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David Hume on Banking and Hoarding

Maria Pia Paganelli*

David Hume opposes banks and favors hoarding. The only bank he reluctantly approves of is a public, 100% reserve bank. Other banks increase money supply and prices, hindering exports and economic growth. For Hume, a 100% reserve public bank would lead to "the destruction of paper-credit" ([1752] 1985, p. 285), fostering economic growth instead by preventing inflation. Additionally, a 100% reserve bank hoards a large quantity of gold and silver, which is available in case of national emergency.

JEL Classification: B12, B22, E5, E6

1. Introduction

We recently faced a crisis possibly caused, at least in part, by an overgrown banking sector and overextended bank credit. We heard fears of inflation and liquidity crises and calls for narrow banking (e.g., Cochrane et al. 2010; Benes and Kumhof 2012). These concerns and called-for solutions seem to (re)occur when banking systems expand to the point of crisis.

During the Great Depression and its banking crisis, a group of Chicago economists, led by Henry Simons, prepared a policy proposal to reform the banking system. The so-called 1933 "Chicago Plan" proposed the abolition of the fractional reserve system and the imposition of 100% reserve on demand deposit (Phillips 1995). A few years later Irving Fisher also tried to influence the Roosevelt administration to adopt a 100% reserve system (Allen 1977).

Similarly, during the eighteenth century Scottish banking and credit expansion, David Hume (1711–1776) suggested reforming the banking system in ways that, with caveats, adjustments, and appropriate modifications, may sound similar to that suggested in our recent and less recent past. Hume proposes the abolition of all private banks and, reluctantly, the establishment of a 100% reserve public bank as possible solutions to overextended credit and threat of inflation. This article shows how David Hume can be more or less comfortably placed in the same line as the Chicago Plan and of recent calls for more narrow banking due to his beliefs that having a 100% reserve banking system would be more beneficial to the economy than a fractional reserve system, while at the same time maintaining views quite peculiar for a twenty-

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first century observer. Regardless of whether Hume is correct or not in his analysis, what is relevant here is that the fear of overextended credit seems to lead to calls for very similar action both today and in the eighteenth century, even though the beliefs about the consequences of the overextension of credit are quite different. Hume fears that the extension of the banking system would cause a decrease in precious metals, which could render a country's military weak. Today the fears are more linked to the stability of the economy and the banking system. Yet, the remedies called for in these very similar fears are similar: a 100% reserve banking system.

Hume claims the following about the kind of bank he prefers: "No bank could be more advantageous, than such a one as locked up all the money it received, and never augmented the circulating coin, as is usual, by returning part of its treasure into commerce" ([1752] 1985, pp. 284–5). Hume recognizes that a bank that does not lend cannot stay in business by itself: "It would have no profit from its dealing" ([1752] 1985, p. 285). Therefore, rather than allowing the bank to earn a profit by lending out money or by charging fees, Hume suggests a purely subsidized public bank, where "the state bore the charges of salaries of the directors and tellers of this bank" ([1752] 1985, p. 285).

Hume suggests the bank of Amsterdam as a successful example of a 100% reserve bank that should be imitated. He ignores the rumors and doubts about the Bank of Amsterdam's practices that were already common in his day (e.g., Smith [1776] 1981, II.ii.104, p. 328 and IV.iii.b, pp. 479–88). The bank, in fact, virtually admitted insolvency in 1780–1784 and was then liquidated in 1820 (Quinn and Roberds 2007, 2012).

Hume justifies a 100% reserve public bank with at least three reasons. First, having one 100% reserve public bank would eliminate all other banks. Other banks generate disruption in the economy "by increasing money beyond its natural proportion to labour and commodities, and therefore heightening their prices to the merchants and manufacturers" ([1752] 1985, p. 284), while the reserve public bank would generate "national advantage, resulting from the low price of labour" ([1752] 1985, p. 285). Second, such a 100% reserve public bank would lead to "the destruction of paper-credit" ([1752] 1985, p. 285). Third, the reserves of the bank would be "so large a sum, lying ready at command, [which] would be a convenience in times of great public dangers and distress" ([1752] 1985, p. 285). I believe this last reason is what characterized Hume's understanding of money as incomparable and inapplicable to today's models and reality but more appropriate for a distant past (Dillen [1934] 1964; Usher 1943), despite his worries about the tendencies to over-extend credit in a paper-credit system, which may sound more familiar to us.

This article develops by clarifying each of these three explanations that Hume provides. The next section considers a possible change of mind that Hume may have had regarding the role of paper-credit. Section 3 extends Hume's aversion to private paper-credit to public credit. Final remarks conclude the article.

2. Banks disrupt the economy "by increasing money beyond its natural proportion to labour and commodities, and therefore heightening their prices to the merchants and manufacturers" while this bank would create "national advantage, resulting from the low price of labour"

David Hume is a controversial figure in economics (e.g., Berdell 1995). Some claim he was a genius and a precursor of our times (e.g., Frenkel and Johnson 1976). Some claim he had nothing significant to say, and the little he may have said, he took from others (e.g., Schumpeter 1954). Some claim that to understand Hume, we need to model his ideas with our tools (e.g., Glasner 1985). Some claim that to understand Hume, we need to understand his whole philosophy (e.g., Dow 2002) or the historical context to which he meant to apply his analysis (e.g., Caffentzis 2001).

His explicit views on banking are limited to a few paragraphs, but I believe that understanding Hume's views on banking requires us to contextualize those paragraphs in both Hume's essays and the state of the economic knowledge of his time.

The banks that Hume criticizes are banks that, in their practice, would not accept deposits. They started to accept deposits only later in the eighteenth century, when the banks were trying to raise their reserve of gold and silver. Banks would discount merchants' bills of exchange and offers merchants' lines of credit paid out not with gold and silver but by issuing their own notes, redeemable on demand for gold or silver and guaranteed by the bank's reserves of precious metals and the personal wealth of the bankers (Kerr [1884] 1902; Checkland 1975; Munn 1981; Cowen and Kroszner 1989; White [1994] 1995; Gherity 1995). It is the issuing of these paper notes that Hume condemns as increasing the money supply. Hume is not explicit about how else the ideal lending market would work, but from his essay "On Interest" he seems to imply that loans are an important part of an economy and ought to be given in actual gold and silver (Hume [1752] 1985, pp. 295–307). Hume therefore can be read as implicitly distinguishing between money as a means of exchange and money as a part of financial intermediation (for an explicit distinction see Arnon's [2011b] claim that we have to wait until David Ricardo's (1824) *Plan for the Establishment of a National Bank*).

Hume condemns banks because banks produce money or "counterfeit money" as he calls it. I explain why bank money is "counterfeit" later in this article. Here I focus on why regular banks cause disadvantages for the economy by creating paper money with their loans. For Hume, banks increase the money supply, and increasing the money supply increases the price level, including the price of labor. Higher domestic prices, for Hume, make a country less competitive in international markets. Therefore, the increased prices are detrimental to the economy. Indeed, Hume tells us "the dearness of every thing, from plenty of money, is a disadvantage, which attends an established commerce, and sets bounds to it in every country, by enabling the poorer states to undersell the richer in all foreign markets" ([1752] 1985, p. 284).

Hume's fear of an increasing money supply, however, seems to be in contradiction with the rest of his analysis of money. In the rest of the essay "Of Money" and in "Of the Balance of Trade," Hume (1752) explains that the quantity of money in an open economy cannot rise above its natural level, nor can it fall below it, just like "All water, wherever it communicates, remains always at a level" ([1752] 1985, p. 312). Should the quantity of money increase above its natural level, domestic prices would increase causing an increase in imports, as foreign goods are now less expensive. Importing more foreign goods causes an outflow of money, which would bring the prices back down to their natural level. Therefore, whatever excess supply of money a country has, the excess will be drained out of the country by foreign trade. Exactly the same mechanism works in reverse if money is artificially kept below its natural level. In Hume's words:

> Suppose four-fifths of all the money in GREAT BRITAIN to be annihilated in one night, and the nation reduced to the same condition, with regard to specie, as in the reigns of the HARRYS and EDWARDS, what would be the consequence? Must not the price of all labour and commodities sink in proportion, and every thing be sold as cheap as they were in those

> ages? What nation could then dispute with us in any foreign market, or pretend to navigate or to sell manufacturers at the same price, which to us would afford sufficient profit? In how little time, therefore, must this bring back the money which we had lost, and raise us to the level of all the neighbouring nations? Where, after we arrived, we immediately lose the advantage of the cheapness of labour and commodities; and the farther flowing in of money is stopped by our fullness and repletion. Again, suppose, that all the money of GREAT BRITAIN were multiplied fivefold in a night, must not the contrary effect follow? Must not all labour and commodities rise to such an exorbitant height, that no neighbouring nations could afford to buy from us; while their commodities, on the other hand, become comparatively so cheap, that, in spite of all the laws which could be formed, they would be run in upon us and our money flow out; till we fall to a level with foreigners, and lose that great superiority of riches, which had laid us under such disadvantages? ([1752] 1985, pp. 311–2)

So it seems that an increase in money is a disadvantage because the country's higher prices will make it less competitive in the international markets, and at the same time an increase of money is irrelevant because the quantity of money will adjust to its natural level.

Some readers see this contradiction, even if presented in different ways, as the difference between short run and long run (Hegeland 1951; Rotwein 1955; Vickers 1957; cf. Perlman 1987). In the short run money is not neutral, but in the long run money is neutral (Friedman 1987; Lucas 1996). The different way in which short and long run adjustments are often presented focuses on a different passage in "Of Money," though, where Hume is allegedly describing the beneficial effects of an increase in the money supply: "It is of no manner of consequence, with regard to the domestic happiness of a state, whether money be in a greater or less quantity. The good policy of the magistrate consists only in keeping it, if possible, still encreasing; because, by that means, he keeps alive a spirit of industry in the nation, and encreases the stock of labour" ([1752] 1985, p. 288). Here I follow Paganelli (2006, 2007) instead, who offers a possible reading that makes Hume more coherent using the differences between level and flow of money.

In a closed economy, for Hume, the level of money is irrelevant. Indeed "If we consider any one kingdom by itself, it is evident, that the greater or less plenty of money is of no consequence; since the prices of commodities are always proportioned to the plenty of money" (Hume [1752] 1985, p. 281), and again "where coin is in greater plenty; as a greater quantity of it is required to represent the same quantity of goods; it can have no effect, either good or bad, taking a nation within itself" (Hume [1752] 1985, p. 285).

In an open economy, on the other hand, if the level of money changes for some reason to a level that is not natural, the quantity of money will adjust to the natural level via the price-specie-flow mechanism. One cannot force its level to one different from its natural level. The natural level is the one "proportionable to the art and industry of each nation" (Hume [1752] 1985, p. 312).

A passive change in the money supply, to use an expression of an admirer of Hume, Pietro Verri ([1771] 1993; see also Cantillion [1730] 2010), is a change in the money supply that does not reflect a change in the industry of a country, such as the discovery of mines. An active change is a change due to a change in industry. Now, if one increases the money supply passively, prices will rise, exports will fall, imports will rise, domestic industry is hurt, and the extra money flows out, returning to its natural level. The same in reverse is true for a decrease in the level of the money supply (Hume [1752] 1985, p. 312). Notice, indeed, that when Hume describes the price-specie flow mechanism, he starts from a change in the level of money, as cited previously: "Suppose four-fifths of all the money… to be annihilated…. Again, suppose, that all the money…were multiplied fivefold in a night'' ([1752] 1985, p. 311). Similarly, Hume claims ''it is certain that, since the discovery of the mines in AMERICA, industry has encreased in all the nations of EUROPE, except in the possessors of those mines; and this may be justly ascribed, amongst other reasons, to the encrease of gold and silver'' ([1752] 1985, p. 286).

On the other hand, changes in the flow of money are indicative of changes in industry, which ''really arises from the manners and customs of the people'' (Hume [1752] 1985, p. 290). If money flows into circulation, it means the domestic industry is active. The reverse is also true: If money flows out of domestic circulation, it means the domestic industry is shrinking. Where there is little industry, there is little need for money and, therefore, little money. Where industry increases, the need for money increases and, therefore, also its presence. ''[A]fter men begin to refine on all these enjoyments, and live not always at home, nor are content with what can be raised in their neighbourhood, there is more exchange and commerce of all kinds, and more money enters into that exchange. The tradesmen will not be paid in corn; because they want something more than barely to eat'' (Hume [1752] 1985, p. 291). And again ''Men naturally flock to capital cities, sea-ports, and navigable rivers. There we find more men, more industry, more commodities, and *consequently* more money'' (Hume [1752] 1985, pp. 314–5; emphasis mine).

Hume continues his explanations claiming that the times of industry are times of low prices. When industry is lacking, prices will be higher: ''provided the money encreases not in the nation, every thing must become much cheaper in times of industry and refinement, than in rude and uncultivated ages'' ([1752] 1985, p. 291) Industry lowers prices, encouraging foreign trade by making a country more competitive, which in turn generates the inflow of money that is symptomatic of the increased industry. Here the lowering of prices is a consequence of the increased industry, and it is welcomed. Lower prices imply increased export and increased inflow of money. In the case of an artificial increase in the money supply, prices eventually will decrease, but in that case the lowering of prices is a consequence of the outflow of money due to the decrease in industry caused by the lack of competitiveness generated by the artificial increase in money and prices.

It should now be easier to explain the otherwise contradictory claims that Hume makes. If the magistrate should increase the level of the money supply to stimulate the economy, how could we reconcile it with what Hume says about the disadvantages of an increase in prices (which comes as a consequence of an increase in the level of the money supply) and the advantages of low prices? If we see that ''keep money still increasing'' may mean keeping the inflow of money increasing, then Hume is coherent. A growing economy experiences lower domestic prices compared to the rest of the world, an increase of exports relative to imports, and as a consequence an increase in the inflow of money as a payment for the increase in exports. This is why the keeping of ''money still encreasing'' may better refer to keep increasing exports (rather than increasing the money supply), which in turn would generate an increase in the money supply in terms of inflow of money (Paganelli 2006, 2007).

Understanding how to ''keep money still increasing'' through keeping industry ''still increasing'' makes Hume coherent and extends Hume's coherence to his analysis of banking. His aversion to banking works through the analysis of changes in the flow of money and may be seen as part of a way to short circuit the mechanism of the price-specie flow mechanism to take advantage of it.

Banks, for Hume, increase the quantity of money in the economy with the introduction of paper-money. The artificial increase in paper via paper-money keeps ''heightening the prices.''

Higher prices cause an increase in imports relative to exports, contract the economy, and lead to an outflow of specie. Banks, therefore, by increasing the money supply, cause contraction of the domestic economy. On the other hand, a 100% reserve deposit bank would not increase the money supply, but by "lock[ing] up all the money it received, and never augment[ing] the circulating coin, as is usual, by returning part of its treasure into commerce [… would generate] the national advantage, resulting from the low price of labour" ([1752] 1985, p. 285).

Clifton Luttrell's (1975) reading of the influence of David Hume on Thomas Jefferson corroborates the interpretation that I provide here: Jefferson, like Hume, proposes to prohibit the emission of paper-money by private banks to stabilize domestic prices and determine the direction of the balance of trade. While for some (e.g., Dorfman 1940; Riggs and Velk 2008) both Jefferson and Hume lived through some bank and credit turmoil that may explain, in part, their aversion to paper-credit, others claim that Hume's Scotland had a relatively stable banking system (White [1994] 1995). Yet, regardless of the mechanism through what is perceived as a problem develops, both Jefferson and Hume see the extension of the banking system as a problem, and the solution that both Jefferson and Hume propose remains quite similar.

3. Such a Bank Would Lead to "the Destruction of Paper-Credit"

The Scotland of Hume's day experienced a boom of banking and credit, as well as a chronic shortage of specie (Checkland 1975; Munn 1981). Many, including David Hume, blamed the scarcity of gold and silver on the introduction of banks and their issuing of paper credit; others, including Adam Smith ([1776] 1981), saw banks and their issuing of paper credit as an answer to the scarcity of specie (on the differences and similarities between Hume and Smith, see, among others, Viner [1937], Eagly [1970], and Arnon [2011a]). Hume claims that the abolition of private banks, and their substitution with a 100% reserve nonlending public bank of deposit, would have the advantage of destroying paper-credit and bringing back specie. To understand why the destruction of paper credit is an advantage, we have to understand how Hume understands money.

Hume tells us that money is "the instrument they [men] have agreed upon to facilitate the exchange of a commodity for another" ([1752] 1985, p. 281). Money is a universally accepted means of exchange. Gold and silver, being precious metals, are universally wanted. So money made of gold and silver is universally accepted, which makes gold and silver (real) money. On the other hand, paper money, created through credit or loans, is not universally accepted as money. It is accepted only within a small circle of people, usually physically located around the issuer of the note: "Foreigners will not accept of in any payment" ([1752] 1985, p. 284). Adam Smith explains it more clearly: "[P]aper cannot go abroad; because at a distance from the banks which issue it, and from the country in which payment of it can be extracted by law, it will not be received in common payment" (Smith [1776] 1981, II.ii.32, p. 294). This is why Hume claims that paper money is counterfeit money. It is not real money. It is something that may work as money only in limited places, but it is not universally accepted. One may think (or hope) that paper money is accepted everywhere as real money. But it is not. So it is a fake, an illusion, "a shadow without a substance," as Isaac Gervaise ([1720] 1954, p. 12) would say.

Gold and silver, on the other hand, are precious metals. People want gold and silver for their nonmonetary uses as well as for their monetary uses. Gold and silver make silverware and decoration for houses and churches, as well as jewelry. Their intrinsic values are what allow them to be universally accepted and, therefore, to be money. Gold and silver are money not because there is anything special in their nature. They do not have to be money. They happened to become money—money as a universally accepted medium of exchange. It is not because of their intrinsic value that they became money but because of their intrinsic value as commodities that people, by custom, started and continued to accept them as means of payment.

Hume also implies that only gold and silver are to be considered money in at least two other ways. First, every time he refers to money he refers only to gold and silver coins. When he refers to paper-money, he explicitly defines it as paper-money, paper-credit, counterfeit money, and the like. Second, in the 1768 edition of the *Essays*, Hume adds a paragraph where he claims that with paper-money one cannot expect the same kind of benefits one has with gold and silver because paper "has no intrinsic value" ([1752] 1985, p. 637). If money is to be universally accepted, it has to be accepted within domestic markets, in international transactions, and, especially, by soldiers. Gold and silver do that. Paper does not. Paper is not accepted in "foreign wars and negotiations" or by foreigners (Hume [1752] 1985, p. 284).

Now, if paper is counterfeit money, what are the consequences of introducing it, besides the nonacceptance of it in international trade, wars, and negotiations? As if these were not bad enough, Hume tells us that the introduction of paper will impoverish a country. The introduction of paper increases the money supply in a country. Following the specie-flow mechanism, an increase in the money supply will increase prices and therefore decrease the competitiveness of the country in the international markets. Domestic industry will languish, and precious metals flow out. Paper-money stays as the only circulating means of exchange, leaving the country with both a loss of industry and loss of gold and silver. And a decrease in money (gold and silver) is a problem, as one country does not have anything with which to pay the soldiers hired for its defense.

Therefore, it is true that Hume argues against mercantilism in the sense of criticizing the claims that the quantity of money in a country could be increased by tariffs and bounties. It is also true that Hume criticizes mercantilism because of the strict association of precious metals with wealth. Hume, in fact, claims that tariffs and bounties will be useless instruments in controlling the quantity of money in a country ([1752] 1985, pp. 308–10). He also claims that money is not wealth, but rather people and industry are the wealth of a country. Money is just a reflection of the people and industry of a country. Yet, like mercantilists, he seems overwhelmingly worried about maintaining a certain quantity of gold and silver in a country, or, more precisely, about increasing this hoarded quantity.

Banks need to have 100% reserve and not issue paper credit because paper credit will make gold and silver leave the country. Adam Smith, and some later commentators, offers a mild accusation of Hume being too close to mercantilism in his views of money. He may indeed have been, even if with a free trade flavor.

4. "So large a sum, lying ready at command, would be a convenience in times of great public dangers and distress"

The other motivation Hume offers for supporting a public 100% reserve bank is more alien to a modern mind: the accumulation of stored money the bank would provide. For Hume, some aspects of a 100% reserve bank seem to work similarly to how a treasury worked in the past. Hume's ideal bank is a sort of hoarding institution because it is a bank that has "locked up all the money it received … that so large a sum, lying ready at command, would be a convenience in times of great public dangers and distress" ([1752] 1985, pp. 284–5), that is, in times of "wars and negociations with foreign states" ([1752] 1985, p. 282). The availability of precious metals during war emergency is a common reason for hoarding. Cantillion ([1730] 2010) exemplifies this by claiming: "Hoarded money, silverware, churches' money, etc, are resources that the state turns to in emergency situations" (p. 153). Hume's distinction between a 100% reserve bank and a hoarding institution does not seem obvious when he comes to this availability of gold and silver in case of state need. To support a bank that cannot lend to prevent increases in prices is consistent with Hume's support of hoarding and other pro-hoarding policy recommendations that Hume offers to prevent price inflation and to finance wars.

Hume's fascination with a treasury is present through all his essays. He claims its superiority to issuing public credit (paper money) in the essay "Of Public Credit." In "Of the Balance of Trade," Hume ([1752] 1985) reiterates the importance of a treasury for the accumulation gold and silver. He offers many historical examples to show how the presence of a treasury would take money out of circulation and therefore maintain low prices that stimulate domestic production and exports and, as a consequence, an inflow of money. This inflow of money would increase the money in circulation and therefore increase the prices of domestic goods and eventually decrease exports and increase imports. However, this process can be short circuited if the inflowing money is not let into circulation. If the money that is flowing in flows into the treasury, it will not go into circulation, and the prices of domestic goods will be maintained competitively low. Hume actually tells us that the best way to maintain an inflow of money is to gather "large sums into a public treasure, locking them up, and absolutely preventing their circulation" ([1752] 1985, p. 320).

It is true that locking money up in a public treasure may be "destructive" because a large sum of money in one place attracts enemies and dissipation ([1752] 1985, p. 321).Yet the advantages of doing it are so much more: locking up money gives a country "the advantage in its commerce with the neighbouring kingdoms" ([1752] 1985, p. 321). So Hume concludes "Of the Balance of Trade" with the claim that "Our modern politics embrace the only method of banishing money, the using of paper credit; they reject the only method of amassing it, the practice of hoarding; and they adopt a hundred contrivances, which serve to no purpose but to check industry, and rob ourselves and our neighbours of the common benefits of art and nature" ([1752] 1985, p. 324). This also means jeopardizing national defense ([1752] 1985, p. 349 and p. 358, among several examples).

The role of hoarding in Hume comes to light even with his claims regarding the "good policy of the magistrate." If the "good policy of the magistrate" is to keep low prices so that exports are encouraged and the flow of precious metal can "keep increasing," the problem becomes how to maintain those low prices (Hume [1752] 1985, p. 288). The new money would increase prices, eating away the competitiveness of low prices, and eventually stopping the inflow of money. Hume's bank prevents prices from rising by preventing lending, but this is not enough. Hume also needs a mechanism to take money out of circulation and therefore maintain low prices and increase industry through an increase in exports. Hume praises France for having a "great plenty of bullion" ([1752] 1985, p. 317). The reason he offers is "the want of paper-credit. The FRENCH have no banks" ([1752] 1985, p. 317). In France, "many have large a sum of money in their coffers; Great quantities of plate are used in private houses; and all the churches are full of it" ([1752] 1985, p. 317). Hume offers here the same justification as he does for the proposal of a 100% reserve bank: "[T]he provision of labour remains cheaper among them, than in nations that are not half so rich in gold and silver. The advantages of this situation, in point of trade *as well as in great public emergencies*, are too evident to be disputed" ([1752] 1985, p. 317; emphasis mine).

The other policy recommendation Hume praises is one from Genoa. When in Genoa it became fashionable to use services of chinaware rather than of silver or gold plate, that is, when it became fashionable to have serving utensils made of porcelain rather than of precious metals, "the senate, foreseeing the consequences, prohibited the use of that brittle commodity beyond a certain extent; while the use of silver-plate was left unlimited. And I suppose, *in their late distresses, they felt the good effect of this ordinance*" (Hume [1752] 1985, p. 318; emphasis mine). Using silver or gold for silverware and serving utensils is like locking it up. Silverware absorbs the incoming flow of money, preventing prices from rising (Paganelli 2007). Gold and silver serving utensils store the precious metals and can be easily melted into coins. Having silver vases to melt into coins is a device to fight liquidity emergencies for individuals and to pay taxes eventually used to buy soldiers in case of need, just like in the case of a 100% reserve bank.

A 100% reserve bank, a complete absence of banks, and a partial ban on the use of porcelain all prevent price inflation (the latter two actually favor price deflation), but all, according to Hume, facilitate the accumulation of gold and silver. The presence of large sums of money is seen as positive because it can be released in times of need, meaning it can eventually be used to pay for troops in case of war.

Therefore, a 100% reserve bank does not increase the money supply, causing disadvantages in an economy; it helps maintain low prices, which cause advantages in international trade and therefore for the domestic economy. It eliminates the presence of paper credit and, proving to be a sort of avenue for hoarding, it accumulates a large quantity of precious metals, which can be used in emergencies. Hume also recognizes that a 100% reserve public bank makes trade more convenient because the paper note given as a receipt of deposit is more easily transportable and safer that the actual gold and silver. This is the reason why Hume suggests this kind of bank as opposed to none.

5. Change of Mind?

Could we claim that Hume is not that much against banks and credit because he changes his mind, as testified by his adding a new paragraph in the 1764 edition (Hume [1764] 1985, p. 637)? The added paragraph opens by claiming how difficult understanding money is. Hume then seems to show some favor of paper credit and banks because he sees their advantages "to be superior to their disadvantages. That they banish specie and bullion from a state is undoubtedly true; and whoever looks no farther than this circumstance does well to condemn them; but specie and bullion are not of so great consequence as not to admit of a compensation, and even an overbalance from the encrease of industry and of credit, which may be promoted by the right use of paper-money" ([1752] 1985, p. 318). Hume then goes on, describing "one of the most ingenious ideas that has been executed in commerce" (Hume [1752] 1985, p. 319): bank-credit. Bank credit is "equivalent to ready money, a merchant hereby in a manner coin his houses, his household furniture, the goods in his warehouse, the foreign debts due to him, his ships at sea; and can, upon occasion, employ them in all payments, as if they were the current money of the country" ([1752] 1985, p. 319).

I am not convinced this claim represents a change of mind and an endorsement of banking and credit (cf. Arnon 2011a). The following paragraph was also added to the same edition. In this added paragraph, Hume continues his rant against the loss of precious metal, which is so deleterious for a country. Hume claims, "But however other advantages result from these inventions, it must still be allowed that, beside[s] giving too great facility to credit, which is dangerous, they banish the precious metals" ([1752] 1985, p. 320).

These two new paragraphs may also be interpreted in the following way. Hume always presents both sides of the argument. He then proceeds to either demolish the argument against his or claims that the other face of the coin is not as good as the one he favors. In his essay "Of Public Credit," this is quite explicit both in the final edition of the essay and previous versions. From 1752 to 1768, Hume declared, "[W]hat human evil is there, which is not attended with some advantages? This we shall endeavour to explain, that we may estimate the weight which we ought to allow it" ([1752] 1985, p. 637).

Furthermore, these two new paragraphs are mounted between two statements regarding the negative effects of banking and paper money, as they cause the outflow of money (gold and silver). This is directly before the two new paragraphs: "What a pity LYCURGUS did not think of paper-credit when he wanted to banish gold and silver from SPARTA! It would have served his purpose better than the lumps of iron he made use of as money; and would also have prevented more effectually all commerce with strangers, as being of so much less real and intrinsic value" (Hume [1752] 1985, p. 318). And this is what follows the two new paragraphs: "[O]ur projects of paper-credit are almost the only expedient, by which we can sink money below its level" (Hume [1752] 1985, p. 320).

When reading the essay both in its entirety and as part of a group of other essays, one might interpret these two new paragraphs as Hume simply presenting costs and benefits of paper-credit, only to then conclude that the benefits do not outweigh the costs of the loss of hoarded gold and silver.

6. The New Paradox

Hume's aversion to bank lending extends to bank lending to the government. In Scotland the problem was not as severe since the charter of the Bank of Scotland included a clause prohibiting the Bank from lending to the government. But for the Bank of England it was different (Checkland 1975).

Hume sees the problems of debt financing and increasing the money supply with easy credit, especially to the government: "[O]ur national debts furnish merchants with a species of money" ([1752] 1985, p. 353). To speak about fiscal or monetary policy in the eighteenth century is premature, given that such policies did not openly exist yet. Still, there was talk about how to stimulate an economy. And an increase in paper money, generally through easy credit, was commonly believed by some of his contemporaries, such as Sir Robert Walpole (see also, e.g., Dutot [1738] 1974; Wallace [1758] 1969; de Pinto [1774] 1969), to be a possible way to achieve this. Hume, on the other hand, does not believe one can stimulate the economy with an increase in paper money (Paganelli 2009).

Hume tells us that in his day, people were experiencing a paradoxical situation: They want to increase debt without any necessity to do so. That is, they want to increase the money supply via paper money because they think, incorrectly, or better, ridiculously, according to Hume, that increasing the money supply would bring along beneficial stimuli. Politicians will brag about the benefits they have generated without having imposed any direct cost to the current citizens. These are Hume's words describing the "folly" of these "absurd" claims:

> It is very tempting to a minister to employ such an expedient, as enables him to make a great figure during his administration, without overburthening the people with taxes, or exciting any immediate clamours against himself. … What then shall we say to the new paradox, that public incumbrances, are, of themselves, advantageous, independent of the necessity of contracting them; and that any state, even though it were not pressed by a foreign enemy, could not possibly have embraced a wiser expedient for promoting commerce and riches, than to create funds, debts, and taxes without limitation? Reasonings such as these, might naturally have passed for trials of wit among rhetoricians, like the panegyrics on folly or fever, on BUSIRIS and NERO, had we not seen such absurd maxims patronized by great ministers, and by a whole party among us." ([1752] 1985, p. 352)

The reason why the idea of stimulating the economy by increasing the money supply via public credit sounds like a trial of wit is, I believe, twofold. First, because of the price-specie-flow mechanism, any attempt to artificially increase the money supply would lead to a decrease of domestic industry. Second, debt financing is a sure road to abuse: "The practice, therefore, of contracting debt will almost infallibly be abused, in every government. It would scarcely be more imprudent to give a prodigal son a credit in every banker's shop in London, than to impower a statesman to draw bills, in this manner, upon posterity" (Hume [1752] 1985, p. 352; see also, Paganelli 2012).

While Hume's inflationary worries sound modern, we must not forget that his most pressing preoccupation about price inflation was the outflow of precious metals, which would make a country unstable and indefensible in case of war. My interpretation here differs from Istvan Hont's (1993), who suggests that for Hume wars are the main cause of public debt, and the coming and maintenance of peace would eliminate the need of public credit. But even accepting that "Britain's quest for [military] glory had to be denounced 'as the source of all dangers'" (Hont 1993, p. 336), Hume's preoccupations regarding paper-money remain.

7. Conclusion

David Hume's aversion to banking, reluctant acceptance of a 100% reserve public bank, and espousing of hoarding may be interpreted as parts of his vision of money being only gold and silver and being indispensable for economic stability and national security. Banks produce counterfeit money, which generates price inflation and decreases the competitiveness of a country in its international trade, therefore damaging the domestic economy. The outflow of gold and silver due to the introduction of paper money is also seen as a threat to national security as a country without precious metals would not be easily able to pay its troops. Only the abolition of private banks, the presence of one 100% reserve public bank, and various hoarding mechanisms would, according to Hume, allow an economy to flourish and to be safe.

Hume's fears of the excessively increased money supply and overextended credit and some of his possible solutions may be read, with caveats of course, as some of the fears we may face today.

Fears of the possible danger and abuses of overextending credit seem to be present when credit quickly expands. They were present during the time of credit expansion in Scotland in the eighteenth century, during the Great Depression, and during the banking crisis of our recent past.

The proposals for reform of the banking systems are strikingly similar if adjusted to the different institutional context: David Hume seems particularly conscious of the dangers of credit, both private and public, and he does not sound far from the Chicago Plan group (Phillips 1995), which proposes versions of a 100% banking system (e.g., Fisher 1945; Simons 1946; Friedman 1959, 1967), or to current advocates of higher capital requirements as a possible remedy against future financial crises. Hume seems, therefore, to fit in the large family of economists that proposed the Chicago Plan in the 1930s and narrower banking today.

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