

THE MACROECONOMIC THOUGHT OF NICHOLAS BARBON

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I. INTRODUCTION

Nicholas Barbon (1640-1698)¹ is little appreciated by most historians of economic thought. He is sporadically mentioned in a few writings—probably the most well-known being the favorable reference to him made by John Maynard Keynes (1883-1946) in *The General Theory of Employment, Interest, and Money* (Keynes 1936, p. 359). The fullest treatment of Barbon's economic ideas is contained in *The Origin of Scientific Economics: English Economic Thought 1660-1776* by William Louis Letwin (Letwin 1963, pp. 48-75). Letwin considers a major defect of Barbon's first purely scientific inquiry into economics, *A Discourse of Trade* (Barbon 1690), and by implication, his other economic writings, to be "the logical incoherence of its parts" (Letwin 1963, p. 57). This criticism is not surprising in light of the pre-paradigm period² in which Barbon was writing.

Douglas D. Vickers includes a chapter on Barbon, which centers on his monetary economics, in his monograph entitled *Studies in the Theory of Money*, 1690–1715 (Vickers 1959, pp. 75–93). While commenting on Barbon's notion that a "true Idea of Trade [can only be understood by] ... Reflecting on the different Rules of Proportions betwixt the Body and Parts" (Barbon 1690, Preface), Vickers notes that this well-known Barbonian medical analogy is indicative of "[t]he aggregative ... nature of Barbon's attitude ... and remains characteristic of his work as a whole" (Vickers 1995, p. 75n). Given the widely recognized difficulty of analyzing Barbon's pre-paradigm writings, the literature does not contain a full and complete

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¹The year of Nicholas Barbon's birth is uncertain; some writers give it as 1637 and others cite 1640.

²Thomas S. Kuhn developed the concept of a paradigm and defined it as "universally recognized scientific achievements that for a time provide model problems and solutions to a community of practioners" (Kuhn 1970, p. viii). The discipline of economics was in a pre-paradigmphase in the seventeenth century. A pre-paradigm situation is considered by Kuhn to be evidence of a discipline that is in an embryonic stage and "as a result, early fact-gathering is a far more nearly random activity than the one that subsequent scientific development makes familiar" (Kuhn 1970, p. 15). The situation is aptly described by the phrase: "Every man his own economist" (Johnson 1937, p. 3).

treatment of his macroeconomic ideas of macroeconomic thought. Further, Barbon's reputation as a self-promoter has weakened his status as a thinker. A more cohesive, less fragmentary interpretation of Nicholas Barbon's economic ideas than has thus far been realized can be achieved by providing a macroeconomic presentation of his thought. In the same way a pathologist analyzes an exhumed body for its historical significance, this depiction will resurrect the macroeconomic ideas of Nicholas Barbon as a systematic body of thought with the goal of securing a deeper appreciation of the contributions he made to the early study of political economy.

A brief biography of Nicholas Barbon will first be presented. That will be followed by a discussion of his concerns regarding inadequate trade, in his estimation—along with the concomitant unemployment that it engendered—the crucial economic dilemma of his time. Then his ideas on money will be offered, followed by his real sector analyses. Finally, the policy recommendations that Nicholas Barbon proposed will be assessed.

II. THE LIFE OF NICHOLAS BARBON

Nicholas Barbon was born in London, the son of a leather seller, Praisegod Barbon, an avid Anabaptist preacher as well as a politician of some note.³ Nicholas Barbon was, therefore, brought up in a family that was part of the newly emerging commercial class. Hence, it is not unreasonable to assume that he had first-hand knowledge of the life, aspirations, and activities of the members of this socio-economic class.

As a young man, Barbon studied medicine at Leyden and later at Utrecht, where he graduated with an M.D. in October of 1661 (Harrison 1917, p. 1070). In 1664, he was admitted as an Honorary Fellow to the College of Physicians in London. However, it appears that he did not practice medicine for long, but instead, he became involved in other professional activities. More precisely, he became one of the prominent London builders of his time. He was already engaged in the profession when the Great Fire occurred in London in 1666. This well-documented catastrophe provided an obvious impetus to his then-fledgling business. A second fire in 1678 gave Barbon the opportunity to obtain a commission to rebuild the Middle Temple section of London following the disaster.

During this commission, Nicholas Barbon met Roger North. In North's autobiography, he has provided us with our most intimate look at Barbon. North renders the following somewhat critical review of Barbon as a builder:

There was one Nicholas Barbon ... bred a doctor of physic, but that failing, he fell into that of building, and the fire of London gave him means of doing and knowing much of that kind. His talent lay more in economizing ground for advantage and

³The Barebones Parliament, which met from July through December of 1653, was named for Praisegod Barbon. Christopher Hill comments on the origination of the term thusly: "It came to be known as the Barebones Parliament, a social sneer directed against Praisegod Barbon, one of its members, who was a leather-seller" (Hill 1980 [1961], p. 97). During the interregnum, Praisegod Barbon did all in his power to prevent the Restoration of Charles II. As a result of his political stance, he was jailed in the Tower after the Restoration from November 26, 1661 until July 27, 1662 when his wife successfully petitioned for his release (Grosart 1922, p. 1073). Little is known of Praisegod Barbon from the time of his release until his death in 1679.

the little contrivances of a family than the more noble aims of architecture, and all his aim was at profit. But he had like to have lost his trade by slight building in Mining Lane, where all the vaults for want of strength, fell in and houses came down most scandalously (North 1887, p. 53).

Later, in the same vein, North noted:

He never failed to satisfy everyone in treaty and discourse, and if he would have performed as well he [would have] been a truly great man. His fault was that he knowingly overtraded his stock, and that he would not go through with undertakings without great disappointments to the concerned, especially in point of time. This disposed him to great and clamorous debts, and consequently, to arrests and suits, wherein he would fence with much dexterity, with dilatories and injunctions (North 1887, p. 54).

In modern parlance, Barbon certainly "talked the talk," but at least in North's opinion, could not or, more probably, would not "walk the walk." In essence, North paints the picture of a somewhat disingenuous businessman—a reputation that remains Barbon's to this day.

Barbon was also engaged in other entrepreneurial activities in London. For example, he established the first English fire insurance company in 1681. But his involvement in the fledgling banking industry of his time was of greater significance, at least with regard to the development of his thinking on economic matters. Barbon entered the world of finance on May 29, 1695, when he and John Asgill co-founded a land bank. Their bank was different from other contemporary land banks in that it resembled a present-day savings and loan institution. In this regard, Barbon and Asgill announced that they would grant secured loans at three and a half percent and would pay two percent interest on customer deposits (Horsefield 1960, p. 198).

In 1695, consistent with his interest in banking, Barbon published a pamphlet entitled *An Account of the Land Bank, showing the design and manner of the settle-ment*. On February 10, 1696, a proposal was passed approving the unification of the Barbon-Asgill land bank with John Briscoe's land bank for the purpose of establishing a National Land bank" (Hayton 2002, vol. 3, p. 132). Subsequently, Barbon helped to prepare "a scheme for a National Land Bank which did not, however, come into existence" (Vickers 1987, vol. 1, p. 189). Despite this failure, Barbon's own land bank continued to function, but with lessening success, until 1700, two years after his death.

During his life, Barbon was also heavily involved in the political arena, a volatile endeavor at the time, as evidenced by the political turmoil that eventually led to the Glorious Revolution of 1688. Barbon was elected a Member of Parliament from the borough of Bramber—he was classified a Whig—in 1690 and again in 1695 (Hayton 2002, vol. 3, p. 132). In his entry of April 5, 1698, Narcissus Luttrell noted Nicholas Barbon's passing with the following: "Dr. Barebon (sic), a member of Parliament, and the famous builder, is dead" (Luttrell 1857, vol. 4, p. 364).

⁴Land banks were financial institutions whose assets consisted mainly of titles to land. Notes, which were intended to circulate as currency, were then issued on the basis of these titles. For a description of two late-seventeenth-century English land bank schemes, namely those of Hugh Chamberlen and John Briscoe, refer to *British Monetary Experiments*, 1650-1710 (Horsefield 1960, pp. 156-95).

III. BARBON ON TRADE

At the beginning of his first strictly economic tract, *A Discourse of Trade*, Nicholas Barbon notes "Trade is the Making and Selling of one sort of Goods for another ..." (Barbon 1690, p. 1). Thus, trade is defined as a market process that involves two distinct steps. He identifies these separate operations with the ensuing:

The making is called Handy-Craft Trade, and the Maker an Artificer; The selling is called Merchandizing and the Seller a Merchant: The Artificer is called by several Names from the sort of Goods he makes. As a Clothier, Silk-weaver, shoo-maker or Hatter, etc. from [the] Making of Cloth, Silk, Shooes, or Hats; And the Merchant is distinguished by the Names of the Countrey he deals to, and is called, Dutch, French, Spanish or Turk Merchant (Barbon 1690, pp. 1–2).

Hence, artisans and merchants together were responsible for producing national output. Their roles, however, were quite distinct. The artificer was an early manufacturer, who also engaged in the domestic distribution of his wares. The merchant, in its seventeenth-century meaning, was strictly engaged in international trade. This distinction in function was commonly understood by late-seventeenth-century pamphleteers. On the other hand, seventeenth-century usage of the word "trade" was inconsistent. It was used as an all-purpose term for commercial activity, as described above by Barbon, or as shorthand for international trade. The exact connotation meant by Barbon is clarified in the text where the contextual meaning appears ambiguous. In the Preface of *A Discourse of Trade*, Barbon offers his clear purpose for writing the pamphlet:

Trade is now become as necessary to Preserve Governments, as it is useful to make them Rich. And not withstanding the great Influence, that Trade hath in the Support and Welfare of States and Kingdoms, yet there is nothing more unknown, or that Men differ more in their Sentiments, than about the True Causes that raise and promote Trade (Barbon 1690, preface; emphasis deleted).

Here, Barbon is unequivocal in stating that his reason for writing the economic tract is to explain how to "raise and promote trade." Later in the same treatise, Barbon explains why a lack of trade is the burning economic issue of his time:

So that by *Trade*, the Inhabitants are not only Fed, Clothed and Lodged; but the Richer sort are Furnished with all the things to promote the Ease, Pleasure, & Pomp of Life: Whereas, in the same country where there's no Trade, the Land-Lords would have but Coarse Diet, Coarser Clothes, and worse Lodgings; and nothing for the Rent of their Lands, but the Homage and Attendance of their Poor Bare-footed Tenants, for they have nothing else to give (Barbon 1690, pp. 36–37).

Thus, a lack of trade leads to an impoverished citizenry and, more importantly, to Barbon, as described in the excerpt below, an impoverished government:

Trade increaseth the Revenue of the Government, by providing an Imploy for the People: For every Man that Works, pay[s] by those things which he Eats and Wears, som[e]thing to the Government. Thus the Excise and Custom's are Raised,

and the more every Man Earns, the more he Consumes, and the King's Revenue is the more Increased (Barbon 1690, p. 39).

Hence, aside from any element of self-promotion, Nicholas Barbon's motive for delving into things economic was to provide a structural framework and accompanying policies that would enable England to increase its trade. This expansion of economic activity would benefit the populace and, more significantly to Barbon, it would increase tax revenues to the British Government.

IV. BARBON ON MONEY

The great recoinage debate of the 1690s in England centered on the issue of whether new coins should be minted at the old standard, or should be devalued. The dispute was the impetus for significant activity among the late-seventeenth-century pamphleteers and involved an underlying philosophical argument between metallists and antimetallists. The metallists, the most prominent proponent being John Locke (1632–1704), maintained that money had an intrinsic value based on the amount of gold or silver that the coin contained. In contrast, the anti-metallists, whose main advocate was William Lowndes (1652–1724), Secretary of the Treasury, believed that the value of money was determined by its stamp or face value.

Locke contributed three important tracts to the recoinage debate, which together comprise his macroeconomic ideas on money. They are: Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of the Money (Locke 1691); Short Observations on a Printed Paper Intitled, For encouraging the Coining Silver Money in England, and after for keeping it here (Locke 1695); and Further Considerations concerning Raising the Value of Money (Locke 1696). Locke, in apparent contradiction to his nascent subjective theory of value, argued that the government stamp certified the intrinsic value of the coin and, furthermore, once the face value was attested to, the intrinsic value was fixed. Hence, Locke writes that "[m]en . . . contract not for denomination . . . but for the intrinsick value; which is the quantity of Silver by publick Authority warranted to be in pieces of such denominations" (Locke 1696, p. 415). Locke then notes that "[t]he Standard, once settled by publick Authority, the quantity of Silver establish[e]d under the several denominations . . . should not be alt[e]red" (Locke 1696, p. 415).

Barbon sided with the anti-metallists in the vigorous debate by the pamphleteers over recoinage. Indeed, Barbon's pamphlet, aptly entitled A Discourse Concerning Coining the New Money Lighter. In Answer to Mr. Lock's Consideration about Raising the Value of Money (Barbon 1696), was written in direct response to Locke's monetary position. He believed that Locke's arguments were flawed

⁵The best sources for the arguments pertaining to the re-coinage debate are Chapters III through VI of *British Monetary Experiments*, 1650-1717 (Horsefield 1960, pp. 23-70) and *The Great Recoinage of 1696 to 1699* (Li 1963).

⁶Locke had a second moral reason against devaluing the currency. He notes that "[i]t [devaluation] will *rob* all creditors of One twentieth ... of their Debts, and all Landlords of their quit Rents" (Locke 1691, p. 309).

⁷The recoinage proposals by Lowndes, which were based on recommendations by the House of Commons, are contained in *A Report Containing an Essay for the Amendment of the Silver Coins* (Lowndes 1695).

because they were based on the erroneous "single Supposition, [t]hat there is an Intrinsick Value in Silver, which is the Price or Estimate [indicated by the stamp of the coin] that Common Consent hath placed on it, by which it comes to be the Measure of the Value of all other things" (Barbon 1696, p. 1).

Barbon's own anti-metallist conception stemmed from his subjective theory of value—a concept he may have adopted from Thomas Hobbes (1588-1679) and then further developed by including a supply component.⁸ Barbon's most explicit description of this theory of value is spelled-out thusly:

The price of Wares is the present Value; and ariseth by computing the occasions or use for them [the demand for goods], with the Quantity to serve that Occasion [the supply of goods], for the value of things depending on the use of them, the *over-plus* of those wares, which are more than can be used, become worth nothing; so that Plenty, in respect of the occasion, makes things cheap; and scarcity dear (Barbon 1690, p. 18).

Barbon considers precious metals to merely be another commodity. Thus, he notesthat "Gold and Silver are commodities as well as Lead or Iron; and according to their Plenty or Scarcity will make those things that are made of them Dearer or Cheaper" (Barbon 1696, p. 7). Hence, he is led to the subsequent conclusion:

Now if the Value of all things arise from their use: If Plenty or Scarcity makes things Dear or Cheap: If Silver be a Commodity for several uses, and more plentiful in some places than others; then it must necessarily follow that Silver can have no Certain or Intrinsick Value, and if Silver be of an uncertain Value, then it can never be the instrument of Commerce and Traffick; For, that which is uncertain in its own Value can never be of a certain Measure of another Value (Barbon 1696, p. 8).

Consequently, the value of gold and silver, as is the case with all goods, is settled within the framework of his subjective theory of value. Moreover, as is the case with other commodities, the value of precious metals is volatile, and thus, the intrinsic value of coins should not be a measure of commerce because their monetary worth was subject to market forces and, thus, unstable.

Barbon first explicitly stated his anti-metallist view in *A Discourse of Trade*: "Mon[e]y is a Value made by a Law; and the Difference of its Value is known by the Stamp and the Size of the Piece" (Barbon 1690, p. 20). Subsequently, in *A Discourse Concerning Coining the New Money Lighter. In Answer to Mr. Lock's Considerations about Raising the Value of Money*, Barbon reemphasized and expanded his anti-metallist views on money. Those anti-metallist leanings are most fully expressed in the following passage:

There is no Intrinsick Value in Silver, or any fixt or certain Estimate that common consent has placed on it; but that it is a Commodity, and riseth and falleth as other Commodities do. ... Money is the *instrument and measure of commerce*, and not Silver. . . . [I]t is the instrument of Commerce from the Authority of that Government where it is Coined; and that by the Stamp and Size of each piece the value is known.

⁸Hobbes's most explicit statement of his subjective theory of value is rendered in the following: "The value of all things contracted for, is measured by the Appetite of the Contractors" (Hobbes 1651, p. 208).

... Money differs from Uncoined Silver in this, that the Authority of the Government gives a fixt and certain value to each piece of Money, which is generally beyond the Silver in it. ... [I]t is the Money that men give, take and contract with all other Commodities, and which they *estimate the value of all other things*, having regard more to the stamp and curr[e]ncy of the Money, than to the quantity of Silver in each piece (Barbon 1696, preface; emphasis added).

Here, it is apparent that Barbon had a sophisticated definition of money that emanated from his anti-metallist position. Specifically, he attempted to define money by its functions, particularly its role as a standard of value and a medium of exchange, respectively.

Finally, on the basis of his anti-metallist beliefs, Barbon implied that currency did not require any metallic content but needed merely to be fiat money: "It is not absolutely necessary, Mon[e]y should be made of Gold or Silver; for having its sole Value from the Law, it is not Material upon what Metal the Stamp be set. Mon[e]y hath the same Value and performs the same Uses; if it be made of Brass, Copper, Tin or anything else" (Barbon 1690, p. 21). Thus, Barbon was unequivocal in his conviction that the "[v]alue of Money ariseth from the Authority of Government" (Barbon 1696, p. 15).

Barbon was equally unambiguous in his opinion that money mattered; i.e., it had a significant impact on the real sector of the economy. For instance, if the supply of money fell below a certain level, it would have a depressing effect on consumer spending, which Barbon notes in the following excerpt: "When *money* is wanting, men consume less: They are better Husbands, and make everything last longer; which lessens the consumption of their Native Commodities" (Barbon 1696, p. 93). Thus, in *A Discourse Concerning Coining the New Money Lighter. In Answer to Mr. Lock's Consideration about Raising the Value of Money*, Barbon's overriding message is that the newly recoined money should be made lighter to ensure an adequate supply of money to stimulate and maintain trade.

Making new coins lighter was a form of devaluation that would work thus: If silver coins were devalued by twenty-five percent, new silver coins would contain seventy-five percent of the standard mint weight of the old coins. Hence, if 100 coins could be minted from a given amount of silver at the old weight, a twenty-five percent reduction in the metallic content of money would result in 133 coins being produced from the same quantity of silver—an increase of thirty-three percent.

It should be noted that at the time Barbon published his response to Locke, milled coins were in short supply and the existing hammered coins had been clipped to the point that the average clipped coin contained less than eighty percent of its stated silver content (Price 1996, p. 481). Thus, recoinage at a lower weight would have a lesser impact on the money supply than the example above indicates. Conversely, recoinage at the old weight would have an even more contractionary effect on the money supply, the further the actual silver content of the hammered coins was from their face value. This was the predicament that most concerned Barbon—recoining at the old weight would make an already inadequate money supply smaller.

Barbon forecast the impact such a devaluation of coins could have on the money supply: "The Effects of raising the Value of Money [coining the new money lighter], are: That it increases the Species of the Money [the size of the money supply], and preserves it in the country where 'tis coin'd' (Barbon 1696, p. 85; emphasis deleted).

Hence, according to Barbon, if the new coined money had a reduced metallic content, then the incentive to melt down coins, clip them, or transfer them to countries where the price of bullion was above the face value of the coins would be greatly reduced or even eliminated. He concludes that "if the Money be Rais'd above the price of Bullion, it will not be in the Interest of Goldsmiths and Merchants to melt it down" (Barbon 1696, p. 85). Thus, it was Barbon's belief that devaluation might be desirable because it would assure an adequate money supply.

Barbon's analysis of the relationship between the size of the money supply and the level of trade, employment, and the general welfare of society is explicitly stated in various places throughout the concluding chapter of *A Discourse Concerning Coining the New Money Lighter. In Answer to Mr. Lock's Consideration about Raising the Value of Money.* Barbon's fullest exposition of this connection is rendered in the following quotation:

If the *Money* not be rais'd, the *Mischiefs* will be real, and the Consequences very fatal to the Nation. For if the *Money* be new-coin'd according to the old Standard [one with a higher metallic content], it will be certainly melted down, and carried away as fast as 'tis coin'd, ... and the Nation will be left without *money*: The Consequence whereof will be; that Trade will be at a stand; the prices of all Commodities will fall; And a general Poverty and Clamour over the whole Nation will ensue (Barbon 1696, p. 92).

Moreover, in much the same vein, Barbon notes in the conclusion: "Besides [there will be] the preventing [of] those fatal Consequences that follow Coining the *Money* too weighty; [such] as the Loss of the *Money*; Decay of Trade; the fall of Rents; and a general Poverty and Clamour all over the Nation" (Barbon 1696, p. 96).

V. BARBON'S REAL SECTOR ANALYSES

Consumption is an important component of spending in Nicholas Barbon's macroeconomic world. His disquiet regarding under-consumption is scattered throughout his economic writings. In Chapter V of *A Discourse of Trade*, Barbon most distinctly presents his thoughts on under-consumption in the following well-known passage:

The Chief Causes that Promote *Trade* ... are Industry in the Poor, and Liberality in the Rich: Liberality is the free usage of all those things that are made by the Industry of the Poor, for the use of the Body and Mind. It relates chiefly to Man's self, but doth not hinder him from being Liberal to others.

The Two Extreams to this Vertue are Prodigality and Covetousness: Prodigality is a Vice that is prejudicial to the Man, but not to *Trade*; ... Covetousness is a Vice prejudicial both to Man & *Trade*; It starves the Man and breaks the Trader; and by the same way the Covetous Man thinks he grows rich, he grows poor; for by not consuming the Goods that are provided for Man's Use, there ariseth a dead Stock, called Plenty [a general glut], ... And a Conspiracy of the Rich Men to be Covetous and not spend, would be as dangerous to a Trading State, as a Foreign War; for though they themselves get nothing by their Covetousness, nor grow the Richer, yet they would make the Nation poor (Barbon 1690, pp. 62-63).

Thus prodigality, generally considered a private vice—then, as now—is considered a public virtue because it promotes trade, while covetousness, an unwillingness to spend, is deemed undesirable because it lessens trade.

Barbon isolated three different types of consumption. They are, respectively, expenditures on food, clothing, and finally, building and its ancillary industries. These three types of outlays represent the consumption component of Barbon's macroeconomic model. Furthermore, the expenditures which most increase output and employment are those that are most beneficial to the country:

Building is the chiefest Promoter of Trade; it Imploys a greater Number of Trades and People, than Feeding or Cloathing: [They include] [t]he Artificers that belong to Building, such as Bricklayers, Carpenters, Plasterers, etc.; Those that make the Materials for Building, such as Bricks, Lyme, Tyle, etc.; and with those that Furnish the Houses, such as Upholsters, Peweterers, etc. they are almost innumerable (Barbon 1690, p. 68; emphasis deleted).

Therefore, he identified building as the most important promoter of trade.

Barbon believed that consumer demand was derived from two distinct sources—what he termed "wants of the body" and "wants of the mind." He defined goods that satisfy wants of the body as "all things necessary to support life . . . [and includes] those Goods which are useful to supply the Three General necessities of Man, Food, Clothes and Lodging" (Barbon 1690, p. 14). Barbon identifies commodities that satisfy wants of the mind as "all such things that can satisfy Desire; Desire implys Wants: It is the Appetite of the Soul, and is as natural to the Soul, as Hunger to the Body" (Barbon 1690, pp. 14–15).

Wants of the mind are especially significant to consumption spending for two reasons. First, these desires increase with man's social and economic development and, moreover, are basically insatiable. In this regard, Barbon writes:

The Wants of the Mind are infinite, Man naturally Aspires, and as his Mind, is elevated, his Senses grow more refined, and more capable of Delight; his Desires are Inlarged, and his Wants increase with his Wishes, which is for everything that is rare, [and] can gratifie his Senses, adorn his Body, and promote the Ease, Pleasure, and Pomp of Life (Barbon 1690, pp. 14–15).

Secondly, wants of the mind encourage "conspicuous consumption" (Veblen 1899, pp. 40–60). Accordingly, while describing how new fashions might stimulate consumption spending, Barbon writes:

⁹Barbon's distinction between those things that satisfy "wants of the body" and "wants of the mind" are similar to Adam Smith's differentiation between the necessaries and conveniences of life" (Smith 1776, Vol. 1, pp. 10, 47, 51, 176; Vol. 2, p. 927).

¹⁰Barbon's statement that "wants of the mind are infinite" anticipates Marshall's observation that "[t]here are an endless variety of wants" (Marshall 1920, p. 78). Furthermore, in a manner similar to Barbon, Marshall noted the impact of evolving social circumstances upon people's wants with the following: "each new step upward is to be regarded as the development of new activities giving rise to new wants." Thus, Marshall in Barbonian fashion was convinced that the "the whole history of man shows that his wants expand with the growth of his wealth and knowledge" (Marshall 1920, pp. 76, 186).

Fashion or the alteration of Dress, is a great promoter of Trade, because it occasions the Expense of cloaths, before the Old ones are worn out: It is the Spirit and Life of Trade; ... The Promoting of New Fashions, ought to be Encouraged, because it provides a Livelihood for a great Part of Mankind (Barbon 1690, pp. 65, 67; emphasis deleted).

Subsequently, in a Veblenesque manner, Barbon renders the following:

[B]y Enlarging of Cities; the Two Beneficial Expenses of Cloathing and Lodging, are Increased; Man being Naturally Ambitious, the Living together, occasion[s] Emulation, which is seen by Out-Vying one another in Apparel, Equipage, and Furniture of the House; whereas, if a Man lived Solitary alone, his chiefest Expense would be Food (Barbon 1690, p. 69).

Thus, because of the conspicuous consumption aspects of expenditures on clothing and furnishings that wants of the mind engender, such spending is a greater promoter of trade than spending on food. In *Harmony and the Balance: An Intellectual History of Seventeenth-Century English Economic Thought*, Andrea Finkelstein aptly notes that "Barbon saw those forever variable desires [wants of the mind] as the "perpetual Spring" that kept 'the great Body of trade in Motion'" (Finkelstein 2000, p. 211). Christopher J. Berry points out in his monograph, *The Idea of Luxury: A Cultural and Historical Investigation*, that "we can detect in Barbon's argument that fashion and luxury goods can be justified by their instrumental promotion of trade" and, moreover, are morally justified because "[t]he benefits of trade in turn are justified by their positive effect on social well-being" (Berry 1994, p. 125).

Barbon's ideas on whether investment would be undertaken in a mercantile economy centered on the rate of interest and its effect on profits. Barbon, being a member of the emerging commercial class, had first-hand knowledge of the importance of interest costs on the trader's investment decision. Accordingly, in Chapter III of *A Discourse of Trade*, he clearly rendered his principle of interest in the following famous passage:

Interest is the Rent of Stock and is the same as the Rent of Land: The First is the Rent of Wrought or Artificial Stock; the Latter of the Unwrought or Natural Stock. Interest is commonly reckoned for Mon[e]y, because the mon[e]y Borrowed at Interest, is to be repayed in Mon[e]y; but this is a mistake: For the Interest is paid for Stock: for the Mon[e]y borrowed, is laid to buy Goods, or pay for them bought: No Man takes up Mon[e]y at Interest, to lay it by him, and lose the Interest of it (Barbon 1690, pp. 31–32).

Having defined interest as a payment for wrought or artificial stock, Barbon next describes the relationship between interest and profit:

It is the Rule by which the Trader makes up the Account of Profit and Loss; the Merchant expects by Dealing to get more than Interest by his Goods; ... and therefore, reckons all he gets above Interest, is Gain; all under, Loss, if no more than Interest, neither Profit nor Loss (Barbon 1690, p. 32).

Clearly, Barbon considered interest costs to be an important determinant as to whether investment would be undertaken. The trader measured his profit or loss by comparing

the expected return on his merchandise with the rate of interest, and would engage in trade as long as the former was above the latter. Like Keynes's view of the "marginal efficiency of capital" (Keynes 1936, pp. 135-36) and the rate of interest in an entrepreneurial economy, ¹¹ Barbon held a similar view of the relationship between the return on "circulating capital" (Smith 1776, p. 279) and the rate of interest in a mercantile economy. Essentially, the rate of interest set a lower limit on what the expected return on circulating capital must be in order for the merchant to expect a profit and thus invest in trade goods.

Barbon's theory of international trade was based on absolute advantage. Countries gained an advantage in international markets by benefiting from natural endowments, or acquired advantages in the form of more advanced skills—then referred to as art—which allowed them to sell certain "Staple Commodityes" (Barbon 1690, p. 3) at lower prices than competing countries. Hence, Barbon notes that "the Native Staple is what Each Country doth Naturally and best produce . . . [and] is the Foundation of its Forreign Trade (Barbon 1690, pp. 4, 6; emphasis deleted). For example, as a result of its natural resources and climate, a nation could produce certain natural wares more cheaply; similarly, by acquiring and enhancing its art, a nation could produce artificial wares more cheaply. Barbon identified the staple commodities of several European countries:

Thus, Herrings, and other Fish are the Staples of Holland; the Dutch living amongst the Water, are most naturally inclined to Fishing: English Wool being the best in the World, is the Staple of England, ... and the making of Glass and Paper were the Staple of Venice (Barbon, 1690, pp. 4–5; emphasis deleted).

Not surprisingly, because of the conflict between the rate of interest and the expected return on circulating capital, relative rates of interest among nations were important in determining how successful a country would be in international trade. Countries with high rates of interest would find fewer profitable opportunities to invest in trade goods than their international competitors because of the resulting higher interest costs. In this regard, Barbon writes:

The next Cause of the Decay of [international] Trade in England . . . is, That Interest is higher in England, than in Holland, and other places of great Trade: It is at Six per cent in England. And at Three in Holland; . . . Interest is the Rule of Buying and Selling: And being higher in England, than in Holland; the English merchant Trades with a Disadvantage, because he cannot Sell the same sort of Goods in the same Port, for the same Value as the Dutch merchant. The Dutch merchant can sell 100£. worth of Goods for 103£. and the English Merchant must sell the same sort, for 106£. to make the same Account of Principal and Interest (Barbon 1690, pp. 79–80; emphasis deleted).

There are two other aspects of international trade that are important considerations in Barbon's macroeconomic thought, highlighted in the following extract:

¹¹Joseph Schumpeter notes that although Keynes was somewhat critical of Barbon because he confused the rate if interest with the marginal efficiency of capital, that "we [Schumpeter] have been sketching a most interesting line of doctrinal development which starts with Barbon and runs a course that ... ends with Keynes" (Schumpeter 1954, p. 1119).

It is not Necessity that causeth the Consumption [of foreign goods], Nature may be Satisfied with little; but it is the wants of the mind, Fashion and Desire of Novelties, and Things scarce, that causeth [international] Trade. A Person may have English-Lace, Gloves, or Silk, as much as he wants, and will buy no more such, and yet, lay out his Mon[e]y on a Point of Venice, Jessimine-Gloves, or French-Silks; he may desire to Eat Westphalia Bacon, when he will not [eat] English; so that the Prohibition of Foreign Wares, does not necessarily cause a greater Consumption of the like sort of English.

Besides, There is the same wants of the Mind in Foreigners, as in the English; they desire Novelties, they Value English-Cloth, Hats, and Gloves and Foreign Goods, more than their Native make; so that, tho' the Wearing or Consuming of Foreign Things, might lessen the Consuming of the same sort in England; yet there may not be a lesser Quantity made, and if the same quantity be made, it will be a greater Advantage to the Nation, if they are Consumed in Foreign countries, that at Home; because the Charge, and Imploy of the Freight, is gained by it, which in bulky Goods, may be a Fourth Part of the whole Value (Barbon 1690, pp. 72-74; emphasis deleted).

First, he notes that the demand for foreign products is primarily derived from wants of the mind and not from wants of the body. Therefore, the consumption of foreign commodities should not, to any extent, hinder the consumption of domestic goods. Moreover, foreigners also have wants of the mind, which could be a boon to aggregate demand for English products. Secondly, the process of foreign trade itself would generate additional output and employment that could, from Barbon's perspective, constitute as much as a fourth part of the whole value in the case of bulky goods.

VI. BARBON'S POLICY RECOMMENDATIONS

Nicholas Barbon believed that a lack of trade and the unemployment it engendered were the primary economic problems facing late-seventeenth-century England. Hence, his policy prescriptions were aimed at stimulating output and employment. Moreover, though the impetus for those recommendations certainly contained an element of self-interest, they appear consistent with his theoretical apparatus described above.

Barbon's monetary policy and its concomitant impact on the economy are overriding themes in *A Discourse Concerning Coining the New Money Lighter. In Answer to Mr. Lock's Consideration about Raising the Value of Money.* As mentioned above, during the recoinage debate in the 1690s in England, Barbon, on the basis of his anti-metallist tendencies, favored lowering the metallic content of the newly coined money—in effect, devaluing the currency—to ensure an adequate money supply. He felt that an adequate money supply was necessary to drive the nation's economy:

For Money is the Measure of Commerce; And for a Nation to be without money, is the same thing as if it were without measures; and had neither Yards, Scales, nor Bushels in the Country; without some of which, no Bargain can be made. In those Countries where the Inhabitants do not live upon Trade, but in a Country-life, every man having always Provisions sufficient to sustain life, they may shift without money, and barter one Commodity for another. But in England, where the great Body of the People

depend upon Trade, and that by the Selling of such Goods, the greatest part of which People are under no great necessity of having, but may shift without; and have no way of feeding themselves but by the profits of such Bargains, that cannot live without money; and if there were no money, would starve, because no person will barter for those Goods that they have no absolute occasion for, if they want money (Barbon 1696, pp. 92–93; emphasis deleted).

For the mercantile nation that England was becoming, Barbon recognized that an adequate money supply was not only necessary, but crucial.

Given his views on the relationship between interest rates and trade, Barbon favored a low interest policy for England. Barbon noted that "[i]nterest in all Countrys is settled by a Law" (Barbon 1690, p. 33), and he proposed that the rate of interest in England be at least as low as in Holland—England's major competitor in the latter half of the seventeenth century. Barbon's notion that England's interest rate was in conflict with the rate of return necessary on circulating capital for trade to take place led him logically to this position. He believed that a lower relative rate of interest in England would increase foreign consumption of domestic goods, as well as help maintain domestic consumption of England's own commodities.

Barbon's final policy proposal was the establishment of free trade in the international arena. He makes his desire for free trade below:

The Prohibition of [international] Trade, is the Cause of its Decay; for all Foreign Wares are brought in by the Exchange of the Native: So that the Prohibiting of any Foreign Commodity doth hinder the Makeing and Exportation of so much of the Native, as used to be Made and Exchanged for it. The Artificers and Merchants, that dealt in such Goods, los[t] their Trades; and the Profit that was gained by such Trades, and laid out amongst other Traders, is Lost (Barbon 1690, p. 71; emphasis deleted).

Barbon's advocacy of free trade was based on its stimulative effect on the domestic economy. In Barbon's opinion, free trade would improve both foreign demand for domestic goods and local consumption demand for domestic goods. The latter increase in demand would arise indirectly from the spending of the increased profits; i.e., from the income of those who directly profit from international trade.

Barbon, however, hesitated in the total advocacy of free trade. He made a distinction between wrought and unwrought goods, the former being manufactured goods and the latter being raw materials and unfinished goods. He was somewhat concerned about the possible, but not likely, importation of too many wrought goods because the labor used in their production, that is, the increase in employment, would be realized by foreigners, negatively impacting domestic employment and output:

To Conclude, If the bringing in of Foreign Goods, should hinder the making and consuming of the Native, which will very seldom happen [only in the above cited circumstance]; this disadvantage is not to be Remedied by a Prohibition of those Goods; but by Laying so great Duties upon them, that they may be always Dearer than those our Country make (Barbon 1690, p. 78).

Here, Barbon appears to equivocate in his advocacy of free trade in that he proposes a tariff when special circumstances arise, as described in the above passage. However, his trade policy is consistent in the context of his macroeconomic analysis. Free trade

is advantageous because it stimulates and maintains a high level of aggregate output and employment. This policy is to be abrogated only in rare circumstances, described above, in which free trade may lessen employment.

VII. CONCLUSION

In noting that Nicholas Barbon's "ideas and theories ... were in advance of their time," Terence W. Hutchison (1988, p. 78) insightfully comments that "[t]he assessment of Barbon's economic theories and writings seems sometimes to have been unduly affected by his reputation as a wealthy and unscrupulous businessman who refused to pay his debts, and also by elements of special pleading at some points in his works." Certainly, Nicholas Barbon's tracts on land banks and fire insurance were merely promotional and, thus, can be disregarded as early contributions to political economy. His treatise entitled An Apology for the Builder, or A Discourse Shewing the Cause and Effects of the Increase of Building (Barbon 1685), though having some economic content, is tainted to a great degree by conflicts of interest involving Barbon's entrepreneurial concerns, as evidenced by the title. However, Barbon contributed two seminal pamphlets that, irrespective of the incentive for their publication, represent serious and advanced scientific inquiries into pre-classical economics. A Discourse of Trade and A Discourse Concerning Coining the New Money Lighter. In Answer to Mr. Lock's Consideration about Raising the Value of Money, when taken together, represent significant contributions to early economic thought—especially when interpreted in an aggregative and synthesized manner.

Barbon's macroeconomic analyses involving money, consumption, investment and international trade were all concerned with maintaining sufficient national output and employment. The nexus between the rate of interest and profit was the lynchpin of his macroeconomic world because, simply put, interest costs were in conflict with the merchant's profits—the merchant played a role in Barbon's mercantile economy similar to the role that the entrepreneur performed in Keynes' industrial economy.

The policy recommendations offered by Barbon included easy money, as evidenced by his proposals for devaluation during the recoinage debate, low rates of interest to encourage merchant investment in circulating capital and, finally, free trade to increase the foreign demand for English goods. These economic proposals certainly contain an element of Barbon the "projector" (Letwin 1963, pp. 48-75)—for example, Barbon's recommendations for devaluation would have helped him raise the necessary reserves for his national land bank, and his suggestions for a lower ceiling on interest rates would obviously favor him as a heavily indebted builder. Nevertheless, the policy prescriptions of Nicholas Barbon are, for the most part, consistent with his macroeconomic analyses.

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