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"The good policy of the magistrate":

deflation as a policy option

in David Hume's economic essays

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Abstract:

In his 1752 essay "Of Money", David Hume proposes that a "good policy" for a magistrate would be to keep money "still encreasing." This paper proposes that, for Hume, money can be kept "still encreasing" through deflationary policies, rather than through inflationary policies as commonly presented in the literature. Decreasing the quantity of money in circulation in an open economy decreases prices and gives a competitive edge to the country's products. The increase in exports "keeps money still encreasing." Deflation may be achieved through the promotion of hoarding and non-monetary uses of precious metals. The position of this paper is derived from a close reading of Hume's texts, an analysis of his examples, and an examination of some 18th century beliefs on money.

"The good policy of the magistrate":

deflation as a policy option in David Hume's economic essays

In his 1752 essay, "Of Money", David Hume claims that the "good policy of the magistrate consists only in keeping [money], if possible, still encreasing" (Hume 1985 [1752], 288). In this paper I propose that the "still encreasing" money may not be interpreted as inflationary expansion of money supply meant to stimulate the economy, as often done in the literature on Hume, but rather as an inflow of money generated by an increase in trade, and that the "good policy of the magistrate" as a consequence is not inflation, but a policy meant to creating incentives for trade through the lowering of prices.¹ According to Hume, the prosperity of a country depends on the extent of its industry. Industry, in its turn, develops when there is demand (domestic and foreign) for its output. Lower prices for domestic products increase commerce and the inflow of money. I therefore suggest that the "good policy" Hume refers to is deflation. Deflation is induced by demonetizing precious metals through increasing their alternative uses.

The paper is organized as follows. The first section defines some concepts used in the paper and by Hume. The central sections of the paper describe the economic forces relevant for understanding Hume's policy prescription and the instrument through which it is possible to decrease money supply—private alternative uses of money and individual hoarding. The

¹ For some literature on Hume's monetary thinking see among others: Keynes 1936, Vickers 1959, Duke 1979, Fausten 1979, Mayer 1980, Rashid 1984, Friedman 1987, Perlman 1987, McGee 1989, Viner 1991, Hont 1993, Skinner 1993, Berdell 1995, Blaug 1995, Lucas 1996, Cesarano 1998.

final section shows how, for Hume, contrary to the common mercantilist understanding of his time, increasing the quantity of money brings economic decline, rather than economic growth. Concluding remarks close the paper.

Caveats and Definitions

First, and most importantly, a qualification on the scope of this paper is needed. This paper is simply an attempt to understand Hume's policy prescription, and it should not be taken as a critique or an enhancement of his analysis. Analyzing how connected or disconnected Hume's theories may be from monetary practices, or proposing a way to correct him when wrong goes beyond the scope of this work. The question asked in the present paper is merely: What kind of policy "to keep money still encreasing" could Hume envision?

Second, the word deflation here simply parallels and contrasts the use of the term inflation so commonly used in the literature on Hume.² Even if at times anachronistically and imprecisely, Hume's "rising prices" are commonly associated with modern inflation because both terms refer to a general increase in prices associated with a relative decrease in the value of money due to a relative increase in money supply. As a consequence, his "sinking prices" (regardless of whether today we would refer to them as the result of monetary targeting or price level targeting³) are here referred to as deflation because both terms imply a generalized

² For an alternative reading of Hume and other classic economists on deflation see Humphrey 2004.

³ I thank an anonymous referee for pointing this out.

decrease in prices associated with a relative increase in the value of money due to a reduction of money supply.⁴

Third, Hume's concept of money is taken as a given, regardless of its correctness. Hume defines money as "not properly speaking, one of the subjects of commerce; but only the instrument which men have agreed upon to facilitate the exchange of one commodity for another" (281). For the purpose of this paper, there are two significant factors in Hume's definition: the relative lack of relevance of money in the growth of the economy ("money is not one of the subjects of commerce") and the "agreed upon" character of money. Let us focus on the "agreed upon" character first. The relative unimportance of money for economic growth will be looked upon in conjunction with the analysis of the relevant forces in the economy in the following section. Hume seems to adopt the traditional idea, still shared by many among his contemporaries, as for example Ferdinando Galiani (1977 [1751]), Isaac Gervaise (1954 [1720]), Charles de Secondat baron de Montesquieu (1989 [1748]), that money is conventionally seen as such. Indeed, the word money derives from the Greek *nomisma*, which shares its root with *nomes*, human conventions⁵. Because of their

⁴ For a contemporary positive account of deflation see, for example, Mukherji 1992, and Selgin 1997. For some other contemporary contributions on the effects of deflation see, among others, Bernanke and Gertler 1989, Cecchetti 1992, Chatterjee and Corbae 1992, Delong 2000, Friedman 1992, Irwin 1998, McGuire 1990, Saundres 2000, Taub 1989.

⁵ Aristotle claims that money is introduced as a human convention in book V of *Nicomachean Ethics* (1982): "There must, therefore, be (as was said above) one standard by which all commodities are measured. This standard is in fact demand, which holds everything together (for if people had no needs, or needs on a different scale, there could be no exchange, or else it must be on different lines);

desires, men begin to trade. But the more they trade, the stronger is the need to overcome the problems of the double coincidence of wants present with barter. Money emerges, therefore, as "the instrument which men have agreed upon to facilitate the exchange of one commodity for another" (290). The forms, shapes, and denominations that money may take do not seem to matter, as long as they are "agreed upon" (290). Now, in Hume's time there were two major forms of money: precious metals and paper-money. For Hume, gold and silver are "agreed upon to facilitate the exchange of one commodity for another" not only domestically, but also for international transactions, for "negotiations with foreign states", and acquisitions of "mercenary troops [from] poorer neighbours" (282). For Hume, gold and silver have therefore the full status of money, as basically *universally* "agreed upon." On the other hand, the status of paper-money is more problematic. Hume declares that papermoney is voluntarily accepted only for domestic transactions, and even then not all the time. He claims that paper-money would not be accepted for international transactions, being "there absolutely insignificant" (317, emphasis added). Unlike several of his contemporaries, including but not limited to, Bishop George Berkley (1979 [1735]) and later Sir James Steuart (1966 [1767]), for Hume paper-money is "a counterfeit money, which foreigners will not accept in any payment" (284, emphasis added). In his essays, Hume usually maintains this distinction between gold and silver money and paper-money by using the word "money" by itself to refer to the metallic means of exchange, and by indicating the chartaceous means of

but by a convention demand has come to be represented by money. This is why money is so called, because it exists not by nature, but by custom, and it is in our power to change its value or render it useless" (184). For how the idea of money as a convention is transmitted in time see Pribram 1983. For an account of its relevance in Hume see Paganelli 2001 and Paganelli 2006. exchange explicitly as such ("paper-money" and "paper-credit" being the two most common words to refer to non-metallic-money).⁶

Finally, prices are what Hume understands to be prices, correctly or not. For Hume, prices "are always proportioned to the plenty of money" (281), that is, prices are the proportions between the amount of goods in circulation and the amount of money in circulation. Prices "sink"—decrease—when the number of goods in circulation increases more (or at a faster rate⁷) than the quantity of money in circulation, or when the money in circulation decreases. On the other hand, prices rise if the amount of goods in circulation increases more than the quantity of goods. Note that, for Hume, the amount of goods in circulation depends on demand, and demand depends on the refinement in society's manners.⁸ The amount of money in circulation depends on the number of people and the level of "art and industry" of that country, i.e. the level of demand and commerce. Therefore, in a "rude and unrefined" society, holding the quantity of money constant, prices are high because so few commodities are exchanged, as people are happy consuming whatever they can produce themselves (291).

⁶ For a general discussion on the nature of money, see among others, Caffentzis 2001, Pribram 1983, Shell 1995, Simmel 1900.

⁷ Hume seems to be using both scenarios.

⁸ "Beside that more commodities are produced by additional industry, the same commodities come more to market, *after* men depart from their ancient simplicity of manners" (Hume 1985 [1752], 292, emphasis added). Whether this is the only reason or just a factor that contributes to the change does not seem to affect the argument. On 18th century consumption in general, see Brewer and Porter 1993.

On the other hand, "every thing must become much cheaper in times of industry and refinement, than in rude and uncultivated ages [...] the proportion being here lessened on the side of the money" (291-2). This means that prices decrease (increase) if either production increases (decreases) or money decreases (increases), holding all else constant. To lower (raise) prices, therefore, Hume's magistrate has either to directly affect demand upon which production depends (a position explicitly taken by Sir James Steurat 1966 [1767]), or to "annihilate" ("multiply") money (most famously, 311)⁹—a position also taken by Jacob Vanderlint (1970 [1734]) and Joseph Harris (1966 [1757]).

Relevant economic forces

Let us now turn to consider the interplay between prices and money in the economy. Hume elaborates at length on the economic forces present in an economy. Two of these economic forces—demand and the specie flow mechanism—will be briefly highlighted here.

As mentioned, Hume describes money as "not properly speaking, one of the subjects of commerce" but as just "the oil which renders the wheels more smooth and easy" (281). Hume's approach contrasts with some of his contemporaries, who, in the words of Jacob Viner (1930) "wanted more money because they regarded money, not merely as a passive medium of exchange, but as a force acting through circulation from hand to hand as an active stimulus to trade. An increased amount of money in circulation, they believed, meant (or caused) an increased volume of trade, and since men would produce only what they

⁹ Robert Lucas (1996) is able to claim Hume as a promoter of money neutrality, even with some imperfections, by focusing exclusively on this aspect of the essay. For a critical reading of Lucas' interpretation, see Paganelli 2006.

could sell, a quickening of trade meant an increase of production and therefore a wealthier country" (284). Hume claims instead that money is not a cause but a *consequence* of trade. Money follows commerce, and commerce follows demand for consumption goods. Merchants introduce individuals to previously unknown and more refined products, which spark their demand (264). So "after men [...] 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" (291). Hume uses the two parts of the essay "Of Money" to explain how output, its trade, and as a consequence money increase when there is an increase in demand. In the first part, Hume explains how an increase in foreign demand for domestic goods increases domestic industry and, as a consequence, the quantity of money in the domestic economy also increases as more money flows in from abroad. In the second part of the essay, he explains how an increase in domestic demand increases domestic industry and, as a consequence, the quantity of money in circulation also increases, as more money flows out from coffers into circulation.

Since, according to Hume, only commerce can generate incentives to consume more and therefore produce more in order to obtain, via exchange, the newly discovered "pleasures" and "delicacies," commerce remains the only hope for effectively stimulating the economy. In general, restrictions on commerce can never be good policies. Limiting trade in any form is equivalent to limiting demand, therefore production, and economic prosperity. Hume explains this idea in several of his essays. "Of Commerce" describes how only commerce allows men to shake off the "habit of indolence" (261, 264), making them productive and bringing prosperity to themselves and to the state. "Of the Balance of Trade" is explicitly

directed toward the dismantling of export restrictions—restricting exports is "very usual, in nations ignorant of the nature of commerce [...since] they do not consider, that, in this prohibition, they act directly contrary to their intention; and the more is exported of a commodity, the more will be raised at home" (308). "Of the Jealousy of Trade" aims at dismantling another "ill-founded jealousy [...] which seems equally groundless" (327), i.e. the jealousy that leads to import restrictions. Indeed, Hume's argument is often seen as a polemic against those positions that promote export restrictions to prevent the alleged loss of "whatever they think valuable and useful" (308) and import restrictions to prevent an outflow of precious metals (309).¹⁰ So if the presence of money is a *consequence* of the presence of trade and industry, then "a government has great reason to preserve with care its people and its manufactures. Its money, it may safely trust to the course of human affairs, without fear or jealousy" (326). In the 18th century these views are not uncommon: Galiani (1977 [1751]), Gervasie (1954 [1720]), Montesquieu (1989 [1748]), Adam Smith (1982 [1776]), and Steuart (1966 [1767]) contain similar, yet not identical, views on the topic.

Simply protecting commerce from limitations will not be enough. Hume's argument is that "money is *imported* into a nation," because "[a] set of *manufactures or merchants* [...] have received returns of gold and silver for *goods which they sent* to CADIZ" (286, emphasis added). Money coming in is a sign that foreigners are buying domestic products. "Manufacturers and merchants" will "employ more workmen," so that they can produce more only because they see that they can export more. Just like "the farmer and the gardener, finding, that *all their commodities are taken off*, apply themselves with alacrity to the raising more" (287). But if the increase in foreign demand for domestic goods encourages the domestic economy, the

¹⁰ For a detailed account of the mercantilist positions, see Viner 1930.

increased exports increase the inflow of money, and the corresponding price increase would eventually eat away the competitive edge previously present. The benefits of low prices are temporary (286-7). It is at this point that Hume claims that "the good policy of the magistrate consists only in keeping [money] still encreasing" (288). If the good policy of the magistrate were simply to assure that commerce would maintain its course and/or that ships would safely arrive in port, the benefits of exporting with the West Indies would eventually "encrease the price of labor," ending therefore the inflow of money and the outflow of goods. The good policy of the magistrate seems to be, instead, to prevent this increase. Decreasing money supply by encouraging alternative uses of gold and silver lowers prices, increases the inflow of money into the economy, "keeps alive a spirit of industry,"¹¹ and seems to be what Hume proposes as "the good policy of the magistrate."

The second economic force to corroborate how Hume's "good policy of the magistrate" is deflationary is the specie flow mechanism described in "Of the Balance of Trade."¹² The analysis of the specie flow mechanism *by itself* seems to imply that any attempt to change the quantity of money in a country with an open economy will prove futile as "the common

¹¹ This is further testified to by Hume's analysis of the effects of "taxes upon foreign commodities," which would decrease the relative price of domestic products so that "a tax on GERMAN linen encourages home manufacturers, and thereby multiplies our people and industry" (Hume 1985 [1752], 324). Hume does not endorse this kind of policy as "the arithmetic of the customs, two and two makes not four, but often makes only one" (324).

¹² For traditional and neoclassical models and interpretations of Hume's specie-flow mechanism see in particular Berdell 1995, Cesarano 1998, Duke 1979, Fausten 1979, Samuelson 1980, and Rashid 1984.

course of nature [...] preserve[s] money nearly proportionable to the art and industry of each nation. All water, wherever it communicates, remains at the same level" (312). Hume explains that "multiplying" the money supply above its natural level is counterbalanced by a proportional outflow of money as payment for the increased imports.¹³ A decrease in money supply causes an inflow of money instead. Hume states:

Suppose that 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 reign 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 manufactures 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 have arrived, we immediately lose the *advantage of the cheapness of labour and commodities*; and farther *flowing in of money* is stopped by our fullness and repletion. (311, emphasis added)

¹³ Going back to the original position with this mechanism implies that all the changes are proportional. Hume seems to work with this assumption of the price elasticity of demand. If the magnitude of the changes is not proportional, then the starting position may or may not be regained. I thank Nicola Giocoli for pointing out the relevance of this assumption. On the accuracy of the magnitude of the changes, see Schabas 2001. See also Schabas 2004 on the possible reading of these examples as mental experiments and on the use of mental experiments in general in Hume.

So, a one-time decrease in money supply will generate a temporary increase in exports, which brings money back in to the country and prices back up to their original level. But if money keeps being annihilated, money will keep coming back in—it will "keep encreasing". Indeed, so important is this concept, that 11 out of the 20 pages of that essay are dedicated to explaining how "[t]here is indeed one expedient by which it is possible to sink, and another by which we may raise money beyond its natural level in any kingdom" (316).

The Annihilation of Money

It is easier to annihilate part of the money supply by assumption than in practice, and the length of the adjustment process may be questionable.¹⁴ Nevertheless, Hume claims that ¹⁴ It is debatable whether Hume is talking about a rapid adjustment or about secular growth. From some of his descriptions he seems to refer to rapid adjustment as, for example, "we immediately lose the advantage of the cheapness of labour and commodity, and the farther flowing in of money is stopped by our fullness and repletion" (Hume 1985 [1752], 311). But only one paragraph below, he refers to the miserable situation of Spain: "Can one imagine, that it had ever been possible, by any laws, or even by any art of industry, to have kept all the money in SPAIN, which the galleons have brought form the INDIES? Or that all commodities could be sold in FRANCE for a tenth of the prices which they would yield on the other side of the PYRENEES, without finding their way thither, and draining from that immense treasure?" (312), which is a process that took place over a fairly long time horizon. Nevertheless, the references to the "weaker and more miserable" nation "whose money is decreasing" is in the same sentence as "the good policy of the magistrate is to keep the money still encreasing," which may imply that policies that lead to artificially increasing money supply would "immediately" increase prices, and cause the deleterious outflow of gold and silver so "pernicious to industry" (288). For an extensive analysis of the problems of the timing of adjustment, see Schabas 2004.

this can be done. He explains at length that in practice there are successful methods to artificially increase or decrease the quantity of money above or below its natural level (316). Let us first see how Hume describes the possibility to go around the specie flow mechanism and increase the quantity of money above its natural level. Later, we will see how for Hume it is possible to "sink money" below its natural level.

According to Hume, to increase money above its natural level, money has to be "annihilated" first. To follow Hume's argument, we need to keep in mind that for Hume the quantity of money that affects prices is only the amount in circulation, but that gold and silver are money even if they are hoarded or demonetized, because they can be converted relatively easily back into circulating money. His argument runs as follows: we are able to "annihilate" money by, literally, making it disappear, that is, by taking it out of circulation:

If the coin be locked up in chests, it is the same thing with regard to prices as

if it were annihilated (290).

This implies that "*the only method* of amassing [money is] the practice of hoarding" (324, emphasis added). Hoarding indeed decreases the quantity of money in circulation in a country, lowers prices, favors exports (which encourages commerce and industry), and allows more money to flow in. If money continues to become "annihilated," its inflow will keep "encreasing." To show how effective this method is, Hume offers a list of historical examples of the power of hoarding: Geneva, despite being such a small city, "engross[ed] nine-tenths of the money of EUROPE" (321); Athens was able "in about 50 years [... to] amass a sum not much inferior to that of HARRY VII" (321), despite being such a small republic; "[Philip and Perseus] in thirty years collected from the small kingdom of MACEDON, a larger treasure than that of the ENGLISH monarch" (322). Berne and the

Ptolemies offer the same lesson (323): hoarding, with its annihilation of money, increases money above its natural level by attracting increasing quantities of money into the country to restore the natural proportion between money (in circulation) and the arts and industry of that country.

Hume is not alone in claiming that hoarding is necessary to raise money above its natural level. Before him, John Houghton (1728 [1681-1683]) claims that hoarding would lead to an increase in imports of bullion from abroad. Vanderlint (1970 [1734]) approves of the practice of the East Indians of burying silver underground to keep prices low and exports, with their resulting inflow of silver, high. After Hume, Lord Kames Henry Home (1774) supports a state treasury because "it could absorb a redundancy of currency, which otherwise would get into circulation, raise prices, and thus hamper trade" (cited in Viner 1930, 272-3).

Therefore Hume's claim that "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, in which consists all real power and riches" (288) seems to imply that the good policy of the magistrate is to stimulate foreign demand for domestic goods by "sinking the prices" with a continuously "annihilation" of money. The promotion of hoarding seems to be the "the only method" that can be used to "sink the prices" so that money is kept "still encreasing."

The kind of hoarding that Hume seems to promote is done *privately*, and it is achieved through the alternative uses of precious metals. Gold and silver can be used not only as money but also as jewelry, decorations for churches and palaces, and as domestic utensils (silverware was in fact made out of silver).¹⁵ Indeed, Hume praises the policy of France where

many have large sums in their coffers: Great quantities of plate are used in private houses and all the churches are full of it. By this means, provisions and labour still remain 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. (317)

Similarly, Hume looks favorably upon policies that discourage using chinaware, a close substitute for silverware. By using utensils made of silver, the quantity of silver-money would decrease, reducing domestic prices, increasing exports, and therefore increasing the inflow of precious metals. The incoming flow of precious metals that would follow may not increase the domestic money supply and domestic prices, because it is taken out of circulation and melted into plate.

The same fashion a few years ago prevailed in GENOA, which still has place in ENGLAND and HOLLAND, of using services of CHINA-ware instate

¹⁵ Adam Smith (1982 [1776]) provides us with a description of the three forms that gold and silver take: "[t]he gold and silver which can be properly considered as accumulated or stored up in any country, may be distinguished into three parts; first, the circulating money; secondly, the plate of private families; and last of all, the money which may have been collected by many years' parsimony, and laid up in the treasury of the prince" (WN IV.i.22, 441). See also David Ricardo and his distinction of the different functions of gold in Schmitt 1985.

of plate; but the senate foreseeing the consequence, 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 later distress, they felt the good effect of this ordinance. Our tax on plate is, perhaps, in this view, somewhat impolitic. (318)

Preceding Hume, Willaim Petty (1963-1964 [1691]) claims: "There may be ... too much money in a country ... as to the best advantage of its trade; only the remedy is very easy, it may be soon turned into the magnificence of gold and silver vessels" (193). Similarly Vanderlilnt (1970 [1734]) recommends not only the use of plate but also of silver and gold cloth and garments: "I can't pass over this Fact without remarking, that it must be beneficial to Trade, that our Princes, Nobility, and Gentry, should wear the richest Gold and Silver Cloathing, and use such Utensils, and adorn their Palaces and Houses with these shining Metals ... I am induced to make this Remark, from the Practice of the East-Indians, who, as I have often heard, carry this Matter so far, as to bury the Money they get by Trade" (93-94). Only few years later, Joseph Harris (1966 [1757]) states: "Let an increased stock of bullion get out again into trade, and it will soon turn the balance the other way [..."to prevent its getting into trade as money" it has to be stored up.] But people in general will not heard up cash; all like to display their wealth, and to lay out other superfluity in some costly things. There seems then no method so effectual for the securing of dead stock of treasure in any country, as the encouraging the use of plate, by making it fashionable, preferable to more brittle or more perishable commodities" (99-100).

To a modern reader, the effectiveness of decreasing the supply of money by using silver and gold in household utensils may not be clear, and Hume does not give many indications

regarding the magnitude of the changes. We can look at Hume's contemporaries to infer whether using plate could be enough to both decrease money supply so that prices are "sunk", domestic goods are made competitive in international markets, and enough to keep taking out of circulation the inflow of money generated by it. Adam Smith (1982 [1776]) has a somewhat sophisticated description of this process. In particular, but not exclusively, in books IV and V of *The Wealth of Nations* (WN), Smith follows the specie-flow mechanism described by Hume, but unlike Hume, he considers the effects of changes in prices and in production costs of gold and silver, the effects of changes in the price of plate, as well as some "empirical data".

Smith states: "In order to supply so very widely extended a market, the quantity of silver annually brought from the mines must not only be sufficient to support that continual increase both of coin and of plate which is required in all thriving countries; but to repair that continual waste and consumption of silver which takes place in all countries where that metal is used. *The continual consumption of the precious metals in coin by wearing and in plate both by wearing and cleaning, is very sensible; and in commodities of which the use is so very widely extended, would alone have required a very great annual supply*" (WN, I.Xi.g.29-30, 225, emphasis added). Increasing the use of plate not only "annihilates" the quantity of gold and silver in circulation once, but generates a permanent mechanism to prevent money supply from increasing again, since, given the continuous loss of metals due to "wearing and cleaning," to maintain the same amount of plate, a "sensible" amount of silver and gold have to be used.¹⁶

¹⁶ One additional benefit of using gold and silver as plate that Hume considers, besides decreasing the quantity of money in circulation, is the ready availability of precious metals in case of need. Smith seems to be more skeptical than Hume on this point. While using plate may prove an effective

That the "annihilation" of money done through individual hoarding is the preferred method of "sinking prices" is further shown by Hume's lack of enthusiasm for the alternative methods available. A public treasure may be a more effective hoarding "expedient" (320), but the encouragement of individual hoarding through the use of plate is the least costly policy tool. Decreasing the money supply by "gathering large sums into a public treasure" is "destructive" (320), because a huge quantity of precious metals is concentrated in *one* place. This creates a perverse set of incentives for either a weak or a strong state. "A weak state, with an enormous treasure, will soon become a prey to some of its poorer, but more powerful neighbours. A great state would dissipate its wealth in dangerous and ill-concerted projects, and probably destroy, with it, what is much more valuable, the industry, morals, and numbers of its people" (321). Hume, like Houghton before him (1728 [1681-1683]), is concerned about the "expenditure on sinful purposes" of large treasuries.

way to decrease the quantity of gold and silver in circulation, melting plate into coins or bullions in case of financial distress may not be as effective a method to increase money supply. The reasons for this asymmetry are wear and war. If the accumulation of gold and silver in the form of plate and treasury helped in the past, now financial distresses such as wars are too enormous ("the foreign wars of the present century, the most expensive perhaps which history records" [WN IV.i.26, 441]) to be sustained by it. Smith claims indeed: "The French, in the beginning of the last war, did not derive so much advantage from this expedient ["the melting down of plate of private families"] as to compensate the loss of the fashion" (WN IV.i.24, 441). Instead, wars are now better financed by debt and "by that [exportation] of British commodities of some kind or other" (WN IV.i.27, 443).

On the other hand, allowing individuals to decrease the quantity of money in a decentralized manner implies that not only may a country enjoy the benefits of low prices, but it may also avoid the danger of accumulating riches in one hand.

Hume discusses another method of decreasing money supply-avoiding recoinage-to encourage export and therefore domestic industry, but he mentions it only in a footnote (287-8, note 7). Refraining from recoining worn out coins, first, avoids some of the problems associated with recoinages, and second, decreases the quantity of gold and silver in circulation in the country, as the metal content in the old coins is reduced, while the number of coins and their denomination stay the same. Not recoining old coins differs from debasing them. Debasement implies maintaining the same quantity of gold and silver in circulation. Each coin now contains less precious metal, while the number of coins has increased and the old denomination is maintained. With worn out coins, on the other hand, the metal content of each coin would be decreased by excessive use, but the number of coins would stay the same and would maintain the same denomination even with less metal content. The prices of the goods in the domestic market would most likely stay the same, since the proportion of what is domestically "agreed upon" as money (i.e. coins) to goods in circulation would not change. On the other hand, as the quantity of what is "agreed upon" as money internationally (i.e. gold and silver) has decreased, the prices of domestic goods for foreigners would be a little lower, so "foreign trade [would be] enlivened" (288). Foreigners would want more domestic goods, increasing domestic industry. An increase in industry would bring more money in, which would eventually wear, maintaining the cycle.

"The greater plenty of money"

The notion that decreasing the quantity of money in circulation is the good policy of the magistrate could also be inferred by running the same argument in the opposite direction: in Hume's account, increasing the quantity of money in circulation *depresses* the economy. Throughout the essays, Hume repeats that "the greater plenty of money, is very limited in its use [as "only the *public* draws any advantage from [it] and only in its wars and negotiations with foreign states" (282. See also 316-7)], and may even sometimes be a loss to a nation in its commerce with foreigners" (283). Indeed, "the dearness of every thing, from plenty of money, is a disadvantage, which attends and established commerce, and sets bounds to it in every country, by enabling the poorer states to undersell the richer in all foreign markets" (284. See also 312, 314,316-8, 320, 324). This is further supported by the fact that "as to foreign trade, it appears, that greater plenty of money is rather disadvantageous by raising the price of every kind of labour" (286).

Hume's disapproval of the most effective inflationary instrument—paper-money—further corroborates that increasing money in circulation is not a policy that should be encouraged: "I scarcely know any method of sinking money below its level, but those institutions of banks, funds, and paper-credit, which are so much practiced in this kingdom" (Hume 1985 [1752], 316). In Hume's time, paper-money is mostly in the forms of paper-credit, bank-credit, and public-credit.¹⁷ Without much of an explanation, Hume lumps them together. Still without much explanation, he lumps together their consequences as well: they "can *never* be in the interest of any trading nation; but *must* lay them under *disadvantages*, by encreasing money beyond its natural proportion to labour and commodities, and thereby heightening

¹⁷ For a detailed account of the different kinds of paper money see Steuart 1767.

their price to the merchant and manufacturer" (284, emphasis added, see also 316). Furthermore, "[paper money in circulation] banish[es] gold and silver from the most considerable commerce of the state" (355) *decreasing* the quantity of money in the home country (324). Moreover, he writes that "a nation, whose money decreases, is actually, at that time, weaker and more miserable than another nation which possess no more money, but is on the encreasing hand" (288. See also 311-2). Inflationary policies increase prices and increase the outflow of precious metals and, since it is "*pernicious* to industry, when gold and silver are diminishing" (288, emphasis added), they discourage the economy, leaving us with all the "ill effects arising from a great abundance of money" and none of the benefits (317).¹⁸

¹⁸ To prevent these inflationary tendencies, Hume is willing to go as far as proposing the creation of a public bank with strict 100% reserve requirement (285). Because the bank would not survive, as it could not generate the revenue to pay its "directors and tellers," Hume's proposal includes the idea that the state "bore the charges of salaries," since "the national advantage, resulting from the low price of labour and the destruction of paper-credit, would be a sufficient compensation" (285). Similarly, bank-credit should be avoided, as the costs of using it are more than the advantages. Bankcredit is indeed a way to "coin [one's] house, his household furniture, the goods in his warehouse," (319) etc., or using Sir James Steuart's words (1966 [1767]), it allows people to "melt and circulate" a house or a less liquid asset. "But whatever other advantages result from these inventions [coining the house], it must still be allowed that, besides giving too great facility to credit, which is dangerous, they banish the precious metals" (320). And Hume's position against public credit in the essay "Of Public Credit" was the flagship in battles against public credit (cf. in particular De Pinto 1969 [1774]) and his statement that "either the nation must destroy public credit, or public credit will destroy the nation" (Hume 1985 [1752], 360-1) was made a popular motto in the anti-public credit propaganda campaigns of the 18th and early 19th century (See Hont 1993, Pocock 1975, Pocock 1985.) See also,

Conclusion

This paper interprets Hume's "good policy of the magistrate [which] keeps [money] still encreasing" as a form of deflation, rather than as a form of inflation as commonly done in the literature. The good magistrate "keeps alive a spirit of industry in the nation, and encreases the stock of labour, in which consists all real power and riches" (288) by encouraging exports through the low prices of domestic goods. Low prices come from decreasing money in circulation, and this is achieved by encouraging alternative uses of gold and silver and by hoarding—i.e. taxing the use of chinaware and/or favoring the fashion of using precious metals to decorate churches and homes. The demand for gold and silver for non-monetary uses¹⁹ also prevents prices from raising again, as they otherwise would owing to the inflow of money generated by the increase in export. Deflation seems, therefore, to be the "good policy of the magistrate" that Hume prescribes.

for example, Gerveise 1954 [1720], Vanderlint 1970 [1734]. Cf., for example, Dutot 1974 [1738], Law 1966 [1705], Melon 1983 [1734], Steuart 1966 [1767], Wallace 1969 [1734].

¹⁹ An anonymous reader correctly noticed that gold and silver, as any other goods, have decreasing marginal utility and therefore their demand tends to saturation beyond some given point. Hence, the policy has an intrinsic limit. Unfortunately Hume does not see this point, does not address this possibility, and in general does not appear to make use of marginal analysis.

ARISTOTLE. 1982, The Ethics of Aristotle: Nicomachean Ethics, New York, Viking Penguin.

- BERDELL J.F. 1995, "The Present Relevance of Hume's Open Economy Monetary Dynamics", *The Economic Journal*, 105,432, 1205-1217.
- BERKLEY G. Bishop of Cloyne. 1979 [1735-1737], "The Querist", In The works of George Berkeley, Bishop of Cloyne ed by A.A. Luce, London, Nelson.
- BERNANKE B. and GERTLER M. 1989, "Agency Costs, Net Worth, and Business Fluctuations", *The American Economic Review*, 79,1, 14-31.
- BLAUG M. 1995, Why is the Quantity Theory of Money the Oldest Surviving Theory in Economics? The Quantity Theory: from Locke to Keynes and Friedman, Elgar, Aldershot.
- BREWER J. and PORTER R. 1993, Consumption and the World of Goods, Eds. London and New York, Routledge.
- CAFFENTZIS, C. G. 2001, "Hume, Money, and Civilization: or, Why Was Hume a Metalist?" *Hume Studies*, 27, 301-35.
- CECCHETTI S. 1992, "Prices During the Great Depression: Was the Deflation of 1930-1932 Really Unanticipated?" *The American Economic Review*, 82,1, 141-156.
- CESARANO F. 1998, "Hume's Specie-Flow Mechanism and Classical Monetary Theory: An Alternative Interpretation", *Journal of International Economics*, 45,1, 173-186.
- CHATTERJEE S. and CORBAE D. 1992, "Endogenous Market Participation and the General Equilibrium Value of Money", *The Journal of Political Economy*, 100,3, 615-646.

- de PINTO I. 1969 [1774], An essay on circulation and credit, in four parts, and a letter on the jealousy of commerce; from the French of Monsieur De Pinto; translated, with annotations, by S. Baggs, Farnborough, Gregg.
- DELONG B. J. 2000, "America's Historical Experience with Low Inflation", Journal of Money, Credit and Banking, 32,4, 979-993.
- DUKE M. 1979, "David Hume and Monetary Adjustment", *History of Political Economy*, 11,4, 572-587.
- DUTOT. 1974 [1738], Political reflections on the finances and commerce of France, Clifton N.J., A.M. Kelley.
- FAUSTEN D. 1979, "The Humean Origin of the Contemporary Monetary Approach to the Balance of Payments", *Quarterly Journal of Economics*, 93,4, 655-73.
- FRIEDMAN M. 1987, Quantity Theory of Money, in: The New Palgrave Dictionary of Economics, Money, Macmillan, London.
- FRIEDMAN M. 1992, "Franklin D. Roosevelt, Silver, and China", The Journal of Political Economy, 100,1, 62-83.
- GALIANI F. 1977 [1751], On Money: a translation of Della moneta, Ann Arbor, Published for Dept. of Economics
- GERVAISE I. 1954 [1720], The System or Theory of the Trade of the World, Baltimore, Johns Hopkins Press.

HARRIS J. 1966 [1757], An Essay Upon Money and Coins, New York, Johnson Reprint Co.

HOME, Lord K. H. 1774-75, Sketches of the History of Man, Dublin, Printed for J. Williams.

HOUGHTON J. 1728 [1681-1683], A Collection of Letters for the Improvement of Husbandry and Trade, London, Printed for Woodman and Lyon.

- HONT I. 1993, "The Rhapsody of Public Debt: David Hume and Voluntary State Bankruptcy", *Political Discourse in Early Modern Britain. Edited by Nicholas Phillipson and Quentin Skinner.* Cambridge, Cambridge University Press.
- HUME D. 1985 [1752], *Essays: moral, political and literary,* Ed. Miller, Indianapolis, Liberty Fund.
- HUMPHREY T. M. 2004, "Classical Deflation Theory", Economic Quarterly, 90,1, 11-32.
- IRWIN D. 1998, "The Smoot-Hawley Tariff: A Quantitative Assessment", The Review of Economics and Statistics, 80,2, 326-334.
- KEYNES J. M. 1936, The General Theory of Employment, Interest, and Money, New York, Harcourt.
- LAW J. 1966 [1705], Money and Trade Considered with a Proposal for Supplying the Nation with Money, New York, A.M. Kelley.
- LUCAS R. 1996, "Nobel Lecture: Money Neutrality", *The Journal of Political Economy*, 104,4, 661-682.
- MAYER T. 1980, "David Hume and Monetarism", *The Quarterly Journal of Economics*, 95,1, 89-102.
- McGEE R. 1989, "The Economic Thought of David Hume", Hume Studies, 184-204.
- McGUIRE R. 1990, "Deflation-induced Increases in Post-Civil War US Tariffs", *The Economic History Review*, 43,4, 633-645.
- MELON J.F. 1983 [1734], Opere/Jean-Fancois Melon; a cura di OnofrioNicastro e Severina Perona, Pisa, Libreria testi universitari.
- MONTESQUIEU, C. de Secondat, baron de. 1989 [1748], The Spirit of the Laws, Cambridge, Cambridge University Press.

- MUKHERJI N. 1992, "The Optimum Quantity of Money in a Stochastic Economy: A Comment", International Economic Review, 33,2, 487-489.
- PAGANELLI M.P. 2001, "Topics on Eighteenth Century Money: Robust and Fragile Models of Money and Man" Unpublished dissertation.
- PAGANELLI M.P. 2006, "Hume and Endogenous Money", *Eastern Economic Journal*, 32, 3, 533-547.
- PERLMAN M. 1987, "A Controversial Passage in Hume", Journal of Political Economy, 95,2, 274-289.
- PETTY W. 1963-1964 [1691], "The Political Anatomy of Ireland" in *The Economic* Writings of Sir William Petty, Together with the Observations upon the Bills of Mortality, More Probably by Captain John Graunt, Ed. Charles Henry Hull, New York, A. M. Kelley.
- POCOCK J.G.A. 1975, The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition, Princeton, Princeton University Press.
- POCOCK J.G.A. 1985, Virtue, Commerce, and History: Essays on Political Thought and History Chiefly in the Eighteenth Century, Cambridge, Cambridge University Press.
- PRIBRAM K. 1983, A History of Economic Reasoning, Baltimore, Johns Hopkins University Press.
- RASHID S. 1984, "David Hume and Eighteen-Century Monetary Thought: A Critical Comment of Recent Views", *Hume Studies*, 5,2, 156-164.
- SAMUELSON P. A. 1980, "A Corrected Version of Hume's Equilibrating Mechanism for International Trade" in *Flexible Exchange Rates and the Balance of Payments*, edited by John S. Chipman and Charles Kindleberger, Amsterdam, North Holland.

- SAUNDERS A. 2000, "Low Inflation: The Behavior of Financial Markets and Institutions", Journal of Money, Credit and Banking, 32,4, 1058-1087.
- SCHABAS M. 2001, "David Hume on Experimental Natural Philosophy, Money, and Fluids", *History of Political Economy*, 33,3,411-435.

SCHABAS M. 2004, "Hume's Monetary Thought Experiments", Unpublished manuscript.

- SELGIN G. 1997, Less than Zero: the Case for a Falling Price Level in a Growing Economy, London: Institute of Economic Affairs Hobart Paper No. 132.
- SHELL M. 2000 [1995], Art & Money, Chicago and London, The University of Chicago Press.
- SIMMEL G. 1990 [1900], The Philosophy of Money, London and New York, Routledge.
- SCHMITT B. 1985. Introduzione agli Scritti monetari di David Ricardo, Roma, Istituto della Enciclopedia Italiana, 3-88.
- SKINNER A. 1993, "David Hume: Principles of Political Economy", The Cambridge Companion to Hume, edited by David Fate Norton, Cambridge, Cambridge University Press.
- SMITH A. 1982 [1776], An Inquiry into the Nature and Causes of the Wealth of Nations, Indianapolis, Liberty Press.
- STEUART J. Sir. 1966 [1767], An Inquiry into the Principles of Political Economy, Edinburgh, London, Oliver & Boyd.
- TAUB B. 1989, "The Optimal Quantity of Money in a Stochastic Economy", *The International Economic Review*, 30,2, 255-273.
- VANDERLINT J. 1970 [1734], Money Answers all Things; or, An essay to make money sufficiently plentiful, New York, Johnson Reprint Corp.

- VICKERS D. 1959, *Studies in The Theory of Money, 1690-1776*, New York, Chilton Company-Book Division.
- VINER J. 1930, "English Theories of Foreign Trade Before Adam Smith", *The Journal of Political Economy*, 38,3, 249-301 and 38,4, 404-457.
- VINER J. 1991, *Essays on the Intellectual History of Economics*, ed. Douglas A. Irwin. Princeton, N.J., Princeton University Press.
- WALLACE R. 1969 [1734], Characteristics of the Present Political State of Great Britain, New York, A.M. Kelly.