colony most clearly demonstrated mercantilist principles. What is important to keep in mind is that the English pamphleteers, who advocated many of the policies that the Court undertook, believed their solutions were key to correcting the "want of money." While it is possible that England was as short of coin as the writers claimed, this fact does not appear in the modern (re)assertions of colonial monetary woes. If the English polemists exaggerated their country's money troubles in order to advance their economic polices, it is not unreasonable to assume that the colonists did the same. Again, the liberal use of the phrase "want of money" may simply have been an attention-getting device, completely divorced from the actual supply of money.

In 1641, Henry Robinson wrote that to increase England's trade it was necessary to lighten "the customs especially of goods exported."²⁷ In this respect Massachusetts was ahead of the game. On March 4, 1635, the Court voted to remove the twelve pence a

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²⁶ *Records*, 4 pt. 2:41.

²⁷ Robinson, 4.

pound custom then in effect for beaver.²⁸ Reducing the custom on animal skins spurred economic development. Bernard Bailyn credits the fur trade, especially in beaver pelts, with establishing the great merchants of New England's first generation.²⁹ The fur trade exhibited another characteristic of English-style mercantilism—it was not open to competition—for, until 1636, the Massachusetts Bay Company controlled the lucrative trade. After that year the colony appointed a commission to oversee the trade, and to farm out the rights to trade with the Indians. While the General Court declared that "there shall be no monopolies granted or allowed," it was doubtlessly familiar with Misselden's injunction that the interference of government in trade is necessary for the "restraint of unskillful and disorderly trade."³⁰ The Massachusetts government echoed the contemporary arguments in England—part free trade, part mercantile.

While peltry was the Bay's most important industry in the first decade of the colony, intense competition from the French and the Dutch and over-trapping gradually decreased the returns. By the middle of the seventeenth century, codfish exports to the West Indies and Iberian Peninsula emerged as the most important trades for the colony.³¹ It was in the deputies' encouragement of the fishing trade that one of the central problems with the phrase "want of money" emerges. As the fishing industry developed, thus

³⁰ Bailyn, 30-32; Misselden, 14; *The Book of the General Lawes and Libertyes Concerning the Inhabitants of the Massachusets* (Cambridge: Massachusetts General Court, 1647), 43, hereafter: *Laws.*

³¹ Daniel Vickers, "A knowen and staple Commoditie': Codfish Prices in Essex County, Massachusetts, 1640-1775," *Essex Institute Historical Collections* 124, no. 3 (1988), 187, 190; "Massachusetts, plagued by a sickly economy in the late 1630's, made efforts to encourage the fishery as a source of returns to alleviate the *specie shortage*." (emphasis added) James G. Lyndon, "Fish and Flour for Gold: Southern Europe and the Colonial American Balance of Payments," *The Business History Review* 39, no. 2 (1965), 173; *Journal of John Winthrop*, 353, 386; Nettels, *Money Supply*, 78-80; Vickers. *Farmers and Fishermen*, 98-99.

²⁸ *Records*, 1:140.

²⁹ Bailyn, 26-30.

increasing trade and bringing cash into the colony, the assembly continued to dictate improvements to the industry. The apparent reason for the Court's actions was that, while the fishing trade was generating returns for the colony, those returns could be increased. When the Court ordered that it should bear the £100 16s 3d expended "about furthering the fishing," it envisaged Robinson's 1641 injunctive to increase England's trade by "using all means for prosecuting and advancing the Fishing employment in general."³²

The General Court continued to anticipate the crux of Robinson's later prescriptions for increasing the fishing industry when it "encouraged new industries with immunities and privileges."³³ In 1639, just two years before Robinson would pen his tract, the Court granted a seven-year exemption from colonial taxes for all stock employed in fishing. The order continued by exempting ship carpenters and sailors from militia training days, and prohibiting the use of cod and sea bass for manure.³⁴ Even before the loss of currency imports that accompanied the end of the Great Migration, the Court was concerned with expanding the colony's export trade. The encouragement of exports was not, at this time, tied to a shortage of coin. Rather, the colony was pursuing wealth through international trade.

The General Court frequently employed land grants to reward those who served the colony. Two land grants, however, are unique. June 2, 1641, saw the Court creating a "plantation" for the fishing trade. Nantascot was to be a village of fishers. Any

³² Robinson, 4; *Records* 1:230. Robinson was not the only polemist to advise the advancement of England's fishing industry, see also, Bland, 14; Misselden, 30.

³³ Robinson, 5.

³⁴ *Records*, 1:257-258.

fisherman who moved there would automatically receive land for a house as well as meadow. Any boat owner who moved to Nantascot would receive four acres per boat, on top of the land he had already received.³⁵ For most Atlantic fishers at this time, this was more land than they could expect to acquire in a lifetime. However, this sort of encouragement did not necessarily advance the fishing industry. Upon receiving land, many fishermen turned to husbandry and away from the uncertain life of the sea.³⁶ Six years later, the Court tried a slightly different tact when it informed the village of Hull that it would be allowed to "order their own affairs," provided they "advance fishing."³⁷ The Court did not remind the residents of Nantascot or Hull that the success of their industry would increase the colony's money supply. Instead, the deputies offered the reward of greater autonomy for the fishers if they advanced the industry. A fisherman did not need to be reminded that his industry promised coin. If the money supply of the colony was indeed in need, the Court gave no indication with its promised reward.

By 1652, it came to the court's attention that the mis-grading of fish was creating a decrease of the trade. Echoing Misselden's complaint that the poor trade in English textiles was the result of unscrupulous clothiers, the Court called for the appointment of "fish viewers." These fish viewers were to inspect the fish packaged for export and grade it according to quality and appearance.³⁸ By 1670, the General Court could say, "Whereas, by the blessing of God, the trade of fishing hath been advantageous to the

³⁵ *Records*, 1:326.

³⁶ Vickers, *Farmers and Fishermen*, 94, 96, 102.

³⁷ *Records*, 3:106.

³⁸ *Records*, 3:265-66; Misselden, 11-12, see also Robinson, 4.

country."³⁹ A "want of money" was Misselden's expressed concern when he advocated viewers to assure the quality of English cloth. The General Court's declaration, however, demonstrates that the real concern was the health of trade itself, not a shortage of coin.

Despite the positive tone of the Court, there were still issues in the fish trade for the Court to address. Fishermen were salting down their catch with "Turtoodas salt" (collected from Tortuda). The salt, which was free to collect, contained shell fragments that left spots on the finished product. Consequently, immediately after commenting on the advantages to the colony brought by fishing, the Court forbade the use of "Turtoodas salt." Furthermore, the court disallowed the collection of mackerel before July 1, in any year. The proscription placed on mackerel was not the result of decreasing fish stock, but rather because the Spanish preferred fish caught prior to July 1 and considered mackerel inferior to codfish.⁴⁰ Despite the praise heaped on the fishing trade, the General Court still found a reason for concern. That the deputies still found the trade wanting, despite its success, suggests that when the Court complained for want of coin, it meant that, regardless of the amount in circulation, there was always room for more.

Caveat emptor appears to have had no place in the seventeenth-century Atlantic world. Sloppy packaging and curing, or a disreputable middleman's actions threatened the entirety of Massachusetts codfish exports. Misselden addressed this potential problem when he wrote that such disreputable practices "not only sink themselves and others with them; but also mar the Merchandize of the land, both in estimation and in

³⁹ *Records*, 4, pt. 2:450.

⁴⁰ *Records*, 4, pt. 2:450; Nettels, *Money Supply*, 82 *n*., 96; Vickers, "Commodity," 188.

goodness."⁴¹ The colony stepped in to protect the industry, and the honest merchants employed therein. Given the interactions between state and capital in Massachusetts, it is not hard to imagine that a "want of coin" in any particular industry would elicit a response from the state. State intervention does not imply that the colony as a whole was experiencing a depressed level of currency. Rather, legislation such as that directed at the fishing industry were indications that, though times were good in a trade, they could always be better. This was one meaning of the phrase "want of money" on *both* sides of the Atlantic.

The fishing trade in New England during the seventeenth century did not interfere with that of England. The same political changes that brought an end to the Great Migration also reduced the number of ships sailing from England to the Newfoundland fisheries.⁴² Domestic cloth and iron manufacture, however, did directly compete with England. In part because New and Old England shared a similar climate, the two produced essentially the same commodities. Lacking a staple crop that London could reexport to the continent for profit, the New England colonies became important to the mother country primarily as a market for her finished goods. As Boston became the center for English colonial shipping, the possibility of Massachusetts supplying not only her own needs for cloth, but also those of the other New World colonies was frightening to English merchants.⁴³ As the colony reached for ever more coin, it began to enter the same trades that the English pamphleteers advocated with cries of "want of money." If

⁴¹ Misselden, 21.

⁴² Vickers, *Farmers and Fishermen*, 98.

⁴³ Nettels, *Money Supply*, 132-136; E. A. J. Johnson, 380; McCusker and Menard, 38; Gary M. Walton and James F. Shepherd, *The Economic Rise of Early America* (New York: Cambridge University Press, paperback, 1979), 46-47; Newell, 76.

the Court's only reason for pursuing domestic cloth manufacturing was to reduce imports, a mercantilist, balance-of-payments, specie-scarcity interpretation is valid. If, instead, the Court desired domestic manufacturing in order to employ more of its citizens in the international cloth trade, then the free trade, increased commerce, interpretation applies—an interpretation that does not imply a lack of cash.

The justification for the use of legislation to encourage the colonial production of cloth contains some of the same embellishments that the colony employed when speaking of coin. "Whereas this country is at this time in great straights in respect of clothing," a 1654 law that restricted the export of sheep declared.⁴⁴ A literal reading of that statement leads one to believe that the colony lacked clothing. That was patently untrue. Instead, the Court was pleading for increased domestic production of cloth. For, though "hemp and flax" were plentiful and "for cloth, here is and would be materials enough to make it . . . Farmers deem it better for their profit to put away their cattle and corn for clothing, then to set upon making of cloth."⁴⁵ In other words, the cloth industry did not offer the same returns as farming. The demand for coin was not so great as to lead men to put aside their corn for flax.

In the May General Court session of 1640, the court ordered the town magistrates to determine the amount of hemp and flax seed available. Furthermore, the magistrates were to ascertain who in their village was skilled in linen production. The General Court also instructed the magistrates to teach the boys and girls and those people not otherwise

⁴⁴ *Records*, 3:355-356.

⁴⁵ Johnson, Wonder-Working Providence, 211.

employed in the methods of linen production.⁴⁶ The Court was preparing to set about ordering the creation of a new industry in the colony. That the deputies stepped in to orchestrate the creation of a new industry in Massachusetts demonstrates the complicated process of learning the new system of capitalism. If a genuine need for the new industry existed, individuals would step forward to fill it. The "want of money" in the colony can be viewed the same way. If the demand for coin was great, enterprising colonists would have already set about to fulfill it.

By October of the same year, the Court determined that the need for domestic cloth production was great enough that it should issue a bounty. For the next three years, the colony would pay an additional three pence in every shilling for "linen, woolen, and cotton clothe" produced in the colony. It did not take long for this subsidy to spur the cloth industry. In fact, the colonists outstripped the Court's expectations. On June 2, 1641, just eight months after beginning its subsidy program, the Court repealed the bounty. It had placed too great a financial burden on the colony.⁴⁷ The promise of an additional fifteen percent profit on cloth was all it took to spur the settlers to production.

Tapping both capitalism and paternalism, the same court created another piece of legislation touching on cloth production. First, noting that there was a type of "wild hemp" growing throughout the colony, the Court instructed the colonists to set about gathering it. The assembly then played to the capitalistic tendencies of the colonists that had performed so well the previous year, informing the colonists that, "some [merchants] have already offered to take a good quantity at 2d the ££, & pay ready money for it."

⁴⁶ *Records*, 1:294.

⁴⁷ *Records*, 1:303, 320.

Finally, the lawmakers evoke paternalism, instructing each master of the family to see that his children and servants were employed in the working of hemp and flax.⁴⁸

Two things in particular stand out about this legislation. The Court acknowledged that there was a market for a raw product. This suggests that individuals in the colony were attempting to create an industry involving the processing of wild hemp, yet the government also ordered compulsory participation in the processing of hemp and flax. This action on the part of the Court seems to undermine the capitalist spirit of the merchants who offered cash for the commodity. Additionally, this order, with the inclusion of the phrase "ready money," complicates the argument that the colony was continually specie poor. For the promise of ready money for a farm commodity runs counter to the "barter economy" assumption for the colony at that time.⁴⁹ That merchants were offering cash payments for this "wild hemp" directly contradicts the assumption that the colony lacked sufficient capital to undertake domestic manufacturing.

It was twelve years before the Court addressed the cloth industry again. Previous legislation had stressed linen and hemp production. Wool had become the industry to encourage by 1654. As previously mentioned, in August of that year the Court restricted the export of sheep; allowing colonists to export them only to their fellow New Englanders. Additionally, the Court prohibited the butchering of rams and wether

⁴⁸ *Records*, 1:322.

⁴⁹ The term "barter economy" is a misnomer. The economies of the colonies typically employed some form of commodity money, either formally or informally. Despite the fact that one good was exchanged for another, and consequently appears to be bartered at least on the surface, all commodities employed as money had a specific value assigned to them in the local unit of account. Essentially, farmers were growing cash. As such, if a colony was short of coin, one would expect to see farmers repaid in merchandise, and not money. For an explanation of the difference between a barter economy and a commodity money colony, see Nettels, *Money Supply*, 208-210.

lambs.⁵⁰ Once again, if the demand for money was great, as it should be if the colony was indeed lacking sufficient money, then the local market should have valued sheep so that no colonist, acting out of self-interest, would slaughter or export his ovine commodity. Instead, the deputies' actions appear to go against the market, and against the accumulation of specie.

The most paternalistic, mercantilist legislation concerning cloth came in 1656. The first session of that year declared the country was still in dire straits with regard to cloth. As such, the Court dictated that "all hands not necessarily employed on other occasions, as women, girls, & boys, shall, & hereby are, enjoined to spin according to their skill and ability." This section foreshadowed Richard Haines' 1674 suggestion that England put the poor of each parish to work spinning.⁵¹ The act then went on to specify how much each spinner should produce. Any person assessed as a proficient spinner was to spin three pounds of wool, linen, or cotton per week, for thirty weeks a year. The Court then encouraged the keeping of sheep and the planting of flax and hemp.⁵² This legislation appears to have created the desired results, for orders of its kind cease to turn up in the records. However, one additional reference to sheep, from 1673, bears mentioning. The Court declared that the rated value of sheep (used to compute an estate's taxes) was too high—indicating that the colony had finally achieved an adequate supply.⁵³ That it took nineteen years for the colonists to accumulate what the deputies

⁵⁰ *Records*, 3:335-336.

⁵¹ Richard Haines, *The Prevention of Poverty: Or, a Discourse of the Causes of the Decay of Trade, Fall of Lands, and Want of Money throughout the Nation; with certain Expedients for remedying the Same, and brining this Kingdom to an eminent degree of Riches and Prosperity* (London: Nathaniel Brooke, 1674), 5.

⁵² *Records*, 3:396-397.

considered to be an adequate number of sheep suggests that the money available in exporting sheep outweighed the returns from keeping a flock.

One year later, Haines, writing in England, provided a likely explanation of the Court's actions concerning the cultivation of flax and hemp. Haines recommended the improvement of all lands that "are proper for Hemp and Flax, to that degree, that what before was worth but twenty shillings *per* Acre for Corn or Pasture, by this means will be worth forty or fifty shillings."⁵⁴ Doubling the profit of an acre was the Court's real motivation for pushing the production of flax, hemp, and sheep, and not a lack of available cloth. As the clothing industry of England enjoyed protection at the time, the only way the colony was going to realize the two-fold increase in profits, was by exporting to the other English New World colonies. The Court had suggested its motivation was to correct for a shortage of cloth. The deputies had lamented a lack of cloth where no such shortage existed. In actuality they sought greater profit from the land currently under cultivation. The evidence offered by cloth-production legislation forces a reconsideration of any cry of currency scarcity emanating from the Court.

The Bay colony's interference in domestic industries suggests that its leaders were not unfamiliar, nor hostile, to the ideas espoused in England for the pursuit of both mercantilism and freer trade. Both sides of the Atlantic were affected by one of the colony's more ambitious industrial undertakings. In 1644, the General Court agreed to the conditions set forth by a group of English and colonial investors for the construction of the first ironworks in the English colonies. The colony would provide the land for the

⁵³ *Records*, 4, pt. 2:564.

⁵⁴ Haines, 5.

works, exempt the employees from training days, and exempt the works from the rate. In exchange the operators of the works agreed to supply all the iron the colony needed at a price of £20 a ton before undertaking any exports. If the investors agreed to this condition for three years, the colony would grant them a twenty-one-year monopoly on the production of iron in the colony.⁵⁵

"Iron, which most certainly might . . . be raised at home, the benefit whereof would be great; because some hundred thousand pounds might hereby every year be saved, or otherwise improved [by investment]." This phrase did not come from Massachusetts. Rather, Haines wrote it in England in 1674. Even in the last quarter of the seventeenth century, an Englishman was concerned with his country's expenditure on iron. "Or otherwise improved," however, was Haines' real objective—as it was for the Bay colony. Ironworks employed not only workers for the foundry, but also miners, timber harvesters, farmers, and teams of animals for the transportation of materials to and from the works.⁵⁶ Not only did the ironworks project suggest the immediate employment of local colonists, but also those from miles away. The Court's encouragement of the ironworks squares with the free trade ideology. The deputies' actions should not be viewed as solely an attempt to reduce imports, thus countering one drain of colonial specie. Instead, the legislature aimed to increase the colony's internal economy. When examined through a mercantilist lens, the legislation promoting the ironworks appears to

⁵⁵ Records, 2:81-83, 103-104, 125-128; E. N. Hartley, *Ironworks on the Saugus: The Lynn and Braintree Ventures of the Company of Undertakers of the Ironworks in New England*, (Norman: University of Oklahoma Press, 1957, third printing 1990), 93-95. The colony's "rate" was the tax assessed by the General Court that the towns were responsible for collecting. The rate was collected on top of town and church taxes.

⁵⁶ Haines, 5-6; McWilliams, "From the Ground Up," 231-248.

support the specie-scarce thesis. When this legislation is viewed from the free-trade point of view, however, it suggests nothing of the level of the money supply in the colony.

The Ironworks would consume the excess product of the colony's fields and forests. In return it would provide the colony with cheap iron. Had the Ironworks succeeded, and had it produced enough for export, the colony might never have been labeled specie poor, but the works did not last. The Saugus Ironworks could not produce enough to cover costs at the maximum price set by the Court. High labor costs worked against the proprietors. An abundance of cheap, even free land created an environment where virtually every man could be self-employed on his own farm, thus driving up the price of labor.⁵⁷ In the end the colonists could not come up with enough capital to keep the works in operation.⁵⁸ This is not to say that the colonists lacked capital, just that there were other investment opportunities, such as fishing, trade, and infrastructure and land improvements—investments that were closer to home. What is important regarding the ironworks is that the Court was not simply seeking to reduce the colony's dependence on English imports but also to employ more of its citizens and resources in the production of an exportable commodity. Free-trade advocates stressed the importance of employment through internal improvements; mercantilists stressed the external balance of trade— Massachusetts did both.⁵⁹ Three years earlier, Robinson had suggested that Parliament encourage "all manufactures at present practiced in England," not for the lessening of

⁵⁷ Vickers, Farmers and Fishermen, 54-56.

⁵⁸ The story behind the closing of the Saugus Ironworks is long and complicated, and involves more than just a little political competition. For a complete discussion of the events surrounding the failure of the first undertakers, the attempts by colonial operators to keep the works open, and the eventual demise of the first ironworks in English North America, see Hartley, 215-271.

imports, but on the grounds that such industries set "multitudes of poor people a work, who thereby maintain their wives and families in good order."⁶⁰ Instead of coin the Court was concerned with employing more colonists so that they could provide for themselves.

The use of commodity money has long been pointed to in support of the speciescarce hypothesis. The traditional narrative suggests that a lack of specie hampered commercial transactions, and that in response to this, colonial governments set prices for locally produced commodities to facilitate trade.⁶¹ According to this explanation, colonial governments affixed a price for their commodities at or slightly above the market price to facilitate the exchange of commodities for goods. Another possible explanation for fiat commodity prices and commodity money is that they acted as a form of agricultural subsidy. By affixing a price to the region's agricultural products, colonial government created a floor price.

Only for a period of six years did commodity money enjoy legal tender status. Two laws from October 7, 1640, made corn acceptable for debts. The first began by declaring that, "there is a great stop in trade and commerce for want of money." The act then went on to state that no man was "compelled to satisfy a debt in money, but corn, cattle, fish, or other commodities at a rate defined by the court."⁶² The act specifically applied to debts contracted after the law was made public. Later that same day, the Court amended its earlier declaration. "Whereas many men in the plantation are in debt, & here is not money sufficient to discharge the same, though their cattle and goods should be

⁶⁰ Robinson, 18.

⁶¹ See note 4 for some examples. The majority of contemporary histories no longer provide an explanation for the use of commodity money. Nettels suggests that the goal of commodity money was primarily inflationary—to prop up land prices. Nettels, *Money Supply*, 202.

⁶² *Records*, 1:304.

sold for half their worth," the order began, before making all past debts subject to payment in commodities.⁶³ Imagine the joy that such legislation would have brought the English pamphleteer if Parliament had responded the same way following his lament, "Oh cruel *Times*! Thou makest me keep my cell, I dare not stir for fear of Counter Hell. Dun upon Dun about my doors do lurch, My body to devour."⁶⁴ Debt resulting from temporary market fluctuations was not unique to Massachusetts. In fact, two years after the Court legalized commodity money, an anonymous pamphleteer in London lamented that "they who lived in this our age, are far more miserable, and in a worse condition than they who lived formerly."⁶⁵ That the Court responded to the colonists' debt problems with the legalizing of commodity money, while Parliament did not follow suit in England, is not necessarily evidence that the colony lacked coin. Rather, through the legalization of commodity money for debts, the assembly was forcing creditors to temper their contracts in light of their debtors' misfortunes.⁶⁶

The Court responded to the sudden decrease of inflowing coin by driving it from the market. A simple application of Gresham's Law shows that if base and fine monies attempt to co-circulate, the base will drive out the fine. In 1631, the Court had ordered that corn "shall pass for payment of all debts at the usual rate it is sold for, except money

⁶³ *Records*, 1:307.

⁶⁴ G. M., 4.

⁶⁵ Anonymous, A caution to keepe money: shewing the miserie of the want thereof. I. In a state or kingdome, to supply vvarre. II. In younger brothers pawning their lands, to redeeme them. III. In shopkeepers wanting stock to supply. IIII. In handicraft-trades by negligence. V. In handsome and honest maidens, wanting portions. Declaring their slight neglect and scorne in these hard and dangerous times (London: G. Lindsey, 1642), 5.

⁶⁶ For a description of the importance of charity in Puritan dealings with each other, see Innes, 195-197.

or beaver be expressly named."⁶⁷ In 1640, with a simple vote, the Court debased nine years worth of contracts. Not only did creditors have to accept corn for payment, but they had to do so at the rate set by the Court. One year later that restriction was removed, and the market price for corn now applied to debt payments. Finally, in 1646 the General Court repealed the 1640 statutes, and commodity money no longer passed as legal tender.⁶⁸

One possible explanation for the repeal of the legal-tender status of corn in contracts is that the colony's infrastructure improved over the six years that commodity money passed as tender. The quantity theory of money asserts that either an increase in the money supply or an increase in the velocity of money will produce a rise in prices.⁶⁹ As money moved more easily from the ports to the backcountry, debtors were more likely to encounter the coin necessary to pay their creditors. At the same time, goods became less dear in the backcountry, and the revenue from their grain increased as the transaction costs involved with exporting grain decreased.

Aside from the brief period that commodities enjoyed legal tender status, corn, cattle, horses, and sheep could be used to pay taxes. It was with an eye to tax collection that the Court set the price of corn nearly yearly. If the Court believed that it was creating an acceptable replacement for money, it was mistaken. The three main

⁶⁷ *Records*, 1:92.

⁶⁸ *Records*, 3:69.

⁶⁹ The quantity theory of money is expressed in equation form as: M·V=P·T where M=the money supply, V=velocity (the speed with which money passes within an economy), P=price, and T=the number of goods bought with money. This equation is called the Fisher Equation after Irving Fisher (1867-1947). Traditionally, velocity was believed to be a constant in the short run; however, the recent failures of the Monetarist school (lead by Milton Friedman and Anna Schwartz) have forced a re-evaluation of that belief. The original application of the quantity theory was to demonstrate how increases in the supply of money would increase prices. With a variable velocity, either M or V can affect price levels. For a brief overview, see: http://www.economyprofessor.com/economictheories/quantity-theory-of-money.php.

advantages of money over barter are that money acts as a store of wealth, is readily acceptable, and easily transportable.

As early as 1637, the Court faced one problem created by commodity tax revenues: it failed as a store of wealth. The previous year, the Court collected the rate with wheat valued at five shillings a bushel. However, by 1637, wheat prices had fallen, and the colonists complained to the Court that the pay they received from the colony, in the form of wheat, was not worth their charges.⁷⁰ On top of the fluctuations in the market price of corn, there was also the problem of waste. Corn that was improperly stored or lost in transit was a loss to the Court. The assembly passed this loss on to the towns through legislation in 1654.⁷¹ Faced with fluctuating market prices and the losses of spoilage, the Court was well aware of the inferiority of corn as money, as it failed as a store of wealth.

Additionally, there were transportation problems associated with collecting taxes in corn. In 1663 the Court required a rate of £2500. That year the court rated wheat at five shillings six pence the bushel for taxes. One bushel of wheat weighs sixty pounds. If the entire colony paid their taxes in wheat, the town magistrates had to transport nearly 550,000 pounds of wheat to the treasurer! The expense of transporting that much grain would have been astronomical, re-enforcing commodity's inferiority as a money substitute.

Given the difficulties involved in accepting commodity payments for taxes, it seems the only reason the government accepted them was that there was not a sufficient

⁷⁰ *Records*, 1:200.

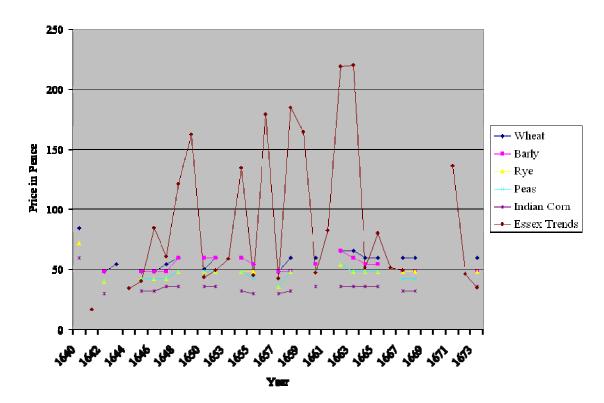
⁷¹ *Records*, 4, pt. 1:214.

stock of specie in the colony for the average farmer to pay his taxes. One other option exists however; the Court may have continued to accept commodity money in order to maintain agricultural prices. State manipulation of corn prices dated back to the fifteenth century in England. Traditionally English Corn Laws prohibited the export of corn below a certain price. The reason behind this prohibition was that coastal farmers faced lower transportation costs if they shipped their produce to the continent than if they transported it overland. Later Corn Laws forbade the importation of foreign grain and added an export bounty to grain. These laws assured that the people of England received their daily bread regardless of the high transportation costs associated with the poor infrastructure of the island nation.⁷²

Massachusetts likely originally authorized the use of commodity money for taxes in order to draw the country's produce to the larger metropolitan areas. This motivation would have been perfectly natural to the recently transplanted immigrants. However, the price assigned to grain did not remain above the market price for long. As the years went by, and the colony matured, the Court's prices fluctuated little. This was exactly what should occur in a colony with a drain of specie, *ceteris paribus*.⁷³ As the amount of goods on the market increased and the amount of coin decreased, prices should have remained stable. Deflation, in other words, would offset gains in agricultural production. If the price set by the Court were a reflection of the market price, then the defenders of

⁷² "Corn Laws (1661-1861)," *The Companion to British History, Routledge (2001)*, Retrieved 16 April 2006. Available from xreferplus, http://www.xreferplus.com/entry/1241587; "Corn Laws," *LoveToKnow 1911 Online Encyclopedia (2003)*, Retrieved 22 March 2006, Available from LoveToKnow, http://64.1911encyclopedia.org/C/CO/CORN_LAWS.htm.

⁷³ *Ceteris paribus*: "A Latin phrase meaning 'other things being equal;' used in partial equilibrium analysis to indicate the isolation of the effects of a change in one of the independent variables in the model." Peter N. Hess and Clark G. Ross, *Principles of Macroeconomics: An Analytical Approach*, (Minneapolis: West Publishing Co., 1993), 386.



the money-poor thesis would be correct. However, things did not remain the same in the colony.

Figure 1.1 Essex County Corn Prices Compared to the Official Rate-Value.⁷⁴

The rated value of corn did not match the market price. Instead, in nearly all the years sampled, the Court's price was well under the market price (Figure 1.1). That the value of corn on the open market fell below the rate-price only thirteen times in thirty-three years suggests that the true reason for the Court's acceptance of corn as payment was that it established a floor price. So long as the price of corn was higher at the merchant than at the tax collector, only the meanest farmer would tender his taxes in

⁷⁴ Essex price trends from, William I. Davisson, "Essex County Price Trends: Money and Markets in 17th Century Massachusetts," *Essex Institute Historical Collections* 103, (1967), 169; *Records*, Vol. 2, 27, 112, Vol. 3, 27, 87-88, 215, Vol. 3, 136, 284, 359, Vol. 4, pt. 1, 309, 348, 434, Vol. 4, pt. 2, 60, 88, 134, 281, 346, 415, 567-568.

corn. The better return came from export. However, in those years when bumper crops or decreased demand pushed the price of corn below the rate, corn was worth more in taxes than in export. The Bay colony was subsidizing agriculture, therefore, and not offsetting a drain of specie.

For example, the Court was concerned late in 1654 that many towns were going to pay their rate in Indian corn. Earlier that year, the Court had designated a rate-price for Indian corn of three shillings a bushel "which it is not really worth, nor will it pass from man to man, above two shillings and six pence." Consequently, the Court lowered the rate price.⁷⁵ The data supplied by William I. Davisson on Essex County corn prices indicate that the aggregate price for corn did fall below the Court's price and well below the price for the years surrounding (Table 1.1).⁷⁶ The year 1673 presents another example of the market price falling well below the Court's value for corn. That year, corn prices fell to their lowest point since 1641. In response, the legislature announced that any man "shall pay their country rate in money, they shall be abated on fourth part of their said rate."⁷⁷ Given the temporary nature of such falls in the price of corn, the treasury acted as a storehouse for the colonists, holding grain until the price recovered. The use of country pay for tax purposes was an agricultural subsidy first, and a solution for scarce specie second, at best.

While the Bay colony undoubtedly experienced a currency crunch in 1640-41, that is not to say that the situation was anything other than short-lived. The use of

⁷⁵ *Records*, 4, pt.:1.

⁷⁶ William I. Davisson, "Essex County Price Trends: Money and Markets in 17th Century Massachusetts," *Essex Institute Historical Collections* 103, (1967), 169.

⁷⁷ Davisson, 169; *Records*, 4, pt. 2:6-8.

General Court dictates to support the coin-short hypothesis fails to take into account the

rhetorical value of the phrase "want of money."

Year	Wheat	Barley	Rye	Peas	Indian Corn	Essex Trend
1640	84		72		60	
1641						17
1642	48	48	40	40	30	
1643	54					
1644						34
1645	48	48	42	42	32	40
1646	48	48	42	42	32	84
1647	54	48	42	42	36	61
1648	60	60	48	48	36	121
1649						162
1650	50	60	48	48	36	43
1652	60	60	48	48	36	49
1653						59
1654	60	60	48	48	32	134
1655	54	54	48	42	30	45
1656						179
1657	48	48	36	36	30	42
1658	60	48	48	48	32	185
1659						164
1660	60	54	48	48	36	47
1661						82
1662	66	66	54	54	36	219
1663	66	60	48	48	36	220
1664	60	54	48	48	36	51
1665	60	54	48	48	36	80
1666						51
1667	60	48	48	42	32	49
1668	60	48	48	42	32	
1669						
1670						
1671						136
1672						46
1673	60	48	48	36	36	35

Table 1.1 Showing the Essex County Corn Price Trends and the Official Rate-Value of Corn Established by the General Court (in Pence).⁷⁸

⁷⁸ William I. Davisson, "Essex County Price Trends: Money and Markets in 17th Century Massachusetts," *Essex Institute Historical Collections* 103, (1967), 169; *Records*, Vol. 2, 27, 112, Vol. 3, 27, 87-88, 215, Vol. 3, 136, 284, 359, Vol. 4, pt. 1, 309, 348, 434, Vol. 4, pt. 2, 60, 88, 134, 281, 346, 415, 567-568.

By beginning with the assumption that the colony generally had an adequate stock of money, the verbiage employed by the Court appears in its proper historical context. In the early years of the colony, the policies tended towards mercantilism, and the phrase "want of coin" was meant literally. As the colony developed economically, the Court gradually shifted to a freer trade attitude. Despite the shift, the colonists, like the pamphleteers in England, continued to despair for "want of coin." Only the words now had new meaning, indicating a desire for more trade, both internal and external. There is no doubt that a "want of coin" meant a variety of things in the seventeenth century. For the colonialist to take these words literally at all times, and thereby to declare that the colonies constantly lacked currency, is to ignore the evidence offered by political economists in England and the laws of Massachusetts Bay itself. The words of Thomas Mun should constantly ring in the ears of the colonial historian. For when it comes to money, in the seventeenth century much like today, "poor and rich complain they never have enough."⁷⁹

CHAPTER III:

A MULTITUDE OF MONEY

"It seems a very intricate way of trade and what Lex Mercatoria had not thought of."— Sarah Kemble Knight, *The Diary of Sarah Kemble Knight*, 1704.

In the fall of 1704, Sarah Kemble Knight set out on horseback from Boston for

New York. During the course of her travels, she recorded her experiences in a travel

diary. One passage provides a glimpse into the commercial life of early New England.

They give the title of merchant to every trader; who rate their goods according to the time and specie they pay in: viz. Pay, money, pay as money and trusting. *Pay* is grain, pork, beef, etc. at the prices set by the General Court that year; *money* is pieces of eight, Ryalls, or Boston or Bay shillings (as they call them,) or good hard money as sometimes silver is termed by them; also wampom, vizt. Indian beads which serve for change. *Pay as money* is provisions, as aforesd one third cheaper than as the General Court sets it; and *trust* as they and the merchant agree for time.¹

As Knight's distinctions show, the monetary system of colonial Massachusetts

was extremely complex. In addition to coin, there also circulated a wide variety of

money substitutes and complements. Musket balls, wampum, corn, livestock, and a

variety of debt instruments—both transferable and non-transferable—served as money.

Historians frequently point to the existence of these money substitutes and complements

as evidence of a shortage of specie in the colony. Though their words differ, most writers

¹ Sarah Kemble Knight, "The Journal of Madam Knight," in Wendy Martin, ed., *Colonial American Travel Narratives* (New York: Penguin Books, 1994), 65.

describe the monetary situation in the colonies roughly as Curtis P. Nettels did when he wrote, "Their best money—coin—flowed away to England to redress the unfavorable balance of trade. On the other hand, England did nothing to supply them with either English coin or a coinage of their own wanting English currency, the colonists had been forced to use their native commodities."² The presence of money substitutes, according to the common interpretation, implies that the colonists suffered from a chronic shortage of currency as a result of Imperial policy and an imbalance of trade.

While it is undisputable that the American colonies employed non-specie monies, a long-term, constant dearth of coin is not the only explanation for the presence of these money substitutes. Temporary fluctuations in international trade may have created the occasional short-term shortage of coin in the colonies, which colonial governments might have addressed by legalizing money substitutes.³ A deeper look at the use of specie substitutes suggests that they were employed for a variety of reasons besides a long-term lack of coin. After all, on the ground, buyers and sellers did not always think about the "long-term." Finally, a thorough examination of the monetary situation of contemporary Europe forces a questioning of colonial specie shortage—specifically, one must ask: scarce compared to what?

Participants in the commercial realm of seventeenth-century Massachusetts were faced with a number of options when it came to tendering payment. Coin, of course,

² Curtis P. Nettels, *The Money Supply of the American Colonies Before 1720* (Clifton, NJ: Augustus M. Kelley Publishers, 1973), 280.

³ See chapter one, pages 35-37 for a discussion of the temporary nature of corn as a fiat currency in Massachusetts.

offered one and perhaps the most readily acceptable option.⁴ Even coin transactions, however, were not necessarily straightforward. Would the seller accept the coins by tale (face value) or by weight? If by weight, the purchaser stood the risk of losing part of the value of his money if he had accepted the coins by tale and they proved light. If the purchaser had no coins, would the seller accept any of the variety of goods to which the General Court had affixed transactional values? If the merchant refused commodities, there was always the option of purchasing on credit, wherein the merchant recorded the purchase price (often at a premium) in their book for future reference.⁵ One final method of payment, similar to book debt, was with a "note of hand." The note of hand was, essentially, an IOU. Notes of hand were transferable, however, and created the possibility of triangle settlement, an arrangement by which three parties—indebted to each other—could erase all the debts with one reckoning.⁶ When any of these money substitutes received legal tender status, they worked as a money substitute (as when the General Court made corn a legal tender for the years 1640-46). Book credit, notes of hand, and international bills of exchange, however, acted as money *complements* effectively increasing the practical money supply. Though the colony may have occasionally suffered a shortage of coin, it constantly experienced an over-abundance of money. This chapter will investigate the various forms of money circulating in the

⁴ Continuing her description, Knight relates the following, "Now, when the buyer comes to ask for a commodity, sometimes before the merchant answers that he has it, he says, *is Your pay ready?* Perhaps the Chap Replies Yes; what do You pay in? says the merchant. The buyer having answered, then the price is set; as suppose he wants a sixpenny knife, in pay it is 12d—in pay as money eight pence, and hard money its own price, viz. 6d." "The Journal of Madam Knight," 65.

⁵ David T. Flynn, "Credit and the Economy of Colonial New England," (Ph. D. diss., Indiana University, 2001), 6-7.

⁶ For a brilliant examination of the variety of debt in the seventeenth-century Bay colony see, James E. McWilliams, *Building the Bay Colony: Local Economy and Culture in Early Massachusetts* (Charlottesville: University of Virginia Press, in press), 108-174 passim.

Massachusetts Bay colony with an eye towards what they can tell us about the specie stock of the colony.

The first action that the General Court took in regard to the colony's money supply occurred very early on, at a time when the massive influx of settlers was flooding the colony with cash. In March 1635, the General Court passed legislation outlawing farthing coins (1/4 d)—replacing them with musket balls so long as no man was compelled to take more than 12d at a time in them.⁷ At least one author has interpreted this move as evidence that currency was scarce in the colony at even this early date.⁸ One other influential explanation holds that the General Court hoped the order would create a more thorough distribution of munitions during a time of war, and that the members of the General Court did not understand that their order would serve to drive the English coins out of circulation.⁹ These interpretations, however, are incorrect, if for no other reason than they ignore the resolution's preamble, which states in part, "hereafter farthings shall not pass for current pay."¹⁰ John Winthrop, in his journal, provided slightly more information pointing to the court's deeper motivation. Winthrop stated that, "brass farthings were *forbidden*, and musket bullets made to pass for farthings."¹¹

⁷ Records of the Governor and Company of the Massachusetts Bay in New England Printed by Order of the Legislature, edited by Nathaniel Bradstreet Shurtleff, (Boston: W. White Printer to the Commonwealth, 1853), 1:137. Hereafter cited as *Records*.

⁸ George Francis Dow, *Every Day Life in the Massachusetts Bay Colony* (New York: Dover Publications, Inc., 1988; reprint, Boston: The Society for the Preservation of New England Antiquites, 1935), 166.

⁹ Sylvester S. Crosby, *The Early Coins of America; and the Laws Governing Their Issue* (Boston: n.p., 1875), 26; Joseph B. Felt, *Historical Account of Massachusetts Currency* (New York: Burt Franklin Press, 1968), 20.

¹⁰ *Records*, 1:137.

¹¹ *The Journal of John Winthrop 1630-1649*, Richard S. Dunn, James Savage, and Laetitia Yeandle, eds., (Cambridge: Belknap Press of Harvard University Press, 1996), 142, emphasis added.

Both of the traditional explanations rest on the assumption that the General Court acted to increase the supply of small change in the colony. The act's preamble and Winthrop's journal entry, however, contradict this notion. It seems indisputable that the General Court sought to eliminate the English farthings from the market. In other words, the authorities did not monetize musket balls to supplement the colony's money stock, but rather to replace a portion of it.

That the Bay Colony sought to force farthings out of the market supports the thesis that the colony was experiencing no currency shortage during the first decade of its settlement. Even if the colony possessed a sufficient circulating medium, why replace the coin of the Realm with bullets? The answer lies in the intrinsic value of the two items. Small denomination coins could contain an amount of precious metal proportionate to the larger coins in circulation, in which case they would be on par with the larger coins. If a small denomination coin contains proportionately less specie than its face value or no precious metal at all, it is called "token" change. By minting coins containing less than their intrinsic face value, a mint authority stood to profit. Ultimately, the value of brass in the farthings of the time was less than their face value—and thus meant a profit to the mint. The profit from these farthings went to a circle of patentholders close to King James I. Due to the circumstances surrounding their emission, the farthings were unpopular in England, but Massachusetts acted on its displeasure a full seven years before Parliament.¹² It appears that it was because of the corruption associated with these token farthings that Massachusetts outlawed them.

¹² Philip L. Mossman, *Money of the American Colonies and Confederation: A Numismatic, Economic and Historical Correlation* (New York: American Numismatic Society, 1993), 106-7.

That the colony replaced brass tokens with musket balls appears to be a case of swapping one base currency for another. There are two compelling reasons, though, that the colony encouraged the circulation of lead tokens over brass. The first reason, mentioned earlier, has to do with munitions. Most male colonists had cause to use musket balls. The colonists did not go forth like babes in the wilderness; rather they often went about armed. Nearly all male colonists, therefore, had use for musket balls making them more valuable than the brass farthings that they replaced. The other reason that the colony desired the use of lead balls over brass coins was intrinsic to the pieces in question. While the intrinsic value of the English token farthings was below tale, the value of a musket ball was not. Using the valuation of lead in 1654, a musket ball of full bore would be worth .281d versus .25d for a full valued silver farthing.¹³ Both their utility and intrinsic value made musket balls more desirable as currency than the token farthings. In this instance, at least, the General Court set the monetary value for their chosen money substitute below the market value—that fiscal conservatism would not always be the case. Ultimately what the colony's farthing legislation demonstrated was knowledge of the differences between good and bad money, and a desire to furnish the colony with a "good" circulating currency, whether in the form of coin or commodity. This desire seems to have disappeared when the Court pondered its next monetary policy—the legislating of legal values for wampum.

¹³ Value of lead found in George Francis Dow, ed., *The Probate Records of Essex County Massachusetts* (Salem, MA: Essex Institute, 1916; reprint, Salem, MA: Higginson Book Company, 2005) Vol. 1, 170. The probate inventory quoted a price of 1s 2d for seven pounds of lead. A lead musket ball of full bore (.75 caliber) weighs 1.42857 oz.

Much ink has been spilled describing the role of wampum (wampampege, or also simply peage) in the colonial monetary standard.¹⁴ Consisting of tubular white or black (variously described as black, blue, or purple) beads made from native shellfish, wampum was the premier means of trading with the native population of New England. The Dutch introduced these beads to the English settlers at Plymouth in 1627.¹⁵ Highly labor intensive in its production, wampum was not, at first, cheap or easy to manufacture. That fact, combined with its usefulness in the fur trade, made wampum a valuable commodity. Jonathan Carver, in the late eighteenth-century, described wampum as being, "held in as much estimation by the Indians, as gold, silver, or precious stones, are by Europeans."¹⁶ If Carver meant that the Indians valued wampum as decoration and status symbol, he was correct. If Carver instead meant that the Indians valued wampum as Europeans valued coins, as a unit of exchange, he was undoubtedly incorrect.¹⁷ Regardless of their reasons, the Indians held wampum in high enough esteem to exchange their labor for it—in that sense, wampum could serve the role of money in European/Indian exchanges. Due to the importance of the fur-trade in the first decades of

¹⁴ Bernard Bailyn, *The New England Merchants in the Seventeenth Century* (Cambridge: Harvard University Press, 1982), 13, 24; Crosby, 26-28; Dow, 166-67; Felt, 12-13, 24, 25, 27, 28, 29; Albert Bushnell Hart, ed., *Commonwealth History of Massachusetts: Colony, Province, and State* (New York: Russell and Russell, 1966), 1:433; Mary W. Herman, "Wampum as Money in Northeastern North America," *Ethnohistory* 3, no. 1 (1956): 21-33; Ernest Ingersoll, "Wampum and its History," *The American Naturalist*, 17, no. 5 (1883): 467-479; Mossman, 42-43; Nettels, 211-12; Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca, NY: Cornell University Press, 1998), 52-53; George S. Snyderman, "The Functions of Wampum," *Proceedings of the American Philosophical Society*, 98, no. 6, Studies for the Library of the American Philosophical Society, (1954): 469-494; William B. Weeden, *Economic and Social History of New England: 1620-1789* (New York: Hillary House, 1963), 1:40-46.

¹⁵ Herman, 21; Mossman, 42.

¹⁶ Jonathan Carver, *Three Years Travels Throughout the Interior Parts of North America* (Boston: n.p., 1797), 207-8, quoted in Mossman, 42; William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 1983), 61, 95-97, 101-104, 166.

¹⁷ Snyderman, 470-71.

Massachusetts' colonial development, wampum necessarily became an important commodity for the colony.¹⁸ It was with an eye towards preserving and increasing the fur-trade that the General Court engaged in setting the legal value of wampum, and not as a remedy for any apparent cash shortage.

Despite the Court's 1636 injunction that only contract-holding colonists could trade for wampum with the Indians, some transactions inevitably took place—especially in the backcountry.¹⁹ Sixteen months later the legislature valued wampampege at six pieces a penny for any transaction under twelve pence.²⁰ This move was likely designed to encourage the movement of wampum from the backcountry to the coast. There it would find its way into the hands of the wholesale fur-traders preparing for their next purchase from their agents in the backcountry. The value set by the court was surely under the beads' worth in furs, especially in that both white and black had the same value. Roger Williams observed that the white passed at six to the penny, while the black, "three make a penny."²¹ Despite the official halving of the value of the black peage, it was not until 1640 that the General Court revised itself. At this point, wampum was overvalued—with white passing at four per penny, and black two. Perhaps this overvaluation was an attempt to attract wampum from the surrounding colonies. William Bradford had early discovered the importance of cornering the wampum market when he wrote in 1628 that by securing the wampum trade they had, "cut off the trade from the

¹⁸ Bailyn, 24.

¹⁹ *Records*, 1:179.

²⁰ *Records*, 1:208.

²¹ Roger Williams, unattributed quote in Felt, 12-13, and Ingersoll, 470.

fishermen and the straggling planters.²² Following the pattern observed earlier with corn, wampum was made legal tender for any debt contracted after June 2, 1641, at the value of six to the penny for any sum up to 10£. This is an odd value, for it deviates so dramatically from the aforementioned statute. Unfortunately, the next statute, which obviously was intended to address this sudden deflation of wampum, has been damaged and does not show the valuation of the peage, though it likely returned to the same values contained in the 1640 legislation.²³ Aside from the extreme fluctuation of the legislated value, the more important consideration for both of these laws is that wampum was now a legal tender, mimicking the General Court's actions towards corn. Once again, though 1641 stands out as a time of scarce coin in the colony, there is little evidence that the monetization of wampum was intended as a remedy for a constant scarcity of specie. In fact, the reasons for the General Court's actions were entirely independent of that supposed problem; instead, they were geared toward maintaining and expanding the fur trade.

Madam Knight's description of the role of wampum in trade for the year 1704 suggests the real utility of the beads was not as "big money," but rather as a form of subsidiary change. Small change was more difficult to mint at the time, and minting regulations seldom defined what proportion of the total coinage should be in petty coins. Consequently, medieval and early-modern European economies frequently encountered a shortage of small-denomination money.²⁴ If England lacked sufficient small change to

²² Unattributed in Felt, 12.

²³ *Records*, 1:329; 2:48.

²⁴ Carlo M Cipolla, "The Big Problem of the Petty Coins," in *Money, Prices, and Civilization in the Mediterranean World: Fifth to Seventeenth Century* (New York: Gordian Press, 1956); Angel Redish, "The Evolution of the Gold Standard in England," *The Journal of Economic History* 50, no. 4 (1990): 789-

meet her own needs, it is likely that Massachusetts must have likewise suffered. Further evidence to support the hypothesis that wampum served primarily as change is provided by the 1648 ordinance that required wampum to be strung in eight known parcels, to wit, "the penny, 3d, 12d, 5s, in white; the 2d, 6d, 2s 6d, and ten shillings in black."²⁵ Similar to musket balls, wampum served to satisfy the colony's need for small change in the marketplace. The legislation of commercial values for wampum and musket balls does not speak to the overall level of money available in the colony. To the contrary, the fact that the two items had uses other than money made them more specie-like than the brass farthings issued in England.

Just as wampum-related legislation reinforces the earlier observation that 1641 marked the beginning of the colony's money supply troubles, so too can it help mark the end. The General Court repealed corn's status as legal tender in 1646, suggesting that money was once again readily available in the colony. Three years later, the magistrates disallowed wampum in the payment of taxes.²⁶ In 1661, owing to the "inconvenience of the law for the payment of forty shillings in wampampege," the Court repealed the law granting legal-tender status to the beads.²⁷ Despite the loss of the Court's support, wampum undoubtedly continued to circulate in the role of small change, as suggested by Madam Knight's diary. Finally, a word concerning the supposed ubiquity of wampum in

^{805;} Angela Redish, "Why Was Specie Scarce in Colonial Economies? An Analysis of the Canadian Currency, 1796-1830," *The Journal of Economic History* 44, no. 3 (1984): 713-728; Thomas J. Sargent, and Francois R. Velde, "The Big Problem of Small Change," *Journal of Money, Credit and Banking* 31, no. 2 (1999): 137-161.

²⁵ *Records*, 2:146.

²⁶ *Records*, 2:279.

²⁷ *Records*, 4 pt. 2:4. Nettels believed that the fall of wampum from legal tender status was due to an increase in unfit and counterfeit wampum, 212.

Massachusetts: the belief that the use and ownership of wampum was widespread appears to be overstated.²⁸ Of the 476 inventories sampled from Essex and Suffolk counties for the years prior to 1661, wampum was listed thirteen times. During the same period, supposedly scarce specie appears in 131 estates—ten times more often than peage.²⁹ The ratio of wampum to coin suggests that the colonists did not resort to the beads solely as a remedy for a scarcity of money.

The extensive use of credit in the colony also, at first glance, seems to support the specie-scarce hypothesis. Credit in the Bay colony can be divided into two rough categories: internal and external. External credit consisted of bills of exchange. Bills of exchange were the result of a colonial merchant importing less than he exported. In this case, the difference was made up by a bill drawn on a metropolitan merchant and payable by the same at some future date. If a colonial merchant wished, he, or his agent, could exchange this bill for goods from a third party overseas, or return with the bill to his homeport. If he brought the bill back to the colony, the merchant could exchange it, at a premium, with a local merchant who in turn would send it back to London for payment. Bills of exchange that were sold under such circumstances would be endorsed on the back before being transferred. Functionally, bills of exchange were similar to modern checks. These bills served to replace the costly and, until 1663, illegal exportation of coin from England.³⁰

²⁸ Crosby, 28-29; Weeden, 41; Mossman 42.

²⁹ Dow, *Probate*, Vol. 1; Suffolk County Massachusetts Probate Records, Vol. 1, 3, & 4.

³⁰ John J. McCusker, *Money and Exchange in Europe and America: 1600-1775, a Handbook* (Chapel Hill: University of North Carolina Press for the Institute of Early American History and Culture, 1978) 19-23; Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca: Cornell University Press, 1998), 117; Weeden, *Economic and Social*

Internal credit instruments likewise came in two forms: book credit and promissory notes. The various forms of promissory notes potentially served as money *complements* in the colonial economy. Little is known of the true relationship of an individual's cash reserves and the use of personal credit notes. What is known is that numerous inventories from Essex and Suffolk counties included debts payable as well as cash. In those cases, the presence of an even-valued debt could indicate that the debt was a personal debt such as a note of hand. Those estates where the total debt payable was less than the amount of cash on hand present at least the possibility that the individual was issuing a note despite the fact that they had sufficient cash to cover their obligation a perfectly reasonable thing to have done for a variety of reasons. In this way, a note of hand functioned similarly to fractional reserve banking in that it allowed for moderate increases to the money supplied. So long as the creditor believed that he could redeem the note for specie on demand, he would accept the note. In this way, the promissory notes of prominent merchants, those believed to have a constant store of silver, could have functioned as a private paper currency—being countersigned upon countersigned and passed from hand to hand, perhaps going months or years before finally being redeemed. This theory of notes of hand as private currency issues is strengthened when one considers that the merchants most likely trusted to always have reserves to pay their obligations were also most likely to be major creditors. It is possible that when the notes were returned, it was in fulfillment of a debt to the merchant who set the debt instrument into circulation in the first place, and therefore no coin would need to change hands. In this way, personal credit instruments effectively increased the amount of money in

History, 316-317, Jacob M. Price, "What Did Merchants Do? Reflections on British Overseas Trade, 1660-1790," *The Journal of Economic History* 49, no. 2 (1989): 279-282.

circulation.³¹ Finally, notes of hand may have been employed in certain transactions in order to decrease the risk and cost of transporting money from the coast to the interior. A coastal merchant could purchase local commodities for eventual export without the need to carry cash into the countryside. For these reasons, the use of promissory notes does not imply any more specie shortage than the fractional reserve lendings of the nineteenth century or the personal checks of the twentieth.

While bills of exchange and notes of hand rarely have survived the centuries, account books have faired slightly better. Merchant account books, and the debts that they hold, appear to indicate that the average consumer possessed insufficient cash to conduct routine commercial transactions.³² One enormous problem in extrapolating the state of the colony's currency from merchant accounts is that account books do not include every transaction. Double entry bookkeeping, though practiced for over a century in Italy, was not widely practiced in the English world. Merchant books did not charter profits and losses, but rather held debts payable and receivable. Therefore, account books do not always include cash payments, or indeed any immediate payment whether cash or commodity, and are therefore largely silent on the issue of the

³¹ This is essentially the argument made by William Potter, *The Key to Wealth: Or, a New Way, for Improving of Trade: Lawfull, Easie, Safe and Effectuall* (London: R. A., 1650), which Weeden asserts that John Winthrop Jr. owned a copy of (319). Potter specifically envisioned his paper currency backed by land, though what seems most important is that the public has faith that the bills will be honored at face value, or in some cases, at a premium. For a brief description of some early attempts at organized private issuance of bills secured by personal property, see Bailyn, *New England Merchants*, 184-85; Newell, 135-137, 151-152, 163, 165, 175-178, 215-222.

³² In addition to the sources listed in notes 5 and 6, see also: Bailyn, *New England Merchants*, 47-49; Newell, 119; T. H. Breen, *The Marketplace of Revolution: How Consumer Politics Shaped American Independence* (New York: Oxford University Press, 2004), 120-121; Claire Priest, "Currency Policies and Legal Development in Colonial New England," *The Yale Law Journal* 110, no. 8 (2001): 1303-1405; Gordon S. Wood, *The Radicalism of the American Revolution* (New York: Vintage Books, 1993), 67-68; J. R. T. Hughes, *Social Control in the Colonial Economy* (Charlottesville: The University of Virginia Press, 1976), 123.

availability of coin in the colony.³³ Credit and debt, moreover, were integral to all areas of seventeenth-century commerce. The account book debt of a backcountry Massachusetts merchant was just the final link in a chain of obligation that stretched all the way back to London, Amsterdam, Paris, or Seville. European merchants supplied goods to the colonies on generous terms, often interest-free for a year or more, though the actual length could vary depending on the status of credit in the home city. In turn, the merchants of the colonial ports would supply similar terms when they acted as wholesalers to the interior. While estimates for the duration of book credit vary, accounts tended to be open for more than one year, but generally less than two.³⁴

Several possible reasons exist to explain the more generous terms supplied by local merchants. The Puritans' strong belief in charity and compassion may be one. Sharp-dealing merchants could find themselves in front of a county court as well as the court of public opinion. The fear of facing charges of usury or exceeding the just price may have exerted pressure on the merchant community to engage in commerce with compassion. Compassion required a reluctance to press too hard for payment.³⁵ A lack of small change might also explain some book debt. If the smallest coin that a consumer possessed was a shilling, but they only wished to purchase eight pence worth of thread, the merchant would need to have small change. If the colony lacked sufficient small

³³ Flynn, 3-5, 38-48.

³⁴ Gary M. Walton and James F. Shepherd, *The Economic Rise of Early America* (New York: Cambridge University Press, 1979) 89-90; Newell, 76, 93-95; Flynn, 68-70; Price, 273; McWilliams, 107, 131, 174.

³⁵ Arthur Prentice Rugg, "A Famous Colonial Litigation: The Case Between Richard Sherman and Capt. Robert Keayne, 1642," *Proceedings of the American Antiquarian Society* 30 (Oct. 1920): 217-50; Bernard Bailyn, "The Apologia of Robert Keayne," *The William and Mary Quarterly* 3rd ser., 7, no. 4 (1950): 568-587.

change to facilitate these types of transactions, business would grind to a halt. If, on the other hand, merchant and consumer agreed to transact business on paper until the account could be settled in "big money," it would lessen the need for small change. While this explanation explains the few accounts settled in cash, it fails to explain the large number of accounts settled in kind.³⁶

Obviously, neither of these solutions positively addresses the question of specie scarcity, and for that reason, they have often accompanied the use of merchant debt as an indication of a chronically cash-strapped society. The problems inherent in transporting coin—both intra-regionally, and across the ocean—provide another approach to the extension of book credit; one that does not imply a scarcity of specie. The possibility of loss always accompanied the transportation of specie. Pirates at sea, or highwaymen on land presented the most obvious threats, but accidental loss was also an issue. The bulk of the metals, contrasted with paper, present another obstacle to the efficient transportation of money—especially in oceanic voyages where the cost of freight (as well as insurance) would reduce the profitability of transporting coin or bullion. Credit instruments, therefore, were a more efficient and safe means of delivering payment whether across the Atlantic, or across a raging river in the backcountry.³⁷

The extensive use of credit in the local economy of England suggests that historians who have insisted that the American colonies lacked specie have failed to specify that the scarcity was likely a *real* (i.e. global) scarcity and not a *nominal* (or local) scarcity. The actual amount of gold and silver in circulation in England was small

³⁶ See notes: 5, 6, and 24 above.

³⁷ For a penetrating analysis of the hazards of intra-colonial travels, see McWilliams, 7-28.

throughout the sixteenth and seventeenth centuries. As a result of rapid economic and population growth, England experienced demand-driven inflation that further exacerbated the situation by causing prices to increase faster than the nation's money supply.³⁸ Faced with rising prices and a lack of sufficient specie to satisfy the needs of the market, informal and formal credit instruments served to transact daily marketplace interactions. The ability to create intricate credit networks would have been greatest in urban centers. Given that a majority of colonists to New England came from urban centers, it stands to reason that they brought with them a model of local economy that prominently featured the use of credit instruments.³⁹ Future generations in the colony continued to transact business in a manner that would have been familiar to an urban Englishman, despite their rural surroundings. Just as in Massachusetts, market participants would accumulate a number of debts over time, and periodic reckonings were necessary to determine the true state of an individual's account. Reciprocal debts between as many parties as possible, in both Old and New England, could be canceled against each other, and only the remaining balance could be paid in either money or bond. On both sides of the Atlantic, the primary importance of money was to settle accounts, or in transactions involving strangers whose credit worthiness was questionable.⁴⁰

The colonists, therefore, were accustomed to an economy that was largely cashless. Which is to say that the colonists and their English counterparts were both

³⁸ Craig Muldrew, *The Economy of Obligation: The Culture of Credit and Social Relations in Early Modern England* (New York: St. Martin's Press, 1998), 98, 100.

³⁹ Virginia DeJohn Anderson, *New England's Generation: The Great Migration and the Formulation of Society and Culture in the Seventeenth Century* (New York: Cambridge University Press, 1991), 29.

⁴⁰ Muldrew, *Economy of Obligation*, 101, 107-108; McWilliams, 137, 148, 174.

sufferers from a *real* lack of specie. Why then, have colonial historians continued to stress the specie scarcity within the colonies? One possible answer is that the early historians believed that the English colonies suffered from a *nominal* cash shortage; that they were at a disadvantage vis-à-vis England. Thus, Nettels and Felt were able to point to the scarcity of coin in the colonies as one proof of the hardships imposed on the colonies by the English practice of mercantilism. The nineteenth-century American sociologist William Graham Sumner suggested another possibility: that the calls of the colonists regarding specie scarcity were actually laments of *capital* scarcity. For Sumner, the lack of money in the colonies was very real, but not because of any machinations on the part of England. Rather, the scarcity of money was originally the result of a need to import capital goods from abroad to make the land profitable. Sumner believed that the decision on the part of colonial governments to adopt legal tender laws to remedy the deficiency of specie only hastened their drain. Like other hard-money advocates of the late nineteenth century, Sumner was using the history of the monetary regimes in the colonies to advocate fiscal conservatism in an era of cheap money unrest.⁴¹ By treating the quantity of coin in the colonies as nominally deficient (with respects to England), historians have been able to shape the political interpretations of the policies both of and to the colonies. Historians in the vein of Felt and Sumner have used their interpretations of the scarcity of money in the colonies to rebuff calls for cheaper money in their day. Nettles, and many who have followed, was eager to accept that English imperial authority was the cause of a very real shortage of currency in the colonies, and thus to advocate

⁴¹ William Graham Sumner, *History of American Currency* (New York: H. Holt and Company, 1874; reprint, New York: Augustus M. Kelley, 1968), 5-6; H. A. Scott Trask, "William Graham Sumner: Monetary Theorist," *The Quarterly Journal of Austrian Economics* 8, no. 2 (2005): 33-54.

against imperialism and pro-business legislation. The true state of cash in the colonies was less important to these historians than the political traction that their interpretations might gain them.

One final possibility exists to explain why the widespread use of credit is used to support the belief that something was afoul with the colonial money supply. From Adam Smith through Ricardo, Marx, Simmel, and to this day, the development of an economy has generally been understood to progress from barter to money and only then to sophisticated credit. Under this interpretation, informal credit is seen as more primitive than a money economy—little more than semi-barter.⁴² In the seventeenth century, however, at least one other view of economic development existed. "The first invention of money was for a pledge," begins Rice Vaughan's 1675 tract A Discourse of Coin and *Coinage.*⁴³ For Vaughan, and many others in England, the purpose of money was as a substitute for trust. So long as the actors in the market knew each other, and could trust in being repaid at some point in the future, credit was sufficient. If, on the other hand, the actors did not know the reputation of the other, or the institutions and laws necessary to insure credit were lacking, money became necessary. This model of economic development posits the existence of a credit market prior to a moneyed market.⁴⁴ As lines of credit became longer and more abstract, trustworthiness and honesty became,

⁴² Craig Muldrew, "'Hard food for Midas': Cash and its Social Value in Early Modern England," *Past and Present* 170, (2001): 84.

⁴³ Rice Vaughan, A Discourse of Coin and Coinage: The First Invention, Use, Matter, Forms, Proportions and Differences, Ancient and Modern: With the Advantages and Disadvantages of the Rise or Fall thereof, in Our Own or Neighboring Nations, and Their Reasons (London: Th. Dawks, 1675), 1.

⁴⁴ Franz Ritzmann, "Money, a Substitute for Confidence?: Vaughn to Keynes and Beyond," *American Journal of Economics and Sociology* 58, no. 2 (1999): 170-171.

what one author has styled "social capital."⁴⁵ Despite a superficial appearance of barter, the credit-commodity economy practiced in Massachusetts was not necessarily a step backwards in the transition to a moneyed economy.

The holding of "barren money," that is, the hoarding of money beyond what was necessary to discharge the few debts that must be paid in specie, was considered miserly. As the economy expanded, either in the number of participants, or in geography, the number of transactions that could not be conducted on trust inevitably grew—forcing an increase in the level of acceptable cash holdings. The need for increased reserves meant that as the colonial economy developed, more cash was needed as security against the possible breakdown of confidence in persons, institutions, or rules. Thus, temporary fluctuations in individuals' assessments of risk could create a short-term demand for increased liquidity that, failing a sudden influx of treasure, would manifest itself as a market shortage for bullion and specie.⁴⁶ The unmet demand for specie was temporary, and due to fluctuations in the dynamics of the local credit economy.

As the economies of the world developed in the nineteenth century, they grew too large and too complex to operate on trust and credit, and therefore resorted to money exchanges. With the advent of high-speed communications in the twentieth century, it became much easier to collect and disseminate the information needed in a credit-based economy, thus reinforcing the illusion that a credit economy developed from a money economy. If the development of a credit economy predates a money economy, then the belief that informal, localized credit was little above barter is false, and the extensive use of credit in Massachusetts was not backward. Instead, the extension of credit allowed for

⁴⁵ Muldrew, *Economy of Obligation*, chapter six.

⁴⁶ Ritzmann, 186.

expansions in the money supply, allowing growth. Since those extending credit were concerned not so much with profiting from interest but on finding ready buyers of their goods, local creditors would have been more receptive to inflationary and deflationary movements and hence less likely to flood the market with emissions of their money substitutes than the colonial governments were in the following years. The role of credit in the economy was more complex than as a replacement for cash. Furthermore, the widespread use of credit seemed to be something that the Puritans brought with them to the colony, and not something that they resorted to out of desperation for a circulating medium.

Specie, whether in the form of silver and gold coinage or bullion, was just as complex in the colonies as were the other forms of money. French, Dutch, German, English, and above all, Spanish coins of varying denominations circulated throughout the New World. The monetary system of the seventeenth century was a complex environment for even the most seasoned international trader—let alone a simple farmer or artisan. The purity of the metals in the coins, as well as their weight, fluctuated from country to country, and even within the same country in the case of manipulations undertaken by the mint authorities.

Because of the multiple variables involved in exchanging currencies, governments occasionally determined the exchange rates of coins based on their intrinsic silver content. Governments did not always confine themselves to reporting the true exchange rate for foreign coins, however. By manipulating the exchange rate, authorities believed that they could manipulate the direction and magnitude of currency movements. The colonists in the Bay Colony had experienced the effects of governmental meddling in currency valuations, as Kings James and Charles had both manipulated their currencies and exchanges in the first half of the seventeenth century. By reducing the silver content of the Realm's coins, thus debasing them, the Crown could realize a profit. The Crown also undertook policies designed to set the price of their silver coins above that offered by their neighbors, thereby "crying up," or inflating, the coin with the aim of drawing it away from other nations. The aim of the latter policies was to draw coin into England.⁴⁷ It should come as no surprise then, that upon the outbreak of the English Civil War in 1642, the General Court took advantage of the chaos across the sea to dictate an inflated exchange value for foreign currency. In June of that year, the General Court ordered that the eight real should pass at four shillings eight pence. Three months later, taking into consideration the "oft occasions we have of trading with the Hollanders at the Dutch plantation," the Court then ordered an exchange rate for Dutch currency, though the last line of the order would have much longer significance, when the Court further ordered that "the ryall [real] of 8 shall be also current at 5s."⁴⁸ Thus enters the first two official mentions of the most important coin in early American history.

The Spanish eight real (also known as the piece of eight, *peso*, *peso* de a ocho, *peso* duro, *piastre*, 8/8, or simply dollar) was the most important coin in world exchange, and the coin that English colonists were most likely to encounter.⁴⁹ Though the eight real

⁴⁷ B. E. Supple, "Currency and Commerce in the Early Seventeenth Century," *The Economic History Review* 10, no. 2 (1957): 239-241.

⁴⁸ *Records*, 2:20, 29.

⁴⁹ Shepard Pond, "The Spanish Dollar: The World's Most Famous Silver Coin," *Bulletin of the Business Historical Society* 15, no. 1 (1941): 12-16. For a more detailed and numismatic handling of the Spanish eight real, see: W. G. Sumner, "The Spanish Dollar and the Colonial Shilling," *American Historical Review* 3 (Jul., 1898): 607-619. The Spanish dollar would eventually become the model for the dollar of the United States, a fact that cannot escape anybody familiar with the phrase two bits (a bit being 1/8th of a real), meaning one quarter of a dollar.

was minted on both sides of the Atlantic, the crudely made American version was the one typically found in the colonies. Called cobs, the eight reals manufactured in the New World were simply chunks cut from simple silver ingots (the word cob came from the Spanish *cabo* or end). Due to their odd shape and thickness, the dies used to stamp the images on the coins often failed to impress a clean image on the coins. Frequently the cobs cracked during the stamping process. Finally, adding to the lack of uniform appearance, any overweight coins were reduced to the correct size by trimming excess silver from the edge. These cobs, primitive in their appearance yet quite accurate in weight, were not intended to function primarily as currency. Instead, the cobs were an easily portable product for shipment back to Spain.⁵⁰

The unrefined appearance of the cobs made them particularly susceptible to tampering and counterfeiting. The rough edges of the cobs, and the fact that many of them had been trimmed at the mint, hid the effects of clipping. Clipping and filing were the most common means of adulterating currency for individual gain. By removing a small amount of silver from the coin's edge, the clipper hoped to pass the coin off at its full weight while retaining a portion of the precious metal. The variance in thickness and diameter of the cobs also made them likely subjects for counterfeiting. The most egregious form of counterfeiting would be to replicate the coin in a base metal, but clippers could manufacture a true silver counterfeit using their ill-gotten gains to cast a coin that was lighter than standard. As cobs circulated through the economy, they could

⁵⁰ Louis Jordan, *John Hull, the Mint and the Economics of Massachusetts Coinage* (Lebanon, NH: University press of New England for The Colonial Coin Collectors Club, 2002), 150.

be subject to multiple instances of clipping, and as ever more light cobs exchanged hands, the likelihood of detecting the occasional counterfeit must have diminished.⁵¹

The perhaps widespread circulation of underweight cobs provides one explanation for the Court's order of June 14 and September 27, 1642. Instead of setting a price below the English standard for the eight real, as would be expected if the colony was suffering from a debased currency, the order actually set the value of the eight real at first roughly eight, and then eleven percent *above* the English standard.⁵² This process of inflating the value of coinage was called "crying-up," and has a variety of reasons behind it. The most common two explanations for crying-up the coin, especially in the English colonies are that it served to draw coin to the colony from other colonies and that the debtors of the colony demanded cheap money to pay their debts.⁵³ While these explanations may serve to explain, at least in part, the more severe inflations of the late seventeenth century, there are more plausible explanations to consider.

The first lies in the English valuation of silver. At the mint, English silver was worth less in relation to gold than silver at other European mints—in particular at Amsterdam. Numerous polemists in England repeated the observation that London goldsmiths and merchants were melting down full-bodied silver coins and sending the bullion out of the country for a profit, despite the prohibition on exporting silver and coin.⁵⁴ In 1634, Nicholas Briot attested that English silver was undervalued by

⁵¹ Ibid.

⁵² McCusker, Money and Exchange, 10.

⁵³ Nettels, *Money Supply*, 232-233.

⁵⁴ Thomas Mun, A Discourse of Trade, From England Unto the East-Indies: Answering to diverse Objections which are usually made against the same (Nicholas Oaks: London, 1621), 45; Edward Misselden, Free Trade or, The Meanes to Make Trade Florish. (John Legatt: London, 1622), 3-4, found at

approximately three percent in relation to gold. While in a case involving a number of London goldsmiths accused of culling out heavy coins in order to melt them down for export, the court heard evidence that the defendants were making better than three percent profit, even after paying short-term interest on the money that they sorted.⁵⁵ It is clear that the Royal Mint's ratio could not compete in the international bullion market. While the value of silver appears to be constantly three percent too low, fluctuations in the international commodities market meant that at times the variation was greater. It is possible, therefore, that the Massachusetts Bay government was simply addressing the deficiencies of English monetary policy when it set the rate for pesos higher than the official English price. In fact, in his tract A Diamond or Rich Jewel, Samuel Chappel claims that the French and Portuguese pay 6s for a piece of eight—or thirty-three percent more than in England, a percentage that will shortly appear in the colony as well.⁵⁶ Finally, the price of the eight real in London likely fluctuated based on the comings and goings of the East India fleet. The economies of the East had a voracious appetite for the white metal. Prohibited by law from exporting English coinage, the East India Company was, however, allowed to export foreign silver—and in great quantities. Undoubtedly the high demand for Spanish coins drove up the price, in fact, while the company at one point

⁵⁶ Chappel, 2.

http://socserv.mcmaster.ca/econ/ugcm/3113/misselden/freetrad.txt accessed: 2/15/2006; Gerard De Malynes, *The Maintenance of Free Trade* (I. L.: London, 1622), 4-5, found at: http://socserv.mcmaster.ca/econ/ugcm/3113/malynes/malynes.txt accessed: 2/15/2006; Samuel Chappel, *A Diamond or Rich Jewel* (John Clowes: London, 1650), 2; John Bland, *Trade Revived* (London: T. Leach, 1659), 15. The debate over the proper valuation of silver would become even more heated during the recoinage crisis of 1694, see: Joyce Oldham Appleby, *Economic Thought and Ideology in Seventeenth-Century England* (Princeton: Princeton University Press, 1978), chapter eight.

⁵⁵ "Nicholas Briot on Coinage Problems, 1634," Public Records Office, SP 16/275, no. 44, in Joan Thirsk and J. P. Cooper, eds., *Seventeenth-Century Economic Documents* (New York: Oxford University Press, 1972), 611-615; "A Prosecution for Currency Offences, 1636," John Rushworth, *Historical Collections* (London: n. p., 1721), I, part ii, 350-352 in ibid.

turned down an offer from Misselden to supply eight reals at 5s. per, it was only because they had secured a source at 4s. 8d.⁵⁷ The overvaluation of the peso by the General Court was only an overvaluation compared to the official English rating. The Court's actions actually brought the Spanish dollar in Massachusetts closer to the international price level.

Another overlooked possible explanation of Massachusetts' decision to increase the value of the peso involves an attempt on the part of the colonial authorities to supplant imports with domestic production. In 1617, many of the German states undertook a series of currency inflations. Misselden, in 1623, reported the impact that that move had on English exports to the region. Faced with an artificially enhanced medium of exchange, English cloth merchants increased the price of their goods imported to the region in an attempt to secure the same amount of specie as before the enhancement. Misselden notes, however, that local prices did not increase proportionately to the increase in the extrinsic value of the coins, and therefore locally produced cloth soon undercut the English imports.⁵⁸ In other words, enhancing the unit of exchange in the German states primarily harmed importers.⁵⁹ If, as has been suggested in this thesis, the goal of many of the General Court's actions was to encourage domestic industries as a form of local mercantilism, then the enhancement of the dollar in the colony served this purpose as well.

Regardless of the true intent behind the earlier valuations, there can be little doubt

⁵⁷ K. N. Chaudhuri, "The East India Company and the Export of Treasure in the Early Seventeenth Century," *The Economic History Review* New Series 16, no. 1 (1963): 38.

⁵⁸ Edward Misselden, *The Circle of Commerce, or the Balance of Trade* (John Dawson: London, 1623), 39.

⁵⁹ Supple, "Currency and Commerce," 248-249.

that the colony would not have undertaken its next action if Cromwell had not triumphed in England. May 27, 1652, was an important day for Massachusetts in its continuing effort to establish local control over its economy and money supply. On that day, the General Court authorized the establishment of its own mint under the direction of local silversmith John Hull. The assembly encouraged the colonists to bring their "bullion, plate, or Spanish coin" in order to have it minted into "the current coin of this commonwealth." The coin produced by the mint was to be the same alloy as English coin, but every shilling would be three pennyweight (.15 troy ounces) lighter than the royal coin, and lesser denominations proportionate. Finally, the act allowed the mintmaster to take one shilling out of every twenty as profit.⁶⁰ At this rate, including the mint's take, the Massachusetts (or Bay) shilling was twenty-two and a half percent overvalued with respect to the English mint—still below the rate reported by Chappel, but well above the recognized discrepancy at the English mint.⁶¹

Originally, the Massachusetts coinage was to be square, with "NE" stamped on one side, and the denomination on the other. The denominations of the Boston coins, twelve, six, and three pence, suggest that the mint existed to supply the colony with the small change necessary to carry out daily business.⁶² As to the shape of the coin, the Court quickly changed its mind when in October of the same year it ordered that the coins should bear a double ring on the edge containing the inscription "Massachusetts" on one side, and "New England" and the year on the other in order to prevent clipping. Furthermore, the side containing Massachusetts (the obverse) was to include the image of

⁶⁰ *Records*, 3:261.

⁶¹ Jordan, 169.

⁶² *Records*, 3:261.

a tree in the center, while the reverse was to bear the year. So that their instructions would be clear, the deputies went so far as to include a drawing in the margin.⁶³ One point of curiosity with regards to New England's coinage is that all the coins produced during the thirty years of mint operations bear the date 1652 despite several changes to the coins' faces over the years, though why is not entirely clear—perhaps Hull took the Court's direction that the coins should bear the "year of our Lord" literally.

With the difference of valuation between the Bay shilling and the eight real at eleven and one half percent, colonists who brought their Spanish coins in for reminting stood to reap a profit. Even after deducting the mint fees, a colonist would realize a profit of 6 d. per every full-sized cob.⁶⁴ Even plate, typically valued at 5s. per ounce in inventories, but occasionally rated as high as 6s. 2d., could produce between six and twenty pence profit at the mint.⁶⁵ Obviously, profit provided a clear motive for bringing silver into the mint. Those most likely to be in the position to capitalize on the mint rates should disproportionately come from the inter-colonial merchant class. While these merchants relied on the eight real to conduct their external trade, they stood to gain doubly from converting at least a portion of their silver into Massachusetts coinage. According to one modern model of the real business cycle, the first recipients of inflated money stand to benefit the most. Those individuals have the opportunity to spend the

⁶³ *Records*, 4 pt. 1:104.

⁶⁴ Jordan, 169.

⁶⁵ Jordan, 170; Suffolk County Probate Records, passim. It should be noted that there is no clear indication whether inventories were recorded in local pounds or English pounds. The value of silver plate in the estates examined held relatively stable at 5s./oz despite the frequent manipulation of the value of the local coinage. The consensus among historians who have studied colonial probates, however, is that the values listed in the inventories are in the local currency. For an in-depth explanation of the general assumptions utilized in examining colonial probate records see in particular: Alice Hanson Jones, *American Colonial Wealth: Documents and Methods* (New York: Arno Press, 1977), 3 volumes.

inflated money before the market has a chance to adjust prices.⁶⁶ Those merchants who converted their Spanish silver into Massachusetts silver would profit from the mint exchange, and were in the place to capitalize on the inflationary cycle that should follow the introduction of the adulterated money. By employing the cheap coins to purchase goods before the resulting inflationary price increase, merchants locked in a profit should they hold their goods until after the market adjusted. Finally, it should be noted that just because the merchant class stood to benefit from the infusion of cheap money into the economy, that does not mean that the traditional interpretation of cheap money agitation originating in the debtor class is incorrect. Merchants were as likely to be debtors as they were creditors. The debt network of early Massachusetts was too intertwined as to allow the direct association of debtor status to a particular class. Lacking a landed class dependent on long-term rents for income, there would have been less resistance to inflationary policies from the elites as there was in England during the recoinage crisis.⁶⁷

Despite the introduction of light money in the colony, there is no reason to believe that it caused an inflationary cycle. A central point of disagreement in the intrinsic versus extrinsic value of coin is the method employed to value the coins in exchange. The debate centers on whether coins were accepted by weight (intrinsically) or by face value, also called tale (extrinsically). If, on the one hand, merchants insisted on weighing coins before accepting them, then the Bay colony's machinations would have been readily apparent and thus an increase in prices was likely. On the other hand, if coins circulated according to their face value, then no price change was likely. There is evidence that in

⁶⁶ Murray N. Rothbard, "The Austrian Theory of Money," in *The Logic of Action I: Method, Money, and the Austrian School* (Cheltenham, UK: Edward Elgar, 1997), 297-320.

⁶⁷ Appleby, 237-238.

Restoration England, coins continued to circulate by tale regardless of the fact that many of them were as much as one-half light.⁶⁸ Additionally, the ability of the capital-poor economy of Massachusetts to absorb additional currency through investment provides one more reason to believe that the influx of cheap money would have no inflationary impact on the colony.⁶⁹ Finally, it should be noted that at the time of the recoinage crisis in England—when debates raged about what the proper rate and fineness should be for the coin of the Realm—many plans suggested that the shilling be coined twenty-five percent lighter than the official standard. One common defense of this proposal was that, despite the introduction of milled edges in the 1660's (a move designed to thwart clipping) the majority of coins circulated at that weight.⁷⁰ The problems surrounding the sorry state of English coinage suggest that when the Massachusetts mint produced coins twenty-two percent lighter than their English counterparts, it was a particularly perceptive move, and not necessarily designed as an inflationary policy. Rather, the colony's mint produced coins near the weight of those that actually circulated in England, instead of at the undervalued royal mint standard.

The mint closed in 1684, following the revocation of the company's charter. One of the specific infractions the Bay colony stood accused of was of usurping the king's authority by operating a mint.⁷¹ It is unclear how much the operation of a mint contributed to Charles II's actions, however, the mint had already begun to experience decreasing operations. Two pieces of legislation between 1672 and 1682 raised the value

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⁷¹ Jordan, 263-265.

⁶⁸ Appleby, 218. For a thorough description of the debate over how money actually circulated, see: Appleby, chapter eight.

⁶⁹ Appleby, 212.

⁷⁰ Appleby, 209.

of the eight real without adjusting the price of the Boston shilling reduced, and finally removed the profitability of bringing the Spanish coins to the mint.⁷² Many other English colonies beginning with Montserrat, aware of the actions of Massachusetts and the increase of money seen there, undertook a series of steps wherein they valued the Spanish dollar more than thirty-three percent above par with England. The result was a decrease in the amount of coin brought into the colony as it commanded a higher price in these other colonies.⁷³ By 1682, the General Court had set the value of the Spanish cobs at six shillings eight pence in the local currency (on par with the New England coinage) in an effort to stem the tide of Massachusetts coin flowing out of the colony. Those who brought Spanish silver into the mint would actually lose money, regardless of whether the cobs circulated by tale or by weight. The mint effectively was thus out of business.⁷⁴

Had the overvaluation of Spanish coin initiated inflation in the colonies, it is likely that the rise of prices would have offset the legislative actions and the flow of coin to the colony would have been short-lived. The fact that the original valuation in Massachusetts served the colony for twenty years suggests that there was no general price inflation. Whether this was due to an unquenchable desire for currency brought on by a chronic shortage of the same, that the influx of coin only served to offset depreciating prices brought by the taming of the wilderness, or that the valuation was closer to the international market price is not entirely clear. Since John Hull's mint did not coin gold, the colony had no actual mint ratio to compare internationally. The poor state of the English currency in circulation suggests that a colonist holding a full-sized Bay shilling

⁷² *Records*, 4, pt. 2:533; *Records*, 5:373; Jordan, 172-176.

⁷³ Jordan, 172; Nettels, 233-235.

⁷⁴ Jordan, 175-176.

held more silver than an Englishman with a typical shilling of the Realm in his purse. In this respect, the colony may have been in a better state of currency than the home island.

While it may be tempting to look at the numerous forms of money circulating in New England as a sign of specie scarcity, it is hardly definitive proof. The immigrants carried with them not only a desire to establish a "city on a hill" but also a traditional economic system saturated with numerous money substitutes. Many of the historians who have examined the monetary system of the colonies have done so with an eye to explaining the monetary phenomenon of their day, or to reinforce the assumption that the colonies were harmed by England's trade policies. The evidence suggests that, at least in New England, the colonies possessed a detailed understanding of the international economy. Furthermore, the colonies used their knowledge in an attempt to establish local economies distinct from the motherland. Defying Ockham's razor, the simplest explanation (that the colonies were short of money) is not necessarily the best. As Sarah Kemble Knight so eloquently summed up the colonial economy, "It seems a very intricate way of trade and what Lex Mercatoria had not thought of."⁷⁵

CHAPTER IV:

FORTUNATELY, YOU "CAN'T TAKE IT WITH YOU"

Probate records provide a tantalizing source for the study of material culture and wealth, including cash, though their use is not without potential pitfalls. Some problems include the percent of decedents actually probated, the possibility of wealth and gender bias in the probate process, the existence of incomplete inventories (whether due to oversight or fraud), and the fact that those probated are typically older than the average age of the population and consequently have had more time to acquire wealth.¹ Due to

¹ Terry L. Anderson, "Economic Growth in Colonial New England: 'Statistical Renaissance," The Journal of Economic History 39, no. 1 (1979): 243-257; William I. Davisson, "Essex County Wealth Trends: Wealth and Economic Growth in Seventeenth-Century Massachusetts," Essex Institute Historical Collections 103, (1967): 291-342; Alice Hanson Jones, "Estimating the Wealth of the Living From a Probate Sample," Journal of Interdisciplinary History 13, no. 2 (1982): 273-300; Alice Hanson Jones. Wealth of a Nation to Be: The American Colonies on the Eve of the Revolution (New York: Columbia University Press, 1980); Alice Hanson Jones, "Wealth Estimates for the New England Colonies about 1770," The Journal of Economic History 32, no. 1 (1972): 98-127; Alice Hanson Jones, "Wealth and the Growth of the Thirteen Colonies: Some Implications," The Journal of Economic History 44, no. 2 (1984): 239-254; Peter H. Lindert, "An Algorithm for Probate Sampling," Journal of Interdisciplinary History 11, no. 4 (1981): 649-688; Gloria L. Main, "The Standard of Living in Colonial Massachusetts," The Journal of Economic History 43, no. 1 (1983): 101-108; Gloria L. Main, "Inequality in Early America: The Evidence from Probate Records of Massachusetts and Maryland," Journal of Interdisciplinary History 7, no. 4 (1977): 559-581; Gloria L. Main, "Probate Records as a Source for Early American History," The William and Mary Quarterly 3rd ser., 32, no. 1, (1975): 89-99; Gloria L. Main, "Personal Wealth in Colonial America: Explorations in the Use of Probate Records from Maryland and Massachusetts, 1650-1720," The Journal of Economic History 34, no. 1 (1974): 289-294; Gloria L. Main, "The Standard of Living in Southern New England, 1640-1773," The William and Mary Quarterly 3rd ser., 45, no. 1 (1988): 124-134: Gloria L. Main and Jackson T. Main, "The Red Oueen in New England?," The William and Mary Quarterly 3rd ser., 56, no. 1 (1999): 121-150; Gloria L. Main and Jackson T. Main, "Economic Growth and the Standard of Living in Southern New England, 1640-1774," The Journal of Economic History 48, no. 1 (1988): 27-46; Carole Shammas, "The Determinants of Personal Wealth in Seventeenth-Century England and America," The Journal of Economic History 37, no. 3 (1977): 675-689; Carole Shammas,

these, and other, shortcomings, any study involving the use of probate inventories must establish certain caveats regarding the handling of the data. All probate studies, then, are subject to criticism based on their methodologies, and assumptions.² Through a judicious application of educated guesswork, though, certain conclusions can be drawn that indicate the change of variables over time. Such an analysis can occasionally supply results that suggest the actual conditions in the colony at the time. In order to generate values comparable over time, it has been necessary to deflate all values to constant pounds sterling. This deflation has been done despite the fact that it is not clear if all inventories were measured in the local unit of account. For example, merchant goods were often described as being rated based on the bill of lading, and the price of silver in many inventories was the same as the at the English mint. For the purposes of deflating to constant pounds sterling, the deflators supplied by John J. McCusker in Money and *Exchange in Europe and* America have been used.³ Finally, this work does not rely on sampling, instead it utilizes as near a complete dataset as could be compiled at the time, meaning that questions about the representativeness (though not the questions regarding the completeness) are moot.

As to the question of incomplete inventories, a common concern has been that the inventory takers could occasionally hide assets in order to secure at least a portion of the

³ John J. McCukser, *Money and Exchange in Europe and America: 1600-1775, A Handbook* (Chapel Hill: University of North Carolina Press for the Institute of Early American History and Culture, 1978), 138-139.

[&]quot;Constructing a Wealth Distribution from Probate Records," *Journal of Interdisciplinary History* 9, no. 2 (1978): 297-307.

² Jackson T. Main, Richard B. Sheridan, and Roger W. Weiss, "Comments on Papers by Jones, Shepard and Walton, and McCusker," *The Journal of Economic History* 32, no. 1 (1972): 158-164; Maris A. Vinovskis, "Review: Estimating the Wealth of Americans on the Eve of the Revolution," *Journal of Economic History* 41, no. 2 (1981): 415-420; Holly V. Izard, "Random or Systematic?: An Evaluation of the Probate Process," *Winterthur Portfolio* 32, no. 2/3 (1997): 147-167.

estate against creditors.⁴ While it is possible that debts payable were under-reported in inventories, there is another possibility, one also directly affecting the subject of this study: cash. It is possible that the reason why debts payable listed were smaller than expected (or absent altogether) is that the family used what cash was available in the household to settle as many debts as possible before the probate process had begun. Perhaps the decedent, from their deathbed, actually arranged to put their accounts into good order before their death in order to ensure a smoother transfer of the estate.⁵

The observation that debts payable are absent or appear under-reported in many inventories rests on the prejudice that the colony was short of adequate currency. If we approach the inventories with the assumption that currency was more plentiful than typically believed, the "problem" of debts payable actually becomes an answer to the question of why cash appears less frequently in estates. Additionally, unlike in other colonies, up until the Andros administration, the Massachusetts Bay colony did not have a "death tax."⁶ The lack of taxes imposed upon estates means that there was no incentive to exclude assets from the inventories (for the purposes of evading governmental interference in the estate) prior to the year 1686. Beginning in that year, the total value of estates probated in Boston (where all administrations over fifty pounds had to be settled) does diminish greatly, especially in the reporting of debts receivable and cash.⁷

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⁷ Ibid.

⁴ Main and Main, "The Red Queen in New England?," 130-131, 149-150.

⁵ David Thomas Konig, *Law and Society in Puritan Massachusetts: Essex County, 1629-1692* (Chapel Hill: University of North Carolina Press, 1979), 82-83.

⁶ Thomas E. Atkinson, "The Development of the Massachusetts Probate System," *Michigan Law Review* 42, no. 3 (1943): 440.

As to how representative the inventories available are of the population of decedents, answers vary. One historian, well acquainted with probate methodologies, has estimated the seventeenth-century surviving New England inventories to cover between a low of one quarter (Boston) to a high of nearly ninety percent (Medfield , CT) of adult male property owning decedents.⁸ It seems fairly safe to assume a better than three-quarters coverage of adult male property owners for the counties of Essex and Suffolk during the period under consideration. Another historian suggests that the traditional assumption that probate records disproportionately represent the wealthy may be incorrect. In fact, the opposite may be true; inventories in Massachusetts may underemphasize wealthy estates.⁹

Women, however, are undoubtedly under represented in the probate record for the counties under examination. The rate of representation for both the counties is surprisingly close, suggesting that for the period covered, the probate coverage for the counties as a whole was remarkably similar. For the period of 1630-1681, the Essex County probate records used in this study contain sixty-five clearly identifiable women out of a total sample size of 754—representing 8.6%. Meanwhile, for the slightly longer period covered in Suffolk County (1630-1689) women represented 104 out of 1261 inventories, roughly 8.2%. While the lack of women's inventories is troubling, especially

⁸ Main, "Probate Records as a Source," 97-98; Main and Main, "Red Queen in New England?," 126-127; Main and Main, "Economic Growth and the Standard of Living in Southern New England, 1640-1774," 32.

⁹ David Grayson Allen, *In English Ways: The Movement of Societies and the Transferal of English Local Law and Custom to the Massachusetts Bay in the Seventeenth Century* (Chapel Hill: University of North Carolina Press for the Institute of Early American History and Culture, 1981), 135; cf. Kenneth Lockbridge, "A Communication," *The William and Mary Quarterly* 3rd ser., 25, no. 3 (1968): 516-517; Daniel Scott Smith, "Underregistration and Bias in Probate Records: An Analysis of Data from Eighteenth-Century Hingham, Massachusetts," *The William and Mary Quarterly* 3rd ser., 32, no.1 (1975): 100-110. The Mains assert that the probate process was much more common in the seventeenth century than the eighteenth, one possible reason that the bulk of evidence suggesting wealth bias comes from the eighteenth century, "Red Queen in New England?," 126-127.

in that it is possible that women had to be slightly more cash dependent, it has to be expected under the system of coverture.¹⁰

Due to a lack of genealogical information for all the decedents, this study cannot make accurate predictions for money in the hands of the living. An inability to weigh the averages of decedents by age, and thus to overcome age bias and create statistics more representative of the population as a whole, means that the results from this work are confined largely to the deceased. While it would be preferable to make cash-holding estimates for the Bay colony as a whole, several valuable conclusions may still be drawn just by looking at the dead. First, Craig Muldrew has provided statistics on cash holding and ratios of debt to cash for contemporary England based solely on probate records, with no apparent attempt to adjust these numbers to represent the population as a whole.¹¹ Thus, while only estimating the money stock of the deceased, this paper will still be able to make some comparisons with the money stock of England. Should the Massachusetts statistics compare favorably with those of contemporary England, they would indicate that the colonists' money supply was no worse off than that of the home isle. In turn, colonial cash holdings similar to those in England would mean that the colony did not suffer, at least as far as money was concerned, from its location on the periphery.

¹⁰ This author speculates that women were more cash dependent based on the nature of credit at the time. As Craig Muldrew has expressed, the nature of credit was, in many ways tied up in other societal notions of manhood. Further, if a relict had to depend on the sale of portions of her late-husbands estate for support, such sales may often have exceeded the amount of credit required from any one individual. If, however, the women's estates in this sample are those with no heirs, then they already represent the women most likely to possess cash, as any widow living with male relatives would have likely seen a reduced need for cash as a result of her living situation. Craig Muldrew, "'Hard Food for Midas': Cash and Its Social Value in Early Modern England," *Past and Present* no. 170 (2001): 78-120.

¹¹ Craig Muldrew, *The Economy of Obligation: The Culture of Credit and Social Relations in Early Modern England* (New York: St. Martin's Press, Inc., 1998), 100, 117-118.

Though largely limited to drawing conclusions about the cash holdings of the dead, the data used in this study should illustrate the pattern and magnitude of liquid wealth in the colony. William I. Davisson, in his study of Essex County probates documented an increase in cash holdings post-1652, which he attributed to the Massachusetts mint.¹² With a larger sample than that in Davisson's study, the impact of the mint should become clearer. Those estates that include the composition of money should suggest the role of the mint in contributing to the colony's cash supply. Additionally, the effects of the various legislative attempts to increase the money supply may prove testable in much the same way that Davisson tested the role of the mint.

Ultimately, one of the most important goals of this study is to determine what, if any, variable comes closest to determining the amount of cash in an estate. Should a variable that predicts cash holding be determined it may provide a way to estimate the actual money supply of the colony based on other, more sophisticated probate analyses. If any relationship is discovered, it will necessarily be an approximate relationship. Cash would appear to be the item most likely to be excluded from an inventory for a number of reasons. *In vivo* distribution of portions of the expected inheritance is one possible source of under-counting the money of the deceased. There is no sure way to determine the presence of such gifting, and therefore, any estimations as to the total specie stock will likely be low. The possibility of a correlation between debts payable as a percentage of total estate and cash could provide a more satisfactory result—if such a relationship exists. As mentioned earlier, it is likely that at least some settling of debt occurred by

¹² Davisson, 296-297.

those who realized that death was imminent.¹³ With that in mind, inventories containing no cash, but with a low debt-to-wealth ratio likely contained specie *in vivo*.

Finally, cash, which was desired for its portability, among other things, may just have been overlooked. A few coin hoards discovered in New England, when compared to the cash contained in inventories, may suggest how common money was. Should these hoards prove to be within the average range of inventoried cash, they will serve to reinforce the averageness of the data in this study. Despite concerns over barren money, some money necessarily had to be kept at hand, and in a time before banks, it likely was not uncommon for individuals to "deposit" money in the earth. Of course, some of these hoards, due to the circumstances of their owners' death, remained hidden. Those hoards discovered represent additional cash, once in the hands of decedents not found in the probate inventories.

Some inventory takers appeared to have taken a rather blasé approach to the money that was in the household. Several inventories reported purses with clothing, the combined value of which suggests the presence of money. The most startling example appears in the Suffolk Country records where, in 1665, John Newgate's inventory lists his wearing apparel and purse at £515!¹⁴ At the time, the typical valuation of men's "wearing clothes" was in the six to eight pound range. Silver plate and money were also often lumped together in the same entry as well. The lumping together of plate and

¹³ For contemporary England, Muldrew states that, "some people, anticipating imminent death, attempted to reckon up and collect most of their debts as a way of putting their estates in order." Muldrew, *Economy of Obligation*, 103-104. There should be little reason to suspect that not only did those on their deathbed attempt to collect what debts they could, but also sought to settle as many of their debts payable as possible. Given the nature of Puritan economic interaction, in fact, it seems more likely that the dieing focused more on paying their own debts than on aggressively dunning their neighbors. For a thorough overview of the economic culture of early New England, see: Stephen Innes, *Creating the Commonwealth: The Economic Culture of Puritan New England* (New York: W. W. Norton and Company, 1995), 160-191.

¹⁴ Suffolk County Probate Records (hereafter, SCPR), 4:245.

money values seems to confirm the importance of possessing silver plate as a sign of creditworthiness. Furthermore, the uniqueness of a piece of plate could serve as an identifier in case of loss or theft, and of course, plate could always be taken to the mint and reduced to coin.¹⁵

The dataset used in this study consists of 2009 cases after removing those deemed inappropriate due to lack of details. Of those, Essex County contributes 753 (37%), with the remaining 1256 coming from Suffolk County. Counting all references to money, whether listed separately, or combined with plate, apparel et al., yields the results seen in Table 3.1.

Table 3.1 Number and Percentage of Inventories Containing Cash (By Decade).

Decade	Essex #	Cash #	Essex %	Suffolk #	Cash #	Suffolk %	Total #	Cash #	Total %
To 1649	53	10	18.87	49	16	32.65	102	26	25.49
1650	116	23	19.83	202	56	27.72	318	79	24.84
1660	187	39	20.86	310	130	41.94	497	169	34.00
1670	352	91	25.85	302	132	43.71	654	223	34.10
1680	45	16	35.56	393	182	46.31	438	198	45.21
Totals:	753	179	23.77	1256	516	41.08	2009	695	34.59

With the exception of the 1650's in Suffolk County, the overall trend in cash holdings is upwards during the seventeenth century. Essex County, despite the port of Salem, never approached the percent of cash holding displayed in Suffolk, which housed the colonial government as well as the port of Boston. Though the overall percentages of cash holding appear small, they compare favorably with the available evidence from contemporary England. Of the 266 seventeenth-century inventories examined for Devon, England, 127 contained at least some mention of cash, representing roughly 47%, which is only 2% higher than that observed for Suffolk County in the last decade of the

¹⁵ Muldrew, "'Hard Food,'" 109; Hermann Frederick Clarke, "The Craft of Silversmith in Early New England," *The New England Quarterly* 12, no. 1(1939): 69.

sample.¹⁶ When compared to Ipswich (England), Liverpool, and Frampton Cotterell and district, the colony fares even better. Eric Kerridge determined that only about a third of the inventories for these areas drawn from 1550-1660 mentioned money.¹⁷ Despite being located on the fringe of the burgeoning English empire, the coastal counties of Massachusetts do not appear to be at a significant enough disadvantage in cash holding as to justify as much attention as has been paid to the "specie scarce" hypothesis. In fact, by some accounts, the colonists were more likely to possess cash at death than were decedents in England.

When the actual amount of cash in inventories is examined, the disparity between the two counties becomes readily apparent. Table 3.2 presents the average cash for the sample as a whole. The table shows that over the period studied, the average cash held by a decedent in Suffolk county was greater than that of an Essex decedent by anywhere from a high of 1146% in the first decade of settlement to a low of 242% by the 1680's (see Table 3.2).

Decade	Number of Inventories	Essex Average	Number of Inventories	Suffolk Average	Percent Difference	Combined Average
To 1649	53	£0.13.8 1/2	49	£7.17.1	1146%	£4.2.7 1/4
1650	116	£0.7.3 1/4	202	£2.17.11	796%	£1.19.5
1660	187	£1.2.5 1/2	310	£12.11.7	1119%	£8.5.4
1670	352	£1.6.4	302	£9.19.8	758%	£5.6.4
1680	45	£4.6.5	394	£10.9.2	242%	£9.16.6
Total	753	£1.5.1 3/4	1256	£9.11.0	760%	£6.8.10

¹⁶ Muldrew, "Hard Food For Midas," 91.

¹⁷ Eric Kerridge, *Trade and Banking in Early Modern England* (Manchester: Manchester University Press, 1988), 94-95, quoted in Muldrew, "'Hard Food For Midas," 91.

The dramatic decrease in the disparity between the two counties indicates that over the course of the development of the colony money was becoming more evenly distributed. Suffolk County, with the colonial government and its prominent merchants of Boston, however, still possessed more than twice as much money per capita per decedent.¹⁸ It seems undisputable that for the period under study, Boston was most likely to enjoy a moneyed economy.

The differences between the counties suggest the extreme variations possible between the two regions and indicate that it was possible for one area to suffer from a cash shortage while another did not. Despite the slow start, by the closing decades of the seventeenth century, Essex County began to close the gap. By that point, the inhabitants of Essex could boast that they had finally accomplished something that the residents of Suffolk had enjoyed for nearly the entire period: pass their English counterparts in cash held by the deceased. The average value of money inventoried is available for two regions in contemporary England, Devon and Darlington. For Devon, the average cash across all probated inventories for the seventeenth century was about £4. For Darlington, the average early seventeenth-century inventory contained a more modest £3 4s.¹⁹

Furthermore, using estimates of the money supply and population of England from 1688, the per capita cash of England and Wales is ± 1.1885 d.²⁰ If the average

¹⁸ Peter Earle reports that the average London merchant's probate inventory for the period 1665-1720 contained £254 in cash. Unfortunately, a great number of the Suffolk County probate records failed to list the residency of the deceased making town-by-town breakdowns impossible until further genealogical information is obtained. Peter Earle, *The Making of the English Middle Class: Business, Society and Family Life in London, 1660-1730* (London: Methuen London, 1989), 121, quoted in Muldrew, ""Hard Food For Midas," 111.

¹⁹ Muldrew, "'Hard Food For Midas," 92; Muldrew, *Economy of Obligation*, 100.

household in England consisted of four individuals, then the estimated cash holdings of a household would have been £5 8s. 4d.—still below the average for the last three decades for the combined counties.²¹ Once again, though helpful, the accuracy of comparing the living population in England to the deceased population is subject to criticism based on the caveats offered earlier, the actual amount of money held by the recently deceased is likely to be greater than the rest of the population because of the inherent wealth bias of probate inventories. For the bulk of the seventeenth century, the average New Englander enjoyed the possibility of possessing more cash at the time of his death than his countryman back home. It seems clear from these results that the colony did not suffer any more from a lack of specie than the mother country did. Once again, the evidence actually conveys the opposite: that the colonists had access to more cash than they would have in England.

Cash in the colony was initially highly concentrated. As the century continued, the percentage of total cash held by the top ten percent of cash holders began to decline, but even by the last decade of this study, they still held 86% of the cash inventoried. For the entire period of the study, the 35% of cash holders controlled 44% of the total inventoried wealth.²² Table 3.3 shows the cash contained in the top ten percent of inventories, though the results only represent cash holdings enumerated separately. No effort was made to determine the amount of money contained in estates that grouped

²⁰ Population and money stock estimates drawn from Peter H. Lindert, "English Population, Wages, and Prices: 1541-1913," *Journal of Interdisciplinary History* 15, no. 4, Population and Economy: From the Traditional to the modern World, (1985): table 3. Lindhert's money stock estimate included $\pounds 2$ million in banknotes and deposits, which were subtracted from his total.

²¹ Average household estimate taken from Muldrew, *Economy of Obligation*, 100.

²² This study defines total estate size as the inventoried estate, plus credits, minus debts.

money with plate or apparel thus making the results more conservative. A highly concentrated cash distribution is to be expected in an economy that puts a premium on coins as a result of specie scarcity. What the table illustrates, though, is that, overall, the distribution of money was slowly evening out as the colony developed.

Decade	Total Cash in Pence	Cash Held by Top 10% in Pence	Percentage Held by Top 10%
To 1649	101110	94916	94%
1650	150511	136309	91%
1660	986274	927076	94%
1670	834757	741617	89%
1680	1032989	890986	86%
All			
Decades	3105639	2824009	91%

Table 3.3 Percentage of Cash Held by Top-Ten Percent.

The presence of an exceptionally large amount of money in one or two inventories had the effect of dramatically altering the arithmetic average of the sample. To combat this statistical distortion, Alice Hanson Jones in her seminal work *Wealth of a Nation to Be* elected to eliminate the estates on the extremes. Another suggestion to manage the effects of extreme examples has been to use the median of the sample.²³ The median represents the middle of a sample (or, the average of the two middle numbers in the case of an even sample size) when the sample has been arranged in descending order. Due to the large number of estates without any cash, the median cash holding for a decedent in any decade as a whole is zero. When only those inventories that contain enumerated listings of money are examined, the median can provide useful to determine

²³ Jackson T. Main in Main, Sheridan and Walton, "Comments," 158.

what the average size money supply was for those households that contained money. The results appear in Table 3.4.

Decade	Essex	Essex	Suffolk	Suffolk	Combined	Combined
	Average	Median	Average	Median	Average	Median
To 1649	£3.12.8 1/4	£3.8.4	£27.9.11	£3.6.4 1/2	£17.11.1	£3.6.4 1/2
1650	£2.12.8	£1.6.9 1/2	£11.4.11 3/4	£4.12.5 ½	£9.4.5 1/4	£4.2.9 1/2
1660	£6.7.4 1/4	£3.8.11 1/2	£35.2.7	£4.0.4 1/4	28.10.9	£3.18.10 1/2
1670	£5.15.11	£2.6.6 1/2	£26.13.6 1/4	£8.0.0	£18.0.5	£4.15.7 1/4
1680	£13.17.9	£2.3.5	£25.4.3	£5.7.5 3/4	£24.6.4	£4.16.1 3/4
All Decades	£6.3.9	£2.12.10 3/4	£26.9.6	£5.9.9	£21.7.1	£4.7.11

 Table 3.4 Average and Median Cash Holdings of Estates with Cash Listed.

The data continues to demonstrate that Suffolk County decedents possessed more money than their Essex counterparts. Though Suffolk's averages are still significantly larger, the medians show less divergence in all comparisons. The highest and lowest combined county medians only differ by £1 9s. 9 ¼ d. It appears that for those households that contained cash, the typical amount was better than £2 for Essex and nearly £5 ½ for Suffolk. The medians presented above are at least twice as large as three of the four Massachusetts coin hoards known to the author. The smallest of the hoards was a meager five shillings, while the largest, the Castine deposit, contained four to five hundred coins (including fifty to sixty produced at the Massachusetts mint) and is speculated to represent one share of the profits of a pirate venture.²⁴ The caches do

²⁴ Thomas La Marre, "Hoards and Witch Pieces," *Coinage* 20, no. 4 (1984): 70; Walter H. Breen, "Survey of American Coin Hoards," *The Numismatist: For Collectors of Coins, Medals, Tokens and Paper Money* 65, no. 1 (1952): 12; Q. David Bowers, *American Coin Treasures and Hoards* (Wolfeboro, NH: Bowers and Merena Galleries, 1986), 32; Sydney P. Noe, *The Castine Deposit: An American Hoard* (New York: The American Numismatic Society, 1942), 6.

approximate the cash average of the total population of Essex. The closeness of the averages to the known coin hoards suggests that the hoards were not buried because they represented an unusual amount of money, but rather that it may have been quite common for colonists to deposit any amount of money in the ground for safekeeping.

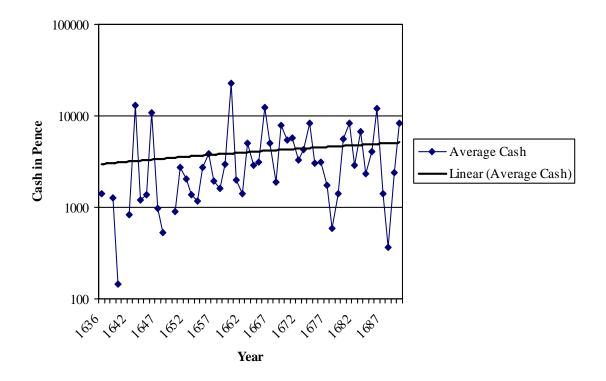


Figure 3.1 Average Cash Holdings by Year (Entire Sample).

Figure 3.1 shows the average cash holdings for the entire sample by year. Thus charted, the data presents two important findings. First, the observations of William I. Davisson notwithstanding, the mint seems to have had little impact on the money stock of the colony.²⁵ While the overall trend is up (as evidenced by the dark "linear" trend line), there is no significant acceleration in the rate of specie accumulation as represented in inventories. Some of the few inventories that listed the composition of the estate's

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²⁵ Davisson, 296-298.

money showed that the bulk of cash continued to be in the form of Spanish reals.²⁶ Meanwhile, many of the inventories contained the bulk of their money as "the money of New England."²⁷ New English money appears more frequently, and in greater amounts, in those inventories that record the composition of the decedents' money. It appears that John Hull was quite busy, and that the colonists were eager to exchange their Spanish coins for lighter-weight Bay shillings. All of this activity at the mint may have been due to a lack of small change, or it may have been out of religious or nationalistic motivations.²⁸ Whatever the reason for the greater number of local coins in inventories, it is clear that the mint did not serve to aggrandize the colony's money supply, as there is no significant, sustained upturn in the average holding following 1652.

The only event in the colony's history, other than the depression of 1641, which clearly affected on the average cash reserve was King Philip's War. Occurring in 1676, King Philip's War took a heavy toll on the New England colonies, especially in terms of lives lost. While farms could be rebuilt, those who lost their lives in the struggle lost the chance to build on their wealth. The effects of the war are particularly apparent in the probate records as a sudden increase in the number of young men's estates probated—particularly in Essex County, which was nearer the frontier.²⁹ The high mortality of

²⁹ Michael J. Pulisi, "An Insupportable Burden': Paying for King Philip's War on the Massachusetts Frontier," *Historical Journal of Massachusetts* 16, no. 2 (1988): 187-203; George Francis

²⁶ SCPR, 3:146, 5:96, 7:74, 7:177, 5:344, 9:38.

²⁷ SCPR, 4:188, 4:225, 5:142, 5:178, 7:83, 7:321, 7:367, 5:211, 9:33, 9:207.

²⁸ This author tends to believe that the best explanation for the operation of the mint was to supply the colony with coins of a more readily usable denomination. Other motivating factors, however, cannot be ruled out. Remembering John Endicott cutting out the red cross of George from the English flag early in the colony's existence suggests that their may have been some colonists who would have willingly paid to have a coinage that did not bear any hint of Catholicism. The colony's apparent attempt to establish an economy independent from the English economy presents some evidence that the Bay shilling represented yet another attempt at identifying the colony's economy as apart from the mother county's.

young men who had yet to establish themselves or their fortunes temporarily removes at least a part of the age bias of the probate records, and explains the sudden drop in the average cash holding in 1676. The initial expense of fighting the war was followed by years of rebuilding followed at great cost to individuals, communities, and even the colony as a whole.³⁰ This rebuilding serves to explain the three-year lag before average cash resumes its upward movement. King Philip's War shows precisely how uncertain the colonial experience, including the money supply, could be.

There remains one comparison left to be made to the economy of England—debt ratios. The ratio of debts to cash in an estate demonstrates the extent to which the economy operated on credit instead of cash. The higher the ratio, the more credit served to facilitate market transactions. An economy saturated with credit transactions is assumed to be one that suffers from a lack of liquidity. There has been no attempt made to determine the completeness of the debts in this sample, therefore the ratios presented in Table 3.5 may be too low. It is unlikely, though, that the ratios stray too far, as the amount of cash reported also suffers from numerous errors. One of the purposes of the probate process was to determine the standing of the estate so that an efficient division could occur. It is possible that the combination of undercounting debts payable and the

Dow, ed., *The Probate Records of Essex County Massachusetts* (Salem, MA: Essex Institute, 1916; reprint, Salem, MA: Higginson Book Company, 2005), Vol. 3, 62-130.

³⁰ The treasurer collected nearly £31,000 (in "cash") in taxes from the towns for the years 1675-1679. William Holmes, "Governmental Accounting in Colonial Massachusetts," *The Accounting Review* 54, no. 1 (1979): 56. If the word cash in the ledger actually refers to cash (and not to pay as cash), which seems a safe assumption given that all of the rates accessed during those years would be rebated if paid in silver, then the sheer scope of this number is amazing. Further, the rates demonstrate one of the ways that cash was directed form the rest of the colony to Boston. Pulisi reports that in September 1678, the "United Colonies claimed total expenditures resulting from the war of over eighty thousand pounds, with Massachusetts alone reporting an outlay of over forty-six thousand ponds." Pulisi, 196.

undercounting of cash serve to partially offset each other. The estates used in creating the contemporary English ratios likely also suffered from some underreporting.

Decade	Avg Cash	Avg Payable	Avg Receivable	AP:Cash	AR:Cash	AR:AP	Total Debt:Cash
To 1649	9399.30	18942.64	65847.18	2.02	7.01	3.48	9.02
1650	4813.48	70972.76	146231.12	14.74	30.38	2.06	45.12
1660	20529.26	85735.37	122379.62	4.18	5.96	1.43	10.14
1670	11720.91	53354.85	74649.47	4.55	6.37	1.40	10.92
1680	23852.57	49005.51	71464.32	2.05	3.00	1.46	5.05
All	14063.10	55602.23	96114.34	3.95	6.83	1.73	10.79

Table 3.5 Debt Ratios for the Combined Counties.³¹

For a sample of decedents from Darlington and Hampshire from the seventeenth century, the ratio of debt to cash was 14:1 in the first case, and 28:1 in the second. Even for a sample of seventeenth-century London merchants, the ratio was 15:1.³² According to the data in Table 3.5, for the fifty-four years sampled, the average total debt to cash ratio is 11:1, lower than any of the samples from contemporary England. The extremely low value of the 1680's may result from the underreporting of accounts receivable under the Dominion of New England, though the fact that debt receivable for that decade is so close to the previous decade suggests otherwise. The extremely high ratio of the 1650's likely results from the early efforts to integrate the local economy into the trans-Atlantic economy. The fact that accounts payable grew seven-fold while accounts receivable merely quadrupled evidences credit's utility in supplying capital for economic development. Regardless of the reasons behind the extreme ratios presented in those two decades, the overall economic picture that emerges from these results is that of an

³¹ Values represented in pence. The values for all decades weighed each decade equally despite the variance in the number of cases. The all decades' values were so calculated because they represented larger ratios, and hence more conservative estimates. The last decade of the study had the fewest cases, and its remarkably low values would have unduly shifted the totals.

³² Muldrew, *Economy of Obligation*, 100. Muldrew does not specify if his ratios reflect debt payable and debt receivable, or just debt payable. For the purpose of maintaining conservative estimates, it is assumed that his ratios represent combined debt.

economy that resorted to credit less frequently than the English economy. While the lower cost of foodstuffs and the prevalence of land likely contributed to the disparity of credit to cash ratios across the ocean by requiring fewer market transactions to meet ones' dietary needs, the high cost of manufactured goods likely served to offset much of this effect.

No clear predictor for cash holding presents itself in the tests conducted in this study. Cash-holding estates held fifteen percent more of the colony's accounts receivable than their moneyless fellows. It is not clear whether the possession liquid assets predicated or resulted from creditor status. Perhaps the best predictor of cash status was overall wealth. Of the top-ten percent of wealth holders, 47% had an enumerated entry indicating cash. The number of top-ten inventories possessing cash, however, represents only 14% of the total number of cases of enumerated cash. Several more of the estates had non-enumerated listing, presenting the possibility that over half of the top-ten estates held some amount of cash.³³ It is abundantly clear that for the inventories in this sample, cash and wealth were largely inseparable. The connection between liquid and total assets implies that for many, despite the overall money stock of the colony, there was the immediate impression of specie scarcity.

All of the results in this study compare favorably with the monetary conditions of contemporary England. It is difficult to determine the optimal money stock of an economy. The debate continues to this day, manifested in the question of whether the Federal Reserve should depend on the interest or inflation rate when determining its monetary policy. Whether or not the colony of Massachusetts had a sufficient supply of specie is nearly impossible to resolve, for it involves, not only the question of how much

³³ Of the top 210 wealthiest estates, 99 contained itemized cash.

cash the colony possessed, but also what constitutes "sufficient." Regardless of what level of money would have been optimal for the Bay colony, the inhabitants were nominally better off in the New World than if they had remained in the Old.

The data presented above suggests that historians have been mistaken in their continued repetition of the specie scarcity thesis. While the seventeenth-century economy of Massachusetts may have contained more coin than the non-London economy of England, this work makes no claim that the situation stayed as rosy. It is possible that the political maneuvers of the eighteenth century (on both sides of the Atlantic) served slowly to starve the colonies of its specie stock. What these policies were, and how they may have contributed to the colonial-imperial relationship is beyond the scope of this work. Something occurred in the period between the terminal date of this study and the eve of the American Revolution that drove specie from the shores of the colonies. Alexander Hamilton estimated that on the eve of the revolution there was \$30 million dollars (£6.75 million) in paper and specie in circulation in the colonies. Of that amount, three-quarters was in the form of paper money. This means that just prior to the revolution there was 13s. 6d. in hard money per person—or less than even the most cash-strapped decade for Essex County.³⁴

³⁴ John J. McCusker, *Money and Exchange in Europe and America: 1600-1775, a Handbook* (Chapel Hill: University of North Carolina Press for the Institute of Early American History and Culture, 1978), 7, n. 9.

CHAPTER V:

EPILOGUE: 1690 AND BEYOND

It was in the fall of 1690 when the Massachusetts Bay colony, not long out from under the control of the dreaded Sir Edmund Andros, became actively engaged in King William's War. English involvement in the war had begun the year before, when William joined the League of Augsburg against France. Now, perhaps seeking to curry favor with their new King the assembly authorized a military expedition against the French at Quebec. The Massachusetts troops, led by Sir William Phips who had recently led an assault on Port Royal in which the value of the captured goods amounted to more than the cost of outfitting the expedition, had visions of an easy victory over the small French city.¹ The colonial officials, too, must have believed in a sure military victory. For in November 1690—in order to secure loans from Boston's elite—The General Court promised to use a portion of the plunder to retire its obligations.²

The lateness of the season forced the militia from Connecticut and New York, who were supposed to keep the garrison at Montreal occupied, to turn home. Consequently the French were able to reinforce Quebec. Phips' men were defeated, and

¹ Thomas Hutchison, *The History of the Colony and Province of Massachusetts Bay*, Lawrence Shaw Mayo, ed., (Cambridge: Harvard University Press, 1936; reprint, New York: Kraus Reprint Co., 1970), Vol. 1, 337.

² Andrew McFarland Davis, "Currency and Banking in the Province of the Massachusetts-Bay: Part I. Currency," *Publications of the American Economic Association* 3rd series, 1, no. 4 (1900): 8-9.

sent back to Boston. Arriving in Massachusetts on November 19, without the expected spoils, the soldiers soon realized that their suffering was not yet over. The treasurer could not pay them. Soon, the troops were on the verge of mutiny.³ Under these circumstances, the General Court undertook its most ambitious monetary scheme to date—the emission of the first public bills of credit in the colonies.⁴

On December 10, 1690, the General Court ordered the creation of no more than seven thousand pounds of notes in denominations no less than five shillings, nor more than five pounds. These bills were legal tender for public payments, and, in theory a colonist could exchange them at the treasury for "the full sum thereof in money, or in other public stock."⁵ On the surface, these bills seemed simply to be promissory notes, which could be redeemed at some future date at the treasury. In other words, the bills appeared to be fully convertible to specie. However, the inclusion of the phrase, "or in other public stock," belies this appearance. The same session of the Court that authorized the issuance of paper money enacted a rather innocuous looking piece of legislation, which ordered that country pay would serve to satisfy the colony's debts at a rate one-third less than the price set by the Court. This second act coerced the soldiers to accept the notes or risk losing a third of their wages if they accepted in kind.⁶ If the Court was willing to penalize those soldiers who wanted their pay in corn (theoretically abundant in

³ Hutchison, 338-340.

⁴ In 1685, the French Army in Canada had received marked playing cards in lieu of wages. These cards, though technically the first publicly issued paper money in the New World, in fact, were intended to be redeemable in specie upon the arrival of the army's pay. Thus, the Canadian experiment represented promissory notes, and not fiat currency—as the Massachusetts issue did, a distinction that will be clarified below. Herbert Heaton, "The Playing Card Currency of French Canada," *The American Economic Review* 18, no. 4 (1928): 652.

⁵ Massachusetts Court Records, Vol. 6, 170-171, quoted in Davis, 11.

⁶ Dror Goldberg, "The Unholy Origins of Modern Currency," Working Paper, found at: http://econweb.tamu.edu/dgoldburg/research/MA.pdf accessed Feb., 16, 2007.

the colony), then what were the chances that a soldier could receive specie (theoretically scarce in the colony)?

The answer was, none at all. The actions of the General Court, in passing the second act, clearly indicate that they desired the bills to satisfy their debts, and not payments from the treasurer; whether in specie or in corn. The Court intended the notes to be paid back to the treasurer as taxes. Originally, the notes plummeted in value, to the detriment of the soldiers who had received them. The veterans of the expedition soon found their notes worth only twelve to fourteen shillings on the pound (as opposed to twenty). However, as tax time neared, and after additional machinations on the part of the Court which ordered the treasurer to accept the notes at five percent over their face value in the payment of taxes, the notes returned to par. The benefactors of these price movements were the wealthy merchants who had been able to purchase the soldiers' notes in specie, or goods at the discounted values, and who received an inflated value when it came time to exchange the notes for taxes. The soldiers, meanwhile, were left to suffer.⁷

The preamble to the act authorizing the creation of paper money seems to lend credence to the specie-scarcity hypothesis. The preamble reads in part, "and (through scarcity of money) the want of an adequate measure of commerce, whereby they [the treasurer] are disadvantaged in making payment as desired."⁸ It seems the General Court was commenting on the money stock of the colony when it addressed the "scarcity of money." If the Court's statement was all that survived concerning the reason for the emission of the notes, then it would seem that the money stock of the colony was

⁷ Hutchison, 341; Goldberg, 32-33.

⁸ Massachusetts Court Records, Vol. 6, 170-171, in Davis, 10-11.

insufficient. The legislature's words, however, are not all that have survived. Nearly a full twenty-two years after the first emission, there came before the Court a bill to make the notes legal tender in all transactions. Samuel Sewall, then sitting in the General Court, spoke out against this bill by recalling the true reason for the 1690 act. Sewall recorded his speech in his diary, "I was at the making of the first bills of credit in the year 1690: They were not made for want of money; but for *want of money in the treasury*."⁹

The bills of credit issued in 1690 were not issued in response to a systemic lack of specie, but rather to a very particular lack of money in the coffers of the colonial government. Rather than risk voter disapproval by adding to the tax burden of the colonies, the deputies and magistrates simply created money out of thin air.¹⁰ By February of 1691, the General Court had removed the self-imposed limit of seven thousand pounds, and by May of that year, the Court authorized a new limit of forty-thousand pounds total for the bills of credit.¹¹ The treasurer was supposed to regularly "retire" the bills paid unto him (by burning them), though he evidently became more lax on this important responsibility over time. Continuously increasing emissions, coupled with too few notes removed from circulation dramatically increased the circulating stock of the colony. The increase of money in the colony caused severe inflation in the rate of exchange on London. The exchange rate for New England money climbed from less than 130% in 1690, to 1050% by 1749, when following a royal shipment of coin to Boston,

⁹ Samuel Sewall, *The Diary of Samuel Sewall: 1674-1729*, M. Halsey Thomas ed., (New York: Farrar, Strauss and Giroux, 1973), 700, emphasis added.

¹⁰ Charles H. J. Douglas, *The Financial History of Massachusetts, from the Organization of the Massachusetts Bay Company to the American Revolution* (New York: Columbia University Press, 1892; reprint, New York: AMS Press, Inc., 1969), 48-49.

coupled with a royal injunctive against any further emissions of paper money in Massachusetts, the Bay colony returned to a specie standard.¹²

Other colonies followed Massachusetts' lead in issuing paper money to varying degrees of success. Through responsible emissions and retirements, some colonies experienced little inflationary effects, and only North Carolina saw exchange rates near those of the New England colonies.¹³ Finally, in 1764, Parliament passed the Currency Act which forbid the colonies from any further currency emissions—which the colonists did their best to circumvent. The results of this act were a decline in the circulating medium of the colonies (now almost entirely paper) and a deepening of the depression that followed the Seven Years' War (1754-1763). As such, the emissions of bills of credit by the colonies, and the subsequent halting of said emissions, conceivably contributed to the American Revolution.¹⁴

Sewall's explanation of the Court's motivation for issuing the first paper money fit well with the findings of this thesis. The money stock of the colony was expanding for much of the seventeenth century. The use of the phrase "scarcity of money" by the General Court in the preamble to the legislation authorizing the emission, like earlier use of the phrase in other acts concerning the political economy of the colony, refers not to a general lack of specie, but to a very specific shortfall. In the case of the 1690 act, the

¹² Leslie V. Brock, *The Currency of the American Colonies, 1700-1764: A Study in Colonial Finance and Imperial Relations* (New York, Arno Press, Dissertations in American Economic History, 1975), 17-64; John J. McCusker, *Money and Exchange in Europe and America, 1600-1775: A Handbook* (Chapel Hill: University of North Carolina Press for the Institute of Early American History and Culture, 1978), 139-141; Davis.

¹³ Brock documents the emissions and retirements of all the colonies.

¹⁴ Joseph Albert Ernst, *Money and Politics in America, 1755-1775: A Study in The Currency Act of 1764 and the Political Economy of Revolution* (Chapel Hill: The University of North Carolina Press for the Institute of Early American History and Culture, 1973).

treasury was experiencing a scarcity of specie, a scarcity that adversely affected its creditors, but Sewall indicates that the scarcity was not widespread.

In a grander scheme, it is hoped that this work will contribute to the broader debate among economic historians, a debate that centers around the effects of the emissions of fiat currency on the money supply and price levels of the colonies. The debate hinges on the results of colonial paper money emissions on the local economies. Did the notes add to the total money supply, allowing increased investment and consumption, and thus contributing to the relatively rapid rate of economic growth experienced by the colonies? Did the increase in the money supply created by the emission of paper money enable farmers in the backcountry to integrate themselves in the expanding international market? Or were the emissions countered by an outflow of specie, as Gresham's Law predicts, and therefore the only effect was to deprive the colonies of hard money?¹⁵ In other words, the participants in this debate fall, roughly into one of two camps: neo-Keynesians and neo-classical (or monetarist). These two

¹⁵ The following is by no means an exhaustive list of the participants or major works in this debate: Farley Grubb, "The Circulating Medium of Exchange in Colonial Pennsylvania, 1729-1775: New Estimates of Monetary Composition, Performance, and Economic Growth," Explorations in Economic History 41, no. 4 (2004): 329-360; Farley Grubb, "State 'Currencies' and the Transition to the U.S. Dollar: Reply—Including a New View from Canada," American Economic Review 95, no. 4 (2005): 1341-1348; Farley Grubb, "Theory, Evidence, and Belief-The Colonial Money Puzzle Revisited: Reply to Michener and Wright," Economic Journal Watch 3, no. 1 (2006): 45-72; Richard A. Lester, "Currency Issues to Overcome Depressions in Delaware, New Jersey, New York, and Maryland, 1715-37," Journal of Political Economy 47, no. 2 (1939): 182-217; Bennett T. McCallum, "Money and Prices in Colonial America: A New Test of Competing Theories," Journal of Political Economy 100, no. 1 (1992): 143-161; Ronald W. Michener, "Backing Theories and the Currency of Eighteenth-Century America: A Comment," Journal of Economic History 48, no. 3 (1988): 682-692; Ronald W. Michener and Robert E. Wright, "Miscounting Money of Colonial America," Economic Journal Watch 3, no.1 (2006): 4-44; Bruce D. Smith, "Money and Inflation in Colonial Massachusetts," Federal Reserve Bank of Minneapolis Quarterly Review 8, no. 1 (1984): 1-14; Bruce D. Smith, "American Colonial Monetary Regimes: The Failure of the Quantity Theory and Some Evidence in Favor of an Alternate View," The Canadian Journal of Economics 18, no. 3 (1985): 531-565; Scott Sumner, "Colonial Currency and the Quantity Theory of Money: A Critique of Smith's Interpretation," The Journal of Economic History 53, no. 1 (1993): 139-145; Elmus Wicker, "Colonial Monetary Standards Contrasted: Evidence from the Seven Years' War," Journal of Economic History 45, no. 4 (1985): 869-884.

schools represent the bulk of the field, and each seeks to prove their monetary policy model through appeals to the historical record.

Further research into the amount of specie in the colonies prior to paper money should help determine what, if any, effects the notes had on economic growth, price levels, and perhaps even the distribution of wealth in the colonies. The evidence provided in this thesis suggests that the monetary supply of seventeenth-century Massachusetts was at least comparable to contemporary England. If Alexander Hamilton's estimation of the quantity and composition of the American colonial money stock on the eve of the Revolution are correct, clearly something appears to have driven specie out of the land.

Through demonstrating a pattern of specie accumulation in seventeenth-century Massachusetts, this thesis lends credence to the monetarist interpretation. Paper money represented a cheap or base money that replaced silver in the colonial monetary supply, thus negating any positive effects that increasing the money stock may have had. Colonial governments resorted to the creation of paper money not because of a chronic shortage of specie, but rather to meet the needs of government spending without resorting to increased taxation. The result of this policy was the creation of an actual shortage of hard money in the eighteenth century. This reckless policy, when combined with Parliament's decision to outlaw further paper money emissions in the colonies in 1764, planted one of the economic seeds of the American Revolution. The colonists had become accustomed to debt financing their governments. The combined effects of a decreasing money supply, and taxation financing (both domestic and imperial) manifested themselves in the second half of the eighteenth century to spark a revolution.¹⁶ Ultimately it was local governmental policy, just as much as Whitehall's, that grew into political revolt.

¹⁶ Ernst; Marc Egnal, *New World Economies: The Growth of the Thirteen Colonies and Early Canada* (New York: Oxford University Press, 1998), 74-75.

APPENDIX A:

SUFFOLK COUNTY PROBATE DATA (IN CONSTANT PENCE STERLING) (Pages 102-128)

Year ¹	Last Name	First Name	Total ²	Land	Cash ³	Payable	Receivable
1638	Shaw	Abraham	28530	0	*	0	0
1639	Smead	"Widow"	24954	8460	111	10880	2483
1639	Fitchene	Peter	1546	0	534	360	0
1639	Branch	Peter	8328	0	0	0	0
1639	Blimfield	Thomas	7200	0	0	0	0
1639	Harlye	Joseph	11554	0	3124	0	840
1639	Skinner	Edward	5237	0	0	5238	1228
1640	Miriam	Joseph	45473	0	144	0	11040
1641	Knocker	Thomas	16438	7427	0	3742	516
1642	Wood	Edward	28262	6000	0	0	12000
1642	Jones	Alice	13576	0	0	0	2064
1642	Blogget	Thomas	23706	0	0	0	0
1642	Bowstred	William	4996	0	762	0	810
1643	Knight	Alhageed	1856	0	0	0	0
1643	Baynley	Thomas	5625	0	0	0	1908
1643	Barrell	George	31926	3012	0	0	4080
1643	Bittlestone	Thomas	65066	0	42000	0	14400
1643	Paine	Thomas	161076	65520	240	17585	31200
1643	Summer	Abigail	1796	0	0	0	0
1643	Fry	William	8675	6240	0	0	0
1643	Holly	Samuel	3758	0	0	0	372
1643	Halstead	Nathan	51278	1680	*	0	6828
1643	Hubbard	Elizabeth	57576	0	9600	17976	7200
1644	How	Edward	173482	39480	1200	0	108360
1644	Phillips	George	132753	76560	0	0	0
1644	Copse	John	20460	12116	0	0	0

¹ Inventories missing dates were assigned the same year as the inventory following them in the records. Errors in arithmetic accepted. Values were deflated to constant pence using John J. McCusker, *Money and Exchange in Europe and America: 1600-1775, A Handbook* (Chapel Hill: The University of North Carolina Press for the Institute of Early American History and Culture, 1978), 138-139.

² Total estate equals gross estate, including debts receivable, minus debts payable.

³ An asterisk indicated the presence of non-enumerated cash in the estate.

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1644	Sharman	Samuell	12654	15960	0	27347	2230
1645	King	Thomas	34236	7200	0	0	15396
1645	Simson	John	61708	53664	0	0	0
1645	Benjamin	John	73868	42612	0	0	5832
1645	Halstead	William	23407	0	2580	0	2244
1645	Graves	John	5874	0	0	0	444
1645	Coytmore	Thomas	301254	107520	144	0	112654
1646	Stower	Amy	39654	21840	0	0	0
1646	Scarborrow	John	9196	0	0	0	0
1646	Lamb	Thomas	26984	2232	0	0	0
1646	Atkinson	Thomas	14221	2880	0	2280	114
1646	Weld	Joseph	486843	91920	30810	0	124504
1646	Starke	Robert	2498	0	0	3284	0
1646	Williams	Thomas	3726	0	0	2516	1860
1646	Edwards	Robert	13623	2400	308	0	312
1646	Stanley	Christopher	83952	58560	0	0	0
1647	Collier	Thomas	23040	9840	0	0	0
1647	Drinker	Philip	26196	8940	*	0	0
1647	Goodrich	William	7689	2400	0	1602	384
1647	Adams	Henry	18156	8640	0	0	0
1647	George	John	78207	0	831	0	14400
1647	Gouldstone	Henry	45131	0	0	0	4800
1647	Weare	William	33420	28800	0	8160	4800
1650	Button	Robert	200552	32143	643	94604	187644
1651	Hudson	Mary	82410	64286	525	0	0
1651	Atwood	Herman	7318	3857	0	0	0
1651	Jarrett	Richard	2905	0	0	0	0
1651	Sautell	Thomas	1946	0	938	932	686
1651	Elliott	Jacob	124293	70929	1071	0	0
1651	Turner	Robert	103385	0	0	21046	40413
1651	Wing	Robert	26652	15000	0	0	0
1651	Thorton	Peter	9825	5357	0	1071	0
1651	Sears	Mary	8236	3214	0	0	0
1651	Sandis	Henry	61990	0	1148	0	0
1651	Browne	James	52904	28071	10071	0	5518
1651	Sheppard	John	16779	0	0	0	0
1651	Bennett	George	20107	11786	0	1311	782
1651	Fisher	Elizabeth	12631	5196	0	5246	498
1651	Payton	Bazeliell	56996	42857	0	17102	0
1652	Loudkin	William	34029	0	696	0	0
1652	Holland	John	712682	85393	0	220286	237302
1652	Butler	William	1947	0	0	0	956
1652	Mellomes	Abraham	4125	2786	0	0	536
1652	Guy	Mr.	13404	0	2143	0	0
1652	Brocke	Henry	39762	21429	*	4613	249
1652	Blanchard	William	50605	0	0	19007	255
1652	Howsen	"Cpt"	91018	0	0	0	9589
1652	Winthrop	Adam	84795	15000	0	30572	12857

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1652	Cotton	John	222471	100714	2786	0	0
1652	Plimpton	Henry	5239	0	0	1085	0
1652	Kinge	Dorothy	25973	1500	0	0	8143
1652	Holman	John	158529	42857	0	0	40071
1652	Tinge	William	594582	206357	134	0	0
1652	Cooper	John	3814	0	0	0	3439
1652	Ivey	James	3890	0	0	969	2775
1652	Adington	Isacke	213957	22286	4516	0	42857
1653	Astod	James	80782	65893	0	0	0
1653	Bass Jr.	Samuel	43269	18643	0	0	403
1653	Low	John	61393	85714	0	45868	0
1653	Oliver	Samuel	90000	0	*	28618	75761
1653	Woodward	Robert	24038	13286	0	1562	0
1653	Thaxter	Thomas	45839	23571	0	36953	246
1653	Maineyard	Elias	16766	0	140	2934	14591
1653	Olliver	Samuel	90048	28334	0	0	47143
1653	Dudley	Thomas	334394	83663	0	0	96651
1653	Grosse	Widow	77284	32143	4750	0	0
1653	Humpherys	William	3704	0	0	6000	0
1653	Roberts	John	158	0	*	1493	0
1653	Eire Jr.	Simon	25800	13929	0	0	2143
1653	Kane	Ezra	3404	0	214	2138	0
1653	Denning	William	14100	12857	0	3209	0
1653	Goodyeare	Samuell	2561	0	0	0	0
1653	Edingsell	Thomas	2537	0	0	0	0
1653	Wight	John	36672	10286	0	0	13347
1653	Scott	Robert	30265	38571	0	63994	51075
1653	Glover	John	717078	289286	0	0	128754
1653	Shaw	Joseph	33204	19714	0	5957	9021
1653	Avry	John	1804	0	0	986	0
1653	Hurst	"Goodman"	10071	0	1639	0	0
1653	Watters	Richard	115971	0	0	11786	40071
1653	Pates	William	49039	4929	0	0	17143
1653	Woodward	Robert	14138	12857	0	11464	0
1654	Allen	Cpt Bazone	246520	85714	0	79081	171705
1654	Metcalfe Jr.	Michael	35248	14946	0	0	3718
1654	Gibbons	Maj Gen Edward	114714	10714	0	0	0
1654	Sharp	Robert	17857	23571	0	8927	0
1654	Matlox	David	11821	2786	0	0	1339
1654	Lane	William	17686	0	4532	0	1500
1654	Wheeler	Thomas	21739	9643	0	0	3214
1654	Willson	Richard	18729	4286	396	3589	1888
1654	Roberts	Thomas	102111	42857	0	0	12857
1654	Morse	Joseph	41079	0	0	0	0
1654	Edwards	Nathaniell	1150	0	62	5532	2216
1654	Turner	Jeffery	35194	20089	0	0	0
1654	Samson	John	7007	0	0	0	6520
1654	Gill	Arthur	22765	0	0	0	22765

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1654	Webb	Rebecca	16113	0	1388	3317	0
1654	Farver	Barnabus	96469	25714	0	31433	47802
1654	Morse	Samuel	26646	8571	0	0	2571
1654	Stevens	George	1634	0	0	0	1286
1654	Kennidge	Matthew	2973	0	546	1002	600
1654	Trescott	Thomas	6247	0	0	0	2778
1654	Damerill	Humphrey	47282	4286	0	0	0
1654	Hawkins	"Capt"	191571	121500	0	5357	0
1654	Sellicks	David	6896	89143	0	120086	28821
1655	Harding	Abraham	69096	32786	0	0	0
1655	Davis	George	122030	32143	0	12077	16418
1655	Bell	Ann	23759	2786	0	1714	1500
1655	Grosse	Edmund	23100	26464	0	8979	0
1655	Souther	Nathan	50105	12857	0	0	0
1655	Jordan	James	10586	0	0	848	7952
1655	Pitts	Elizabeth	534	0	0	2964	0
1655	Spiers	John	7596	0	257	0	3000
1655	Clapp	John	30052	12000	0	1286	6643
1655	Delkl	Cpt George	320514	32143	18222	2357	199217
1655	Glover	Henry	28018	18964	0	0	321
1655	Coddington	John	11368	0	2057	0	2111
1655	Naulton	Samuell	2422	0	0	996	3418
1655	Bosworth	Zacheus	30513	19286	0	0	0
1655	Dudley Jr	Thomas	14091	0	61	0	1500
1655	Foote	Joshua	0	0	0	2790	0
1655	Alley	Phillip	16623	6429	1071	0	0
1655	Gallop	Christobell	7864	0 129	0	0	0
1655	Bate	James	80515	24857	0	9279	50247
1655	Davis	William	1314	0	0	0	1071
1655	Clemans	John	129	0	0	0	0
1655	Butland	Thomas	889	0	0	0	889
1655	Ames	William	9118	7500	0	696	0
	Roberts	John	863	0	0	316	1179
1655	Bennet	Francis	7862	7500	0	2724	2143
1655	Fermase	Alice	6354	964	113	0	1071
1655	Snooke	James	18939	7714	0	0	0
1656	Koker	Samuel	10156	0	1054	2500	0
1656	Gould	Jarvis	14235	8571	0	0	0
1656	Fawkner	Thomas	32882	25714	0	0	0
1656	Paddens	Thomas	1197	0	0	0	0
1656	Kenion	James	11375	6429	0	0	0
1656	Simkins	Nicholas	15434	12857	0	0	0
1656	Whiborne	Thomas	79604	17143	4045	0	35732
1656	Buckmaster	Thomas	24177	9643	0	0	0
1656	Ruggles	John	27819	2143	0	3710	6343
1656	Riplye	William	71143	39000	0	0	00040
1656	Leveret	Anne	61144	25714	12372	0	0
1050	Johnson	Samuel	12004	4286	0	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1656	Hibbins	Anne	185884	0	2218	0	93240
1656	Burrell	John	40475	29679	0	0	0
1656	Keayne	Robert	461487	370714	3064	58714	89220
1656	Gibson	Robert	15621	0	0	0	12429
1656	Hawes	Richard	20767	18643	0	11726	343
1657	Morse	John	82601	0	1328	0	53802
1657	Stevens	William	1278	0	43	1168	1379
1657	Goare	John	174080	103286	0	0	0
1657	Jacobs	Nicholas	62877	28714	0	0	321
1657	Judson	Samuell	124605	52929	4013	0	2786
1657	Hunt	Thomas	21118	0	1500	0	10082
1657	Busby	Nicholas	208625	47143	4843	0	53010
1657	Thornes	Henry	37439	0	3665	0	0
1657	Barlow	Bartholmew	66496	26357	0	0	15000
1657	Strange	John	4911	2571	0	0	0
1657	Birch	Thomas	36556	17143	903	0	0
1657	Merry	Walter	40356	24000	0	8131	19195
1657	Glover	Nathaniell	126768	50143	225	0	51429
1657	Ottise	John	12654	0	0	0	4286
1657	Griggs	Humphrey	21975	7714	0	1500	214
1657	Jewell	Samuell	1104	0	0	0	0
1657	Tavitchell	Joseph	9379	1114	0	0	0
1657	Oliver	Thomas	109172	24643	804	2250	17143
1657	Alcocke	Thomas	4361	3000	0	0	0
1657	Dickerman	Thomas	50586	42214	0	0	429
1657	Davis	Rice	13	0	0	2511	2255
1657	Hardier	Richard	39825	18857	0	1521	2282
1658	Stockbridge	John	18209	9643	0	0	0
1658	Franklin	John	3757	0	0	0	0
1658	Franklin	William	154179	60000	0	0	85714
1658	Flack	Cotton	9161	3643	0	0	0
1658	Elliot	Phillip	118734	57857	0	0	16393
1658	Coggan	John	189577	173571	0	97471	21567
1658	Boyers	Symon	5368	0	0	0	0
1658	Munning	George	84558	0	0	0	80926
1658	Barrell	John	93144	29357	1678	0	0
1658	Williams	John	0	0	375	0	2925
1658	Ambrose	Henry	72311	55714	0	0	0
1658	Lincolne	Stephen	37607	15000	0	857	8571
1658	Chickering	Thomas	390200	60943	7780	0	149839
1658	Beamsley	William	52437	35143	*	1500	0
1658	Eaton	John	84107	34179	0	0	1685
1658	Woody Sr.	Richard	33223	17143	723	0	0
1658	Gibbons	Jonathan	4607	0	0	0	0
1658	Gibbons	Margarett	6107	0	0	0	0
1658	Hearsie Sr	William	89930	49704	0	0	0
1658	Marsh	Thomas	66064	36643	0	2571	1500
1658	Harry	William	7821	6429	0	493	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1658	Beales	John	6734	1929	0	1227	2882
1658	Maynard	John	6179	6857	0	7607	0
1658	Ruggles	Sgt John	39761	21107	0	0	0
1658	Briggs	Clement	14004	7714	0	0	0
1658	Walker	Thomas	69327	21429	396	0	0
1658	Eire	Simon	123696	68571	0	0	0
1658	Paddy	William	591194	55714	0	*	254491
1659	Hayword	William	41845	23357	443	*	0
1659	Baxter	Gregory	88061	67500	0	1500	0
1659	Webb	Richard	103318	75000	0	0	6429
1659	Reynolds	Robert	74355	24482	2893	0	25714
1659	Rachall	Robert	1011	0	0	2132	0
1659	Denton	Richard	9161	6429	0	3107	0
1659	Johnson	John	143738	78000	4929	0	8979
1659	Looman	Anne	6825	536	0	0	0
1659	Bradish	Robert	44380	26786	0	0	1082
1659	Long	Phillip	52980	27857	0	4050	8677
1659	Preist	Margarett	2004	0	0	0	0
1659	Stebbins	Martine	12062	0	0	17888	22621
1659	Read	Thomas	1153	0	0	11179	0
1659	weebow	Stephen	2405	0	0	0	0
1659	Batten	Hugh	33542	11976	0	1436	0
1659	Pacy	Sarah	2021	0	0	5698	0
1659	Barnard	Nathaniell	3666	804	0	7856	471
1659	Sheafe	Jacob	1540382	47143	18445	287135	899179
1659	Johnson	Margaret	15386	8571	0	0	0
1659	Farnworth	Joseph	44338	0	1643	0	1039
1659	Buckmaster	Thomas	8529	3857	0	0	0
1659	Saunders Sr.	Martin	65646	30000	0	3321	7714
1659	Starr	Comfort	138396	55714	457	5075	56760
1659	Trapp	Thomas	13896	0	0	0	0
1659	Glover	Mary	102445	54429	0	0	26550
1659	Munnings	Mahalaleel	70033	38571	429	117857	0
1660	Rawline Sr.	Thomas	26116	12857	0	0	1286
1660	Warner	Thomas	5312	0	0	0	0
1660	Orgrave	Ann	2148	0	21	0	0
1660	Griggs	George	25373	19286	43	3034	1064
1660	Busby	Bridgett	115644	0	964	0	51911
1660	Holloyke	Edward	145929	119143	0	0	4071
1660	Snooke	Margaret	14052	6429	0	0	0
1660	Sherman	Richard	20470	12857	0	2143	0
1660	Kingsberry	John	86850	34661	429	0	10136
1660	Rockwood	Richard	4668	3214	0	3511	0
1660	Coggan	"Mrs"	220746	152143	0	0	0
1660	Bat(ti)le	Robert	5306	0	0	0	3019
1660	Cushen Sr.	Mathew	52929	27771	0	0	4500
1660	Bidfield	Samuell	109714	42857	31071	0	4286
1660	Paine	William	908479	85714	27704	321429	650638

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1660	Piggs	Thomas	6205	0	1564	1421	2239
1660	Thounthell	Cpt. Thomas	26003	0	238	0	3643
1660	Elliot	Philip	81492	57857	0	0	15305
1660	White	Charity	5143	1500	130	0	0
1660	Smith	Christopher	7335	0	0	4633	1290
1660	Turner	Isabell	44125	19500	611	0	0
1660	Peacockes	William	11143	13929	0	5625	0
1660	Everell	Abiell	23459	17143	0	0	0
1660	Dwight	John	108459	30214	975	0	39484
1660	Heath	Isaac	128948	85714	7601	8477	2946
1660	Roggers	John	58929	21429	0	0	0
1660	Langer	Richard	4521	2786	0	0	589
1660	Pitcher	Andrew	57193	47571	8571	4393	0
1660	М	John	21011	0	0	857	0
1660	Burnell	William	34132	27857	0	25	514
1660	Webb	Henry	1675555	78857	286544	0	642857
1661	Smith	M.	7975	0	0	0	0
1661	Luson	John	64404	25929	121	0	7296
1661	Loring	Thomas	108610	71089	0	3654	107
1661	Griffin	Tomas	8834	0	0	0	986
1661	Tucker	John	105833	38143	921	3964	8561
1661	Hanniford	John	207109	42857	6901	20907	40053
1661	Thomas	Evan	154216	107143	*	0	0
1661	Barlow	Thomas	84450	42857	0	0	10500
1661	Scotlow	Thomas	53360	32143	1082	0	0
1661	Stodder Sr.	John	23321	12857	0	3554	1091
1661	Morrell	Isaac	145139	107143	3643	0	0
1661	Irons	Mathew	43532	37179	0	0	0
1661	Dixie	Samuel	5598	0	0	0	3214
1661	Peirse	William	48911	38571	0	0	429
1661	Proctor	George	96940	50464	750	1596	9190
1661	Jempson	James	9825	8571	0	2143	0
1661	Wales Sr,	Nathaniel	24581	29250	0	22907	8571
1661	Davis	James	84099	36429	5931	0	0
1661	Jones	Rice	44245	21429	1077	0	429
1661	Evens	Richard	31189	17357	1714	6445	1179
1661	Humphreys	Thomas	22428	6429	201	0	0
1661	Eliott	Margery	63209	49286	0	0	0
1661	Eliot Sr.	Jacob	40714	18429	0	19286	20036
1661	Mathew	Dorman	24011	17143	0	0	0
1661	Willam	Nathaniel	324457	0	3000	0	111429
1662	Kibby	Henry	14388	9857	0	0	0
1662	Rigby	Grissell	15541	6429	0	0	1071
1662	Modesley	John	51468	37286	0	0	0
1662	Brown	Richard	17338	0	479	0	107
1662	Wheeler	Roger	25480	0	0	0	9746
1662	Pearse	George	17011	2571	214	0	1179
1662	Kingsberry	Margaret	77325	33107	834*	0	13821

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1662	Coggan	Joseph	221081	107143	0	0	0
1662	Wales Jr.	Nathaniel	40546	35143	514	0	319
1662	Garret	Richard	14236	9643	0	0	0
1662	Saxon Jr.	Thomas	42446	8143	391	5955	2893
1662	Blantain	William	106779	75000	911	0	0
1662	Blague	Henry	99565	42429	0	0	0
1662	Osburne	William	55886	55179	0	0	107612
1662	Parkman	Elias	7339	4714	0	0	0
1662	Robinson	William	747	0	0	997	0
1662	Hazard	John	5379	0	0	0	0
1662	Flood	Richard	5630	4714	0	0	0
1662	Kelly	David	61339	44464	0	0	0
1662	Robinson	Samuell	4198	0	0	0	0
1662	Colbron	William	191871	145714	8143	0	771
1662	Streame	Thomas	92486	39000	0	0	9643
1662	Lane	James	2740	0	0	0	161
1662	Breck	Edward	130072	119807	0	29916	2421
1662	Browne	William	17216	0	1500	0	0
1662	Downies	Daniel	3016	0	0	0	1280
1662	Marshal	John	14524	0	2496	0	1511
1662	Houchaio	Thomas	4199	0	43	1438	1373
1662	Row	Moses	4342	0	0	3455	1527
1662	Palmer	Walter	352339	141643	0	0	0
1662	Samuel	John	10489	4286	0	0	1990
1662	Leager	Jacob	39056	32143	0	0	0
1662	Davis	Richard	70147	44786	3214	4789	643
1662	Cullicke	John Cpt	208432	85714	0	0	0
1662	Woodward	Ralph	59571	29143	1714	0	9214
1662	Gray	Peter	1264	0	0	1264	0
1662	Woodcock	Richard	8244	0	0	0	0
1662	Davis	Richard	61203	44786	0	1264	2858
1663	Wilson	"Widow"	7071	0	0	0	7071
1663	Norton	John Rev.	448961	167571	28929	0	134754
1663	Gregs	Alice	0	0	0	0	0
1663	Gurney	John	4741	0	0	7200	0
1663	Thaier	Corneliw	7286	0	504	0	2571
1663	Lincorne	Robert	25647	0	964	0	0
1663	Johns	William	35534	8571	0	0	0
1663	Stream	Benjamin	85543	34661	0	0	8571
1663	Dod	George	9673	0	0	0	4596
1663	Smith	Alice	8183	0	4358	0	0
1663	evans	David	392177	32143	7071	0	207825
1663	Nanny	Robert	233511	0	0	0	0
1663	Gatliffe	Thomas	139615	97071	3000	24338	0
1663	Grice	Charles	19741	12857	0	429	311
1663	Smith	Alice	8108	0	4358	0	0
1663	Carwithy	Joshua	15124	3214	0	0	4286
1663	Stevens	Jeremiah	15481	0	8631	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1663	Gillot	John	3929	3429	0	579	0
1663	Batherston	James	13991	0	0	0	3964
1663	Leader	Thomas	53518	49286	0	0	0
1663	Blake	William	39707	33161	0	9171	750
1663	Gamblon	Robert	59550	41143	0	0	0
1663	Meares	John	49512	32143	112	0	107
1663	Stone	John	63996	33000	0	15161	2946
1663	Mavericke	Samuel	34270	0	0	0	0
1664	Hill	John	58502	39813	0	2287	0
1664	Emons	Thomas	97631	63531	0	9644	14044
1664	Field	William	5734	0	349	0	2536
1664	Munt	Thomas	45416	54002	0	396	4024
1664	Bishop	Henry	53811	0	8968	24777	35789
1664	Atherton	Humphrey	200744	124945	0	14395	0
1664	Harrod	James	10668	0	0	0	2541
1664	Mayo	Samuel	4520	0	0	0	0
1664	Nicolls	Mordecai	104374	10589	0	6671	8471
1664	Cloade	Andrew	84608	42354	*	3860	9953
1664	Rockwood	Ann	4580	0	0	0	0
1664	Poole	Edward	53578	23295	0	0	0
1664	Hardier	Elizabeth	56871	31766	0	0	0
1664	Laner	Margery	9102	1271	4733	0	0
1664	Edwards	Philip	3019	0	0	106	1037
1664	Compton	Susannah	3780	0	222	0	445
1664	Kent	Joshua	33052	12706	0	0	847
1664	Hanniford	John	28004	10165	0	89220	8471
1664	Pennyman	James	106129	78355	0	847	1186
1664	Turner	James	258752	193770	*	0	59142
1664	Clarke	John	274307	148240	10589	0	6353
1664	Metcalfe	Michail	77280	48496	0	0	9898
1664	Heaton	Nathaniel	29618	26471	0	0	0
1664	Rice	Philippe	3575	0	101	731	0
1664	Garrett	William	2848	0	296	191	1445
1664	Gladman	Elkanah	68452	0	3289	3721	29490
1664	Grocer	Thomas	45900	0	0	5685	24846
1664	Heath	Elizabeth	1435	0	0	9935	1946
1664	Pearse	Robert	34095	28589	0	4235	0
1664	Clappe	Edward	144350	91273	0	23957	14934
1664	Powning	Henry	48146	0	*	75900	38783
1664	Ethrington	Thomas	22431	11647	0	0	0
1665	Chadwell	Barbara	75184	64511	2679	0	0
1665	Holloway	William	56547	37458	*	3695	7785
1665	Cad	Bartholmew	100402	31215	6129	0	0
1665	Spicer	Stephan	77801	0	6243	0	13256
1665	Fearing	John	63928	39331	0243	4994	0
1665	Thayer	Thomas	43668	26220	1249	0	1561
1665	Newgate	John	555735	295500	*	0	0
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Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1665	Badifer	Nicholas	790	0	0	0	0
1665	Marshall	Thomas	10275	0	0	0	8324
1665	Clarke	Arthur	14978	11445	0	0	0
1665	Paine	John	-3198	0	884	33344	0
1665	Hands	Marke	61908	52025	900	0	0
1665	Bishop	Elizabeth	2743	0	0	0	0
1665	Smith	Lawrence	101115	60140	0	0	0
1665	Blott	Robert	23359	20810	0	0	0
1665	Sennicke	Walter	18646	13735	0	1249	0
1665	Starr	William	2732	0	753	0	0
1665	Artwick	William	2845	0	0	2326	1269
1665	Prentise	Robert	30298	3121	*	6082	598
1665	Endicott	John Esq	0	0	0	0	0
1666	Roote	Ralph	4560	1660	290	0	0
1666	Robinson	Thomas	56325	64321	0	14420	0
1666	Hubbard	Peter	40958	24898	0	0	0
1666	Woodcock	Jane	4211	0	2	0	597
1666	Chandler	Joseph	6126	0	0	0	0
1666	Peake	Apher	87598	70338	7916	22755	5306
1666	Biggs	John	122843	87144	*	6432	12179
1666	Upshall	Nicholas	112769	62246	25210	14974	11730
1666	Baker	John	186313	115778	0	0	20126
1666	Holmes	David	15281	0	0	0	0
1666	Weld	Daniel	70426	38385	0	0	0
1666	Towell	John	1400	0	0	1531	1774
1666	Clarke	Ann	3364	0	249	0	0
1666	Blackaway	John	25590	0	0	0	21039
1666	Gross	Isaac	15020	7677	0	10626	2075
1666	Gary	Arthur	25583	16755	0	0	0
1666	Hawes	Robert	24203	10374	0	3807	2345
1666	Hull	Robert	47578	0	1867	0	24078
1666	Fletcher	Edward	43977	2075	*	0	415
1666	Hicks	Richard	72185	49797	622	0	0
1666	whston	Joseph	-3491	0	52	6225	259
1666	Winsor	John	4283	0	0	0	0
1666	Shrimpton	Henry	2555855	234460	146052	1219662	1290012
1666	Markspace	Thomas	60452	37348	622	0	0
1666	Withington	Henry	173591	43157	*	2951	43228
1666	Cole	Samuel	32525	8714	0	0	13279
1666	Thompson	William	35088	20842	0	0	0
1666	Tyer	William	37773	0	6640	0	0
1666	Parker	James	23633	0	145	0	0
1666	Bracket	John	211889	72620	0	0	16713
1666	Emons	Martha	86698	62246	1089	0	4980
1666	Ward	Benjamin	177862	127189	0	17176	18798
1667	Hardsman	John	9486	7034	0	0	0
1667	Sandersan	Joseph	8369	0	0	706	592
1667	Griffin	Richard	16293	9103	0	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1667	Milam	Humphrey	144891	54621	28138	1438	21942
1667	Richards	Benjamin	16779	0	0	0	0
1667	Pray	Quinton	11203	0	0	4138	3103
1667	Robinson	Nathaniel	1288	0	166	1241	0
1667	Bird	Thomas	193625	89793	139	12774	13046
1667	Wakefield	John	46060	31034	341	0	0
1667	Maitox	James	57470	31034	4800	0	5735
1667	Scenter	John	88950	10345	0	0	0
1667	Oxeman	Nicholas	3900	0	0	0	0
1667	Wilson	Rev. John	86840	62069	1034	0	0
1667	White	Cpt. James	-1256	0_0	0	38183	0
1667	Cheny	William	183428	130345	0	0	10673
1667	Douglas	Henry	71669	41379	0	2539	18472
1667	Kingman	Henry	72797	61655	0	0	0
1667	Laycock	John	6660	0	7862	4000	1293
1667	Davis	George	73459	35897	0	0	0
1667	Bushnell	John	49874	28966	952	0	0
1667	Dorrell	Charles	2457	0	0	0	0
1667	Parker	Emanuel	11753	0	12481	1518	6324
1667	Meers	Robert	72217	63103	1655	0	0
1667	Remmington	John	26707	0	0	0	19346
1667	Read	William	19992	0	0	0	0
1667	Woodman	Robert Sr.	41278	0	*	0	21724
1667	Garraway	Cpt. Richard	17717	0	14340	0	0
1667	Jones	Thomas	114828	73655	0	0	0
1667	Mason	Robert	38721	30879	0	0	1138
1667	Vergoose	Peter	25495	15931	*	1764	1717
1667	Browne	Edmound	44721	23741	0	0	10676
1667	Purchas	John	16531	12414	0	0	0
1667	Combes	John	47834	41379	569	6621	0
1667	Ellin	Nicholas	34671	26276	0	4138	0
1667	Buttolph	Thomas	330807	144828	*	0	82191
	Lisle	Ann	5069	0	0	0	0
1667	Brisco	William	3595	0	0	0	0
1667	Hunter	William	25305	2069	0	0	0
1667	Ward	Mary	150183	110276	0	9621	7634
1668	Dennison	Edward	260683	193866	0	0	0
1668	Flint	Henry	258518	159654	809	11197	48697
1668	Greenslead	Edward	7718	0	3991	848	2365
1668	Noltan	William	25343	18246	0	0	0
1668	Probert	Elizabeth	2027	0	384	472	0
1668	Robinson	William	79957	60337	0	10367	0
1668	Bellow	Robert	373	0	62	0	0
1668	Jeffery	Nicholas	1463	0	0	532	93
1668	Chapen	Shem	3834	0	0	0	0
1668	Hull	James	2883	0	332	0	0
1668	Humphrey	Jane	7968	0	0	246	1037
1668	Gallop	Marys husband	68755	62203	0	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1668	Butolph	Thomas	62079	14514	0	0	0
1668	Fairbank	Jonathan	68593	52251	100	0	0
1668	Duncan	Nathaniel	3354	0	0	0	0
1668	Butcher	Robert	4147	3110	0	0	0
1668	Church	Richard	75825	24881	0	0	0
1668	Egelden	Richard	16450	0	224	0	1878
1668	Lane	Edward	106241	0	0	102203	207343
1668	Taylor	John	4562	3110	0	0	0
1668	Bugbee	Edward	69735	53909	10352	0	0
1668	Francis	John	8449	0	0	1130	5743
1668	Ruck	Thomas	39271	31102	0	0	0
1668	Fisher	John	71455	43542	0	8294	11776
1668	Buckminster	Josheph	95946	65935	0	5860	1451
1668	Scott	Robert	-2890	0	0	52406	7633
1668	Bishop	Henry	0	0	8773	2830	25816
1668	Rush	Jasper	24904	15551	0	435	2095
1668	Snow	Thomas	24503	41469	0	25094	0
1668	Ruddock	Edward	30440	0	62	20665	0
1668	Snell	John	16902	20734	311	9600	0
1668	Palsgrave	Anna	26811	12441	798	4219	2659
1669	Sinmkins	Isabella	17022	13759	0	0	848
1669	Sauel	William	148034	131586	0	19816	2571
1669	Peacock	Richard	23152	11379	2969	0	0
1669	Kingsbury	John	36767	16552	31	0	7076
1669	Couling	Nicholas	29930	0	0	6271	0
1669	Ruggles	George	77168	10345	*	1547	3621
1669	French	Jacob	3672	2752	0	890	1107
1669	Gardner	John	8286	5172	0	931	0
1669	Bragg	Jonathan	2199	0	0	347	1353
1669	Allen	Samuel	47304	31034	0	0	0
1669	Bran	George	48310	0	828	1433	42041
1669	Townsend	William	48021	41379	*	0	0
1669	Bitfield	Elizabeth	43303	0	0	0	32069
1669	Woodward	William	25845	0	476	0	8069
1669	Chapman	Richard	6636	0	0	0	3791
1669	Downes	Edmond	747541	186207	12414	0	0
1669	Phillips	Philip	579	0	0	0	0
1669	Poole	Samuell	15434	10966	0	0	0
1669	Gay	Hezekiah	12911	0	418	0	1900
1669	Crocum	Francis	26305	20483	*	0	0
1669	Boyse	Antipas	353485	165517	48031	0	0
1669	Briggs	Clement	10416	0	0	0	0
1669	Pearse	William	17607	0	103	0	2586
1669	Chever	Abraham	2489	0	0	0	0
1669	Ballantyne	William	137838	72414	5762	24240	0
1669	Winot	John	409293	156414	0	0	207
1669	Brown	Hugh	7521	10345	0	4138	0
1669	Paine	Tobias	340460	12414	53597*	161903	155722

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1669	Willard	Thomas	46603	37241	3097	0	0
1669	Moore	Joseph	5529	35172	0	49349	13021
1669	Wood	Nicholas	198861	159103	0	16221	3533
1669	Peper	John	25038	4138	*	0	5586
1669	Capp	Wile	23734	19655	170	0	0
1669	Johnsoon	Mary	132192	62069	941	0	0
1669	Smith	Joshua	3083	0	0	3931	3343
1670	Phillips	Nicholas	52394	38400	0	30739	6182
1670	Hawkins	James Sr.	43909	46080	221	7680	490
1670	Frairy	John Jr.	119093	59136	6614	4304	3694
1670	Fisher	Anthony	260978	28800	0	0	4729
1670	Taylor	John Mathew	24768	11520	8640	768	0
1670	Miles	Richard	94982	23040	*	0	18979
1670	Dunckle	Eluathan	2155	3072	0	5205	0
1670	Holdsworth	Joseph	2667	0	2626	0	0
1670	Doble	Tobias	-277	576	0	1429	38
1670	Craze	Richard	11530	0	0	0	10531
1670	Short	Cpt. Francis	8952	0	2083	0	0
1670	Savidge	Habiah	85220	57600	*	0	3360
1670	Rawlins	Thomas	75398	67200	0	0	0
1670	Collens	John	5086	0	0	0	0
1670	Burtt	Thomas	30621	0	26717	158	0
1670	Fabius	John	4171	0	4613	816	0
1670	Hubbard	William	32640	28800	0	0	0
1670	Gillian	Benjamin Sr.	119486	134400	480	177970	46236
1670	Davenport	John	240181	76800	37156	0	0
1670	Fawre	Eleazer	38760	28800	0	0	0
1670	Hull	Thomas	32078	19200	0	0	0
1670	Prince	John	10579	0	1522	0	0
1670	Walls	Nathaniel	42253	29376	0	12	2548
1670	Wardell	William	41919	34560	3322	31493	0
1670	Woodie	John Issack	45888	36096	0	0	0
1670	Totman	John	30461	18528	0	0	0
1670	Glover	Anne	34346	0	0	0	31104
1670	Burges	James	9408	3840	0	0	0
1670	Oliver	Cpt. Peter	877860	274560	*	0	0
1670	Dinely	John	17088	17088	0	0	0
1670	Greeneleife	Edmound	28428	0	0	0	0
1670	Spawle	Thomas	21282	19200	192	1344	288
1670	Huet	Thomas	16243	13920	0	3552	0
1670	Mayes	John	18058	18240	0	0	0
1670	Hollard	Augell	-23117	0	0	28800	5491
1670	Wilmot	John	32928	23040	192	0	0
1670	Houchin	Jeremy	359099	124800	0	0	69698
1670	Newton	Thomas	120	0	0	432	264
1670	Franham	Edward	54718	0	4608	23052	3802
1670	Colins	Benjamin	4074	0	864	1152	3120
1670	Geffs	John	45810	33663	0	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1670	Felch	Henry	18473	0	645	0	9019
1671	Bridgham	Henery	1011494	96000	0	0	0
1671	Fisher	Anthony	40543	0	19	1020	36230
1671	Deacons	Joseph	47786	0	41664	23119	29050
1671	Ransford	Jonathan	70961	48000	0	0	0
1671	Armstrong	Mathew	75389	28800	28128	0	0
1671	Hitt	Eliphelet	110347	49920	*	9677	1920
1671	Palmenter	John	10690	0	0	2170	3072
1671	Leader	Samuell	27830	19200	384	0	6720
1671	Leader	Thomas	15360	15360	0	0	0
1671	Jay	Samuell	25517	20160	0	0	0
1671	Pattishall	Robert	0	0	0	0	15478
1671	Cartwright	Edward	7241	0	0	0	0
1671	Chickerin	Deacon Henry	130032	100032	0	0	960
1671	Barret	Stephen	3900	3072	0	0	0
1671	Barret	"wife of Stephan"	1474	0	0	0	0
1671	Ward	John	5586	0	2400	1526	1008
1671	Penn	James	378902	264960	3850	12720	89923
1671	Allen	John and Katherine	207251	119635	0	1072	16314
1671	Mavericke	James	4608	0	0	0	0
1671	Webb	Christopher Sr.	21082	17280	0	0	0
1671	Bate	Clement	41395	36864	0	0	384
1671	Hearsie	Elizabeth	9763	0	0	7123	12096
1671	Mayes	John	88522	71424	0	1344	1728
1671	Martin	Richard	21322	13440	0	0	384
1671	Redding	Miles	14702	13440	0	1839	24
1671	Atkins	William	-20	0	53	643	0
1671	Stiles	John	3802	0	0	1440	874
1671	Heath	Peleg	129955	106752	0	4800	0
1671	Treundsall	Deacon Richard	175882	48000	7104	0	107040
1671	Howser	Ralph	-565	0	6669	10824	0
1671	Hall	Cpt. John	9874	0	5688	0	0
	Deering	Samuell	23251	0	0	14976	27840
1671	Gill	John	30893	26880	0	0	0
1671	Cheny	John	34546	30912	0	0	0
1671	Phipeny	Gamabell	95160	67200	0	0	0
1671	Minot	George	52105	34560	0	0	9961
1671	Warren	Elizabeth	6475	0	0	0	0
1671	Watson	John	76291	62208	384	0	528
1671	Turell	John	58891	28800	4877	0	0
1671	Lowell	Isaac	51037	0	0	0	3936
1671	Rigger	Edward	23491	17856	2688	1152	720
1671	Rogers	John	4198	0	0	1126	0
1671	Greene	Richard	85136	19200	1920	9110	11444
1671	Minot	Stephen	125036	89664	0	0	3999
1671	Pell	William	46522	32640	3840	0	0
1671	Rainsford	Jonathan	97648	0	0	0	0
1671	Patten	Nathaniel	272036	163968	0	0	83006

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1672	Ricks	Eligha	8683	0	2986	730	1283
1672	Ricks	Mary	8822	0	1147*	221	672
1672	Alsof	Key	50459	38400	0	0	0
1672	Cooper	Francis	6040	0	0	326	0
1672	Elice	Joseph	32338	20736	807	0	269
1672	Newell	Abraham	4454	0	0	0	0
1672	Whittingham	William	127928	76800	*	0	0
1672	George	Nicholas Jr.	35323	30720	0	0	0
1672	Dyer	George	81643	71040	816	0	398
1672	Duncomb	Oliver	33302	18816	*	0	0
1672	Davis	Samuell	24576	0	0	0	0
1672	Fisher	Lt. Joshua	219902	99782	0	0	9600
1672	Chafnie	David	12182	9600	0	0	0
1672	Atherton	Mary	56670	45504	192*	0	384
1672	Phillips	Nicholas	49454	43776	1949	0	0
1672	Steven	Thomas	634	0	192	0	0
1672	Lovell	Isaac	46565	0	0	0	35156
1672	Hull	Jane	44417	0	19435*	828	384
1672	Saywell	David	66149	38400	576	0	0
1672	Ingalls	Francis	13442	6720	*	4201	5546
1672	Bridgeham	Elizabeth	41011	0	0	0	0
1672	Witherdew	John	5179	0	0	0	0
1672	Bowen	Henry	4802	1536	0	0	0
1672	Marshall	John	23880	17280	0	0	0
1672	Oates	William	603	0	1267	4711	1760
1672	Barnes	Thomas	53123	32256	1536	0	912
1672	Porter	Thomas	5309	0	0	0	0
1672	Topliffe	Clement	30024	21600	0	0	538
1672	Green	Joseph	12643	0	0	19200	0
1672	Powell	Michall	13976	0	0	0	0
1672	Marins	Widow	25417	19200	0	592	0
1672	Holbrook	Abiezer	7709	0	3101	0	0
1672	Jackson	John Sr.	53947	47424	0	0	0
1672	Staine	Richard	106022	76800	6144	0	0
1672	Lusher	Mary	97535	60672	557	1152	0
1672	Prott	Micaieth	58752	45792	0	0	0
1672	Bradish	Widow	880	0	0	0	0
1672	Bellingham	Richard	622882	549888	26890	0	0
1672	Ratalie	Peter	1182	0	0	0	774
1672	Chaplin	Peter	4421	0	1430	0	2213
1672	Perkins	John	8381	0	0	0	0
1672	Bernard	Samuell	34514	0	1438	0	0
1672	Geech	Charles	652	0	0	0	431
1672	Parker	Richard	372146	249600	0	0	0
1673	Downing	Darman	1882	192	0	0	0
1673	K_igless	Elder	277378	265824	0	1445	4704
1673	Fisher	Isabell	11650	0	0	10752	5386
1673	Hull	John Jr.	15667	0	5760	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1673	Corser	William	30629	19200	7392	0	0
1673	Andrews	Thomas	34823	28320	0	0	0
1673	Osborn	William	7042	0	1152	0	888
1673	Taylor	Richard	117250	28032	38717	0	2309
1673	Holbrook	Dainel	-4190	0	0	12336	1286
1673	Burne	Edward	61056	30336	0	0	0
1673	Bird	Ann	57071	0	0	0	1194
1673	Cartwright	Elizabeth	47382	28800	4992	0	0
1673	Onion	Robert	12115	5280	0	0	576
1673	Thuring	Benjamin	11452	8640	0	0	1576
1673	Lobdell	John	43171	26496	1920	1325	0
1673	Blatchley	Thomas	24499	0	0	0	15552
1673	Coloborne	Murgery	15360	0	0	0	11520
1673	White	William	23229	19200	0	1635	0
1673	Shrimpton	Jonathan	215040	78720	10051	1920	23230
1673	Hambleton	William	58599	0	0	0	0
1673	Malliot	James	773	0	710	1157	0
1673	Finch	Samuell	30250	26496	0	614	0
1673	Talby	Stephen	60350	38400	0	0	0
1673	Wight	Thomas	88956	66144	790	469	4237
1673	Howard	William	52968	38400	0	0	0
1673	Armitage	Elizar	10039	0	0	2975	0
1673	Lodbell	John	41294	24960	1920	1330	0
1673	Lobdell	John	43982	24960	1920	749	1925
1674	Mullins	William	4243	0	0	0	1920
1674	Gold	Thomas	150144	48000	0	28752	25152
1674	Baster	Sgt. Joseph	72653	57600	0	3072	1248
1674	Spelman	Francis	9752	0	3168	0	0
1674	Hassellwood	Francis	26630	0	16512	1152	384
1674	Simpson	William	163	0	3610	3446	0
1674	Sandy	John	31087	23040	0	0	0
1674	Davis	Anthony	691	0	0	288	0
1674	Smith	John	44544	38400	*	0	0
1674	Mason	Richard	39499	34560	0	0	0
1674	Harris	Arthur	15530	0	192	6905	3898
1674	Cope	Hugh	13197	0	4301	5494	0
1674	Price	Richard	15648	0	0	0	0
1674	Hitt	Eliphalet	14189	0	0	34042	9677
1674	Normans	William	31682	0	0	0	0
1674	Grubb	Thomas	71130	0	5539	3362	34246
1674	Bridge	John	99642	70752	1920	1064	2429
1674	Walker	Isaac	221137	57600	*	94082	115806
1674	Clarke	Alice	1200	0	0	994	0
1674	Beck	Alexander	66864	61440	0	0	0
1674	Wilson	Alexander	579	0	0	675	1254
1674	Winslow	John	565774	86400	122907	0	100868
1674	Ewell	John	7717	0	1862	0	0
1674	Gridley	Richard	17827	12480	0	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1674	Gibson	Christopher	67041	57600	*	29601	0
1674	Camell	Adam	389	0	0	870	0
1674	Clemont	Augustin	182436	156096	0	0	12864
1674	Williams	Hugh	3140	0	0	472	480
1674	Morgan	Cornelius	-43	0	48	7363	0
1674	Prince	Rebecca	6979	0	1478	0	758
1674	Mackaniell	John	9797	0	0	216	1104
1674	Woods	Edward	2794	0	0	0	0
1674	Mellows	John	38856	18240	1214	0	10560
1674	Clarke	James	28474	17280	0	1920	0
1674	Oxenbridge	John	353447	105600	29592	0	119642
1674	Temple	Thomas	431698	0	0	0	42044
1674	Faxon	Richard	81658	57600	576	0	0
1674	Chinery	Lambert	18502	1248	53	0	11931
1674	Johnson	Marmaduke	57538	28608	0	0	2304
1674	Truesdall	Mary	129210	0	12398	0	99840
1674	Armitage	Godfray	72510	38400	3053	0	4416
1674	Belcher	Gregory	120816	62400	643	19584	2112
1674	Gibbs	Robert	381189	0	8011*	233342	365985
1674	Brisco	Ezekiel	32030	38400	0	15360	0
1674	Chamberlain	Henry	25997	18624	0	288	0
1674	Sammons	Ralph	17213	0	13248	0	0
1674	"Negro"	"Angola"	8611	5760	0	0	0
1674	Sammons	Ralph	17213	0	13248	0	0
1675	Bartlit	Faithful	5618	0	*	0	0
1675	Harbor	Anthony	22486	21697	0	0	0
1675	Place	Peter	69148	49399	4262	0	2906
1675	George	Nicholas	52014	23246	6877	0	0
1675	Antrobus	William	2039	0	17	1724	1356
1675	Star	Richard	53194	0	1403	0	1629
1675	Hanna	Thomas	5137	0	5037	1785	0
1675	Grosse	Issac	24409	19372	0	0	0
1675	Gridley	Tremble	11400	13560	0	7846	2016
1675	Sumner	William	65013	48430	0	2761	4814
1675	Turner	Joesph	54242	50367	0	0	0
1675	Gridley	Grace	15711	11623	0	0	0
1675	Howard	Daniel	38583	18403	1743	3084	7252
1675	Lane	Andrew	45021	51917	155	533	969
1675	Cumby	Humphrey	4170	0	0	0	0
1675	Jackson	Edward	51728	89111	0	46687	0
1675	Dinsdale	William	39341	30995	0	0	0
1675	Hobert	John	12321	6780	0	0	0
1675	Marks	Thomas	9570	0	1065	9928	591
1675	Frary	John Sr.	63267	39422	872	0	0
1675	Anthropas	William	2000	0	0	1763	1373
1675	Gornell	John	317724	117394	0	0	21697
1675	Blackman	John	56829	43393	0	2325	0
1675	Swift	Thomas	89017	68432	0	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1675	Scarlet	Cpt. Samuell	468409	288643	0	31854	111919
1675	Page	George	18248	0	0	0	0
1675	"Negro"	Menenine	1884	0	0	0	0
1675	Fans	John	31159	0	0	0	0
1675	Smith	John	3681	0	2906	4068	0
1675	Salsbery	William	26201	18403	0	3874	58
1675	Tucker	Anne	51806	45331	0	194	678
1675	Lincoln	Thomas	49040	39713	0	0	0
1675	Licks	George	2761	0	1211	0	1550
1675	Adams	Nathaniel Sr.	175586	135604	10073	0	0
1675	Albe	Jonathan	8892	5812	0	0	833
1675	Sprague	William	37473	5230	9686	0	12108
1675	Blower	John	73575	58116	0	0	0
1675	Gurney	John	11197	7749	0	0	0
1675	Salter	William	117724	65671	15885	0	9686
1675	Chricheley	Richard	68792	58116	1143	455	4262
1675	Lewes	Edward	2489	0	0	0	0
1675	Harris	Joanna	3229	0	0	1003	0
1675	Spencer	Cpt. Roger	2606	0	0	0	0
1675	Travers	Nathaniel	4768	0	0	0	1230
1675	Coxe	Edward	10785	48430	0	40139	0
1675	Hutchinson	Cpt. Edward	144351	92986	0	0	0
1675	Chapman	John	1506	0	581	0	0
1675	Curtice	Philip	38798	33901	0	5812	3880
1675	Upshall	Dorthy	32932	0	0	0	8330
1675	Hoar	Leonard	260692	0	5424	19692	115147
1675	Dence	Richard	7652	0	0	0	0
1675	Freack	John	463202	87174	1947	0	0
1675	Kemble	Henry	203998	174348	0	197894	0
1675	Woodward	Nathaniel	56549	48430	1818	3627	0
1675	Howlet	John	48982	67802	775	29058	0
1675	Douglin	Allen	13524	0	0	0	10425
1675	Davenport	Thomas Jr.	23040	19372	0	0	1285
1675	Lingly	Farhergen	9943	0	0	0	0
1675	Davenport	Nathinel	238568	0	0	0	215975
1675	Hill	Ignatius	9686	0	0	0	0
1675	Lincoln	William	56750	36807	0	0	0
1675	Jonnson	Cpt. Isaac	112285	93954	0	7749	0
1675	Evans	William	39635	0	*	0	0
1675	Reed	Philip	26239	19372	0	0	329
1675	Hewes	Joshua	6321	0	0	3284	0
1676	Chaplin	Edward	288	0	0	0	0
1676	Priest	James	25158	19323	0	0	1208
1676	Raynsford	Nathan	466552	121551	21664	64921	123960
1676	Bowers	John	51207	41248	929	0	0
1676	Bates	Clement	14251	12449	0	1486	0
1676	Adams	LT. Henry	60088	52535	876	15593	4326
1676	Harres	Elizer	8557	3716	0	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1676	Bowens	John	15101	8500	0	276	0
1676	Waterman	Thomas	2113	13378	0	0	0
1676	Mason	Thomas	42084	30100	242	0	6689
1676	Alids	Nathinel	20893	9197	0	0	0
1676	Johnson	Ruth	26532	18580	0	0	1858
1676	Walker	Obadiah	150534	48308	0	23298	91132
1676	Atkinson	Theadore	27426	74321	465	54621	0
1676	Minot	James	103292	86955	0	0	0
1676	Cleves	William	15802	7432	465	0	0
1676	Rogers	William	50900	0	19974	0	13749
1676	Hawley	Thomas	105967	83611	929	0	929
1676	Kingsbury	Joseph Sr.	76654	43775	1151	646	1928
1676	Priest	Elizabth	25469	19509	0	0	0
1676	Westbrooke	George	6271	0	0	0	0
1676	Seaver	Nathaniel	60906	44592	743	0	0
1676	Withington	Margery	11868	0	599	0	0
1678	Fuller	Thomas	6272	0	*	0	0
1679	Harbour	John	38508	19672	*	0	0
1679	Newman	Joanna	58150	21639	1072	0	0
1679	Nash	James Sr.	20678	2951	1967	0	605
1680	Young	John	15405	0	0	14570	0
1680	Roberts	William	5958	0	5548	0	409
1680	Laland	Henry	120635	97796	2395	1186	943
1680	Holloway	Elizabeh	92290	59875	0	0	12953
1680	Maverick	John	15458	11975	0	0	0
1680	Patten	Justin	127744	96200	12823	0	17523
1680	Liscome	John Sr.	23875	1996	4511	0	0
1680	Belchar	Katharin	8429	0	126	0	0
1680	Paddy	Nathaniel	20782	0	19958	0	0
1680	Hicks	Richard	59870	47900	0	0	0
1680	Beals	Benjamin	93864	82628	0	0	0
1680	Hamilton	Alexander	5163	0	504	0	405
1680	Read	Esdias	6324	0	998	0	2994
1680	Belcher	Samuel	115335	103385	0	0	0
1680	Tarlton	Henry	48197	45904	424	26768	1227
1680	Saxton	Thomas	32151	49896	0	27131	0
1680	Dows	Francis	122342	65863	8662	33949	49155
1680	Raynsford	Edward	326998	115759	25836	0	0
1680	Bowlds	John	153617	101389	*	0	0
1680	Bradford	Robert	22152	19958	0	0	0
1680	Paddy	William	145846	105780	0	0	39917
1680	Proutt	William	22531	0	1317	0	0
1680	Eamos	Thomas	13178	2096	0	0	5334
1680	Ainsworth	Daniel	39097	31933	0	421	200
1680	Warren	Humphry	184490	0	24519	449170	388288
1680	Winslow	Samuel	75619	35925	0	0	4990
1680	Waite	Richard	65543	59875	0	0	0
1680	Buttolph	Anna	23148	0	14111	0	961

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1680	Derifeild	Barnabas	41114	30137	0	0	0
1680	Faxton	Thomas	171474	89813	0	0	63368
1680	Wiatt	Edward	40613	30037	125	299	599
1680	Bacon	Samuel	63892	35925	2435	2857	6215
1680	Rockett	Nicholas	15967	8782	0	0	2994
1680	Jackson	Jeremiah	26195	46004	1597	28441	1896
1680	Flint	Josiah	93216	68058	*	19210	8802
1680	Thwyng	Benjamin	34610	31933	0	0	570
1680	Kirbee	William	1553	0	3593	3777	0
1681	Wooddes	Cpt. Richard	132790	174888	0	76874	11531
1681	Wight	Sgt. Henry	100714	68658	384	0	0
1681	Leager	Anne	15255	0	538	173	10186
1681	Buckman	John	1288	0	0	0	0
1681	Veazey	William	166126	143177	0	4805	5652
1681	Porteus	Robert	63234	15375	*	4467	34872
1681	Grant	Thomas	24785	17297	199	0	0
1681	Turnor	John	161324	67265	5679	103993	0
1681	Smith	Thomas	12474	0	577	0	0
1681	Messinger	Henry	95415	76874	0	0	0
1681	Smeaton	James	4088	0	2771	0	0
1681	Bayley	Thomas	64968	47181	0	0	4805
1681	Maverick	Peter	10687	9609	0	0	0
1681	Dowlettell	John	303334	111467	6419	0	58616
1681	Cheeny	William	27629	0	0	0	15375
1681	Jacklen	Edmond	52136	32671	288	6280	383
1681	Cartleif	Johathan	21260	0	0	0	0
1681	Hudsun	Henry	17249	24984	0	16336	3488
1681	Howard	Alice	-227	0	192	5541	3844
1681	Edwards	Richard	1915	0	0	310	1095
1681	Cushing	Jeremiah	257526	91672	107623	15378	41389
1681	Marshall	Joseph	5721	0	29	0	3990
1681	Twitchell	Benjamin	18889	11531	0	774	0
1681	Dells	Joseph	6352	0	0	0	0
1681	Stebbins	John	112947	87444	317	10998	16845
1681	Benson	John Sr.	12333	0	0	0	0
1681	Blague	Phillip	35429	34593	0	4007	0
1681	Willys	Mildred	14856	0	4180	0	5766
1681	Button	John	49814	49968	0	7111	0
1681	Brisco	Ezekiel	4717	9609	0	7534	0
1681	Hudson	Cpt. William	8218	0	0	0	0
1681	Balston	James	32172	23062	0	0	0
1681	Miller	Mathew	1245	0	1427	878	0
1681	Plumbley	Alexander	20972	15375	0	0	0
1681	Tucker	Robert	85807	60874	0	1387	1605
1681	Foster	John	20501	2883	*	0	0
1681	Tucker	John	25037	19218	0	0	0
1681	Haiden	John Sr.	24148	21140	0	0	0
1681	Cheeny	William	5547	0	0	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1682	Luist	William	9455	0	2250	0	0
1682	Howard	Jeremia	21581	15000	0	0	0
1682	Belchar	Joseph	91941	90000	0	384	2325
1682	Mattocks	Mary	41569	37500	0	0	0
1682	Savage	Thomas	550184	560625	0	120830	24620
1682	Richards	William Sr.	27141	14438	0	0	1875
1682	Norman	Richard	4770	0	0	1366	375
1682	Simons	Thomas	5150	0	366	0	394
1682	Hollidge	Ann	8213	0	3938	1482	0
1682	Grant	Edward	104822	65625	23250	0	0
1682	Perwitt	Elias	755	0	938	1055	234
1682	Baker	Nathaniel	237919	201375	188	1406	459
1682	Evered	Richard	52087	38156	*	0	0
1682	Simth	Seth	43903	31125	0	0	202
1682	Harding	John	31369	27563	375	0	0
1682	Arnett	Cpt. David	16275	0	0	0	0
1682	Richbell	Col. Robert	74367	0	0	0	46458
1682	Pearse	John	24323	13125	197	0	0
1682	Lawson	Christoper	12768	0	3150	0	2625
1682	Inglish	William	85252	56250	563	3097	7551
1682	Swimsteed	Daniel	51071	0	15844	11220	27931
1682	Guild	John	28791	24750	38	0	0
1682	Harris	Thomas	37396	0	0	0	0
1682	Purkis	George	27491	10313	0	0	0
1682	Macannu	Waller	2340	0	1941	0	0
1682	Peirpont	John	324395	241875	741	0	38082
1682	Walker	Edward	1037	0	2	0	0
1682	Harris	John	50620	46875	0	10083	0
1682	Foster	Elisha	62227	47813	0	0	0
1682	Hobart	Cpt. Joshua	308859	276563	0	0	0
1682	Bingley	Thomas	13337	0	0	0	0
1682	Maynard	Elizabeth	20665	4313	0	0	14850
1682	Weld	Thomas Sr.	234478	204375	375	3938	2625
1682	Oliver	Cpt. James	1831	0	0	0	0
1682	Fairfield	Elizabeth	12710	13125	0	2721	656
1682	Everett	James	37373	31875	0	29163	15094
1682	Johnson	John	12901	18750	0	10008	1177
1682	Winslow	Edward	58448	9375	4406	0	0
1682	Butler	Dr. John	2091	0	141	0	0
1682	Whiting	Nathaniel	90820	72563	*	938	1875
1682	Drewry	Mary	13279	0	0	10379	18750
1682	Martyn	Michael	28284	30000	0	7706	0
1682	Hunt	Richard	6311	0	0	0	0
1682	Fisher	Lydia	6768	0	1056	2344	450
1682	Waterman	Margeret	9566	15000	850	8759	600
1682	Sanders	Robert	4641	3281	0	0	0
1682	Stevens	Robert	18286	13313	0	0	0
1682	Fairbanks	George	150354	107672	522	0	516

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1682	Robinson	Nathaniel	33984	29063	0	0	0
1682	Bowsworth	Benjamin	27014	21375	0	2939	0
1682	Phillips	Sarah	17004	0	1691	4473	10547
1682	Penny	William	17827	50625	0	49945	0
1683	Herbert	David	4017	0	0	0	0
1683	Tay	William	57061	54788	0	0	0
1683	Mason	John	33298	52500	0	47388	16453
1683	Richards	William	19545	10313	0	0	0
1683	Horton	Richard	105131	0	0	0	42017
1683	Richards	Benjamin	8079	0	0	0	5951
1683	Brooking	John	120666	97500	0	0	0
1683	Seaver	Robert	77790	56250	394	2888	5809
1683	Sedgwick	Robert	3923	0	0	0	0
1683	North	Edward	45171	0	0	25280	11559
1683	Bacon	John	99339	66581	844	0	2841
1683	Randall	Richard	15263	9375	0	0	0
1683	Staple	John	17873	1875	*	0	0
1683	Gill	Ann	29116	0	3429	3956	25080
1683	Bligh	Thomas Jr.	82167	65625	0	0	0
1683	Boulton	Nicholas	26796	18750	0	0	0
1683	Telton	Robert	1248	0	841	0	0
1683	Brattle	Cpt. Thomas	1467720	664688	*	140625	421875
1683	Harmer	Ephraim	25198	0	19461	0	1041
1683	Thurston	Daniel	22369	12750	0	2517	4275
1683	Bussell	Stephen	95179	0	4875	0	31163
1683	Spreague	John	35831	15000	0	4688	12563
1683	Chard	Thomas	11348	0	1941	0	0
1683	Halgeson	Ingeman	38850	35625	0	11813	0
1683	Fisher	Cpt. Daniel	99502	67200	*	0	0
1683	Vose	Robert	8391	0	0	0	0
1683	Johnson	Vessell	1478	0	122	0	966
1683	Billing	Roger	191077	99375	375	0	32986
1683	Saunders	John	2904	0	0	0	2306
1683	Jackson	David	2759	0	1167	0	0
1683	Pease	John	40181	37500	938	22847	0
1683	How	Abraham Sr.	60738	53063	0	0	272
1683	How	Abraham Jr.	54375	46594	122	0	0
1683	Kelland	Thomas	1123077	313875	37500	112500	337500
1683	Stowell	Samuel	34698	25406	0	0	0
1683	Howard	Robert	113456	70125	23438	0	1500
1683	Richardown	William	1523	0	0	0	0
1683	Phillips	John	25814	18750	0	0	0
1683	Gord	Richard	24909	21563	0	0	0
1683	Turell	Joseph	31341	0	8813	0	188
1683	Cantleer	Cornelius	101309	80438	853	7165	2330
1683	Baker	Thomas	27347	20531	0	1416	0
1683	Bradish	John	43636	30000	1500	0	0
1683	Sanford	Thomas	69155	46875	0	12123	13422

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1683	Meade	William	50914	7500	31	0	38030
1683	Wheelock	Ralph	29217	24994	0	563	0
1683	Batten	Verilah	14773	16594	0	3375	300
1683	Waldron	Isaac	583696	222113	3750	0	114176
1683	Hearsy	James	114469	89344	1500	0	938
1683	Scott	Benjamin	24848	20625	0	2325	0
1683	Hanset	John	18908	14155	673	0	0
1683	Bingley	Abigail	4317	0	0	0	0
1683	Wilkey	John	21703	0	8808	0	1500
1683	Merridall	Thomas	4467	0	4111	3497	0
1683	Ripley	Abraham	71278	48188	0	0	544
1683	Rock	Joseph	140680	93750	375	9124	0
1683	Bridge	Edward	60000	59250	0	0	0
1683	Ripley	John	128827	103781	0	1355	638
1683	Davis	William	80447	56625	0	0	2250
1683	Clarke	Joseph	55177	36281	0	0	0
1683	Winslow	John	196335	75000	44774	30496	38102
1683	Howard	Samuel	32598	27188	0	0	1787
1683	Spencer	Abraham	1135	0	2981	7795	0
1683	Belcher	Josiah	67978	48750	0	0	0
1683	Phillips	Maj. William	5617	0	0	0	0
1683	James	Gaudey	11936	14063	0	4363	0
1684	Hayward	Mary	51658	24485	*	0	0
1684	Pepper	Robert	75942	65862	0	0	0
1684	Ingoldsby	John	14400	11077	37	0	0
1684	Smith	Mary	20774	0	120	0	16387
1684	Callaway	Judith	4375	0	369	0	1477
1684	Pendall	James	63793	0	0	0	0
1684	George	Daniel	15462	0	268	12877	3692
1684	Buckner	Charles	38922	0	4477	0	0
1684	Greenwood	Nathaniel	214163	174462	0	0	0
1684	Gillam	Cpt. Joseph	219582	130892	1108	0	9600
1684	Wight	Jane	8568	0	0	0	0
1684	Mason	George	12132	0	11072*	14997	0
1684	Chauncey	Elnathan	20054	0	0	0	0
1684	Sendall	Samuell	94052	73846	0	0	10708
1684	Scont	William	13080	11077	0	0	0
1684	Harring	Thomas	1731	23262	323	1108	0
1684	Clap	Nehemiah	49142	50031	0	13876	0
1684	Whitwell	William	126508	59077	6092	9969	47815
1684	Spowell	William	1135	0	0	0	0
1684	Rootes	Thomas	37117	18462	0	0	3692
1684	Maverick	Elias Sr.	151523	129231	*	0	0
1684	Wise	Joseph	12037	4431	0	0	0
1684	Woodward	John	15517	0	*	0	0
1684	Thurston	Ens Benjamin	23534	0	4985	895	3231
1684	Sterrey	Cpt. William	2560	0	1154	4747	0
1684	Evans	Matthias	28098	18462	1066	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1684	Powes	Thomas	10599	0	18	0	0
1684	Wheaton	Christopher	14654	7385	0	0	0
1684	Spence	John	2474	0	2031	171	0
1684	Plaston	John	6000	0	471	0	0
1684	Dawes	John	12532	11077	0	1001	0
1684	Neale	Andrew	154191	92308	3711	0	0
1684	Ainsworth	Daniel	35485	29538	1414	0	0
1684	Woodmansy	John	251573	147692	738	0	0
1684	Fairbouke	John	87143	67477	323	3508	0
1684	Garey	Nataniel	18062	19015	0	2845	1698
1684	Haeke	Mathew	88615	59446	1292	1292	2215
1684	Worcester	William	14649	11077	0	2418	1440
1684	Kemble	Samuel	5055	0	0	0	0
1684	James	Francis	43855	34523	0	2215	2031
1684	Harris	William	48861	59077	3138	108538	22085
1684	Laurence	Nicholas	18683	7385	0	0	0
1684	Checkley	John	3983	0	0	0	0
1684	Engs	Madet	45175	40615	2178	3378	0
1684	Parker	John	20014	12923	0	738	0
1684	Davis	William	74304	48000	7200	11505	0
1684	Coxe	Robert	18496	0	0	4811	6885
1684	Wilmott	Nicholas	30212	0	0	14188	13689
1685	East	David	27991	0	0	1882	13176
1685	Barbur	George	70024	50165	0	10146	3765
1685	Pitts	Edmond	87211	84894	0	3390	0
1685	Williams	John	82478	56471	941	2332	282
1685	Parke	Deacon William	329784	282353	2984	0	19134
1685	Smith	Richard	35834	0	23680	0	0
1685	Norman	Thomas	-3457	0	15059	61170	37647
1685	Timberlake	Willson	1186	0	0	0	0
1685	Sweet	John	290652	141176	1120	0	90774
1685	Smith	Samuel	46826	0	0	5353	10889
1685	Phippen	Sarah	49976	47059	0	0	0
1685	Smith	Thomas	19454	16941	0	0	0
1685	Dafforne	John	10761	0	0	0	0
1685	Shute	William	31642	28235	0	0	0
1685	Keen	Hannah	2792	0	0	897	0
1685	Devotion	Edward	143473	75200	0	2824	50824
1685	Pickerin	William	10052	7529	0	0	0
1685	Alline	Jonathan	10835	0	85	4866	0
1685	Crafts	John	13225	9412	0	3170	2071
1685	Elliot	Asaph	115084	63059	1459	0	0
1685	Emons	Samuel	2969	0	0	0	0
1685	Johnson	Joseph	3341	0	66	0	1459
1685	Bate	Christopher	1120	0	0	0	932
1685	Lewis	John	23741	18334	0	941	127
1685	Catlin	John	23056	0	0	0	0
1685	Hodge	Robert	8104	0	0	847	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1685	Vergoose	Susanna	17882	12235	0	0	0
1685	Davenport	Thomas	62011	40094	1901	640	7677
1685	Vining	John	88273	69835	0	0	753
1685	Phillips	Henry	252236	251294	0	39693	15812
1685	Woolfalt	Richard	622	0	824	1020	0
1685	Tawley	Thomas	59445	0	11624	0	866
1685	Hobart	Edmond	66224	56094	67	329	679
1685	Savage	Ebenezar	17652	0	753	0	1045
1685	Jolls	Thomas	110847	7529	2322	0	7906
1685	Greenough	William	222473	178824	0	0	0
1685	Waite	Gramaleil	36225	39529	0	11690	0
1685	White	Cornelius	29412	28235	0	3654	66
1685	Sparrey	John	1155	0	0	1586	0
1685	Hawkins	William	38570	0	0	0	0
1685	Matson	John	3821	0	2824	0	0
1685	Gillian	Cpt. Benjamin	243227	188235	2687	0	0
1685	Maverick	Moses	48287	53271	0	16268	0
1685	Key	Thomas	9435	0	0	0	347
1685	Platt	Thomas	305115	139294	376	39804	182171
1685	Thurston	John Sr.	31848	8659	0	254	18885
1686	Porter	Abel Sr.	39274	17664	12864	1781	1248
1686	Place	John	48475	38400	*	17280	4896
1686	Sanford	"Widow"	6211	0	82	0	0
1686	Dowden	Leonard	81758	23040	0	0	0
1686	Condy	William	129053	0	49536	1536	37891
1686	Oliver	John	48845	11520	31680	50592	0
1686	Wansley	John	338314	142080	140064	0	0
1686	Henchman	"Cpt."	262175	234240	0	3109	0
1686	Adams	Thomas	69557	98304	0	0	0
1686	Thatcher	Thomas	0	0	477	0	0
1686	Bate	Edward	126288	120000	0	0	0
1686	Allin	William Sr.	73123	63168	0	0	0
1686	Farwell	John	54455	9216	*	0	4921
1686	Jones	Thomas	62333	19200	*	0	7680
1686	Moody	William	2437	0	490	0	442
1686	Weld	John	46051	38400	0	221	2496
1686	Burges	Margaret	8567	0	6144	1513	0
1686	Pilsbury	William	60565	36480	0	2304	349
1686	Paine	Thomas Jr.	51202	38352	0	0	0
1686	Brooke	Isaac	48192	32832	0	19200	0
1686	Pederick	John Sr.	70171	54432	0	41664	10752
1686	Harris	George	13459	0	0	0	0
1686	Bracket	John	14598	9504	0	7981	806
1686	Matson	Joshua	11846	0	0	2304	6528
1686	Chappel	Francis	5707	0	7363	2402	0
1686	Tovey	John	2361	0	547	15270	10959
1686	Bowles	Sarah	4224	0	960	960	0
1686	Johnson	Henry	2955	0	1486	0	0

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1686	Woodbury	Humphery	147898	113952	0	0	0
1686	Standley	Mathew	37942	28800	0	0	0
1686	Hodges	Lydia	3533	0	0	0	0
1686	Buckmaster	Jacob	27234	0	202	3485	17245
1686	Moss	Jonathan	40838	22896	134	0	0
1686	Stone	Jane	64358	55104	0	0	0
1686	Parker	John Sr.	77602	52992	288	0	691
1686	Woodbury	Nicholas Sr.	493824	382944	13440	15360	34560
1686	Winn	Anna	21526	17280	0	0	905
1686	Bright	Deacon Henry	130560	99744	290	0	19728
1686	Noyce	John	2361	0	0	0	0
1686	Merritt	Nicholas Sr.	30168	28320	0	4282	0
1686	Lovett	John	95200	65824	*	0	576
1686	Groves	Edward	48782	11520	2880	0	0
1686	Pope	John	47105	40320	0	2815	0
1686	Smith	Henry	50186	42864	*	77	782
1686	Simpson	George	17490	0	4016	10503	13389
1686	Bullard	William	46042	34320	0	0	8640
1686	Gengel	John	28074	28800	0	5494	0
1686	Holt	John	7872	0	0	0	0
1686	Well	Humphery	18230	0	17069	193	0
1686	Collins	Henry	91104	77952	0	0	0
1686	Kyrtland	Nathanael Sr.	67200	53568	350	0	0
1686	Gookin	Daniel	62054	46848	0	0	0
1686	Hunt	Sgt. Ephriam	96394	78336	0	0	0
1686	Peirson	Bertholomens	192810	111936	32405	1407	14488
1686	Sparhauck	Nathaniel	129397	133248	0	22735	1007
1686	Leppingwill	Michel	18365	17664	0	0	0
1686	Whipple	Gennet	48941	23040	470	734	16546
1686	Shelly	Sarah	41680	0	179	3377	36809
1686	Messinger	Henry	65573	38400	432	0	0
1686	Ellis	Constante	122	0	0	1538	269
1686	Shaplin	Michael	34469	17280	806	0	1728
1686	Porter	Abell	18991	0	0	56724	57600
1686	Vial	John	74575	0	895	0	0
1686	Rodgers	John Sr.	56346	41798	0	900	194
1687	Baker	Edward	8553	0	0	0	1588
1687	Green	James	82732	59534	0	0	3969
1687	White	Susannah	33349	22424	129	0	992
1687	Francis	Richard	12497	1984	1612	0	0
1687	Newhall	Ens. Thomas	112836	102299	1588	0	0
1687	Jacklin	Susannah	15824	0	*	0	0
1687	Gridley	Joseph	17369	7938	0	15	3721
1687	Keen	Arthur	56096	35720	1588	0	0
1687	Underwood	Magdalen	18763	7839	0	0	3473
1687	Thaxter	Cpt. John	207504	140103	*	0	7138
1687	Rediat	John	27728	15330	1290	0	0
1687	Nichols	Edward	4872	0	0	2426	4381

Year	Last Name	First Name	Total	Land	Cash	Payable	Receivable
1687	Cromwell	Thomas	13772	8335	0	0	0
1687	Small	Benjamin	21573	18852	0	10456	1984
1687	Hardey	Joseph Sr.	67035	15876	2202	3175	8930
1687	Tovey	John	1826	0	0	0	0
1687	Daniell	Stephen	63700	28576	*	0	2386
1687	Langley	Abel	106214	87018	0	3473	11286
1687	Bartoll	Parmell	19562	18654	0	1875	0
1688	Foster	Timothy	21900	2400	0	0	0
1688	Fuller	Robert	20957	16800	0	0	0
1688	Hooper	James	15130	0	369	0	0
1689	Holm	David	5232	0	3306	0	0
1689	Butler	James	53797	23970	*	0	0
1689	Bate	James Sr.	42850	36849	0	0	0
1689	Drewery	Hugh	130435	90333	1204	0	30051
1689	Peirce	John	20052	11627	*	0	0
1689	Griggs	Isaac	38864	0	1067	7021	19491
1689	Burle	John	10312	6261	0	0	0
1689	Norton	William	68900	39353	8765	5799	5903
1689	Bridgham	Jonathan	263011	160990	0	28196	27404
1689	Townsend	James	78706	71551	590	0	0
1689	Nowell	George	25316	16099	0	0	0
1689	Hawse	Edward	16707	10375	0	1073	0
1689	Gay	John Sr.	16329	4830	1431	0	0
1689	Lane	George	96518	82463	0	0	0
1689	Fisk	Benjamin	35883	21465	331	0	1073
1690	Haugh	Anna	18412	0	0	0	1122
1690	Adams	Nathaniel Sr.	44202	26089	505	0	0
1690	Thaxter	Joseph	101667	15897	15897	0	12841

APPENDIX B:

ESSEX COUNTY PROBATE DATA (IN CONSTANT PENCE STERLING) (Pages 129-145)

Year ¹	Last Name	First Name	Town	Total ²	Cash ³	Payable	Receivable
1636	Dillingham	Sarah	Ipswich	92573	1404	3840	0
1641	Watkins	John	Salem	1258	0	1200	0
1642	Smith	Samuel	Wenham	95126	920	720	0
1642	Roffe	Henry	Newbury	36822	0	0	0
1642	Browne	George	Newbury	12562	0	0	0
1643	Belknap	Abraham	Lynn	12843	0	1359	0
1643	Andrews	Robert	Ipswich	20992	260	0	660
1644	Churchman	Hugh	Lynn	4976	0	315	0
1644	Lewis	Robert	Newbury	6392	0	0	2964
1644	Cummings	Joanna	Salem	7920	0	427	0
1644	Mattox	John	Salem	3525	0	0	2445
1644	Wathin	Margery	Salem	9521	0	0	0
1644	Talby	John	Salem	1562	0	0	875
1644	Pease	Margaret	Salem	4592	0	240	120
1644	West	Isabel	Salem	13104	0	0	3660
1644	Pease	Robert	Salem	9510	0	1440	0
1644	Ingersoll	Richard	Salem	71274	0	0	48000
1644	Ingersoll	Richard	Salem	51228	0	0	1668
1645	Gaines	Jane	Lynn	10387	0	0	120
1645	Chute	Lionell	Ipswich	22696	0	2400	0
1645	Goog	William	Lynn	7934	0	1075	0
1646	Thorne	John	Salem	6674	1066	0	1960
1646	Bartholomew	Richard	Salem	68749	0	0	18981
1646	Lightfoot	Francis	Lynn	12242	0	0	340
1646	Hersome	Mary	Wenham	5229	0	0	0
1646	Mason	Emme	Salem	6192	0	0	0

¹ Inventories missing dates were assigned the same year as the inventory following them in the records. Errors in arithmetic accepted. Values were deflated to constant pence using John J. McCusker, *Money and Exchange in Europe and America: 1600-1775, A Handbook* (Chapel Hill: The University of North Carolina Press for the Institute of Early American History and Culture, 1978), 138-139.

² Total estate equals gross estate, including debts receivable, minus debts payable.

³ An asterisk indicated the presence of non-enumerated cash in the estate.

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1646	Satchwell	John	Ipswich	116584	0	0	1200
1646	Carthrick	Michael	Ipswich	23790	0	0	0
1646	Fairfield	John	Wenham	27163	0	0	0
1647	Clarke	William	Salem	140666	1183	0	74561
1647	Lowell	John	Newbury	58800	0	0	0
1647	Young	Christopher	Wenham	12372	0	0	0
1647	Badger	Giles	Newbury	36836	0	5876	0
1647	Heard	Luke	Ipswich	20372	0	0	0
1647	Scullard	Samuel	Newbury	23988	0	2620	0
1647	Abbot	George	Rowley	22832	300	0	84
1647	Bartlett	Richard	Newbury	4169	580	1188	0
1647	Whipple	Matthew	Ipswich	68905	0	0	0
1647	Pride	John	Salem	21312	0	0	0
1647	Goodale	Elizabeth	Newbury	35372	1949	0	7589
1648	Bailey	Richard	Rowley	25546	720	0	0
1648	Firman	Thomas	Ipswich	21546	0	0	2160
1648	Balch	John	Salem	52960	0	0	0
1648	Jackson	John	Ipswich	19998	0	0	0
1648	Jarrat	John	Rowley	16754	0	0	0
1648	Ingalls	Edmond	Lynn	32506	0	14620	0
1648	Southmead	William	Gloucester	10440	0	1440	960
1648	Withingham	John	Ipswich	143324	340	0	50400
1648	Wood	Daniel	Ipswich	12672	0	3600	0
1648	Nelson	Thomas	Rowley	126631	0	0	0
1648	Hopkins	Michael	Rowley	28076	*	2016	0
1649	Varnam	George	Ipswich	20850	0	1812	0
1649	Johnson	Robert	Rowley	6539	0	0	0
1650	Cooke	Thomas	Ipswich ?	9696	0	0	6096
1650	Sadler	Anthony	Salisbury	13796	0	0	5160
1650	Burt Jr	Hugh	Lynn	15780	0	4896	222
1650	Lewis	Edmund	Lynn	29370	0	1753	0
1650	Cross	John	Ipswich	91742	0	0	26640
1650	Barker	Thomas	Rowley	115549	1300	0	2232
1651	How	Joseph	Lynn	25808	*	0	0
1651	Tibbot	Walter	Gloucester	43440	0	0	0
1651	Barrett	Richard	Lynn ?	9120	0	2092	3240
1651	Baker	Sarah	Ipswich	1388	0	0	0
1651	Lowle	Elizabeth	Newbury	33039	0	0	23527
1651	Hauxworth	Thomas	Salisbury	5668	0	0	0
1651	Osgood	John	Andover	89604	0	0	0
1651	Birdsall	Henry	Salem	11518	0	0	0
1651	Bayly	John	Newbury	65054	0	0	0
1652	Hardy	John	Salem	94374	0	0	0
1652	Rolfe	Ezra	Ipswich	20050	*	2460	2088
1652	Somerby	Henry	Newbury	39408	0	14880	6348
1653	Wathem	Thomas	Gloucester	660	0	0	0
1653	Averill	William	Ipswich	12000	0	2880	0
1653	Ivory	William	Lynn	32518	*	480	0

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1653	Stevens	William	Newbury	40014	0	0	0
1653	Cole	George	Lynn	7808	0	144	162
1653	Tilton	William	Lynn	30778	*	0	0
1653	Cogswell Jr	John	Ipswich	81960	0	4560	22612
1653	Hooke	William	Salisbury	81600	0	0	0
1653	Robinson	John	Salem	13062	240	0	0
1653	Millard	Thomas	Newbury	82360	0	0	37794
1653	Bacon	William	Salem	44352	0	9120	0
1653	Knowlton	Margery	Ipswich	38103	0	7200	4908
1653	Kenning	Jane	Ipswich	39925	0	0	17095
1653	Quitel	Mark	Ipswich	29500	0	3492	0
1653	Varney	William	Ipswich	13712	0	1440	0
1653	Cooley	John	Ipswich	16016	0	0	0
1653	War	Abraham	Ipswich	11368	0	0	0
1654	Scott	Thomas	Ipswich	76559	786	0	1176
1654	Symonds Jr	Samuel	Ipswich	9840	0	0	0
1654	Hollingsworth	Richard	Salem	75822	0	0	8940
1654	Rolfe	Daniel	Ipswich	17972	0	14460	720
1654	Burrill Sr	George	Lynn	203640	19738	9644	11986
1654	Wake	William	Salem	14502	0	14433	8064
1654	Buxton	Thomas	Salem	12576	220	0	0
1654	Trusler	Thomas	Salem	47742	780	2470	0
1654	Ager	William	Salem	10496	0	0	0
1654	Scruggs	Thomas	Salem	58682	0	0	0
1654	Kent Sr	Richard	Newbury	55960	0	0	3678
1654	Fiske	William	Wenham	33990	0	0	6720
1654	Mitchell	William	Newbury	8464	0	4320	0
1654	Perkins Sr	John	Ipswich	60060	2400	0	0
1654	Partridge	William	Salisbury	59828	0	10908	0
1654	Pike Sr	John	Salisbury	55282	0	0	1680
1654	Williams	George	Salem	78372	1200	12367	20976
1654	Williams	Mary	Salem	31479.5	0	4122.25	6984.25
1654	Hardy	Elizabeth	Salem	36350	0	2510	0
1654	Ward	Alice	Ipswich	9059	0	0	0
1654	Mighill	Thomas	Rowley	137219	0	16929	380
1655	Averill	Abigail	Ipswich	18539	0	3120	0
1655	Smith	Henry	Rowley	3396	0	1332	0
1655	Merrill	Nathaniel	Newbury	20232	0	1680	0
1655	Moulton Sr	Robert	Salem	29136	0	1920	0
1655	Tresler	Elinor	Salem	31482	0	6468	0
1655	Knight	William	Lynn	37140	46	0	2196
1655	Fay	Henry	Newbury	14350	0	4404	0
1655	Bradstreet	Humphrey	Ipswich	90360	0	4800	12000
1655	Knowlton	William	Ipswich?	8977	0	2376	0
1655	Rogers	Nataniel Rev.	Ipswich	359428	0	0	12000
1655	Bridgman	John	Salem	16651	0	5913.25	884
1655	Bacon	Rebecca	Salem	46902	0	0	0
1655	Sewall Sr	Henry	Rowley	79396	0	10793	0

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1655	Smith	Hugh	Rowley	56300	0	12324	0
1655	Friend	John	Salem	54626	40	0	0
1656	Ward	John	Ipswich	74007	0	0	50127
1656	Dowe	Thomas	Haverhill	23028	0	0	0
1656	Jackson Sr	John	Salem	4872	0	0	0
1656	Wickes	Thomas	Salem	46200	480	10200	4992
1656	Hart	John	Marblehead	17886	0	15192	0
1656	Parrot	Francis	Rowley	85740	0	15233	1560
1656	Noyes	James Rev	Newbury	143416	0	13560	14400
1656	Chaplin	Hugh	Rowley	29656	0	2040	0
1656	Bullock Jr	Henry	Salem?	28782	0	2142	2424
1657	Richardson	William	Newbury	12638	0	2844	312
1657	Batchelder	Joseph	Wenham	21760	0	1800	0
1657	Alderman	John	Salem	25404	0	1080	0
1657	Scott	Thomas	Ipswich	44072	0	44160	6480
1657	Trumble	John	Rowley	54214	0	1155	0
1657	Eyers Sr	John	Haverhill	59586	0	0	240
1657	Balch	Agnes	Salem	2292	0	3984	0
1657	Scudder	Thomas	Salem	17620	0	0	0
1658	Gilbert	Humphrey	Ipswich	40710	0	0	0
1658	Robinson	John	Ipswich	13192	0	5475	8640
1658	Bunker	George	Topsfield	72168	0	38080	2940
1658	Patch	James	Salem	60192	0	0	0
1658	Creeke	Andrew	Topsfield	4284	0	4754	1584
1658	French	Susan	Ipswich	3018	0	0	0
1658	Clements	Robert	Haverhill	118730	*	0	38298
1658	Whipple	Matthew	Ipswich	57313	0	10732	7680
1658	Adams Jr	William	Ipswich	70243	106	21360	15240
1658	Lampson	William	Ipswich	29966	0	3204	1680
1658	Leach Sr	John	Salem	8922	0	368	0
1659	Corwithy	Samuel	Marblehead?	8928	0	0	0
1659	Cooper	Timothy	Lynn	42492	0	3600	1320
1659	Laskin	Hugh	Salem	13954	2380	0	3048
1659	Perkins Jr	John	Ipswich	24819	0	7178	0
1659	Symmons	Mark	Ipswich	65001	0	3240	8640
1659	Mountjoy	Benjamin	Salem	4589	0	0	0
1659	Jigles	William	Salem	35520	1040	0	0
1659	Woodis	John	Salem	16620	120	0	1560
1659	Travers	Henry	Newbury	22290	0	1200	0
1659	Hobson	William	Rowley	109462	0	2400	0
1659	Lambert	Jane	Rowley	129556	0	0	18720
1659	Abbott	Thomas	Rowley	56340	0	7171	0
1659	Conant	Joshua	Salem	7752	*	8495	0
1659	Norton	George	Salem	32298	0	0	0
1659	Moores	James	Hammersmith	13542	0	0	0
1659	Browne	Edward	Ipswich	54067	0	5857	396
1659	Cutting	John	Newbury	176880	0	15384	13464
1659	Witter	William	Lynn	31812	0	0	0

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1660	Porter	Samuel	Wenham	8148	0	0	240
1660	True	Henry	Salisbury	41946	0	12024	1236
1660	Holyoke	Edward	Lynn	163440	0	0	4560
1660	James	Erasmus	Marblehead	20660	0	4560	0
1660	Golt	William	Salem	11574	0	5064	0
1660	Bradstreet	John	Marblehead	24828	0	0	0
1660	Southwick	Lawerence	Salem	47040	0	0	0
1660	Reyner	Humphrey	Rowley	87614	*	0	72960
1660	Nicholson	Edmund	Marblehead	36000	0	13008	0
1660	Codner	Christopher	Marblehead?	36249	0	0	2604
1660	Jewett	Joseph	Rowley	1239612	720	450393	611472
1660	Ordy	William	?	9911	0	0	957
1660	Rogers	Ezekiel Rev	Rowley	368637	0	0	12917
1660	Colby	Anthony	Salisbury	86392	0	16495	3546
1661	Tucker	Roger	Salem	2328	0	0	0
1661	Peasley	Joseph	Salisbury	34380	0	0	0
1661	Browne	Richard	Newbury	152196	0	7620	0
1661	Seers	Thomas	Newbury	22320	0	3124	0
1661	Kirtland	Philip	Lynn	45349	2400	0	480
1661	Sibly	John	Manchester	16680	0	4044	0
1661	Smith	James	Marblehead	118092	0	0	0
1661	Bellflower	Benjamin	Salem	3360	0	3120	0
1661	Smith	John	Rowley	108874	0	4560	4768
1661	Anderson	Arsbell	Lynn	13145.25	110.5	2685	2930.25
1661	Burt	Hugh	Lynn	34617	440	0	39
1661	Cockerell	William	Salem	19620	0	0	0
1661	Davis	Jenkin	Lynn	44274	0	16800	0
1661	Dorman	John	Topsfield	28332	0	1998	14880
1661	Wilkes	Thomas	Salem	24083.5	0	0	0
1661	Cooke	Henry	Salem	61200	0	22148.75	0
1661	Gray	Robert	Salem	141132	0	0	0
1662	Griffen	Humphrey	Ipswich	69606	0	45600	12564
1662	Goyte	John	Marblehead	6792	0	0	0
1662	Smith	Thomas	Salem	15300	0	8273	0
1662	Balch	John	Salem	45564	0	10293	0
1662	Ringe	Daniel	Ipswich	111252	720	24960	7440
1662	Lume	Ann	Rowley	11790	0	0	0
1662	Lee	Thomas	Ipswich	47558	0	9600	0
1662	Rae	Daniel	Salem	57592	0	0	3360
1662	Stevens	John	Andover	111168	0	0	0
1662	Andrews	John	Ipswich	315820	0	182052	13798
1662	Row	John	Gloucester	49402	0	480	840
1662	Lewis	David	Salem	5352	0	0	0
1662	Browne	William	Gloucester	53604	0	0	0
1662	Leach	Lawerence	Salem	33296	0	0	0
1662	Fuller	Ann	Salem?	5730	0	0	0
1662	Stileman	Elias	Salem	42390	0	67108	0
1662	Brabrooke	John	Newbury	28119	83	0	0

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1662	Call	Philip	Ipswich	88236	0	6240	6360
1662	Lunt	Henry	Newbury	138000	0	9324	8880
1662	Rowell	Thomas	Andover	37562	0	6807	1904
1662	Wild	William	Ipswich	54174	0	1200	17166
1662	Morrill	Abraham	Salisbury	121680	0	0	1920
1662	Farr	George	Lynn	26256	0	0	0
1662	Worcester	William Rev.	Salisbury	155856	*	0	12360
1662	Antrum	Thomas	Salem	63192	1746	0	21600
1663	Muddle	Henry	Gloucester?	3562	0	5158	96
1663	Smith	George	Salem	2160	0	615	312
1663	Smith	Mary	Marblehead	34602	2440	0	0
1663	Bennet	John	Marblehead	18264	0	0	0
1663	Flint	Thomas	Salem	79392	0	15760	1440
1663	Sallows	Thomas	Salem	25335	0	8340	0
1663	Cummings	John	Salem	11454	960	0	0
1663	Cantlebury	William	Salem	112896	240	15824	5412
1663	Roberts	Robert	Ipswich	43580	0	0	960
1663	Winsley	Samuel	Salisbury	2949	*	0	788
1663	Shatswell	Theophilus	Haverhill	182280	0	3360	480
1663	Pickworth	John	Manchester	40368	0	0	0
1663	Rooten	Richard	Lynn	67520	4800	2268	4166
1663	Littlehale	Richard	Haverhill	49374	0	1680	3822
1663	Barnes	Thomas	Salem	81105	0	28962	22731
1663	Wickam	Richard	Rowley	34580	0	0	0
1663	Bullock	Henry	Salem	23940	0	480	6264
1664	Rogers	Robert	Newbury	24420	0	1044	2496
1664	Fraile	George	Lynn	44328	0	1857	1592
1664	Miller	Mary	Newbury	18960	0	0	0
1664	Knight	Alexander	Ipswich	39407	0	1006	6408
1664	Lambert	Jonathan	Rowley?	7308	0	3870	0
1664	Cockerill	Elizabeth	Salem	24504	2880	0	0
1664	Sallows	Grace	Salem?	27279	0	8340	0
1664	Harwood	Henry	Salem	39294	0	2400	2130
1664	Stuart	William	Lynn	9407	0	0	0
1664	Priest	James	Salem	3576	680	0	0
1664	Annabel	John	Ipswich	54780	0	11309	5484
1664	Spooner	Thomas	Salem	79964	0	0	0
1664	Bartoll	John	Marblehead	17160	320	15581	0
1664	Collins	Gabriel	Gloucester	1634	0	0	0
1664	Kinsman	Robert	Ipswich	53437	0	4621	3193
1664	Vinent	Humphrey	Ipswich	26412	0	0	0
1664	Witt	Jonathan	Lynn	13188	0	0	0
1664	Sharp	Samuel	Salem	16096	0	2400	0
1665	Delle	William	Haverhill	28416	0	0	0
1665	Coleman	John	?	2064	0	3015	0
1665	Stickney	William	Rowley	100009	209	1380	2880
1665	Fitt	Robert	Ipswich	55204	0	765	1246
1665	Window	Richard	Gloucester	51666	0	0	0

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1665	Slater Jr	John	Marblehead	12180	0	0	0
1665	Hayward	Nehemiah	Salem?	39180	0	6438.75	0
1665	Metcalf	Joseph	Ipswich	98076	0	9120	0
1665	Moulton Sr	Robert	Salem	70680	0	4945.25	0
1665	Wyatt	John	Ipswich	42712	0	5040	0
1665	Hodges	Andrew	Ipswich	54948	0	4640	360
1665	Moulton	Abigail	Salem	59232	0	7132	0
1665	Clarke	Edmund	Gloucester	20220	0	7920	0
1665	Endecott	John Gov	Boston	384223	*	0	0
1666	Antrum	Obadiah	Salem	45948	0	4800	12000
1666	Thurston	Daniel	Newbury	137520	0	0	0
1666	Bradstreet	Bridget	Ipswich	19499	0	0	0
1666	Symonds	Joanna	Ipswich	7562	0	1548	2424
1666	Emerson	Thomas	Ipswich	61716	0	0	0
1666	Smith	Thomas	Newbury	116880	0	2400	0
1666	Farrington	John	Lynn	60327	0	1929	0
1666	James	Thomas	Salem?	29630	0	2543	236
1666	Eastwick	Edward	Salem	16836	0	9153	0
1666	Trask Sr	Capt. William	Salem	87360	0	0	0
1666	Lawes	Frances	Salem	46080	0	0	0
1666	Gutterson	William	Ipswich	13440	0	0	0
1666	Cheney Sr	John	Newbury	133788	0	0	2400
1666	Brocklebank	John	Rowley	58422	0	9600	0
1666	Fuller	John	Ipswich	82620	0	0	0
1666	Goodell	Richard	Salisbury	63456	800	0	180
1666	Wells	Thomas	Ipswich	291399	4627	48000	31800
1666	Scudder	Elizabeth	Salem?	8010	0	2553	2250
1666	Tompkins	Ralph	Salem	5028	0	1200	0
1666	Johnson	Richard	Lynn	88530	960	5280	6120
1667	Sandie	Arthur	Marblehead	59678	0	28919	12263
1667	Mansfield	Robert	Lynn	41724	280	10320	0
1667	Safford	Thomas	Ipswich	58782	0	5360	0
1667	Winsley	Samuel	Salisbury	76968	720	0	3660
1667	Browne	Jonathan	Salem	16812	0	60048.5	0
1667	Haskell	Roger	Beverly?	148056	0	0	0
1667	Seeres	Alexander	Salem?	32088	0	17226	0
1667	Lemon	Robert	Salem	55620	0	1800	1440
1667	Reed	Thomas	Salem	20964	0	4080	0
1667	Giggles	Elizabeth	Salem	29474	1840	4092	0
1667	Sharp	Alice	Salem	22404	0	3360	0
1667	Searle	William	Ipswich	22332	0	0	0
1667	Worth	Lionel	Newbury	114636	0	0	600
1667	Killian	Austin	Wenham	29280	0	0	0
1667	Killam	Alice	Wenham	2256	0	2480.25	0
1667	Lambert	John	Rowley	141368	0	7693	28656
1667	Archer	Samuel	Salem	42282	0	46969	5664
1667	Randall	Thomas	Marblehead	1548	0	0	0
1667	Woodbury Jr	William	Beverly	45246	0	25680	0

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1667	Gott Sr	Charles	Wenham	45780	0	3360	0
1668	White	John	Haverhill	57960	0	0	0
1668	Law	William	Rowley	157036	1108	49834	26796
1668	Haffield	Martha	Ipswich	83958	0	0	0
1668	Cooper	Peter	Rowley	95140	0	7680	4044
1668	Taylor	George	Lynn	34710	0	0	0
1668	Howlett Jr	Thomas	Ipswich	81608	0	0	1740
1668	North	Richard	Salisbury	36753	120	0	18213
1668	Shepard	Samuel	Rowley	123738	0	7561.5	11596
1668	Cottle	William	Newbury	48480	0	2520	1440
1668	Wheeler	George	Newbury	6972	0	0	0
1668	Perley	Nathaniel	Ipswich	31950	0	552	930
1668	Perkins	John	Ipswich	11700	0	0	0
1668	Bracket Jr	Thomas	Salem	7752	0	864	3912
1668	Dill	Thomas	Marblehead	27240	0	9408	8940
1668	Andrews	Robert	Boxford	150780	0	5520	1200
1668	Birdley	Giles	Ipswich	62694	0	4800	1920
1668	Marchent	William	Ipswich	32628	0	720	0
1668	Knight	Philip	Topsfield	25656	0	0	0
1668	Walton	William	Marblehead	78366	0	28882	9360
1668	Whittridge	William	Ipswich	20326	0	16047	2196
1668	Manning	Thomas	Ipswich	9216	0	0	0
1668	Robinson	Timothy	Salem	32208	0	4800	0
1668	Longhome	Richard	Rowley	175813	*	4800	0
1668	Haskell	Mark	Beverly	109779	3243	20400	0
1668	Carlton	John	Haverhill	101432	0	0	12916
1668	Eaton	John	Haverhill	48000	0	0	1800
1669	Axey	James	Lynn	54000	1746	0	4848
1669	Lyndsey	Christopher	Lynn	21156	0	0	0
1669	Woodrock	William	Salem	25781	960	68511.25	0
1669	Coombes	Henry	Marblehead	20466	0	13712.25	0
1669	Whipple	John	Ipswich	106572	0	0	0
1669	Hall	Edward	Lynn	30264	0	0	0
1669	Palmer	Thomas	Rowley	73722	0	4052	3024
1669	Bradbury	Wymond	Salisbury	57212	*	14400	2880
1669	Stacey	Elizabeth	Ipswich	6984	0	0	0
1669	Marsh Jr	John	Salem	72012	6000	720	8484
1669	Symonds Jr	Samuel	Ipswich	33642	0	9600	6000
1669	Buffum	Robert	Salem	65028	3120	0	0
1669	Powell	William	Salem	18405	1920	432	2924
1669	Hull	John	Newbury	11472	0	0	0
1669	Cogswell	John	Ipswich	27828	0	0	0
1669	Cresie	Mighill	Ipswich	14014	0	2040	0
1670	Bartlett	Christopher	Newbury	45552	0	13185	0
1670	Musselwhite	John	Newbury	9414	0	2154	0
1670	Knight Sr	John	Newbury	77898	0	0	0
1670	Sanders	John	Lynn	1104	0	1061	0
1670	Roberts	Samuel	Ipswich	11025	1609	0	0

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1670	Hilliard	Job	Salem	29676	0	16800	960
1670	Ropes	George	Salem	49522	0	12088	9646
1670	Day	Thomas	Salem?	5606	0	0	0
1670	Sherrat	Elizabeth	Haverhill	10164	0	0	0
1670	Kenny	John	Salem	51588	*	0	0
1670	Ruck	Elizabeth	Salem	53933	0	22046	16013
1670	Thorndike	John	Beverly	133680	0	0	0
1670	Axey	Frances	Lynn	55794	0	5688	300
1670	Bishop	Thomas	Ipswich	1200012	*	230856	676366
1670	Boynton	John	Rowley	56076	0	3360	0
1670	Chase	Aguilla	Newbury	80811	0	0	0
1671	Farrington	Edmond	Lynn	5958	0	0	0
1671	Herrick	Henry	Beverly	233964	0	0	0
1671	North	Ursula	Salisbury	29220	0	0	13440
1671	Baton	John	?	9054	0	0	4771
1671	Grafton	Nathaniel	Salem	90545	6720	28701	19849
1671	Grafton Jr	Joseph	Salem	71304	0	10118	22492
1671	Browning	Thomas	Salem	106692	0	720	3600
1671	Dodge Sr	Richard	Beverly	423362	2880	0	0
1671	Aslet	John	Newbury	120600	0	1920	2160
1671	Hart	Samuel	?	4503	0	3593	432
1671	Moore	William	Ipswich	33210	0	0	14400
1671	Lee Sr	John	Ipswich	207734	0	0	4488
1671	Scott	Benjamin	Rowley	16284	0	960	720
1671	Treadwell Sr	Thomas	Ipswich	135258	0	2269	18820
1671	Wells	Abigail	Ipswich	15341	200	2136	1920
1671	Jones	Thomas	Gloucester	35460	0	0	0
1671	Mercer	Richard	Haverhill	12024	0	8053	0
1671	Symonds	John	Salem	82258	60	2964	5887
1671	Auger	Benjamin	Salem	29304	0	5760	0
1671	Mansfield	John	Lynn	49188	0	9788	342
1671	Owen	Timothy	Marblehead	879	389	606	0
1671	Somerby	Abigail	Newbury	75600	0	0	0
1671	Cheney	John	Newbury	29888	0	12896	10800
1671	Lancton	Toger	Haverhill	16869	0	0	8013
1671	Davis	Joseph	Haverhill	82466	0	75624	0
1671	Stacey	John	Marblehead	34668	2026	2400	0
1672	Hawkes	Adam	Lynn	196632	0	11208	420
1672	Young	Elias	?	5359.75	0	6692	257.25
1672	Yabsley	William	?	3133.25	0	4384	0
1672	Foster	Edward	?	3768	0	9539	0
1672	Dresser Sr	John	Rowley	107844	0	5696	14958
1672	Price	Theodore	Salem	62414	0	20248.25	360
1672	Hing	Daniel	Lynn	366834	0	0	0
1672	Wilkins	John	Salem	12132	0	0	0
1672	Caulie	Thomas	Marblehead	33570	0	3865	0
1672	Comey	Peter	Salem?	1176	0	0	0
1672	Neal	John	Salem	148015	720	29209	6147

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1672	Jacobs	Samuel	Ipswich	85393.5	0	13393.5	960
1672	Soolart	John	Wenham	138156	*	17619	24000
1672	Stanwood Sr	Philip	Gloucester	20880	0	0	0
1672	Whittridge	Thomas	Ipswich	26064	0	20239	960
1672	Kent	Cornelius	Ipswich?	10488	0	9989	360
1672	Lake	Margaret	Ipswich	33924	680	835	7200
1672	Jacobs	Richard	Ipswich	270249	0	19200	4200
1672	Wells	Richard	Salisbury	73236	362	0	0
1672	Worcester	Timothy	Salisbury	21804	0	5616	72
1672	Shatswell	Susanna	Haverhill	48720	0	9600	1200
1672	Gage	Benjamin	Haverhill	51632	0	10718	1200
1672	Farr	John	Lynn	34836	0	0	0
1672	Knight	Daniel	Lynn	25461	0	6600	0
1672	Farifield	John	Ipswich	57906	0	1440	0
1672	Norman	John	Manchester	30000	0	13200	0
1672	Smith	John	?	11724	0	0	0
1672	Burch	George	Salem	11904	0	0	0
1672	Greenfield	Peter	Salem	34514	0	5200	1766
1672	Farr	Lazarus	Lynn	12900	0	0	0
1672	Varney	Bridget	Gloucester	15972	0	0	9864
1672	Southwick	John	Salem	169656	0	25603	1200
1672	Proctor Sr	John	Ipswich	294780	0	14400	16200
1672	James	Edmond	Newbury?	5736	0	2130	180
1672	Crosby	Anthony	Rowley	125600	0	34361	17696
1672	Plummer	Francis	Newbury	98946	0	8145	2400
1672	Jordan	Susana	Newbury	3628	0	2941	708
1672	Fitts	Richard	Newbury	39582	0	0	0
1672	Rayner	William	Marblehead	23400	0	12025	0
1672	Jones Jr	Thomas	Gloucester?	7350	0	1842	960
1672	Cromwell	Giles	Newbury	50856	0	4080	827
1672	Wellman	Thomas	Lynn	88927	0	0	3233
1672	Lilford	Thomas	Haverhill	49956	0	0	0
1672	Eaton	Phebe	Haverhill	2874	0	0	930
1672	Heath	Joseph	Haverhill	16476	126	14459	705
1672	Morgan	Robert	Salem	52728	0	4800	0
1673	Robbins	Samuel	Salisbury	8730	0	1933	960
1673	Button	Matthais	Haverhill	24074	0	5127	948
1673	White	Thomas	Wenham	19538	0	31228	876
1673	Leach	Samuel	?	11388	0	9026	0
1673	Newman	Antipas	Wenham	188430	0	26286	8640
1673	Davis	John	Topsfield	10412	8	3798	9012
1673	Tappan	Abraham	Newbury	203762	0	1902	33176
1673	Gage	John	Bradford	104520	0	3816	3600
1673	Dow	John	Haverhill	41820	0	4816	1440
1673	Short	Henry	Newbury	442176	*	16344	22296
1673	Boardman Sr	Thomas	Ipswich	132798	0	7200	1434
1673	Lord Sr	William	Salem	88080	0	4800	15600
1673	Gillow	John	Lynn	83172	0	1344	1044

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1673	Coldum	Thomas	Lynn	15564	1180	0	3200
1673	Hathorne	John	Salem	157244	1200	3176	0
1673	Burt	Ann	Lynn	11310	0	0	720
1673	Flint	William	Salem	218820	2400	3989	19131
1673	Fiske	Phineas	Wenham	51486	0	1911	120
1673	Charles	William	Marblehead	53940	0	6955	0
1673	Burr	John	Ipswich?	72816	0	7200	720
1673	Andrews	Jebediah	Alisbury	60816	800	4008	12708
1673	Goldsmith	Richard	Wenham	12120	0	9520	1020
1673	Merrill	John	Newbury	91104	0	0	0
1673	Holmes	Robert	Newbury	11004	0	6132	0
1673	Tyler	Abraham	Haverhill	25200	0	0	0
1673	Window	Bridget	Gloucester	6253	0	294	888
1673	Mansfield	Elizabeth	Lynn	44376	280	0	0
1673	Baldwin	John	Salem	18702	0	12000	0
1673	Walton	Josiah	Marblehead?	15069	0	0	9438
1673	Newman Sr	John	Ipswich	41592	0	1847	21912
1673	Clarke	Richard	Rowley	10366	0	5124	708
1673	Marshall	Edmund	Ipswich	5748	0	0	0
1673	Alley Sr	Hugh	Lynn	14608	0	0	1252
1673	Ellinwood	Ralph	Beverly	84626	60	0	0
1674	Williams Sr	John	Newbury	43572	0	0	0
1674	Wallis	Robert	Ipswich	23028	0	3794	0
1674	Sawyer	Edward	Rowley	53616	0	1920	672
1674	Hart	Thomas	Ipswich	175122	1200	22968	22278
1674	Colby	John	Amesbury	56208	0	0	0
1674	Browne	Isaac	Newbury	88656	0	9240	0
1674	Leach	Robert	Manchester	111360	0	0	8400
1674	Partridge	Michael	Marblehead	6987	0	7020	2721
1674	Hooper	Robert	Marblehead	6501	0	8892	2712
1674	Newhall Sr	Thomas	Lynn	41539.5	107.5	0	1440
1674	Price	Capt. Walter	Salem	494092	0	0	0
1674	Legg	John	Marblehead	75998	2700	0	1679
1674	Tarbox	John	Lynn	38238	46	298	3312
1674	Haseltine	Robert	Bradford	117216	0	0	0
1674	Rogers	Ezekiel	Ipswich	44832	1160	44160	960
1674	Meere	Thomas	Salem	5400	0	1668	792
1674	Whittier Sr	Abraham	Manchester	18360	0	738	836
1674	Starkweather	Robert	Ipswich	14162	0	9324	0
1674	Conant	Lot	Salem	187872	0	0	0
1674	Baston	Walter	Marblehead?	2707	0	0	0
1674	Marsh	John	Salem	32454	260	1321	0
1674	Gardner	Thomas	Salem	65952	700	1440	7200
1674	Redding	Joseph	Ipswich	84768	2400*	0	9048
1674	Smith	George	Ipswich	62890	0	0	0
1674	Heath Sr	John	Haverhill	31703	140	0	315
1674	Bond	John	Haverhill	81468	0	0	10368
1674	French Sr	Edward	Salisbury	114888	0	0	29868

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1675	Gage	Jonathan	Bradford	27465	0	11280	0
1675	Bishop	Richard	Salem	34559	840	102	1782
1675	Sargent Sr	William	Amesbury	47040	0	0	0
1675	Gage	Jonathan	Bradford	27470	0	11280	0
1675	Collins Sr	John	Gloucester	33536	1120	0	960
1675	Moody	Samuel	Newbury	441164	0	10800	19920
1675	Black SR	John	?	2760	0	0	0
1675	Whittle	Elias	Salem	2759	0	1560	329
1675	Coldon	Thomas	Lynn	75354	2040	0	0
1675	Lea	Henry	Manchester	34560	0	6720	0
1675	Sanden	Margaret	Marblehead	4116	0	0	0
1675	Cogswell	Samuel	?	19548	0	7576	17772
1675	Manning	Thomas	Ipswich	25848	0	0	0
1675	Kimball Sr	Richard	Ipswich	176922	340	11424	3732
1675	Stevens	Samuel	Newbury	14904	0	3360	480
1675	Cole	George	?	3792	0	0	360
1675	Baron	Peter	Marblehead	2496	860	1200	0
1675	Lothrop	Capt. Thomas	Beverly	177336	2700	12039	1128
1675	Prince Sr	Richard	Salem	92856	21600	3143	9493
1675	Crumpton	Samuel	?	10374	0	1200	3258
1675	Ropes	George	Salem	4833	0	7899	0
1675	Wolfe	Peter	Beverly	27022	0	1104	2400
1675	Kimball	Caleb	?	11793	340	9207	504
1675	Nowell	Philip	?	16408	2607.5	1620	1920
1675	Batcheler	John	Salem	55208	0	2880	0
1675	Batchelder	John	Wenham?	31451	0	0	0
1675	Perley	Allen	Ipswich	76830	0	3624	0
1675	Andrews	Robert	?	58918	0	5346	0
1675	Newman Sr	Thomas	?	129348	1680	0	2640
1675	Simons	Samuel	Lynn	3918	0	0	0
1675	Small	Thomas	Salem	116525	200	32488	14045
1675	Witt Sr	John	Lynn	114564	320	552	1200
1675	Stevens	Samuel	?	13172	0	6688	3840
1675	Thompson	Simon	Ipswich	222392	480	19621	2288
1675	Ireson	Edward	Lynn	51846	0	1584	636
1675	Davis	John	Newbury	19224	0	3540	0
1676	Joseph	Abel	?	1960	0	1458	1218
1676	Littlehale	John	?	4540	0	0	1040
1676	Dew	William	?	2913	0	0	942
1676	Kimball	Margaret	Ipswich	24407	0	758	1565
1676	Ayers	John	Brookfield	46962	8360	0	0
1676	Norton	Freegrace	?	16350	0	0	5982
1676	Rolfe	Daniel	?	11194	0	1014	6241
1676	Smith	Thomas	Newbury	19278	0	2400	240
1676	Browne	James	?	118738	12260	55295.5	12034
1676	Giddings	George	Ipswich	245190	0	5760	0
1676	Kimball	Thomas	?	137700	0	12097	4260
1676	Alexander	Thomas	Salem	2250	0	0	552

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1676	King	Joseph	?	2672	440	0	1062
1676	Pitman	William	?	4944	540	531	0
1676	Pickworth	Samuel	?	20106	0	2400	1680
1676	Small	Joseph	Salem	28992	80	12055	480
1676	Thissell	Jefferey	Beverly?	20148	846	4200	1884
1676	Kemball	Richard	Wenham	235398	0	29587	14520
1676	Kemball	Henry	?	42612	0	18339	15636
1676	Colburn	Henry	?	2430	0	0	210
1676	Sibley	Richard	?	22572	0	0	0
1676	Sibley	John	?	17952	0	5040	216
1676	Kitchen	John	Salem	95568	9600	0	1440
1676	Wildes	Jonathan	?	1134	0	0	0
1676	Pitcher	William	?	20060	0	18498	18480
1676	Legore	Matthew	?	5340	240	1347	4620
1676	Robinson	Elanor	Salem	2736	0	2436	1380
1676	Millett Sr	Thomas	Longhorne	30732	0	0	960
1676	Jacob	Richard	Ipswich	256107	0	6240	1440
1676	Gage	Samuel	Haverhill	60036	0	9811.5	1200
1676	Piper	Nathaniel	Ipswich	66480	0	10800	4800
1676	Tricomb	William	Newbury	199104	0	0	64800
1676	Brocklebank	Capt Samuel	Rowley	111780	*	4242	5568
1676	Wilford	Gilbert	Haverhill	18078	0	13092	0
1676	Dow	Thomas	Haverhill	35598	0	10740	876
1676	Carter	Thomas	Salisbury	58800	0	0	0
1676	Goodale	Richard	Salisbury	78732	440	0	0
1676	Putnam	Samuel	?	45927	0	0	0
1676	Fuller	John	?	29376	0	0	1524
1676	Skerry	Ephraim	Salem	43902	0	13669	1281
1676	Lambert	Michael	?	11532	0	0	204
1676	Hutchison	John	?	69306	620	3720	1848
1676	Brown	James	Salem	28686	020	24303	0
1676	Porter Sr	John	Salem	660780	0	0	0
1676	Skillin	Thomas	Salem	4116	0	0	0
1676	Cole	John	Marblehead	101289	820	45474	78148
1676	Trask	Osmund	Beverly	215406	020	13453	2136
1676	Fellows	William	Ipswich	141638	0	20059	1983
1676	Woodberry	William	Salem	10934	720	0	6252
1676	Charles	Sarah	?	1680	0	0	0202
1676	Hathorn	John	Lynn	78743	0	19212	15540
1676	Massey Sr	Jeffery	Salem	51456	0	27924	12186
1677	Pritchett	William	Topsfield	26271	0	11353	1140
1677	Greenslett	Thomas	?	914	0	0	0
1677	Button	Daniel	Haverhill?	1624	0	2260	452
1677	Herrick	Benjamin	Beverly	31740	0	0	0
1677	Wilson	Anne	Salisbury	3300	0	12720	0
1677	Parker	Thomas Rev	Newbury	146640	0	0	16800
1677	Cummings Sr	Isaac	Topsfield	39858	0	4757	960
1677	Turvill	Thomas	Newbury	2820	140	8400	576
10//	1 01 1 111	rnomas	newbury	2020	140	0400	570

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1677	White	John	?	1272	0	0	0
1677	Dispow	Henry	Lynn	60510	0	0	60000
1677	Spooner	Elizabeth	Salem	72680	3180	3744	2308
1677	Barber	William	Lynn?	6156	0	1950	0
1677	Ford	James	Ipswich	1987	0	1321	0
1677	Brand	Thaddeus	Lynn	12760	0	1200	0
1677	Browne Jr	John	Salem	104160	0	80160	28800
1677	Brown Sr	John	Ipswich	145677	609	8208	0
1677	Bailey	James	Rowley	140640	1300	1440	3600
1677	Lynde	John	?	1280	0	972	560
1677	Wild Jr	John	Topsfield	13514	0	0	260
1677	Barnard Sr	Thomas	Amesbury	145824	80	0	19200
1677	Quinby	Robert	Amesbury	27456	0	0	456
1677	Mighill	Nathaniel	Salem	56189.5	10346	0	28406
1677	Low Sr	Thomas	Ipswich	69798	262	3554	0
1677	Paine	John	Ipswich?	33714	0	0	0
1677	Wilkes	Robert	Salem	40468	0	1416	7089
1677	Collins	John	Gloucester?	24372	220	3600	120
1677	Fox	Nicholas	Marblehead	10890	0	7004	0
1677	Clay	John	Marblehead	768	0	1284	0
1677	Craniver	Richard	Salem	3876	0	24289.75	0
1677	Waters	Richard	Salem	35644	1100	3862	6808
1677	Pickton	Thomas	Salem	66696	5520	825	13740
1677	Bridges	Obadiah	Ipswich	32089	0	13534.5	0
1677	Batt	Nicholas	Newbury	58218	0	0	4828
1677	Potter	Nicholas	Salem	49572	0	3540	19200
1677	London	John	?	4920	0	1008	3120
1677	Rich	Obadiah	Salem	2382	0	8550	1020
1677	Dodge	Edith	Beverly	22206	1560	0	10080
1677	Harmons	John	Gloucester	4992	0	0	0
1677	Pierce	Daniel	Newbury	455400	0	0	2400
1677	Chapman	John	Ipswich	20944	0	2200	1200
1677	Morse Jr	Anthony	Newbury	53535	0	2436	840
1678	Hollingsworth	William	Salem	22188	0	23388	0
1678	Knight	John	Newbury	242863	0	25440	78487
1678	Wharton	Edward	Salem	155920.75	0	72000	9600
1678	Haggert	Henry	Wenham	38940	0	3600	0
1678	Prince	Joseph	Salem	54975	0	16684	2223
1678	Hardy Sr	Thomas	Merrimac	203913	63	4637	264
1678	Browne	Edmund	Newbury	28320	0	1290	960
1678	Chapman	Edward	Ipswich	89623	0	54432	2928
1678	Swan	Richard	Rowley	116877	*	3600	0
1678	Purchase Sr	Thomas	Lynn	8412	0	10980	0
1678	Richard	Richard	?	2262	0	0	0
1678	Condie	Samuel	Marblehead	21468	0	7458	0
1678	Roundy	Philip	Salem	1914	0	0	0
1678	Beckford	George	Marblehead	3234	0	0	0
1678	King	Elizabeth	Lynn	5274	0	3544	0

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1678	Towne	Sgt Edond	Topsfield	108864	0	13479	0
1678	Woodham	John	Ipswich	38484	0	15415	2652
1678	Pearce	William	?	3141	0	3125	0
1678	Bartlett	Dennis	?	1833	0	4115	0
1678	Pike	Robert	?	750	0	1091	0
1678	Stickney	Amos	Newbury	68280	0	3466	0
1678	Jordan	Francis	Ipswich	62952	0	2472	0
1678	Barker	James	Rowley	98776	0	966	4803
1678	Howlet	Thomas	Ipswich	108616	0	8254.5	0
1678	Swan	Ann	Rowley	9891	0	1356	0
1678	Breed	John	Lynn	62076	0	4978	0
1678	Allen	Richard	Haverhill	28116	0	0	0
1678	Spofford Sr	John	Rowley	54828	200	3888	9600
1678	Quilter	Mark	Ipswich	93069	0	4080	42865
1678	Symonds	Samuel	Ipswich	608268	960	20400	15600
1678	Vinton	Edward	?	4320	2173	4337	1200
1678	Parker	Joseph	Andover	131106	0	0	0
1678	Cody	Ann	Marblehead	13134	0	0	0
1678	Brimblecom	John	Marblehead	18312	0	0	0
1678	Bodie	Edward	Marblehead	18312	0	2736	0
1678	Bravender	Alexander	Wenham	1236	0	1200	0
1678	Hathorne	Capt. William	Salem	24587	1080	14261	4199
1678	Rogers	Mary	Rowley	11000	0	816	2436
1678	Morse	Joseph	Newbury	27180	0	12960	0
1678	Allen Sr	William	Manchester	43282	0	4689.5	0
1678	Blake	Deborah	?	25218	0	0	0
1678	Blake	Israel	?	2544	0	0	0
1678	Davis Sr	James	Haverhill	110700	0	9036	18720
1679	Bartlett Sr	John	Newbury	142800	0	0	24240
1679	Peirce Sr	Robert	?	137828	1190	0	21809
1679	Standish	James	?	5496	0	2585	0
1679	Batchelder	Henry	Ipswich	50262	0	11175	0
1679	Bradbury	William	Salisbury	49120	1540	22863	17034
1679	Symonds	William	Ipswich	806271	4500	0	41742
1679	Mansfield	Samuel	Lynn	37062	0	4135	0
1679	Chadwell	Benjamin	Lynn	33912	0	6158	0
1679	Starr	Robert	Salem	37062	0	0	0
1679	Wittier	John	Newbury	9612	0	7356	0
1679	Harding	Philip	Marblehead	21204	0	0	8220
1679	Cole	Thomas	Salem	23928	0	2880	0
1679	Hunn	Nathaniel	?	6780	0	1500	1656
1679	Parker	Nathaniel	Newbury	38712	0	6657	6720
1679	Gallison	Vinton	?	1056	0	1650	240
1679	Millett	John	Gloucester	20652	0	3120	0
1679	Oliver	Thomas	Salem	18336	0	8610	0
1679	Mackmallen	Allester	Salem	11544	0	749.75	0
1679	Pearson Sr	John	?	215508	0	1680	1680
1679	Walden	Edward	Wenham	17238	0	1757	9072

Year	Last Name	First Name	Town	Total	Cash	Payable	Receivable
1679	Gardner	Lt George	Salem	389210	0	0	183600
1679	Fowler Sr	Philip	Ipswich	942	0	0	210
1679	White	Paul	Newbury	464461	*	28800	252000
1679	Ewing	Patrick	Rowley?	3930	0	0	0
1679	Conant	Roger	Salem	62040	0	0	0
1679	Goodale	Isaac	Salem	46164	0	2087	0
1679	Norman	Arabella	?	36192	0	11040	0
1679	Neal	John	Salem	59557	0	16248	6495
1679	Dike	Anthony	Salem	19302	0	4929.5	0
1679	Thomas	William	Newbury	13838	142	0	0
1679	Whiting Sr	Rev Samuel	Lynn	136986	*	1021	3720
1680	Davis	Ephraim	Haverhill	47304	0	13380	0
1680	Lake	William	Salem	41193	0	25698	0
1680	Preston	Jacob	Salem	1398	0	1297.5	840
1680	Boardman	Margaret	Ipswich	21216	0	4572	960
1680	Hooper	William	?	4332	0	5078	462
1680	Moulton Sr	James	Wenham	105336	0	2606	5676
1680	Harris	John	?	4332	40	1911	1910
1680	Werner	Faith	Ipswich	5934	0	0	2760
1680	Verner Jr	Hilliard	Salem	232561	17421	13752	104413
1680	Armitage	Joseph	Lynn	1470	0	600	0
1680	Smith	John	Salem	41945	0	3120	1440
1680	Day	John	Gloucester	17532	560	9720	0
1680	Sutton	William	Newbury	7434	0	2735	1200
1680	Collins	John	Lynn	87618	1200	0	0
1680	French Sr	Ensign Thomas	Ipswich	52266	0	8261	1770
1680	Palmer	Henry	Haverhill	109608	0	0	0
1680	Rogers	Nathaniel	Ipswich	118740	0	103200	60720
1680	Pearce	Abigail	Ipswich	132548	*	8514	18544
1680	Roper	Walter	Ipswich	49788	0	3840	828
1680	Platts	Jonathan	Rowley	87093	2400	1800	873
1680	Mahoney	John	?	1017	0	444	0
1680	Peirce	Robert	Ipswich	2388	122	1560	684
1680	Ward	Joshua	Salem	42936	1280	0	0
1680	Ward Jr	Joshua	Salem	7200	0	0	0
1680	Patch	Edmond	Ipswich	1362	0	0	600
1680	Lovejoy	John	Andover	10980	*	7903	0
1680	Turner	John	Salem	1629335	0	0	0
1680	Hill	John	Salem	73278	0	360	1200
1680	Hyde	Isaac	?	17988	0	1200	0
1680	Coker	Robert	Newbury	144686	82	0	0
1680	Muzzey	Joseph	Newbury	48318	0	9211	4320
1680	Howlet	Rebecca	Newbury	15462	0	0	0
1681	Herrick	John	Beverly	82524	0	3360	480
1681	Worcester	Samuel	Bradford	122616	0	28726	108
1681	Bishop	Margaret	Ipswich	245881	0	75708	172817
1681	Gage	Sarah	Bradford	6744	0	0	0
1681	Redding	Amos	Ipswich	142444	0	6504	1948

Last Name	First Name	Town	Total	Cash	Payable	Receivable
Foster Sr	Renold	Ipswich	178752	240	0	0
Hathorne	William	Salem	180996	26400	264	0
Woodbridge	Thomas	Newbury	53460	300	6505	1617
Richardson	Richard	?	18584	0	4800	0
Tompkins	John	Salem	69169	0	2222	5887
Hubbard	Richard	Ipswich	349740	720	16719	2688
Voden	Moses	?	31230	6126	0	5832

Robert

Salem

Wilson

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