Journal of the History of Economic Thought, 2024

WHERE IS CREDIT IN THE PRICE SPECIE FLOW?

BY
JOHN BERDELL
AND
JOSÉ M. MENUDO

Standard models of the price specie flow do not consider credit. Yet Hume and preceding authors were reacting to the implosion of Law's financial bubble. We delineate the anti-credit thesis contained within the evolution of eighteenth-century balance of payments analyses. A string of eighteenth-century authors argued over whether the balance of payments constituted a binding constraint on credit creation. As part of their analysis they considered how changes in the money supply might alter output, prices, employment, capital, and population. How new money entered the economy was often critical. We start with Law and then consider Melon, Gervaise, Vanderlint, Cantillon, Montesquieu, Hume, Steuart, Forbonnais, and Smith. In closing we pay particular attention to the idea that Hume and Smith effectively displaced preceding, often "mercantilist," analyses of credit and the balance of payments.

I. INTRODUCTION: WHERE IS CREDIT IN THE PRICE SPECIE FLOW?

Each generation seems destined to rewrite the history of mercantilism, recasting the narrative of when, and in what sense, it gave way to liberalism. David Hume's price-specie-flow mechanism (PSF) has figured prominently in those narratives. But Hume's rhetorical strategies are often complex and his target was not the mercantilism Adam

John Berdell: DePaul University José M. Menudo: Universidad Pablo de Olavide; Email: jmmenpac@upo.es. We thank participants at the 2021 and 2023 annual History of Economic Thought Society conferences, especially Mauricio Coutinho and Loïc Charles; also participants at the 2022 Conference of the Latin American Society for the History of Economic Thought; as well as the Journée d'étude en hommage à Jérôme de Boyer des Roches (1954–2020). Particular thanks go to Richard Van den Berg for access to unpublished works, and to our anonymous readers. Funding for open access publishing: Universidad Pablo de Olavide.

ISSN 1053-8372 print; ISSN 1469-9656 online/24/000001-19
doi:10.1017/S1053837224000014

Smith would soon denigrate in the *Wealth of Nations.* Hume aimed his attack at John Law's "system," or, more properly, the continued attraction of state-sponsored credit creation and debt reorganization (Wennerlind 2008). Hume was hardly the first, and certainly not the last, to observe that trade surpluses could be self-defeating and to argue that excessive credit creation was the surest way to turn the balance of trade towards a deficit. While fragments of balance of payments analysis emerged before the collapse of Law's system, Isaac Gervaise produced the first convincing formulation in the immediate aftermath of the system's collapse (Viner 1937, p. 78; Rubin, Filtzer, and Colliot-Thélène 1989, p. 59). Gervaise's formulation differs notably from Hume's and is the first in a formidable chain of analyses that develop balance of payments dynamics in such a way as to oppose credit creation.

We trace the anti-credit thesis contained within the development of balance of payments analysis through the works of Gervaise, Jacob Vanderlint, Charles-Louis de Secondat, Baron de Montesquieu, Richard Cantillon, Hume, James Steuart, François Véron Duverger de Forbonnais, and Smith. Each author articulated a distinctive perspective on the role of international monetary and financial flows within commercial growth and international relations; yet all of them carefully placed an assessment of the effects of credit expansions at the very heart of their analyses.[1] In retrospect we can identify a variety of analytical approaches to balance of payments determination—including combinations of the absorption approach (emphasizing consumption versus production), the relative price approach (the PSF), and the monetary approach (emphasizing money supply versus demand). Our authors argued vociferously over the plausibility of the law of one price and the quantity theory of money (QTM) in an open economy. (Which goods would change in price due to a particular sort of monetary expansion, by how much, and for how long?) They also differed on whether changes in the money supply change output, and if it mattered how new money entered the economy. Some authors very reluctantly admitted that the balance of payments constituted an unavoidable constraint to credit creation—others embraced the constraint with alacrity. We attend to these differences and in closing pay particular attention to whether Adam Smith effectively displaced the analyses of credit and the balance of payments he inherited.

II. LAW AND MELON ON CREDIT EXPANSION AND THE BALANCE OF TRADE

Law's early and obscure *Essay on a Land Bank* contained several distinct proposals with elaborate institutional mechanisms for limiting the issue of banknotes and preventing a spiraling increase of credit (banknotes issued against mortgages) and land prices.[2] In contrast, he rushed *Money and Trade Considered: With a Proposal for Supplying the Nation with Money* off his aunt's press in 1705, hoping to beat out rival proposals for a

[1] We build on Wennerlind's (2008) insight that "variations of Hume's argument" can be found in the writing of Vanderlint, Gervaise, and Cantillon.

[2] Berdell (2017) analyzes the stability of the proposals in Law's *Essay on a Land Bank,* the manuscript discovered by Murphy (Murphy 1994). See Pincus and Wolfram (2011) and Desan (2015) on the partisan parliamentary struggles over land banks.

new bank in Scotland. *Money and Trade* boldly declares: "More Money, by employing more People, will make an Overplus to Export: If then the Goods imported balance the Goods exported, a greater Addition to the Money will employ yet more People, or the same People before employed to more advantage; which by making a greater, or more valuable Export, will make a Balance due" (Law [1705] 1750, p. 14).

The public should not fear inflation or the balance of trade due to a promised increase in production and exports.[3] While Scotland rejected Law's proposal, his plan met success in France. By 1720 Law was head of both the National Bank and a public company that collected the nation's taxes while simultaneously serving as the Contrôleur général des finances in France. Law's companies bought large amounts of the government debt, while his bank issued loans (as banknotes) to purchasers of company shares, thereby making itself vulnerable to a decline in the value of the debt it had acquired. The system's collapse in 1720 was due to many factors, with the cupidity of investors figuring prominently in cartoons of the period.[4] While Law's enemies may have forced his hand, the system was conceptually and inherently vulnerable.[5] Law seems to have believed that inflation occurred only when interest rates were falling—rather than simply low (Law [1705] 1750, p. 67). He appears to have targeted a 2% interest rate (or dividend), but once his stock price hit that target he could not stabilize the nascent market. Demand for shares was predicated on rising prices.[6] Goods prices did not respond very quickly to money creation, but the exchange rate swiftly fell once the inward flow of speculative funds abated (Velde 2007).[7]

Jean-François Melon and Cantillon, Law's contemporaries, indicate the scope for disagreement over the inherent viability or incoherence of Law's system. Melon attributed the fall largely to shifting political constraints, while Cantillon saw the project as inherently explosive.[8] Like Law, for whom he had been secretary, Melon believed that credit growth, especially banknotes, could stimulate commerce far more effectively than

[3] Law's *Money and Trade* deserves to be considered as an early assertion of economic populism: "an approach to economics that emphasizes growth and income redistribution and deemphasizes the risks of inflation and deficit finance, external constraints, and the reaction of economic agents to aggressive nonmarket policies" (Dornbusch and Edwards 1991, p. 9); and also in the sense that it sought to bypass intermediary fiscal authorities (the parliaments) and give the monarchy direct access to fiscal means (Rodrik 2018).

[4] Kaiser (1991) reviews interpretations pointing to the instability of Law's system as opposed to the monarchy's lack of long-term credibility. The system replaced national debts with an equity claim on tax revenues (Murphy 1997, p. 219; Velde 2007, p. 277).

[5] Law certainly made many powerful enemies who were ready to pounce on any hesitation or mistake—which were almost inevitable, given the scope and scale of such an unprecedented innovation. Antoin Murphy (1997, p. 131), citing the work of Daniel Dessert (1984), views the tax-collecting financiers as a front for the old aristocracy, which constituted Law's real opposition.

[6] Murphy (1997, pp. 199, 215–216) suggests that Law aimed to "force down the interest rate to the magic figure of two percent" and that he sought to halt the rapidly rising price of company stock once shares had reached a price of 10,000 livres. Hamilton (1967) suggests that Law's "jealousy" of rising stock prices in London (which made him transfer large sums to cover the margin on his short position) also played a big role.

[7] The falling exchange rate may have prompted Law to reduce the money supply by lowering the face value of banknotes, a fatal blow to confidence and enthusiasm.

[8] Shovlin (2021, p. 117) sees Law's financial system "not as a preparation for war but as the key to a more peaceful world."

could an inflow of specie via a trade surplus (Shovlin 2018, p. 178).[9] Melon was extremely concerned with the negative effect of a high interest rate on both foreign trade and production. Foreign trade requires large amounts of capital, which must come from mercantile profits or credit. Due to insufficient French savings and a high national interest rate, the expansion of exports relied upon foreign investment. Therefore, cheaper money would have competitive advantages and would reduce French reliance on foreign capital (Melon 1736, p. 276). A low interest rate was essential to improving trade, production, and sales, which created further funds for expansion. Melon (1736, pp. 201–204) knew the quantity theory of money (QTM) but attributed price increases in France to supply shortages and monopolization caused by bad policy.[10] Moreover, augmentations of the coin could counter any money-induced increase to prices, wages, and rents. Alternatively, France could simply devalue. In sum Melon essentially repeats Law's enthusiasm for credit creation but without promising an improvement in the balance of trade.

III. EARLY REACTIONS TO LAW: GERVAISE, VANDERLINT, AND MONTESQUIEU

Writing hard upon the heels of the collapse of Law's system, Gervaise (1720) attributed the collapse to the attempts of European nations to "surpass one another" in credit, which he refers to as the "Cypher" of gold and silver without greater specificity. Gervaise's intention in developing *The System or Theory of the Trade of the World* was "to shew the ill consequences of an unnatural Use of Credit" (Gervaise 1720, p. iii). Gervaise describes a self-correcting natural equilibrium system that distributed money in proportion to national labor forces. Like Hume, Gervaise hypothesized a shock. Gervaise's shock was that a war or mortality crisis that reduces labor in production causes a fall in exports and an outflow of money. However, the receiving nations are unable to retain their enlarged money supplies. Their incomes rise with the monetary inflow, and demand soon exceeds what their labor can produce: "the number of Rich is too great, in Proportion to the Poor" (Gervaise 1720, p. iii). Domestic balance and international balance are one "System." But it is absorption, rather than price movement, that moves money from one country to another.[11] Gervaise also inserts the problem of credit in his "natural distribution" of money among nations. The increase of credit will operate like "an equal sum from gold or silver mine" (Gervaise 1720, p. 8). Excess credit would drive

[9] Melon's optimistic discussion of the effects of currency devaluation and credit expansion were criticized by Nicolas Dutot and especially by Hume (Hont 2008, p. 269). Hont (2006) notes that Dutot attempted to blunt Melon's support for augmentation. On Dutot, see Velde (2012).

[10] Melon generally favors competition but supported the exclusive privileges of the *compagnie des Indes* and other chartered companies that required support in the face of foreign rivals (Melon 1736, p. 60).

[11] Letiche (1952) explains Gervaise's mechanism using price variations. However, the effect of price appears only in a special case discussed by Gervaise—bills of exchange—and there the focus is on the exchange rate. Gervaise seems to take a strong position in favor of free trade, opposing any taxes, restrictions, or public companies that constitute obstacles that prevent restoring the equilibrium after "accidents that change the proposition," by which he means relative money supplies (Gervaise 1720, p. 23).

up consumption over the capacity of production, leading to trade deficits and specie outflows (Gervaise 1720, p. 23).

Vanderlint's title *Money Answers All Things* ([1734] 1914) easily misleads. Vanderlint repeatedly insists that only the continual conversion of "Tracts of waste Land" into arable can propel the growth of population, employment, trade, and national happiness. More land lowers the price of food and labor, hence exportables, generating a trade surplus.

> The more Land therefore shall be improv'd and cultivated, &c. the greater will the Plenty of all Things be, and the more People will it also imploy. And as the Produce will hence be increased, so will the Consumption of all Things increase too; and the greater the Plenty becomes this Way, the cheaper will every Thing be. And thus will Money become plentiful. (Vanderlint [1734] 1914, pp. 15–16)

Only continual transformation of "wasteland" into arable would allow population and labor to grow without bidding up wages and prices. While "Plenty of money never fails to make Trade flourish" (Vanderlint [1734] 1914, p. 7), that money can be acquired only by land expansion and lower prices. Vanderlint does not initially distinguish credit and specie, speaking generally of "money," but subsequently makes a clear distinction. Banknotes drive up prices and are to be avoided:

> so long as this Credit is maintain'd, it hath the same Effect, as if there was so much more Cash really circulating and divided amongst the People; and will be attended with these Consequences, that as the Price of Things will hence be rais'd, it must and will make us the Marker, to receive the Commodities of every Country whose Prices of Things are cheaper than ours. … and by their Cheapness so interfere in our Trade at all other foreign Markets, as to turn the Balance of Trade against us, which will diminish the Cash of the Nation. (Vanderlint [1734] 1914, p. 15)

While Vanderlint did not explicitly attack Law's system, his emphasis on expanding real (land and labor) resources and avoiding credit expansion (especially from wars) could not be clearer.[12]

In 1731, after returning from a journey through Europe, Montesquieu wrote an unusual history of Rome along with *Reflections on Universal Monarchy in Europe.*[13] They belong together: the history closed with the death of the eastern Roman Empire; the *Reflections* asked whether a new Rome could rise in the West (Gilmore 2020). In the latter, Montesquieu emphasized the limits to growth from monetary accumulation, without mentioning any Humean stimulus from American specie inflows (Meyssonnier 1989, p. 108):[14] "It is a well-known particularity of nations that practice commerce and industry that they are limited by their very prosperity. If there is a large

[12] Not only banknotes but "publick Securities of every Kind" drive up prices (Vanderlint [1734] 1914, pp. 133, 94, 56).

[13] Like Cantillon's work, the *Reflections* circulated as a manuscript, and was not published until 1886.

[14] Montesquieu was one of the first and more active detractors of Law's system. Criticism of Law runs throughout his work, starting with *Lettres persanes* (1721), where Montesquieu mocked the credulity of the French people abused by a professional charlatan. *The Spirit of Laws* ([1748] 1849, p. 33) continued the attack, representing Law as "one of the greatest promoters of absolute power ever known in Europe." See Orain (2018).

amount of gold and silver in a country, this makes all prices rise, the artisans demand higher rewards for the luxuries they produce, and other nations can sell their goods at a lower price" (Montesquieu [1734] 2020, p. 171).[15]

Montesquieu was considerably more cautious regarding English finance than Melon, Nicolas Dutot, or the Gournay circle. He rejected the adoption of England's central bank and its free ports as incompatible with France's political system (Larrère 2017). Montesquieu contrasted trading nations to countries like Poland in which the landlords had become "planters" subordinate to foreign merchants (Cheney 2010, p. 61). The latter were nearly as dependent as colonies.[16] Their borrowing caused an ongoing balance of payments deficit that led towards total poverty. Robert Dimand (2013, p. 294) has suggested that Hume formulated the price specie flow in response to this discussion. (Steuart and Forbonnais echoed the injunction to avoid foreign debt.) Montesquieu also allowed that a well-balanced trade among wealthier "trading nation[s]" was possible, but he did not present an equilibrating mechanism that would maintain it. Other than his admonitions to avoid international borrowing, Montesquieu simply did not provide much advice regarding how to maintain or extend national wealth—which he seemed to regard as inherently cyclical.[17] Whatever the limits of Montesquieu's visions of commercial growth, he did stimulate Hume's formulation of the price specie flow and its relationship to the growth and limits of commerce.[18]

IV. CANTILLON ON SUSTAINING A MONETARY INFLOW

Cantillon attacked the coherence and cupidity of the system's political and intellectual architects without speaking their names. The tripartite *Essay* builds its analysis upon a foundation that considers production and trade, adding monetary dynamics and international financial flows in the second and third parts. In the second part Cantillon cleverly set the ground for his critique of credit creation by considering the effect of a discovery of a new highly productive seam of gold within the country. A mine is quickly established and the workers drawn to work at the mine from the surrounding area earn high wages. In a series of events suspiciously similar to Hume's subsequent discussion of monetary stimulus, Cantillon remarks that the increased money and spending works its way throughout the whole economy. Some places and sectors do not receive additional demands from the new mining community, but they do face increased higher factor prices, and as a result their net income falls. Indeed, population and the labor force must fall because Cantillon assumed that mining is land-intensive. (Perhaps he supposed that a good deal of pasture is devoted to the many horses that help work the mine?)

[15] In his *Considérations sur les richesses de l'Espagne* (1727–1728), Montesquieu discusses the increase in prices in Europe due to the inflow of specie from America. See also Montesquieu ([1748] 1849, p. 370).

[16] He notes, "The colonies they have formed are under a kind of dependence, of which there are but very few instances in all the colonies of the ancients: whether we consider them as holding of the state itself, or of some trading company established in the state" (Montesquieu [1748] 1849, p. 367).

[17] Wennerlind suggests that Montesquieu favors paper money fully backed by silver and opposes paper money backed by the national debt (Wennerlind 2008, p. 118).

[18] See Hume's letter to Montesquieu, April 10, 1749, in Greig (2011, p. 136), in which he writes, "It is difficult for the balance to break to the point of doing considerable harm to a nation," just before setting out his first version of the specie-flow mechanism.

Cantillon placed an ever-binding land constraint at the foundation of his analysis and, unlike so many authors of the period, avoids mentioning or incorporating productivity improvements. In an open economy, the specie money supply can increase in a variety of ways:

> We have seen that the quantity of money in a state can be expanded through the output of its mines, subsidies from foreign powers, the immigration of foreign families, and the residence of ambassadors and travelers, but, above all, through an annual and regular balance of trade by the export of articles to foreigners so as to draw from them at least a part of the price in gold and silver coins. By this last means a state grows most substantially, particularly when the trade is accompanied and supported by a sizable shipping fleet and a significant domestic production capable of providing the necessary materials for the articles and manufactures that are exported. (Cantillon [1755] 2015, p. 83)

Cantillon understood the tension between the desirability as opposed to the sustainability of a continued inflow of specie. He did not think in terms of the PSF, although the tendency of money creation to increase prices and reduce exports appears at the end of the book. Rather, he emphasized increased consumption relative to output leading to lower net exports—the absorption approach we saw in Gervaise. He clearly thought it important to offer advice regarding lengthening prosperous periods of specie inflows. He considered a policy of sustained state hoarding of specie, but he thought that correctly timing the withdrawal is far from easy and decided (just as Hume will do) that it would encourage rash military endeavors. Instead, he provided subtle and two-sided advice on "public banks" that reappears, though somewhat simplified, in Steuart and Forbonnais. A public bank is helpful in states "in which silver is somewhat scarce" (Cantillon [1755] 2015, p. 142).[19] It was also helpful in preventing large transactions in Britain's public debt from affecting the payments for goods (Cantillon [1755] 2015, p. 143). But it is unhelpful, indeed dangerous, in states with high prices.

> A national bank causes more harm than good. An abundance of fictive and imaginary money causes disadvantages similar to those of an increase of real money in circulation, by raising the price of land and labor there, or by making works and manufactures more expensive at the risk of losing them later. But this furtive abundance disappears at the first whiff of discredit and precipitates disorder. (Cantillon [1755] 2015, p. 141)

To be sure, Cantillon is less worried about high prices than he is about a financial crash in which a state-sponsored bank falls into "discredit," causing stock prices and foreign capital flows to suddenly collapse: "the bomb would burst" (p. 146). His repeated insistence on the importance of accumulating money and maintaining a balance of trade surplus is not easily reconciled with his cyclical view of the rise and fall of relative power and plenty. Cantillon is painfully aware of the self-limiting, hence transitory, nature of balance of payment surpluses, as well as the limitations of his policy prescriptions.

[19] "A general and national bank has this advantage over an individual goldsmith's bank in that there is always greater confidence in it, the biggest deposits are always willingly brought to it even from the most distant quarters of the city, and it usually leaves to the smaller bankers only the deposits of minor sums from their neighborhoods" (Cantillon [1755] 2015, p. 138).

V. HUME'S BALANCE OF TRADE AS A POLITICAL CONCEPT

Hume first mentioned the balance of trade in a 1749 letter to Montesquieu, which set out the core of his automatic mechanism of adjustment. Hume agreed that from a national perspective "paper money has all the inconveniences of coined money, and none of the advantages" (our translation; Greig 2011, p. 136). In the letter as well as the famous essay, Hume was more concerned with the balance of trade as a matter of political dispute—a matter that "we are too much concerned about"—than as a substantive subject for analysis. The essay bemoans the "errors…. gross and palpable" and "groundless apprehensions" regarding an adverse balance of trade (Hume [1752a] 2007, p. 61). Dismissing unreliable "calculations," Hume enunciated his famous thought experiment in which "four-fifths of all the money in Great Britain be annihilated in one night" after which prices fall "in proportion," which "must bring back the money we had lost" (pp. 61–63). Because everything seems to return to its initial equilibrium, Hume's PSF is often called an "automatic mechanism of adjustment." Hume is often portrayed as the vanquisher of mercantilism, but his rhetorical thrust is clearly aimed at "banks, funds and paper-credit" (Hume [1752a] 2007, pp. 67–68) rather than protectionism or a strategy of accumulating specie. He expresses approval of tariffs that support important industries in Britain and its colonies. Deploying his impressive rhetorical skill, Hume began his essay by likening the fear of losing money to the Athenian fear of losing their precious figs to foreigners. But rather than allaying this fear, Hume deploys it against paper money and government credit, which displace coin one for one.

Had Hume left matters there, we would have to say that he kept well clear of the notion that there is any particular benefit accruing to a monetary inflow. All this changes when Hume adds his essay "Of Money" to his *Political Discourses*, presumably in response to James Oswald's comments on a draft of "Of the Balance of Trade."[20] Hume incorporated a discussion of how monetary inflows (of export earnings) stimulate output and employment. This was Hume's response to Oswald's insistence that there is a strong "reciprocal effect" between the balance of trade and industry (Rotwein and Schabas 2007, p. 190). Hume sets out a famous step-by-step account of how the influx of precious metals from America (via Spain) stimulated output and industry in Europe. "When any quantity of money is imported into a nation, it is not at first dispersed into many hands, but is confined to the coffers of a few persons, who immediately seek to employ it to advantage" (Hume [1752b] 2007, p. 38). The exporting merchants hire more workers ("who never dream of demanding higher wages"), which increases the demand for, and in turn the supply of, consumption goods. Hence, the money will "quicken the diligence of every individual before it increase the price of labor." This expansionary effect of an increase in exports led Hume to conclude that, while the "absolute" amount of money is a matter of "great indifference" (p. 46), that amount should increase gradually. How that should be effected remains unclear. Hume formulated the clearest expression of the dilemma at the heart of growth strategies that aimed for a surplus on the balance of trade: "That provisions and labour should become dear by the increase of trade and money is, in

[20] Hume agrees with Oswald's criticism of what happens when money enters a nation in exchange for exports: "No, say you; the additional stock of money may, in this interval, so increase the people and industry, as to enable them to retain their money. Here I am extremely pleased with your reasoning" (Rotwein and Schabas 2007, p. 197).

many respects, an inconvenience that is unavoidable, and the effect of that public wealth and prosperity which are the end of all our wishes" (p. 35). As in "Of the Balance of Trade," Hume warns against the expansion of banks and paper credit, adding the suggestion that the establishment of a bank like the Bank of Amsterdam (one with 100% specie reserves) might displace private credit growth.[21] While it seems that Hume intended simultaneously to evade and to ridicule the mercantilist paradox that a trade surplus is both simulative and potentially self-defeating, Oswald forced him right back into it.

VI. STEUART AND THE CONTROL OF CREDIT

Steuart distinguished three stages in the life of commercial nations: "infant," "foreign," and "inland trade" (Steuart [1767] 1995, III, p. 465). Protection and the encouragement of credit suited the infant stage, while free trade was best in the foreign stage (Skinner 1963). Inland trade applies once a nation begins to lose its competitive edge so that policy needs to maintain employment and stabilize the balance of trade. The price-specie-flow mechanism is analyzed in chapter XXIX of volume II under the name "the general doctrine of the *level.*"[22] After nearly 100 pages explaining how the statesman should use taxes to generate a positive balance of trade, Steuart announces that Hume's "general doctrine" is no more than a hypothetical situation (Skinner 1967). It obtains only when two nations have a "balance of industry and frugality," which is to say only when absorption equals output. Without this hypothesis, Hume's sudden reduction of the money supply would have "the effect of annihilating both the industry and the industrious" (Steuart [1767] 1995, II, p. 109). Exports would be sold at such low prices that "the inhabitants of Britain would starve." Steuart recognized relative price effects, but subordinated them to output-absorption determination of the balance of payments. In the case of a balance of trade surplus, the statesman should carefully monitor the output effect of the monetary inflow. If the monetary impulse does not increase output and lower production costs, the statesman should restrict imports because excess demand and inflation would otherwise cause a trade deficit.[23] His main criticism of Hume's discussion of the price specie flow was that it did not properly incorporate the financial sector. A specie inflow might be hoarded or, on the other hand, a specie outflow could cause a contraction of national credit—a situation that warranted careful attention (Steuart [1767] 1995, III, p. 214).

Steuart shows a clear-sighted understanding that a current account deficit must correspond to the transfer of ownership of assets to foreigners, and carefully distinguishes the current account from the "grand balance of payments," which includes

[21] See Wennerlind (2005, 2008). Paganelli (2007, 2009, 2014) notes Hume's opposition to credit creation on many occasions.

[22] Steuart goes so far as to say, "I find it is the opinion of the learned Mr. Hume, that there is no such thing as a balance of trade, that money over all the world is like a fluid, which must ever be upon a level, and that so soon as in any nation this level is destroyed by any accident, while the nation preserves the number of its inhabitants, and its industry, the wealth must return to a level as before" (Steuart [1767] 1995, II, p. 107).

[23] Steuart advances substantially the same proposition that Hume objected to in Montesquieu's *Spirit*, and which prompted "Of the Balance of Trade" (see Dimand 2013).

capital flows. While he favors requiring convertibility of banknotes into specie, an unfavorable balance of trade (especially during a war) renders that problematic. He notes that the ratio of coin to paper money will fall below its customary level whenever "coin is found to be waiting for paying the *grand balance"* (Steuart [1767] 1995, III, p. 220). As well, an unfavorable balance of trade needs to be facilitated (that is, financed) by the transfer of real assets abroad. Rather than departing from convertibility, Steuart recommends that banks borrow from abroad, when their specie reserves run low, rather than suspend convertibility (Steuart [1767] 1995, III, p. 269). Banks should never contract their credit and note issue in the face of a balance of trade deficit, because changes in national frugality will not reverse the balance of trade at once but only after a period of adjustment. Steuart shows considerable innovation by suggesting that banks should facilitate the capital surplus needed to offset trade deficits.[24]

Steuart emphasizes maintaining credit and the money supply in the face of temporary balance of payments deficits in states that are in the two initial stages of development. Steuart takes a very different approach to credit in "inland" states. Credit should be constrained once the price of "Subsistence and Manufactures" rises relative to rivals.

> On the other hand, when luxury begins to make too great a progress, and when it threatens to be prejudicial to foreign trade, then might solid property be rendered more unwieldy; and entails might then become useful: all moveable debts, except bills of exchange in foreign circulation, might be stripped of their privileges, and particularly, as in France, of the right of arresting the person of the debtor. Usury ought then to be punished severely; even something like the Senatus Consultum Macedonianum, which made the contract of loan void on the side of the borrowers. (Steuart [1767] 1995, II, p. 65)

In sum, Steuart argued that the statesman should continuously monitor the balance of payments, banks, and the growth of credit. While his discussion of emerging commercial nations is sympathetic to the sort of financial innovation and expansion John Law advocated in Scotland, Steuart saw successful commercial growth as ultimately leading to self-limiting trade deficits that would require credit restriction and high tariffs. Despite attempting to break with Hume's analysis, Steuart came to much the same conclusions as Hume did concerning the need for wealthy "inland" states to limit credit expansion.

VII. FORBONNAIS ON EXTENDING THE SURPLUS

The nomination of Vincent de Gournay as Intendant of Commerce in 1751 symbolizes the ascent to power of merchants in the French administration. Looking for political support inside the French government, Gournay formed a network of reforming administrators who also helped him to print and translate some of the more belligerent and

[24] After noting that Steuart was an early exponent of what we now take to be the absorption approach to the balance of payment, Perlman (1990) examines his recommendation that banks should play a prominent role in transferring claims on real property, that is, in facilitating a capital and financial account surplus that would allow the balance of trade to be in deficit without a contraction of domestic credit (Steuart [1767] 1995, III, p. 232). Steuart alternatively suggests that international borrowing might use "public money" (Steuart [1767] 1995, III, p. 475).

https://doi.org/10.1017/S1053837224000014 Published online by Cambridge University Press

aggressive mercantilist British literature of the seventeenth century, such as that of Charles King and Josiah Child. Gournay's central point was that lower interest rates, all else constant, allowed a country to ruin its competitors. Gournay's "circle" hoped to establish a "Science of Commerce" in France and included Anne Robert Jacques Turgot, André Morellet, and Forbonnais. After working for his father's textile company trading with Spanish America and Italy, Forbonnais joined the high administration of the state to become the most prominent member of Gournay's circle as both a fruitful author and an active counselor of French ministers and parliamentarians.

Without mines, the stock of money in a country could increase and interest rates could fall only by way of its balance of trade. Forbonnais differentiated between what he calls an "occasional" (or one time) increase in the money stock via the balance of trade as opposed to an ongoing and sustained balance of trade surplus (Forbonnais 1753, p. cviii). In the case of a one-time injection of money, the interest rate remains constant but prices increase, thereby harming those producers for whom demand did not increase. Forbonnais's analysis parallels Cantillon's in the case of a one-time increase in the money stock but differs in the second case—a sustained trade surplus—because an increase in the money stock stimulates the entire economy through more funds for producers and lower interest rates (Forbonnais 1753, p. cix). Holland was his main example, and England was an exceptional case. Forbonnais insistently repeats that the key to inducing (or "circulating") increased output and employment was not additional paper money but an inflow of specie; an increase in the stock of paper money would cause "immense" inflation and reduce exports.[25]

In his best-known book, *Elemens du commerce*, Forbonnais asserted that an outflow of money due to a negative balance of trade causes spending and output to fall. Employment falls and workers emigrate until the proportion between production and the stock of money is restored at a new lower level of money and output (Forbonnais 1767, p. 172). Forbonnais does not identify the cause of the negative balance of trade. He simply tells us that employment will fall and population will emigrate until production reaches its proportion to the amount of money, now at a lower level. Changes in prices do not play a large role in the adjustment. What happens if the mass of money is increased?[26] In the case of monetary expansion via a trade surplus, Forbonnais did not refer to higher prices, only to greater spending and output. Production rises due to the assumed expansion of export demand, and resource scarcity poses no constraint

[25] Shovlin (2021) remarks that the Seven Years' War brought a burst of proposals in France for emulating British public credit. Among them was a project to establish a *banque générale* on the Dutch or English model. This project was set out in a manuscript that has been attributed to Forbonnais, who was Inspecteur général des monnaies from 1756 until 1775. According to Shovlin, Forbonnais recognized that credit was necessary if France was to beat England: "it is the obligation of France to multiply the specie the nation has by means of credit because it is not possible to give so much advantage to the enemy" (Forbonnais 1755b, pp. 12–13; our translation). See also Charles (2008, p. 192), who notes that at least two copies of the manuscript circulated. Sonenscher (2009) notes the manuscript but does not see it as a reversal of Forbonnais's opposition to "unnatural circulation," emphasizing instead Forbonnais's desire to export excess liquidity. We suggest that future research is needed to situate the manuscript against the rising tide of war—the preliminary stages of the Seven Years' War were well underway in North America—as well as Forbonnais's shifting assessment of the ratio of liquid assets relative to French output.

[26] So far as a domestic mine is concerned, Forbonnais follows Cantillon's explanation quite closely (Van den Berg 2019). However, Forbonnais does not refer to an increase in prices (Forbonnais 1767, p. 33).

(Forbonnais 1767). Forbonnais stressed that this positive balance of trade has two effects. First, profits fall because an increase in production requires hiring additional workers and raising wages. Second, the inflow of new money is not hoarded, but, due to commercial activity, all the new money passes into commerce, either directly to the initial exporter to expand production or redistributed to other producers. This is the only way an increase in the money stock generates prosperity. Paper money does not replace metallic money; rather, it adds to the stock of money, thereby initiating an inflationary process (Forbonnais 1767, pp. 194–195).

Forbonnais distinguished two types of means of payment that solve the transport problem of metallic money: "momentary" signs, such as bills of exchange, and "permanent" signs, such as banknotes. Momentary signs are far less problematic because they quickly dissipate as the underlying debts are repaid (Forbonnais 1767, p. 182). He supports note-issuing banks only when confidence in bills of exchange is low and there is a shortage of money (Forbonnais 1767, p. 196). When confidence is strong, the banking system tends to generate an excessive increase in the money stock. This will generate inflation because the growth of money overwhelms the output-stimulating (and cost-reducing) effects of a lower interest rate.

Although Forbonnais seems to share Hume's fear of paper money, he rejects Hume's price specie flow. Forbonnais limits the price effect of money to a few particular cases. Instead, he provides a narrative of how changes in the money supply have large output effects.[27] Nevertheless, Forbonnais recognizes the self-limiting nature of balance of trade surpluses: "foreign trade, the object of which is to attract continually new money, would work its own destruction" (Forbonnais 1767, p. 179). The economy reaches "all the strength of which it is susceptible." Forbonnais explicitly declares that this limit cannot be reliably predicted: it "would be impossible to determine in what length of time the bulk of the signs may increase in a state to such a degree as to interrupt its foreign trade."

Forbonnais cogently sets out the "general and natural means which prolong the introduction of foreign metals into a nation" (Forbonnais 1767, p. 180). He has already explained the importance of controlling the expansion of banknotes during periods of high confidence. Focusing on excess export earnings, he adds two additional means for sustaining a specie inflow. First, rather than using these excess funds for consumption, merchants can convert it "into plates, or they [may] convert it into precious stones, or into commodities of such known scarcity, as to be everywhere held equivalent to a large bulk of metals" (Forbonnais 1767, p. 173). The second, and most important, means of sustaining a trade surplus is foreign lending. Merchants can place their excess funds abroad. "As fast as money superabounds in the hands of the proprietors of commodities, not finding borrowers, they transmit the portion which they will not put into trade, to nations where money is the measure of commodities. They lend it to the state, to merchants, at a high interest" (Forbonnais 1767, p. 173). This last means foreshadows state encouragement of outward financial flows to restrain the real exchange rate. Note

[27] This situation is explained in detail in *Élémens du commerce* (1754): "The people who were maintained by working in those commodities, would be forced to beg, or to seek employment in other countries […] population would gradually decrease, till the scarcity of the commodities should bring them to a par with the quantity of signs circulating in trade" (Forbonnais 1767, p. 173). This will be the argument Forbonnais uses to explicitly criticize Hume's PSF in his project to establish a *Banque générale* (Forbonnais, 1755b, pp. 140).

that in Forbonnais's third "means" the consumption by merchants is restrained and the funds are funneled abroad, so from a current international accounting perspective we can say that the balance of trade is improved by constraining domestic absorption as well as by depressing the real exchange rate.

VIII. ADAM SMITH'S RESOLUTION

Smith once described his *Wealth of Nations* as "a very violent attack … upon the whole commercial system of Great Britain." His correspondence also suggests that he read Steuart's *Principles* as epitomizing that system: "Without once mentioning [Steuarts's book], I flatter myself that every false principle in it will meet with a clear and distinct confutation in mine."[28] Steuart advised nations to maintain their independence; Smith cautiously advised moving towards greater interdependence. Nearly all of the preceding authors we have reviewed advised severely restraining credit in order to maintain a balance of trade surplus (or minimize the deficit). In contrast, Smith argued that an outflow of specie was actually desirable if it occurred in response to a steady increase in the demand for banknotes.

The rhetorical momentum of the *Wealth of Nations* is at times seriously interrupted by historical digressions and theoretical elaboration. Nevertheless, each of the five books of *The Wealth of Nations* (*WN*) builds towards its culminating policy conclusion: the British "project" of empire must be "laid down" if it cannot be drastically reformed. The opening three chapters present a persuasive and optimistic tableau of self-reinforcing growth in which economic specialization transcends national borders and extends from manufacturing to the division of labor among "philosophers." The latter increases "the quantity of science" available to industry. Much of Smith's attack, however, lies in his discussion of banknote creation in books II and III, devoted to capital and money. Here, Smith develops a theory of international adjustment that foreshadows the spirit of the "monetary approach to the balance of payments" (MABP), according to which the creation of banknotes and deposits convertible into specie simply displaces specie money—so the money supply and overall spending are unchanged. So too are prices and production, except for the output expansion due to the increased import of capital. Smith conveniently assumes, almost in passing, that excess specie is exchanged for real capital goods, thereby promoting growth. Smith takes an intermediate position on private credit growth. Not sharing Hume's fear of banks and paper money, Smith was duly chastised by his Edinburgh friend when the bank of Ayr failed in 1772. In response, Smith formulated a set of rules that bankers ought to follow when discounting bills of exchange by issuing banknotes, which he felt would ensure that paper currency would remain stable and convertible into gold on demand.[29]

[28] Both quotations are from the 1780 letter to Andreas Holt (Smith [1977] 1987, pp. 207–208). As Murphy (2006) notes, neither Hume nor Smith mentions Law by name, so great is their desire to keep a distance from his financial innovations.

[29] Smith's proposed rules for banks have received considerable attention (Laidler 1981; Gherity 1994; Arnon 1999; Carlson 1999). In retrospect, Kroszner (1995) regards the Ayr bank failure as unusual, and generally finds the Scottish banking system to have been both innovative and sound. While Smith's real bills "doctrine"

Hume and Smith actually occupy opposing poles of Cantillon's discussion of changes in the money supply. Cantillon noted that international transport costs were quite high for heavy or bulky low-valued goods.[30] Their prices would rise as a result of an increase in the money stock. These high prices in turn discourage continued monetary inflow. This scenario conforms to Hume's version of international monetary adjustment. In contrast, Cantillon tells us that easily transported, high-value goods do not rise in price; a greater quantity is simply imported. This is Smith's case, but Smith emphasizes the metaphor of the "channel of circulation" overflowing, which will not be found in Cantillon's text, where the emphasis is on consumption rising relative to income.[31]

Read against the preceding authors we have reviewed, Smith's treatment of money and the balance of payments stands alone. The notion that inflows of money are particularly stimulative when they originate as export earnings does not appear in the *WN*. Neither do we read about restricting banknotes and credit in order to extend a trade surplus. Indeed, no previous author had ever written approvingly of an outflow of specie.[32] Rather than attribute high British prices to an inflow of money, Smith attributes high prices to high rates of taxation. High taxation increased costs and reduced competitiveness. Because Britain's indebtedness and high taxes at that time resulted from taxes and debt caused by past military expenditure, he saw a vicious cycle at work. High taxation increased mercantile lobbying for monopolies and protected colonial markets, which in turn led to further costly conflict and war.[33] While only a radical reconceptualization of Britain's place in the world could break this cycle, Smith's

is really just advice to bankers, he suggested legislation prohibiting notes less than five pounds, which was not implemented. He also supported the suppression of the "option clause" allowing temporary suspension of convertibility of banknotes. See Goodspeed (2016) for a critical view. We are indebted to an anonymous reader for drawing our attention to the view that Smith constitutes the fountainhead of a competitive banking model that was elaborated by Fullarton (1845) and members of the nineteenth-century banking school. In this model banks issue an equilibrium quantity of money that responds to variations in money demand without large specie flows in or out of Smith's "fixed channel of circulation" (Glasner 2021, chs. 2, 3). Curott (2017) contrasts the two adjustment mechanisms; and Rockoff (2009) examines the historical background to the Ayr bank failure in detail and speculates on how it may have affected Smith's attitude towards Scottish banking.

[30] Wennerlind (2013, p. 74) writes of Smith adhering to a "variation" of the price specie flow mechanism, in the sense that he doubted that scarcity of money was a serious problem, as it could be imported. This must be accepted as a loose usage, as Smith is careful to avoid the notion that goods price changes are important to the movement of gold.

[31] Cesarano (1998) forwarded a new interpretation of Hume in which Hume only conceptually considered large price movements. Instead of a PSF, Hume is said to have held to a MABP. Were one to accept this, the main substantive difference between Hume and Smith would lie with their (dis)approval of paper money displacing specie. Nevertheless, Hume's discussion of output changes in response to monetary flows is simply incompatible with the MABP. In the fragmentary Early Draft of the *WN,* Smith used Hume's price-specie-flow mechanism to criticize Spain and Portugal's prohibitions on the export of specie as raising prices and reducing exports and industry. However, the notes on his lectures have Smith noting that Hume "seems to have gone a little into the notion that public opulence consists in money" (Smith [1762–63] 1987, p. 433).

[32] A good deal of the rhetorical force of Smith's attack on Britain's commercial system emanated from his portrayal of the "mercantile system" of economic thought and policy to which he devoted most of Book IV. That system seems to have been invented with some clear weaknesses ready to exploit, such as a confusion of money and wealth and a predilection to enrich a few at the expense of many.

[33] Mercantile jealousy of, and hostility towards, foreign competition is "excited by and both inflames and is itself inflamed by, the violence of national animosity" in the *WN* (Smith [1776] 1987, II, p. 496). Any move towards Smith's ideal system of perfect liberty and justice becomes opposed "not only [by] the prejudices of the public, but what is much more unconquerable, the private interests of many individuals" (Smith [1776]

analysis of money flows sought to dispel the anxiety (actually heightened by Hume) surrounding the loss of metal money by portraying it as a gain of real capital, and by arguing that paper credit is not inherently unstable. Smith's reasoning counters Steuart's and Forbonnais's policy prescriptions more specifically than those of Thomas Mun. Nevertheless, the mercantilists served important rhetorical purposes in the *WN*, one of which was to make Forbonnais's preference for monetary expansion via trade surpluses seem antiquarian.

IX. CONCLUSION: FROM JEALOUSY OF CREDIT TO ITS MANAGEMENT

Gervais was not alone in thinking that European nations' jealous attempts to "surpass one another" in credit caused the Mississippi bubble. Steuart and Forbonnais shared Law's desire to harness credit creation for national advancement but feared inflation. We doubt that Smith put these jealousies and fears to rest in the *WN*, despite his earnest efforts to do so. Rather, we suspect that the financial experiments and experience that accompanied the wars with France shortly after his death transformed them. In 1797 Britain left gold in response to an invasion scare, which prompted a run on country banks (Berdell and Mondschean 2020). Yet Britain was able to vastly increase its public debt after abandoning gold, demonstrating the credibility of the Bank of England, acting in concert with the Treasury, to restore convertibility after the war.[34] The British banking system (city and country banks together with the Bank of England) was able to maintain payments, and to increase credit and output in the face of considerable outflows of specie sent to maintain armies and allies on the continent. This decisively demonstrated that international financial flows need not dictate changes in the volume of money and credit, an experience encapsulated in Henry Thornton's Paper Credit (1802). While Thornton was the "hardest of hard money men" in the long run, he emphasized the wisdom of prioritizing the stability of domestic credit in the short run (Hicks 1967, p. 186). Thornton had an exceptionally wide view of credit, which included mercantile book credit as well as financial instruments. If the country bank system experienced a run (which Thornton called an "internal drain") at the same time as international capital movements or government transfers caused specie to flow abroad (an "external drain" on bank reserves), the country should leave the gold standard temporarily. Thornton's view that the Bank of England should support the banking system would later become formalized and refined as Bagehot's lender of last resort (Laidler 2003). For much of the nineteenth century, the currency and banking schools would argue over the merits and demerits of imposing binding rules on the Bank of England as opposed to ceding it discretionary management of credit conditions. That debate displaced the preoccupation with credit-induced balance of trade deficits that so concerned our pre-Smith authors with a very different discussion of the right mix of rules and discretion in financial management.

1987, II, p. 471). As Pitts (2017, p. 142) cogently argues, "among his purposes was that of constituting a public, conscious of its interests as a public."

[34] See O'Brien and Palma (2020) on the steady development of British fiscal-monetary credibility. Bordo and White (1991) contrast the resulting fortunes of British and French currencies during the Napoleonic Wars.

COMPETING INTERESTS

The author declares no competing interests exist.

REFERENCES

Arnon, Arie. 1999. "Free and Not So Free Banking Theories among the Classicals; or, Classical Forerunners of Free Banking and Why They Have Been Neglected." *History of Political Economy* 31 (1): 79–107.

Berdell, John. 2017. "The Structure and Stability of John Law's Early Land Bank Proposals." *Œconomia. History, Methodology, Philosophy* 7 (4): 459–479.

Berdell, John, and Thomas Mondschean. 2020. "Retrospectives: Regulating Banks versus Managing Liquidity: Jeremy Bentham and Henry Thornton in 1802." *Journal of Economic Perspectives* 34 (4): 195–209.

Bordo, Michael D., and Eugene N. White. 1991. "A Tale of Two Currencies: British and French Finance During the Napoleonic Wars." *Journal of Economic History* 51 (2): 303–316.

Cantillon, Richard. [1755] 2015. *Essay on the Nature of Trade in General. Translated, edited, and with an introduction by Antoin E. Murphy*. Indianapolis: Liberty Fund.

Carlson, Mathieu. 1999. "Adam Smith's Support for Money and Banking Regulation: A Case of Inconsistency?" *History of Economics Review* 29: 1–15.

Cesarano, Filippo. 1998. "Hume's Specie-Flow Mechanism and Classical Monetary Theory: An Alternative Interpretation." *Journal of International Economics* 45 (1): 173–186.

Charles, Loïc. 2008. "French 'New Politics' and the Dissemination of David Hume's Political Discourses on the Continent, 1750–70." In Carl Wennerlind and Margaret Schabas, eds., *Hume's Political Economy*. Abingdon and New York: Routledge, pp. 181–202.

Cheney, Paul. 2010. *Revolutionary Commerce: Globalization and the French Monarchy*. Cambridge, MA: Harvard University Press.

Curott, Nicholas. 2017. "Adam Smith's Theory of Money and Banking." *Journal of the History of Economic Thought* 39 (3): 323–347.

Desan, Christine. 2015. *Making Money: Coin, Currency, and the Coming of Capitalism*. Oxford: Oxford University Press.

Dessert, Daniel. 1984. *Argent, pouvoir et societe au Grand Siecle*. Paris: Fayard.

Dimand, Robert W. 2013. "David Hume and Irving Fisher on the Quantity Theory of Money in the Long Run and the Short Run." *European Journal of the History of Economic Thought* 20 (2): 284–304.

Dornbusch, Rudiger, and Sebastian Edwards. 1991. *The Macroeconomics of Populism in Latin America*. Chicago: University of Chicago Press.

Forbonnais, François Véron Duverger de. 1753. *Le négotiant anglais, ou traduction libre du livre intitulé: The British Merchant*. Volume 1. Dresde: Les freres Etienne.

———. 1755a. *Réfutation de quelques articles des discours politiques de M. David Hume, traduits de l'Anglois l'année dernière 1754.* Paris: Bibliothèque de l'Arsenal. MS. 4591, fols. 181 ff. and 210 ff.

———. 1755b. *Mémoires pour l'établissement d'un crédit public*. Paris: Bibliothèque Nationale de France, Département des Manuscrits, Nouvelles Acquisitions Françaises, nº 4295.

———. 1767. *The General Principles of Commerce*. n.p.: n.p. [Translation of *Élémens du commerce.* Second edition. Two volumes. Leyde: Briasson.]

Fullarton, John. 1845. *On the Regulation of Currencies*. Second edition. London: John Murray.

Gervaise, Isaac. 1720. *The System or Theory of the Trade of the World*. London: H. Woodfall.

Gherity, James A. 1994. "The Evolution of Adam Smith's Theory of Banking." *History of Political Economy* 26 (3): 423–441.

Gilmore, Nathaniel K. 2020. "Montesquieu's Considerations on the State of Europe." *Journal of the History of Ideas* 81 (3): 359–379.

Glasner, David. 2021. *Studies in the History of Monetary Theory: Controversies and Clarifications*. Cham, Switzerland: Palgrave Macmillan.

Goodspeed, Tyler B. 2016. *Legislating Instability*. Cambridge, MA: Harvard University Press.

Greig, John Young Thomson. 2011. *The Letters of David Hume*. Volume 1. Oxford: Oxford University Press.

Hamilton, Earl J. 1967. "John Law of Lauriston: Banker, Gamester, Merchant, Chief?" *American Economic Review* 57 (2): 273–282.

Hicks, John. 1967. *Critical Essays in Monetary Theory*. London: Clarendon Press.

Hont, Istvan. 2006. "The Early Enlightenment Debate on Commerce and Luxury." *Cambridge History of Eighteenth-Century Political Thought* 1: 379–418.

———. 2008. "The 'Rich Country-Poor Country' Debate Revisited: The Irish Origins and French Reception of the Hume Paradox." In Carl Wennerlind and Margaret Schabas, eds. *Hume's Political Economy*. Abingdon and New York: Routledge, pp. 243–323.

Hume, David. [1752a] 2007. "Of the Balance of Trade." In Eugene Rotwein and Margaret Schabas, eds., *Writings on Economics, David Hume*. London: Routledge, pp. 60–77.

———. [1752b] 2007. "Of Public Credit." In Eugene Rotwein and Margaret Schabas, eds., *Writings on Economics, David Hume*. London: Routledge, pp. 90–107.

Kaiser, Thomas E. 1991. "Money, Despotism, and Public Opinion in Early Eighteenth-Century France: John Law and the Debate on Royal Credit." *Journal of Modern History* 63 (1): 1–28.

Kroszner, Randy. 1995. *Free Banking: The Scottish Experience as a Model for Emerging Economies*. Volume 1536. Washington, DC: World Bank Publications.

Laidler, David. 1981. "Adam Smith as a Monetary Economist." *Canadian Journal of Economics/Revue Canadienne d'Economique* 14 (2): 185–200.

———. 2003. "Two Views of the Lender of Last Resort: Thornton and Bagehot." *Cahiers d'économie politique/Papers in Political Economy* (2): 61–78.

Larrère, Catherine. 2017. "Montesquieu, critique de Law. Qui est l'ennemi du libéralisme?" *Cahiers d'économie politique/Papers in Political Economy* (2): 13–30.

Law, John. [1705] 1750. *Money and Trade Considered: With a Proposal for Supplying the Nation with Money*. First published at Edinburgh 1705. Glasgow: Printed and sold by R. & A. Foulis.

Letiche, John M. (1952). "Isaac Gervaise on the International Mechanism of Adjustment." *Journal of Political Economy* 60 (1): 34–43.

Melon, Jean-François. 1736. *Essai politique sur le commerce.* n.p.: n.p.

Meyssonnier, Simone. 1989. *La balance et l'horloge. La genèse de la pensée libérale en France au XVIIIe siècle*. Paris: Editions de la Passion.

Montesquieu, de Secondat baron de. [1734] 2020. *Reflections on Universal Monarchy in Europe*. In David W. Carrithers and Philip Stewart, eds., *Montesquieu: Discourses, Dissertations, and Dialogues on Politics, Science, and Religion*. Cambridge: Cambridge University Press, pp. 170–187.

———. [1748] 1849. *The Spirit of Laws*. New York: Colonial Press.

Murphy, Antoin E. 1994. *John Law's 'Essay on a Land Bank.'* Dublin: Aeon.

———. 1997. *John Law: Economic Theorist and Policy-Maker*. Oxford: Oxford University Press.

———. 2006. "John Law and the Scottish Enlightenment." In Alexander Dow and Sheila C. Dow, eds., *A History of Scottish Economic Thought*. London: Routledge, pp. 19–36.

O'Brien, Patrick K, and Nuno Palma. 2020. "Danger to the Old Lady of Threadneedle Street? The Bank Restriction Act and the Regime Shift to Paper Money, 1797–1821." *European Review of Economic History* 24 (2): 390–426.

Orain, Arnaud. 2018. *La politique du merveilleux: Une autre histoire du Système de Law (1695–1795)*. Paris: Fayard.

Paganelli, Maria Pia. 2007. "The Good Policy of the Magistrate: Deflation as a Policy Option in David Hume." *History of Economic Ideas* 3: 9–25.

———. 2009. “David Hume on Monetary Policy: A Retrospective Approach.” *Journal of Scottish Philosophy* 7 (1): 65–85.

———. 2014. “David Hume on Banking and Hoarding.” *Southern Economic Journal* 80 (4): 968–980.

Perlman, Morris. (1990). “Sir James Steuart’s Absorption and Wealth Approach to the Balance of Payments.” *History of Political Economy* 22 (1): 125–136.

Pincus, Steve, and Alice Wolfram. 2011. “A Proactive State? The Land Bank, Investment and Party Politics in the 1690s.” In Perry Gauci, ed., *Regulating the British Economy 1660–1850*. Farnham: Ashgate, pp. 41–62.

Pitts, Jennifer. 2017. “Irony in Adam Smith’s Critical Global History.” *Political Theory* 45 (2): 141–163.

Rockoff, H. 2009. “Upon Daedalian Wings of Paper Money: Adam Smith and the Crisis of 1772.” NBER Working Papers, no. 15594.

Rodrik, Dani. 2018. “Is Populism Necessarily Bad Economics?” *AEA Papers and Proceedings* 108: 196–199.

Rotwein, Eugene, and Margaret Schabas. 2007. *Writings on Economics, David Hume*. London: Routledge.

Rubin, Isaac, Donald Filtzer, and Catherine Colliot-Thélène. 1989. *A History of Economic Thought*. London: Pluto Press.

Shovlin, John. 2018. “Commerce, Not Conquest: Political Economic Thought in the French Indies Company, 1719–1769.” In Robert Fredona and Sophus A. Reinert, eds., *New Perspectives on the History of Political Economy*. Cham: Springer International Publishing, pp. 171–202.

———. 2021. *Trading with the Enemy: Britain, France, and the 18th-Century Quest for a Peaceful World Order*. New Haven: Yale University Press.

Skinner, Andrew S. 1963. “Sir James Steuart: International Relations.” *Economic History Review* 15 (3): 438–450.

———. 1967. “Money and Prices: A Critique of the Quantity Theory.” *Scottish Journal of Political Economy* 14 (3): 275–290.

Smith, Adam. [1762–63] 1987. *Lectures on Jurisprudence*. Edited by R. L. Meek, D. D. Raphael, and P. G. Stein. *Glasgow Edition of the Works and Correspondence of Adam Smith*, Volume V. Oxford: Clarendon.

———. [1776] 1987. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Two volumes. Edited by Roy H. Campbell, Andrew S. Skinner, and William B. Todd. *Glasgow Edition of the Works and Correspondence of Adam Smith*, Volume II. Oxford: Clarendon Press.

———. [1977] 1987. *The Correspondence of Adam Smith*. Edited by E. C. Mossner and I. S. Ross. *Glasgow Edition of the Works and Correspondence of Adam Smith*. Volume VI. Oxford: Clarendon Press.

Sonenscher, Michael. 2009. *Before the Deluge. Public Debt, Inequality, and the Intellectual Origins of the French Revolution*. Princeton, NJ: Princeton University Press.

Steuart, James. [1767] 1995. *An Inquiry into the Principles of Political Oeconomy.* In *The Works, Political, Metaphysical, and Chronological, of the Late Sir James Steuart of Coltness, Bart. Now first collected by Gen. Sir James Steuart, Bart., his son*. Six volumes. London: Routledge/Thoemmes.

Thornton, Henry. 1802. *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*. London: J. Hatchard.

Van den Berg, Richard. 2019. “Circular Reasoning: Forbonnais and the Intricate History of Circular Flow Analysis in the 1750s.” *European Journal of the History of Economic Thought* 26 (6): 1107–1152.

Vanderlint, Jacob. [1734] 1914. *Money Answers All Things*. In Jacob Hollander, ed., *Jacob Vanderlint on Money Answers All Things*. Baltimore: Johns Hopkins, Lord Baltimore Press.

Velde, François R. 2007. “John Law’s System.” *American Economic Review* 97 (2): 276–279.

———. 2012. “The Life and Times of Nicolas Dutot.” *Journal of the History of Economic Thought* 34 (1): 67–107.

Viner, Jacob. 1937. *Studies in the Theory of International Trade*. New York: Harper & Brothers.

Wennerlind, Carl. 2005. “David Hume’s Monetary Theory Revisited: Was He Really a Quantity Theorist and an Inflationist?” *Journal of Political Economy* 113 (1): 223–237.

———. 2008. "An Artificial Virtue and the Oil of Commerce: A Synthetic View of Hume's Theory of Money." In Carl Wennerlind and Margaret Schabas, eds., *Hume's Political Economy*. Abingdon and New York: Routledge, pp 105–126.

———. 2013. "Money, Hartlibian Political Economy and the Culture of Credit." In Philip J. Stern and Carl Wennerlind, eds., *Mercantilism Reimagined: Political Economy in Early Modern Britain and Its Empire*. Oxford: Oxford University Press, pp. 74–93.