Rethinking on the Controversy between J. Locke and W. Lowndes :

from the Viewpoint of Pound Sterling as the Imaginary Money

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Contents

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I The Reformation of Monetary System and Merchant Capital in the latter half of the 17^{th} Century

By the standards of the modern and contemporary economic phenomena, it was like a miracle that the value of pound sterling remained highly stable for more than 300 years from the early 17^{th} century until the suspension of gold convertibility in 1931. The Great Recoinage at the old parity in 1696 was an epoch-making event which produced the above result. A. Feavearyear describes as follows.

> The sanctity which Locke attached to the Mint weights was something new. Before his time few people regarded the weights of the coins as in any immutable. …… They (the Mint weights) were regarded as within the prerogative of the king, who might do as he pleased with them; ……. After 1696, however, the old sacredness was restored to the standard. Peel, both in 1819 and 1844, stood firmly by the doctrine, which he obtained from Locke, that the unit was a definite quantity of bullion, which must not be altered. …… Largely as a result of Locke's influence, £3 17s 10 1/2d. an ounce came to be regarded as a magic price for gold from which we ought never to stray and to which, if we did, we must always return. …… (T)he country gained far more than it lost from the consequences of Locke's reasoning.(1)

The 1660s saw a series of monetary reforms. To be precise, (1) in February 1663 the issue of coins with the milled edge to prevent culling of coins, (2) in August, the same year the liberalization of import-export of foreign coins, gold and silver metal by "An Act for the Encouragement to Trade", and again in December, 1663, the issue of a guinea gold coin for the promotion of African trades on the basis of an order book of the Mint Bureau dated December 4 1663, (3) and the assaying, melting, and minting coins without a fee for "whosoever person or persons, native or foreigner, alien or strangers" in December, 1666. "Thus in few years which had elapsed since the Restoration three great steps had been taken towards the establishment of a completely decontrolled and automatic metallic standard."[(2)]

The establishment of this decontrolled and automatic metallic standard system was almost completed by the foundation of Bank of England in 1694 and Great Recoinage at old parity in 1696. Thereafter the pound sterling was tied to the money metal of a fixed weight. The value of a guinea gold coin was finally fixed at 21 shillings in 1717, and the credit money issued by Bank of England became convertible into gold at the stable rate of one ounce of gold, valued at £3 17s. 10 1/2d.

Although the Great Recoinage of 1696 was significant in the establishment of British gold standard, the monetary phenomena in the process toward it have been examined insufficiently yet. As is generally known, gold and silver prices and an exchange rate of pound sterling were hardly related to the deteriorated rate of coins for the latter half of the 17th century. J. K. Horsefield called this point "the central issue of the entire controversy" between Locke and Lowndes around Great Recoinage.

> But if deteriorated coins retained a purchasing-power, at home and abroad, higher than was justified by the ratio of their actual silver content to its normal amount, was it still possible to claim that the currency remained on a standard comprising a determinate weight of silver ? / This is the central issue of the entire controversy. We have already remarked that it was rarely recognized. It was not to be disposed of, as most writers assumed, by the assertion — or more often the tacit belief — that purchasing-power inhered in the silver content of the coins.[(3)]

Regarding this point at issue, Marx also pays his attention in "Zur

Kritik Der Politischen Ökonomie" (1859). But being an explanation of a quantity theory of money, it says that there were not a sufficient amount of deteriorated coins functioning as a standard of value, and he didn't even proceed to solving the issue.

> In der Geschichte der englischen und französischen Geldfälschungen durch die Regierungen finden wir wiederholt, daß die Preise nicht in dem Verhältnis stiegen, wie die Silbermünze verfälscht wurde. Einfach, weil das Verhältnis, worin die Münze vermehrt wurde, nicht dem Verhältnis entsprach, worin sie verfälscht war, d. h. weil von der niedrigeren Metallkomposition nicht die entsprechende Masse ausgegeben war, sollten die Tauschwerte der Waren künftig in ihr als Maß der Werts geschätzt und durch dieser niedrigern Maßeinheit entsprechende Münzen realisiert werden. Dies löst die in dem Duell zwischen Locke und Lowndes ungelöste Schwierigkeit. Das Verhältnis, worin das Wertzeichen, sei es Papier oder gefälschtes Gold und Silber, dem Münzpreis gemäß berechnete Gold- und Silbergewichte vertritt, hängt ab, nicht von seinem eignen Material, sondern von seiner in Zirkulation befindlichen Quantität.(4)

Nevertheless, it is important to elucidate the following two issues for preliminary investigation of Great Recoinage. The first is about the nature of interest, who planed and executed the series of monetary reforms of 1660's. The second is about why was the guinea gold coin minted for 20 shilling in 1663, never forced to circulate at that price. These facts deeply affected the currency system that Devaluationist and Restorationist aimed to build up. I will discuss the first issue.

It is a well-known that the necessity of the free import and export of gold and silver which was finally approved in 1663, was already pointed out in 1620's and 1630's by Thomas Mun and Lewis Roberts of London Merchants. Roberts presented the argument as follows.

> as a thing granted and found true by experience, that in some countries and free Townes, where the exportation thereof (of silver and gold) is freely allowed and admitted, and the carrying out openly permitted by authority; no such want or scarcity is discerned; but contrariwise, all abundance and plenty thereof is noted, so that this being granted, the exportation thereof may be allowed without prejudice to the state or Kingdom where we abide.(5)

Furthermore, it is the Council of Trade and the Council for Foreign Plantations that played the core role in the enactment of the Navigation Act providing for the free import and export of gold and silver. The letter of the Privy Council asking the Corporation of the City of London for the recommendation of members for these councils (dated on August 17, 1660) tells us what kind of interests they had in this matter.

> We do by his Majs special command and in order to the better carrying on of this royal, profitable, and advantageous design, desire you to give notice hereof unto the Turkey Merchants, the Merchant Adventurers, the East India, Greenland Company, and likewise to the unincorporated Traders, for Spain, France, Portugal, Italy, and the West India Plantations; Willing them out of their respective societies to present unto his Majesty the names of fewer of their most knowing active men …….(6)

Based on this request, the Council of Trade composed of 63 people was organized on November 7, 1660, and the Council of Foreign Plantations composed of 48 people, was organized on December 1, 1660. In addition to these, Royal African Company was founded by 66 members in 1660. The constitution members who constituted then have remarkable characteristics. At first there were 28 members of both Councils, and eight out of them were members of all three organizations concurrently.

Other 11 people had positions in Council of Trade and Royal African Company. The names of 28 mentioned above, are as follows.[7]

> John Lord Berkeley of Stratton, Sir George Carteret, Sir Nicholas Cripse, Sir Andrew Riccard, Sir John Shaw, Thomas Povey, Martin Noell, John Colleton, Lord Clarendon, the Earl of Southampton, Earl of Manchester, Earl of Marlborough, Earl of Portland, Lord Robartes, Francis Lord Willoughby, Denzil Holles, Sir Edward Nicholas, Sir William Morrice, Arthur Annesley, Sir Anthony Ashley Cooper, William Coventry, Daniel O 'Neale, Sir James Draxe, Edward Waller, Edward Digges, William Williams, Thomas Kendall, John Lewis.

Andrews gives the following evaluation about these persons. "Thus the merchants, sea captains, and planters, men thoroughly familiar with the questions of trade and plantations and intimately connected with the plantations themselves are members of the Council of Plantations and sometimes of that of Trades also. It is significant that among the four London merchants common to all three groups should be found the names of Noell and Povey. Their associates, Crispe and Riccard, were persons well known in the history of London trade, and probably the four names represent the four most influential men among the merchants of London who supported the King."[8]

Such characteristics were also found in the members of the Council of Trade. A. Sherman says that in the 63-member Council, there were the president, vice-president and 6 directors of East India Company among the 49 Commons, and 31 persons in the Council had concern with the above mentioned Company and East Indian trades.[9]

And the Council sent "Advice of his Majesty's Council of Trade, concerning the Exportation of Gold and Silver in Foreign Coins and Bullion", and "Reasons and arguments for the Free Exportation of Gold and Silver" on December 11, 1660. The ninth clause of Act for the

Encouragement of Trade of 1663 was the outcome of their representations.(10)

Subsequently the minting of guinea gold coin was decided at the end of 1663, and it was described as "the beginning of a new chapter in the history of English money"(11). It was aimed to promote African Trade by "The Company of Royal Adventures of England trading into Affrica", hence, a mark of a little elephant on the coins as per the minting order of December 24, 1663.(12) Following this procedure, an Act was passed 'for encouraging of coinage' in 1666. "It provided that from 20 December 1666 any person who brought bullion to the Mint should have it assayed, melted, and coined, and for every pound weight of standard metal should receive a pound weight of coins without charge, and baser or finer metal in proportion. …… The Act was to last until the end of the first session of Parliament after 20 December 1671, but the main provisions were continued …… until they were repealed by the Gold Standard Act of 1925."(13)

Therefore, the implications and purposes of monetary reforms of 1660's accomplished by London merchants are fairly clear.

(1) A. Feavearyear, *The Pound Sterling: A History of English Money*, second edition revised by E. V. Morgan, 1963, pp.148-149. On the other hand, A Show criticized the 1696 recoinage at the old parity toward the end for the 19th century. And in particular, after the suspension of gold convertibility in 1930's, criticism occupies the state of affairs than praise to Locke. "it was impossible for any one country to hope to maintain an inflexible mint rate and standard in face of the general movements in the market prices of the precious metal, and of the mint rates in the countries surrounding. The wise in every nation saw this, and accommodated their country's monetary system to the perpetually changing conditions. On previous occasions, and subsequently, the wise in English saw it and did the same; but in this Conspicuous instance in 1696, when the advice of a philosopher prevailed in its counsels, the English Government went astray, and committed a blunder." (WM A. Shaw, M. A., *Select Tracts and Documents Illustrative of English Monetary History, 1626-1730*, 1896, reprinted 1967, p.104). C. R. Fay, "Locke versus Lowndes",

Cambridge Historical Journal, Vol.4, 1933, pp.153, 145, Sir John Craig, *Newton at the Mint*, 1946, p.10. Id., *The Mint: A History of the London Mint from A. D. 287 to 1948*, 1953, pp.193-194, P. Laslett, "John Locke, the Great Recoinage, and the Origin of the Board of Trade: 1695-1698", *William & Mary Quarterly*, Ser. 3, no.14, 1957, p. 384n.

(2) Ibid., pp.96-97.

(3) J. Keith Horsefield, *British Monetary Experiments 1650-1710,* 1960, p.227.

(4) K. Marx, *Zur Kritik Der Politischen Ökonomie,* 1859, Dietz Verlag Berlin, 1968, S. 123-124.

(5) Lewes Roberts, *Merchant, and Captaine of the City of London, The Treasure of Traffike or A Discourse on Forraigne Trade*, London, 1641, pp.21. He also made a plea for the approval of the negotiability of bills obligatory and bills of exchange in this book.

"In the next place, it hath beene noted mainely to further the traffike of a Kingdome, the transportation of bils of debt, from one man to another, in liew of monies, as is used in some Countries; for thereby many Law suits are avoided amongst Dealers, errors in Merchants accounts cleared, the Princes customes increased, the great stock of the Kingdome, which continually lyeth in all Negotiators hands in dead Bills and Bonds, employed, Traffike it selfe quickned, and such a benefit enjoyed thereby to the C" (ibid., pp.53-54)

Thomas Mun, *England's Treasure by Forraign Trade. Or, The Balance of our Forraign Trade is the Rule of our Treasure,* 1664, Chap. 4. "The Exportation of our Moneys in Trade of Merchandise is a Means to encrease our Treasure." This book is presumed to be written in 1620's.

(6) cited from Charles M. Andrews, *British Committees, Commissions, and Councils of Trade and Plantations, 1622-1675*, 1970, pp.65-66.

(7) ibid., pp.67-68. These persons were referred in the following treatise and books. R. Porter, "The Cripse Family and the African Trade in the Seventeenth Century," *Journal of African History,* Vol.11, No.1, 1968, K. G. Davies, *The Royal African Company*, 1957, D. C. Coleman, *Sir John Banks, Baronet and Businessman,* 1963, J. R. Woodhead, *The Rulers of London,* 1660-1689, 1965.

(8) Andrews, *op. cit.,* p.68.

(9) A. A. Sherman, "Pressure from Leadenhall; The East India Company Lobby, 1660 -1678", *Business History Review,* Vol. L, No.3, pp.339-340.

(10) Advice of His Majesty's Council of Trade, concerning the Exportation of Gold and Silver, in Foreign Coins & Bullion, Concluded 11th December, 1660, in *A Select Collection of Scarce and Valuable Tracts on Money,* edited with a Preface, Notes and Index, By John R. McCulloch, 1856, reprinted 1966, pp.145-153. An Act for the

Encouragement of Trade, 9th article, in *17th Century Economic Documents*, edited by Thirsk & Cooper, p.668.

Against this advice T. Violet criticized the intension for the liberalization of exportation of gold and silver by the merchants of East Indian, Turkish, and East Country trade at once in the following pamphlets. T. Violet of London Goldsmith, *A Petition against the Jewes, presented to the Kings Majestie and the Parliament, together with several Reasons, proving the East-India Trade, the Turkey Trade, the East-Country Trade, may all be driven without Transporting Gold and Silver out of England,* 1661, p.4. Violet also published pamphlets having same contents in 1643, 1656, and 1660.

By the way, Violet accused Goldsmith & Casheers of London of culling and exporting coins illegally during 1620's in his booklet published in 1643. He mentions that goldsmiths were already Casheers of London merchant in 20's. This attracts some attentions. The genesis of goldsmith-banker have been generally thought just a little previous to the Puritan Revolution. Before then, he insisted, goldsmiths had been buying a large quantity of Rix-dollars from Hamburg merchants, and had been selling them off to merchants of Norway and Denmark trades. Cf., Thomas Violet of London Gold-smith, *An Humble DECLARATION to the Right Honourable the Lords and Commons in Parliament Assembled, Touching the transportation of Gold and Silver, and other abuses practiced upon the Coynes and Bullion of this Realme,* 1643, pp.20-23.

(11) Feavearyear, *op. cit.*, p.98.

(12) "An Order for the Coinage of Guineas, 24th December 1663," in S. D. Horton, *The Silver Pound,* 1889, reprinted 1983, Appendix, No.1, pp.229-230.

(13) "An Act for encouraging of Coinage," in S. D. Horton, *op. cit.*, Appendix, No.2, pp.230-233. *Feavearyear, op. cit.*, p.96.

II The Coin Circulation in the latter part of 17th Century

In this section I will examine the influences of guinea coins been not compelled by law to circulate at face value had on the money circulation. In the Middle Ages and the early modern times, for example, the proclamation of April 11, 1549 prohibited the buying and selling of coins over the price prescribed by mint indentures. But strangely enough guinea and half guinea coins were exempted from sale and purchase at the minting price of £44 10s. of 1 Crown Troy pound, although other gold and silver coins like angel coins, unite coins, rose-real coin were compelled to circulate at face value. The exemption continued till March 26, 1696 when the price of guinea was fixed at 22 shilling.(1)

According to S. D. Horton, the circulation price of 20s. prescribed about a guinea gold coin in the Mint Indenture of December 1663 did not have the enforcement of a proclamation, and it was not illegitimate to pay for and accept guinea coins at prices above that. Therefore government organizations received guinea coins at a higher price freely.(2)

Charles 1st Earl of Liverpool described circumstances concerning the circulation of guinea gold coins at market-prices in his book written in 1805. He says that although the Mint Indenture mentioned the circulation price of 20s. per guinea, people did not care at all about it, and that measures were not taken to make the Guinea coin circulate at 20s.

> This last mentioned Coin, since called a Guinea, was ordered in the Mint Indenture to pass for 20s. ; but it immediately became current at a higher rate, by general consent, without any authority from Government, …… The subjects of this country paid no attention on this occasion to the rate upon these Coins in the Mint Indenture. There is indeed an order in the Council Books, directing the Attorney General to prepare a proclamation for making these new Coins current, according to the rate prescribed in the Mint Indenture; but it does not appear that any such proclamation was ever issued, or that any other measure was taken to enforce the intention of Government, as expressed in the said Indenture.(3)

The vital point is that good coins may not be driven out of circulation by bad coins, so long as they aren't forced to circulate at face value. In large transactions those coins circulate at market or do not depend on the conversion cost of coins. However in such transactions which seem to use a gold coin, such a cost of conversion is not a big obstacle. Therefore Gresham's Law doesn't work in that situation.

> Bad money will drive good money out of circulation, we argue, but only when use of the good money at its market (nonpar) price is too expensive. Generally, since small change is expensive to use at a nonpar price, we expect small denominations of the money undervalued at the mint to be scarce while large denominations circulate at a premium. History seems to support our new version of Gresham's law.(4)

Although the mint price of silver of 1 pound Troy (11 oz 2 dwt fine) was never raised again after it had been raised to £3 2s. (5s. 2d. per 1 ounce) in 1601, the mint price of gold coin was often raised. Crown gold (22 carats fine) of 1 pound weight was minted at £33 10s. in 1601, and but the mint price was raised intermittently, e.g. to £37 4s. in 1604, £40 18s. 4d. in 1612, £41 in 1661, £44 10s. in 1670.

At the time of the rise in the mint price of a gold coin in 1661, the face value of Unite coin was 23s. 6d., and the parity of gold and silver became 1:15.5, because 1 pound weight gold was priced at £48 2s. and 1 pound of silver, at £3 2s. Compared to the parity in the continent, for example 1: 15.0 in Hamburg, the gold : silver parity in England was more profitable to gold. The market price of a guinea gold coin of 20s. introduced in 1663 (the parity of gold to silver, 1:14.48) was 21s. 4d. (1:15.43) in 1663, 21s. 10d. (1:15.78) in April 1667, 21s. 6d. (1:15.57) in 1673, 21s. 6d. in 1680, 21s. 8d. in 1683, and 21s. 6d. in 1695. The market price of a guinea always exceeded the mint price.(5)

According to a document of 1651, a letter of May 26, 1652 from Amsterdam to London, and a pamphlet written by Samuel Fortrey in 1663, the outflow of gold bullion and weightier silver coins, and the inflow of silver bullion were important issues before the beginning of the 1660's, as the parity between gold and silver was more profitable to silver as compared with the continent before that period.(6) However, the successive increase in the mint price of gold coins reversed this tendency, and English parity became profitable to gold after the 1660's.

Besides, silver coins circulating at face value were worn down badly and were lighter by 20% already in 1650's than the standard weight. Therefore the minting of Guinea coins increased under the free minting after 1666, because they circulated at a market price higher than the face value of 20s. On the other hand, the silver coins were worn down more and more, and the silver coins with the full weight were exported. As a result, D. North predicted that the mintage and circulation of silver coins could not but decrease.(7) We can find these facts in Tables 1, 2, depicting the bullion prices of gold and silver, and in Tables 3, 4, and 5 showing the

Table 1 A Computation of the Common Weight of a Hundred Pounds by Tale, in Ordinary Silver Money at this Day, Taken from a Medium of the Bags, Weighed at the Receipt of Exchequer, in May, June and July 1695.
(The Weight of One hundred Pounds by Tale in Silver Moneys, according to the Standard of the Mint, ought to be Thirty two Pounds Three Ounces, One Peny Weight and Twenty two Grains Troy.)

No. Bags	What they ought to weigh.			Weight at the Exeheguer.			Deficiency		
	oz.	dw.	gr.	oz.	dw.	gr.	oz.	dw.	gr.
40	15,483	16	16	8,095	5	0	7,388	11	16
74	28,645	1	20	14,373	5	0	14,271	16	2
133	51,483	14	22	27,318	0	0	24,165	14	2
120	46,451	10	0	23,496	15	0	22,954	15	0
105	40,645	1	6	20,899	15	0	19,745	6	6
100	38,709	11	16	19,588	5	0	19,121	6	16
572	221,418	16	08	113,771	05	0	107,647	11	08

The Medium of the Weight of each Hundred Pounds	198oz.	18dw.	00 ⅓ gr.
The Medium of the Deficiency	188	03	21 ⅔
標 準 重 量	387	01	22

(*A Report containing an Essay for the Amendment of Silver Coins*, 1695, p. 90, in *A Select Collection of Scarce and Valuable Tracts on Money*, edited by J. R. McCulloch, 1856, reprinted 1966.)

Table 2 Decline in average weight of bags containing £100 sterling received by the Teller of Excise at beginning of July 1686-95 and 1696
(Legal weight of £100 in silver, 32lb. 3oz. 1dwt. 22.5gr.)

Year	lb.	oz.	dwt.	% of legal weight	% loss from preceding year
1686	28	6	18.2	88.6	
1687	28	2	16	87.5	1.2
1688	27	3	16.6	84.7	3.3
1689	27	1	5	84.0	0.8
1690	26	2	5	81.2	3.3
1691	25	5	11	78.9	3.0
1692	23	6	0.4	72.9	7.5
1693	21	6	6.6	66.7	8.5
1694	19	4	16.8	60.1	9.8
1695	16	3	18.2	50.6	16.0
1696	14	6	5.4	45.0	11.0

(*John Locke, Locke on Money,* edited by P.H. Kelly, 1991, Vol.1, p.116)

quantity of gold coins and silver coins that were minted.

Under these circumstances it was finally decided to replace silver coins worn badly with new coins minted at the old parity. It was common sense for a man of intelligence and business to understand that new silver coins would disappear no sooner than they would be introduced. Silver coins of £5,100,000 had been reminted from the end of 1696 to 1700 by the Mint Bureau. Pamphlets of 1696 mention as follows.

> But the greatest confusion is our having so little Silver, as 'tis thought (and 'tis very much feared that will soon be gone when new Coyned.) Now the true Reason is, from our giving so great Denomination to our gold; …… Now if our great Evil comes from the vast Quantity of Gold brought in, and that by Calling our guineas more than the true Value according to our Silver Coyn. …… But when they can get 20, 10, 5, 2, or 1 per Cent. By bringing in Gold, they will soon Exchange our Silver, and we shall have their Gold; the Ill Consequences of which will soon appear. …… What is more plain but that we have made (gold) our Coyn, by selling our silver (though at a

great Loss) for it, and desiring it still rather than Silver in all Payments; Though this Folly is now most unaccountable: …… But if our Gold is not brought down 'twill be Folly for any one to expect to see Silver Coyn pass among us.(8)

You are pleased to express the great Joy of the People, founded on Hopes that may once more see Lawful Silver Money of England; since the late Act of Parliament ordains the present Money so much abused and mangled, to be Recoined according to the former due Weight and Fineness: …… But give me leave to tell you, that this Satisfaction can but of short continuance; …… because while the Guineas pass Current at a rate above the intrinsick Price, they will necessarily destroy and confound the New Silver Coin.(9)

And also another pamphlet ridicules that milled silver coins of £6,000,000 minted for the past 30 years completely disappeared and not even a piece of them circulates now. It predicts that the recoinage at the old parity would result in exporting all English silver with certainty. The author says that we would be free either from old clipped silver coins, or from new heavy silver coins in a year.(10)

Of course London merchants like J. Child of East India Company, John Houblon, James Houblon, G. Heathcote of Bank of England and J. Locke who strongly supported the recoinage at the old parity were surely with full knowledge with this fact, because A. Vickars says that "the Members of the Bank of England will be the persons most capable to regulate the Current of Exchanges, by their examples in those places where there is any".(11)

(1) D. Glassman & A. Redish, "Currency Depreciation in Early Modern England and France", *Explorations in Economic History,* Vol.25, No.1, 1988, p.83n. P. H. Kelley, *Locke on Money,* 1991, Vol.1, p.34.

(2) S. D. Horton, *The Silver Pound and England's Monetary Policy since the Restoration together with the History of the Guinea,* 1887, reprinted 1983, p.106n.

(3) *A Treatise on the Coins of the Realm, in a Letter to the King,* Charles 1st Earl of Liverpool, 1805, reprinted 1880, p.78.

(4) Arthur J. Rolnick and Warren E. Weber, "Gresham's Law or Gresham's Fallacy?", in *Journal of Political Economy,* Vol.94, no.1, 1986, p.186.

(5) Ming-Hsun Li, *The Great Recoinage of 1696 to 1699,* 1963, pp.49-52.

(6) "…… that almost all the English money is clipped, and that it is not so weighty as when it was first coined by twenty pound in the 100 li., ……, and I weighed the English money here in Holland when they returned from Ireland and find 400 li., of your culled and weighty money shall weigh 500 li., light English money (I mean in tale) which clipped English money is transported back into England where it goes current at all sea ports, and they will change it for a small matter in tale for weighty culled money, which heavy money they send for Holland. ……." "you must be sure to give them warning to have a care of believing or advising with the Guinea merchants, the East India merchants, or goldsmiths for these are the only offenders and without a joint confederation with each other these mischiefs of transporting money, diverting it from the mint when it is brought in bullion from beyond seas by giving for it 1d., 2d., in five shillings in silver, sixpence and 12d., and sometimes 2s. in twenty for gold more than it will make in the mint, ……. I am confident and have others speak it that are knowing men. We have in Amsterdam more English gold than you have yourselves in all England. This gold hath been all sent within twenty years and could not come over without hands. I know myself great quantities of heavy English silver hath weekly come over in pinks Dutch men o' war within these few years to the value of many hundred thousand pounds in the return of one commodity which was corn." (To the Honourable Sir Robert Stone from James Yard, Amsterdam, 26 of May, 1652) in *Seventeenth-Century Economic Documents,* edited by Joan Thirsk and J. P. Cooper, 1972, pp.645, 647.

The same fact was pointed out in the following books. WM. A. Shaw, *op. cit.,* p. 100, *Samuel Fortrey, England's Interest and Improvement* ……, 1663, p.34 cited from J. K. Horsefield, *op. cit.,* p.84.

Still I can not understand the reason to a certainty why the parity between gold and silver became favorable to gold in England as compared to the continent since the beginning of the 1660's. British balance of trade, coin and bullion import -export, multilateral payment system in this period have to be considered to gain a better underslanding. Cf., S. Yoji, *Monetary Revolution in the Early Modern England; Bills of Exchange, Maltilateral payment system, and Merchant Capital,* 2004, Chap. 2, "The Structure of multilateral payment system around the early modern London" (Japanese edition).

(7) D. North affirmed in 1691 that the extinction of a silver coin would be unavoidable. "And I do not in the least doubt, unless the currency of clipt Money be stopt, it will not be very long before every individual piece of the Old Coynes be clipt." (Sir Dudley North, *Discourses upon Trade,* 1691, reprinted 1907, 1934, p.31).

(8) *Some Considerations Most Humbly proposed, in Relation to the ill State of Our Money,* 1696.

(9) *A Letter to A Gentleman in the Country Concerning the Price of GUINEAS*, Feb. 29. 95/96, p.1.

(10) *A Letter to an Eminent Member of Parliament, about the Present Rate of Guineas, and the Influence they will have on our expected New Money*, 1696, pp.1, 2.

(11) A. Vickars, Merchant, *An ESSAY for Regulating of the Coyn,* the second edition, 1696, p.28. Cf., S. Yoji, op. cit., 2004, Chapter 5 "Over-View of the City of London".

III Locke=Lowndes Controversy : A Comment

(1) The Process toward the Great Recoinage

In previous sections we have observed that the monetary reforms of 1660's and the Great Recoinage of 1696 were pushed ahead by London Merchants who had a deep interest in foreign trade and finance, and that informed people at that time predicted to some extent a rapid outflow and hoarding of newly minted silver coins with milled edge.

Nonetheless, tables 1, 2, 3, 4, and 5, and figures 1, 2, and 3 show that bullion prices of gold and silver, and the Amsterdam exchange rate of the Pound sterling did not fluctuate so much as to cause big inconveniences before the 1690's in spite of extensive clipping and forgery of silver coins. The range of these activities occured was remarkably less than the that of wear and tear of silver coins. There was no correlation between the extent of clipping of silver coins, and the trends in prices of commodities and in exchange rates.

Therefore A. Feavearyear asserts that the value of money of account is not dependent on the metal weight of money, that is to say, the

Table 3 Gold and silver prices, ratios and Amsterdam Exchange, 1665-1699

Year	Average silver price in London per oz	Gold price	Gold-silver ratio market price	Amsterdam Exchange
1665	5s. 3d.	78s. 6d.	14.952 : 1	33.54 Schelling Banco per £1st.
1666	5 3	78 9	15.000	
1667	5 3	82 0	15.619	
1668	5 3	80 6	15.333	
1669	5 3⅛	79 6	15.113	35.48
1670	5 3½	79 9	15.071	
1671	5 3	79 9	15.190	35.56
1672	5 3	79 9	15.190	34.64
1673	5 3¾	81 0	15.247	
1674	5 3¼	81 4	15.430	34.13
1675	5 3¼	82 0	15.557	35.25
1676	5 2½	82 0	15.744	36.19
1677	5 2½	80 0	15.360	36.23
1678	5 3	80 0	15.238	35.54
1679	5 3	81 0	15.428	35.64
1680	5 3	80 0	15.238	35.92
1681	5 3½	80 0	15.118	35.60
1682	5 4	80 4	15.068	35.36
1683	5 4	80 8	14.666	36.17
1684	5 5	80 0	15.138	
1685	5 4	82 0	15.375	35.51
1686	5 3⅔	81 0	15.428	35.85
1687	5 4	81 0	15.188	35.96
1688	5 3¼	81 0	15.368	34.95
1689	-	80 0	—	
1690	-	—	—	
1691	-	—	—	33.84
1692	5 9	—	—	34.52
1693	5 7	84 0	15.045	33.46
1694	5 7	84 0	15.045	32.33
1695	5 9	—	—	29.55
1696	6 11	—	—	30.63
1697	6 6	82 0	12.615	35.24
1698	5 2	—	—	
1699	5 7	—	—	31.60

(K. N. Chaudhuri, *The Trading World of Asia and the English East India Company 1660-1760,* 1978, p.162; John J. McCusker, *Money and Exchange in Europe and America, 1600-1775,* 1978, pp.54-55)

Table 4 Prices of Silver, Gold, Guineas, and Amsterdam Exchange, 1694-1699

(Par=100)

Month	Price of Silver Bullion		Price of Gold Bullion		Price of Guineas		Rate of Exchange	
	d.	% of par	s. d.	% of par	s. d.	% of par	sch. d. banco	% of par
1694								
Jan.	62•8	101•3	80 7	100•7	22 1	102•7		
Feb.	63•0	101•6	80 6	100•6	21 10•7	101•8		
Mch.	62•9	101•5	80 6	100•6	22 0	102•3		
Apl.	63•0	101•6	81 0	101•2	22 0	102•3		
May.	63•0	101•6	81 0	101•2	22 0	102•3		
June	63•0	101•6	81 0	101•2	22 0	102•3		
July	62•7	101•1	81 0	101•2	22 0	102•3		
Aug.	63•0	101•6	81 0	101•2	22 0	102•3		
Sept.	64•2	103•6	81 3	101•6	22 0	102•3		
Oct.	64•4	103•9	81 0	101•2	22 0	102•3		
Nov.	64•6	104•2	81 0	101•2	22 1	102•7		
Dec.	64•2	103•5	81 5	101•8	22 4	103•9		
1695								
Jan.	64•3	103•7	82 5	103•0	22 9	105•8	32 7	108•9
Feb.	65•0	104•8	84 6	105•6	23 6	109•0	32 6	109•2
Mch.	66•1	106•6	88 9	110•9	25 0	116•3	31 9•7	111•6
Apl.	67•4	108•7	91 7	114•5	25 0	116•3	31 2•5	113•8
May.	64•9	104•7	96 10	121•0	27 2•3	126•5	31 3	113•7
June	67•4	108•7	106 5	133•0	29 6•7	137•5	29 4•5	120•8
July	71•4	115•6	108 5	135•5	29 9•4	138•5	29 0	122•4
Aug.	74•0	119•4	108 6	135•6	29 9	138•4	27 2•7	130•4
Sept.	76•2	122•9	108 0	135•0	29 7	137•6	28 3	125•7
Oct.	74•0	119•4	107 0	133•7	29 5	136•8	28 5	125•9
Nov.	75•1	121•1	107 0	133•7	29 5	136•6	27 6•5	128•9
Dec.	77•0	124•2	108 0	135•0	29 7	137•6	29 3•5	121•2
1696								
Jan.	71•0	114•5	?	?	?	?	30 0	118•3
Feb.	?	?	?	?	?	?	29 1	122•1
Mch.	?	?	?	?	?	?	29 7•5	119•8
Apl.	?	?	?	?	22 0	102•3	30 1•5	117•8
May.	?	?	?	?	?	?	30 3•5	117•2
June	?	?	?	?	?	?	30 4•5	116•9
July	62•0	100•0	82 0	102•5	22 0	102•3	30 1•5	117•8
Aug.	?	?	?	?	?	?	30 5	116•7
Sept.	?	?	?	?	?	?	33 1	107•3
Oct.	?	?	?	?	?	?	34 1	104•1
Nov.	?	?	?	?	?	?	37 2	95•5
Dec.	?	?	?	?	?	?	37 8	94•2

(J. K. Horsefield, *British Monetary Experiments, 1650-1710*, 1960, p.254)

Table 5 The Coinage of Gold and Silver

year		Gold			Silver		
		£	s	d	£	s	d
1660-5	• •	112,868	12	4	902,004	5	5
1666-70	• •	678,900	15	1	422,626	4	7
1671-5	• •	523,426	17	2	750,032	3	9
1676-80	• •	1,704,367	10	0	242,338	19	8
1681-5	• •	1,675,268	14	5	499,951	15	7
1686-90	• •	1,757,188	18	6	485,242	7	9
1691-5	• •	224,963	14	11	17,167	7	3
1696-1700	• •	992,219	3	9	5,106,019	10	11
Total		£7,669,205	6	2	£8,425,382	14	11

(Ming-Hsun Li, *The Great Recoinage of 1696 to 1699*, 1963, p.48)

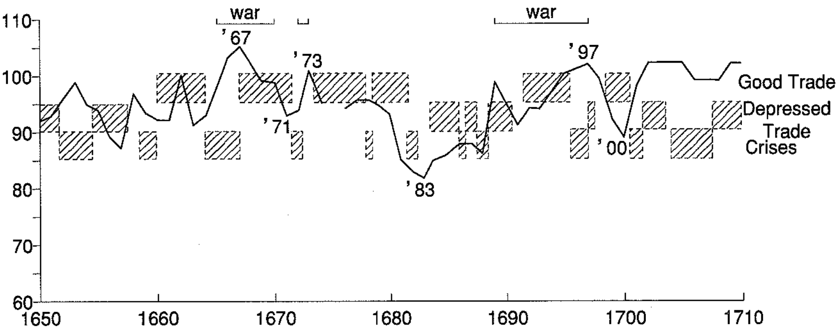
intrinsic value of it.

> The very trifling degree to which the money was depreciated throughout the reign of Charles II is remarkable when we realize the condition of the actual coin in use. …… And during the whole period the Government was struggling with the clippers, and hanging them by the half-dozen; while the silver coins in circulation were being gradually reduced to little more than half their proper weight. Nothing could have shown more clearly that the value of the unit of account did not depend primarily upon the quantity of silver in the coins. …… the clipped money for the greater part of the time caused little inconvenience. The counterfeiting, which always accompanied clipping, served only to add to the circulation the quantity needed to meet the increasing demands of trade, for the milled coins would not stay in circulation. The value of money fell very little. A fluctuation which was no greater than that measured by the variation in the price of guineas from 21s. 2d. to 21s. 10d. could do little harm.(1)

Then, how can we understand the significance of famous Locke=Lowndes controversy? What provided for the value of money during

CHART 1

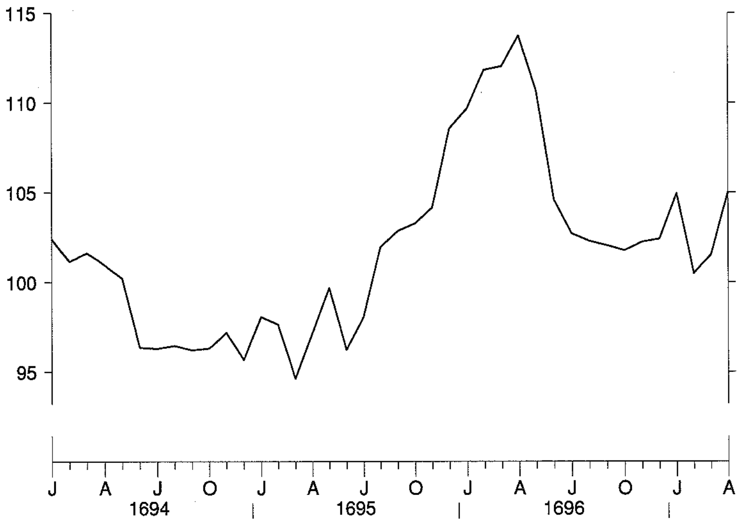
Fuel, Light and Textile Price. Index. and the Condition of Trade.
1650－1710 1695＝100



(J. K. Horsefield, *op. cit.*, p.4)

CHART 2

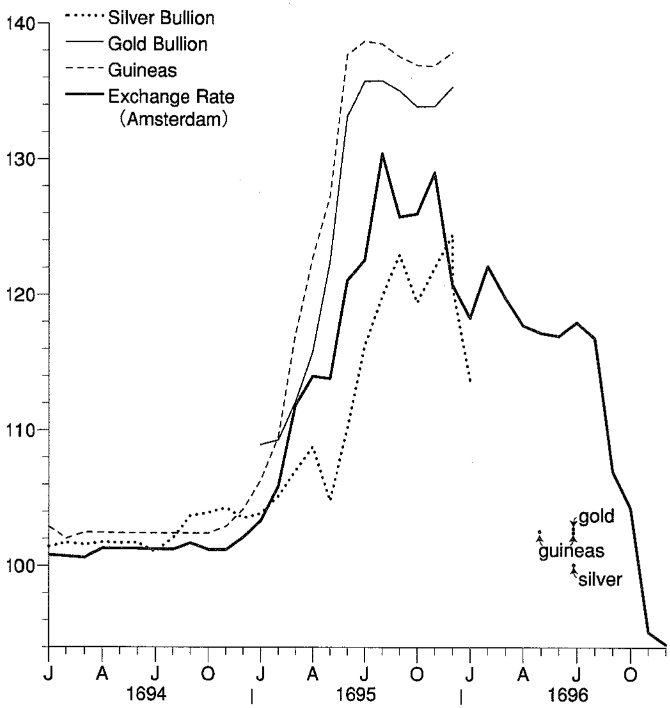
Indices of Average Prices of 22 non-agricultural
commodities, monthly, January 1694 to April 1697
(Average 1695＝100)



(J. K. Horsefield, *op. cit.*, p.7)

CHART 3

Indices of Prices of Silver, Gold, Guineas, and Amsterdam Exchange, 1694-1696 (Par=100)



(J. K. Horsefield, *op. cit.*, p.11)

those days? Let's survey the process toward the recoinage of 1696 briefly.

The English currency system, which had been stable for dozens of years, collapsed suddenly as from the end of 1694, as shown in figure 2. Surprisingly enough, despite strong pressures of war finance and overseas remittance since the beginning of the war against France, the big change was not seen in prices of commodities, those of gold and silver metal, and the Amsterdam exchange rate until 1694. It was in particular from the end of 1694 that bullion prices jumped, and the exchange rate of the pound sterling deteriorated rapidly. Guinea coins transacted at about £22 1/2s. rose to 30s., and silver bullion rose in price from 62s to 77s. per 1 ounce by weight by about 25%. The exchange rate also fell by 25 per cent. Why did the collapse of the English currency system occur suddenly then?

As for these movements, the arguments presented by D. W. Jones are noteworthy. According to his arguments, the shrinkage of money in circulation and the reduction in production and employment did not appear until late 1694, because the current value of clipped silver coins didn't fall, despite the plunge in their intrinsic value by 50%, coins were clipped to raise the silver bullion for export (see table 3).

> In a word, the failure of English trade in the 1690s was total, not just confined to these losses. Hence the massive bullion outflows of the 1690s, culminating with the huge £699,000 out of 1694. / …… How did England manage to survive in the in the 1690s? …… Why was she not prostrated by the money squeeze also implied in normal circumstances by such a deficit? Down to late 1694, the answers are clear enough. Where trade failed, she survived by clipping the coin. It was by clipping that she obtained the bullion needed to pay her debts. Normally such bullion export would enforce an intense monetary squeeze, but clipping provided an escape, since down to late 1694, clipped coin still passed at face value, leaving the total face value of the money stock unchanged. …… Moreover, since what was clipped from the coin closely matched the amount of bullion exported abroad, the income generated by clipping will have closely matched, and thus offset the income deficiently by the deficit. Clipping not only saved England from a monetary squeeze, but also staved off that collapse in spending, output and employment which remittances and the failure of trade would otherwise have produced.(2)

From the view-point of monetary theory it is very interesting to ask why the monetary system collapsed suddenly at the end of 1694. Bullion prices of gold, silver and guinea coins jumped up, and the refusal to accept worn coins spread considerably. The price of a guinea coin rose by 36 per cent from February to June 1695.(3) The signs of a crisis were clearly by visible. But why didn't the situation take a sudden turn until the end of 1694? Jones writes as follows;

> The key factor was the coming session of Parliament, due to commence in November. For ahead of this session, the possibility both of devaluation (i.e. the raising of bullion price) and of a recoining will have been very real in view of the poor state of the clipped coin.(4)

In January, 1695 a committee was established in both Houses of Parliament about coins and bullion export, and on March 14, 1695 the committee of the House of Commons announced 'Fourteen Propositions' which included the raising of the mint price of a silver coin by 9 per cent from 5s. 2d. to 5s. 6d. per one ounce weight. On April 12, a resolution was also made to compensate the holders of clipped coins. The debasement of silver coins was considered to be the official position of government at this time. In August William Lowndes was commanded to make the plan of reminting silver coins along the 'Fourteen Propositions', and on 12th September he finished writing 'A Report containing an Essay for the Amendment of the silver Coins'. The main content of this Report was a 20 per cent increase in the mint price to 6s. 5d. At the end of September, it was submitted to the Council of Regency.(5) These processes caused immense changes in the monetary situation.

After receiving Lowndes' report, the Council of Regency formally consulted opinions of others from various fields, and received opinions from people like John Locke, Charles Davenant, Christopher Wren, John Wallis, Isaac Newton, Gilbert Heathcoat, Josiah Child, John Houblon, Charles Chamberlain, Joseph Herne, John Asgill, and Abraham Hill. Almost all these persons stood against the debasement plan. Locke's opinion, which attracted attention most, was submitted on October 23 and

October 30. Moreover in due consideration of King's intention of maintaining the mint price, the Cabinet meeting decided the recoinage of silver coins along the opinion of Locke, and commanded Lowndes to redraw the recoinage plan.(6) The decision to mint at the old parity made the exchange rates of the pound sterling favorable.

The bill for reminting at the old parity was referred to discussion in both Houses of Parliament on 17^{th} December. The famous treatise, 'Further Considerations Concerning Raising the Value of Money' was published on December 27. The bill passed through the House of Commons on January 17 next year, and 'An Act for Remedying the Ill State of the Coin' got approval of the king on January 21.(7)

This did not, however, lead to a conclusion in the dispute between devaluationists and restorationists. Because guinea coins still continued to be rated at a high price, parity of gold and silver rose to 1:19. However, the price at which government offices accepted guinea coins was reduced to 28s. on February 15, to 26s. on February 28, and to 22s. on March 26. Therefore devaluationists were completely defeated after both Houses passed the resolution again not to raise the mint price of silver coins any more on October 20.(8)

(1) Feavearyear, *op. cit.*, pp.120-122.
(2) D. W. Jones, *War and Economy in the Age of William 3 and Marlborough,* 1988, p.228.
(3) P. H. Kelly, *Locke on Money,* Vol.1, 1991, pp.59, 116.
(4) D. W. Jones, *op. cit.,* p.235.
(5) D. W. Jones, *ibid.,* 235-237, P. H. Kelly, *op. cit.,* p.20-21. J. K. Horsefield, *op. cit.,* pp.49-50.
(6) Horsefield, *ibid.,* pp.51-52, Kelly, *ibid.,* pp.25, 27-29, Jones, *ibid.,* p, 245.
(7) Horsefield, *ibid.,* pp.48, 61, Kelly, *ibid.,* pp.30-32.
(8) Kelly, *ibid.,* pp.33-35, Jones, *op. cit.,* p.245, Henry Horwitz, *Parliament, Policy and Politics in the Reign of William 3,* 1977, pp.167-168, 176-177.

(2) Devaluationist's viewpoint

Needlee to say, the difference of opinions between devaluationists and restorationistsis was that the former insisted on raising the mint price of clipped silver coins, while the latter on reminting them at the old parity. Lowndes' report mentioned, known to all, that silver coins were melted or exported because their mint price was less than the market price of silver bullion. Accordingly people were obliged to depend upon paper money or to resort to barter trade because of the reduction of coins in circulation. Therefore, it was proposed to raise the mint price of silver coins by 25 per cent from 5s. 2d. to 6s. 5 1/2d. per 1 ounce weight in order to increase the circulation of silver coins.

> whensoever the Extrinsick Value of Silver in the Coin hath been, or shall be less than the price of Silver in Bullion, the Coin hath been, and will be Melted down. …… that the want of a sufficient Stock of Money, hath been the chief Cause of Introducing so much Paper Credit (which is at best hazardous, and may be carried too far) and setting up of Offices, both in City and Country, for Bartering of Goods or permutations. …… The Value of the Silver in the Coin ought to be raised, to encourage the bringing of Bullion to the Mint to be Coin'd. It is a Matter of Fact well known to your Lordships, and …… it is perceivable by every body else, that since Bullion hath born a greater Price than Silver in the Coin, there has been none brought to the Mint to be Coin'd, either by Importers or others, …….(9)

Lowndes himself recognized that this policy of raising the mint price was a traditional method to encourage the minting of coins.

> …… from the Indentures of the Mint for above Four hundred years past …… it doth evidently appear, That it has been a policy constantly Practised in the Mints of England (the like having indeed been

done in all Foreign Mints belonging to Governments) to raise the Value of the Coin in its intrinsick Denomination, from time to time, as any Exigence or Occasion required; and more especially to Encourage the bringing of Bullion into the Realm to be Coined.……
And this Method of Raising the Extrinsick Value of the Gold and Silver, in the Denominations of the Coins, as it hath been constant almost in the Reign of every King, so no Inconvenience, Disgrace or Mischief has ever accrued by the doing thereof at any time, …….(10)

The start of real discussions for recoinage in a direction of raising the mint price in the Parliament at the end of 1694 gave rise to a sudden change of situation and intensified the monetary disorder due to the circulation of clipped money and the lack of coins.

In Consequence of the Vitiating, Diminishing and Counterfeiting of the Current Moneys, it is come to pass, That great Contentions do daily arise amongst the King's Subjects, in Fairs, Markets, Shops, and other Places throughout the Kingdom, about the Passing or Refusing of the same, to the disturbance of the Publick Pease; many Bargains, Doing and Dealings are totally prevented and laid aside, which lessens Trade in general; Persons before they conclude in any Bargains, are necessitated first to settle the Price or Value of the very Money they are to Receive for their Goods; and if it be in guineas at a High rate, or in Clipt or Bad Moneys, they set the Price of their Goods accordingly, which I think has been One great cause Raising the Price not only of Merchandizes, but even of Edibles, and other Necessaries for the sustenance of the Common people, to their great Grievance.(11)

Therefore, it is reasonable to suggest that the raising of the mint price of silver would increase the circulation of silver coins for business transactions in the domestic markets. Devaluationists attached great importance to the following two points regarding the recoinage: (1) that exchange rate and bullion price of gold and silver didn't respond to the deterioration rate of silver coins, and (2) English parity of gold and silver was to the disadvantage of silver. These two facts were responsible for the decrease in the circulation of silver coins. The recognition of these facts was a major point of dispute between devaluationists and restorationists. Otherwise, Locke insisted stubbornly as follows.

> …… it not being the denomination but the quantity of Silver, that gives the value to any Coin,(12) Silver is the Measure of Commerce by its quantity, which is the Measure also of its intrinsick value.(13) By this Measure of Commerce, viz. the quantity of Silver, Men measure the value of all other things.(14)

Locke's basic point was that the extrinsic value of coins (circulation value) was determined by their intrinsic value (quantity of metal). This point which Locke insisted, however, was never accepted by devaluationists, and that idea was never, so to say, common sense in those days. Even Dudley North could not understand the reason why people took diminished coins by tale.

> There is great fear, that if clipt Money be not taken, there will be no Money at all. I am certain, that so long as clipt Money is taken, there will be little other: And it is not strange, that scarce any Nation, or People in the whole world, take diminisht Money by tale, but the English ?"(15)

The exchange rate didn't also reflect deterioration rate of silver coins at all. A pamphlet written in 1696 says as follows.

> the greatest part of the Current Cash in the Kingdom this 30 years, has been Clipt Money more or less: For the Exchange does not

regard the intrinsick Value, but the extrinsick Value and Denomination it bears in the respective Countries.[16]

It is very important that prices and exchange rates were related to the extrinsic value instead of the intrinsic value of coins from the view point of the value theory of money.

One more thing to pay attention to is that Lowndes' report mentioned nothing about the mint price of gold coins, while proposing to raise the mint price of silver coins.

And here it is necessary for me to Observe, That if Gold had Advanced proportionably with the Silver, …… And seeing it can be attributed to nothing but the present Badness of our Silver Coins, …… That altering the present standard of our Gold Coins …… would avail nothing. And that the only remedy to fix these Gold Coins upon a right Foot, will be the Re-establishment of the Silver Coins, …….[17]

The recovery of silver coin circulation "is of principal consideration in this whole Affair", and the raising mint price of silver coins is "The True and Reasonable Adjustment of that which is called by the French, Pied de Monoye, and by the others Anciently Pes Moneta", as a pamphlet of 1671 was saying.[18] Obviously what devaluationists aimed at was to recover the silver coin circulation for domestic trades by changing the parity of gold and silver. This pamphlet also attributed the stagnation of silver minting, and the outflow of silver to the underestimation of silver, and proposed to raise the mint price of silver by about 50% to increase the circulation of silver coins. The author attached more importance to domestic trades rather than to foreign trades.

For Example, A Domestick Trade is for the good of the whole Nation, whereas the Foreign Trade, as it is now managed, and in the hands of a few particular persons, and most of them Foreigners, can never prove for the publick good of this Kingdom. From hence, I suppose, the preservation of a Kingdom is rather to be aimed at, than the preservation of a few particular Persons, Corporations, or the like; …… / To sum up all, is thus; That 'tis for the good of a Nation to vend their own Commodities: But by a Domestick Trade the proper Commodities of a Nation are vended: Therefore a Domestick Trade is for the good of a Nation. Where Money is plenty, a Domestick Trade will certainly follow: But Improvement of Money causeth a Plenty: Therefore it causeth a Domestick Trade. That which raiseth the Value of Coin, improves it: But an Alloy to our Coin will raise its Value; therefore improves it: and consequently, the Nation will flourish in a free and happy Trade, which is the good I wish unto my Native Countrey.(19)

And it is just and proper that restorationists could not accept the change of gold-silver parity and a change of 'Extrinsick Value' by raising the mint price of silver coins.

(9) William Lowndes, *A Report Containing an Essay for the Amendment of the Silver Coins, 1695,* in *A Select Collection of Scarce and Valuable Tracts on Money,* edited by John R. McCulloch, 1856, reprinted 1966, pp.206, 214, 215.

(10) *ibid.,* pp.199, 200. Glassman & Redish mentioned "that depreciation may have occurred endogenously as deterioration of the coinage led to undervaluation of good coins" (D. Glassman & A. Redish, "Currency Depreciation in Early Modern England and France," *Explorations in Economic History,* Vol.25, no.1, 1988, p.95).

(11) Lowndes, *op. cit.*, p.233.

(12)(13)(14) John Locke, *Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money,* 1691, p.143, in P. Kelly, *op. cit.,* Vol.1, pp. p.310. Id., *Further Considerations Concerning Raising the Value of Money,* 1695, pp. 2, 3, 4, in P. Kelly, *op. cit.,* Vol.2, pp.410-412.

(15) Sir Dudley North, op. cit., pp.30-31.

(16) *A Letter Humbly Offed'd To the Consideration of all Gentlemen, Yeomen, and*

Citizens, Freeholders, &c. that Have Right to Elect Members to serve in Parliament, 1969, p.20.

(17) Lowndes, *op. cit.*, pp.218-219.

(18)(19) *The USE and ABUSES of MONEY, And the Improvements of it, By two PROPOSITIONS of it, for REGULATING our COIN:* ……, 1671, Preface & p.23.

(3) Restorationists' viewpoint

A basic viewpoint of Locke was that the extrinsic value of coins is determined by the intrinsic value of coins. According to his view point, people accepted clipped silver coins at their face value because they supposed that clipped coins have the full weight as given by minting standard. The following explanation indicates that he was particularly concerned about foreign trade.

> To which I answer, That Men make their Estimate and Contracts according to the Standard, upon Supposition they shall receive good and lawful Money, which is that of full Weight: And so in effect they do, whil'st they receive the current Money of the Country.(20) But whilst clip' t and weight Money will equally change one for another, it is all one to him (the Foreign Merchant) whether he receive his Money in clip't Money or no, so it be but current. …… If he (the Foreign Merchant) would carry away the Price of his Commodity in ready Cash, 'tis easily changed into weighty Money: And then he has not only the Sum in tale, that he contracted for, but the quantity of Silver he expected for his Commodities, according to the Standard of our Mint.(21)

Charles Davenant explains this situation by the differences of money circulation, the value of money in foreign and domestic trades, and in wholesale and retail transactions.

> Why are not all things not at double their former Rate, When the

> money generally speaking, is not half its intrinsick Value ? and why is not this badness of money the sole, or Principall cause of the dearnesse in all Commodities. / To Cleer this matter, Wee must a little inquire which way the domestic Commerce is now Transacted. Wee Consider what real Cash there is stirring, and what fictitious wealth goes about, which virtually has all the power & effect of money. And Lastly wee must distinguish between the Bulky, and Retailing Trade of the Kingdome.(22)

According to his explanation, internal and external wholesale business was carried out 'in Credit, publick or private', namely, by 'assigning or transferring fictitious Wealth' such as tallies, bank bills, and goldsmith' s notes increasingly. Species of money were rarely used. On the contrary, in the retail business accounting for 19/20 of domestic transactions, cash (coins) was used. Coins circulated at face value according to both law and custom, even if they lacked full intrinsic value. Similar conditions could be seen in Netherlands and Italy too.

> Thus Wee see the bulk of our home Trade is managed by that which has no existence but in Creditt, The Species of money seldom intervening, and while this continues the Coine may pass, in the Retailing Trade, at the rate it holds from Law, & Custome.(23) …… for as the publick deals with the people by giving Tallyes or Bank Bills, for Goods and Money, so people deal among themselves by assigning or transferring to one another those or such like securityes, which have no existence but in Credit, publick or private by which the bulk of Trade is carried on: The Species rarely intervening; Just the same thing being practiced in Holland, and in several States of Italy.(24)

Therefore, as long as credit was maintained, English domestic trades could be done through credit 'in whatsoever condition the Coyne remaine.'

And 'the present Cash will be but subservient to these securityes ……, … and serves for Change of the other, and to pass at Market in the retaile Trade, ……'.(25)

Then, how did Davenant explain the rise in bullion prices and the fall in exchange rates? He emphasized the importance of the increase in demand, the remarkable rise in wages, the trade deficit and overseas remittances for the support of war, rather than the debasement of silver coins.

> That almost all things of Common Use are dearer now than formerly is apparent. But the Question is How farr this arises from the badness of money, and how far it may be occasion'd by the want of Bullion to clear our ballance abroad, and Produc'd by the Influence foreign Trade has over all our affairs. / The most probable decision in the Matter is, That this effect proceeds from a complication of Causes, of which the Ill posture of our Trade seems to be the most prevailing. For the Good wee use to Transport rise more in proportion than others. If our Coin were in it's original perfection, yet a sudden and generall Call for any Commoditie would raise its price.(26)

Restorationists agreed that the fall in exchange rates, and the outflow of bullion were caused by the deficits in international trade. Locke also mentioned that "The reason of High Exchange, is the buying much Commodities in any Foreign Country, beyond the value of what that Country takes of ours. …… The coming and going of that depends wholly upon the Balance of our Trade; ……".(27) Restorationists always placed the focus on foreign trade flows. Therefore, they insisted that a change in mint prices was just a change of money-names and it would not influence the rise and fall in money exports.

> the Coining our Money in bigger or less pieces under the same or different denominations, or on the present or proposed Foot, in it self

> neither increasing those Debts, nor the Expences that make them, can neither augment nor diminish the Exportation of our Money.(28) …… All our Names …… are to them (Foreigners) but bare Sounds; and our Coin, as theirs to us, but meer Bullion, values only by its weight.(29)

Then, why did they persist in maintaining the old mint price of silver coins, and object Lowndes' plan ? Davenant didn't agree to the recoinage during wartime, but was against the plan due to its possible bad influence on foreign trade.

> we are a Tradeing Nation, all our Interests are closely linked with the Intersts of Trade. / The product of our Land must be guided and ruled by our Forreign Commerce, Almost whatever our Soile produces must be valued here at Price which the Luxury or Necessities of other Nations put upon it. …… / No man Surely can think so out of the Way and so absurdly as to imagine and Assert that any valuation the Government here can put upon our money can alter its course abroad or put another price upon it then what the Generall practice of the Commercial World Seemes to have established.(30) Therefore to raise the money (as far as it concernes Forreign Commerce) can have no Effect but to make our Neighbours vary their wayes and manner of Reckoning with us, for from the Moment we do it, without all Contradiction the Exchange abroad will alter and the Dealers with us will so make up their Accompts as they may exactly Square with the Intrinsick value of money, for an Ounce of Silver of equall fineness everywhere and eternally must be worth another ounce of Silver.(31)

The reason why restorationists objected to Lowndes' plan is that they couldn't accept the turnover of the gold-silver parity, although anyone of intelligence in those days would have predicted that almost all newly minted silver coins would flow out immediately if clipped silver coins would be reminted at the old par value. We have already discussed this issue in the previous section. J. R. McCulloch supposed in the following cited paragraphs that "they (gold coins) would have been entirely banished from circulation" if the big rise of mint price, according to Lowndes' plan, had been executed.

> Had Lowndes, instead of an excessive reduction of 25 per cent.. In the value of the Silver Coins, contented himself with proposing a reduction of 3 or 4 per cent., …… it is probable that Gold would, notwithstanding, have continued to be preferred by the Public, and Silver been used only in small payments; …… But the degradation which he proposed was so very great that, unless the ratio of gold to Silver had been at the same time very largely raised, or the Gold Coins been called in and their weight proportionally reduced, they would have been entirely banished from circulation.(32) Locke and those who effected the Re-Coinage of 1696-99 should, to be consistent, and prevent the immediate exportation of the new Coins, have reduced the Mint value of the Guinea to 20s. 8d. or 20s. 6d. or have made it optional merely to take Gold at its market price. But it is probably better that they did not. The over-valuation of Gold gave us a Gold Currency which, besides being incomparably more commodious, is, despite the dictum of Locke, in most respects preferable, especially in a country like this, to a Silver Currency.(33)

Furthermore Lord Liverpool appreciated that the government had not taken any step to force guinea coins circulate at face value, and could keep gold coins in circulation, leaving the favorable parity to gold unchanged.

Those who advised their Sovereign no further to interpose his author-

> ity on this occasion, certainly acted wisely; for if he had obliged the people to receive these Gold Coins at the low rate before mentioned, they would certainly all have been melted down and exposed, as fast as they were issued from the Mint; …….(34)

Thus we can understand the kind of English monetary system the restorationists intended to build following the collapse of silver coins in circulation after recoinage at old par. In the background of a sturdy faith of restorationists sacrificing silver coins, there was their recognition that silver coins just functioned to 'serve for Change of the Credit', as Davenant pointed it out. That is to say, they recognized that the hierarchical structure of moneys that had being established at the time, with credit moneys of goldsmith-bankers and the Bank of England taking the preferential position, and state coins the subordinate one. A pamphlet of 1696 revealed that a large quantity of guinea gold coins was being used in domestic trades and at the same time, minted coins were being exported as minted coins were replaced by credit moneys rapidly.

> The Bulk of Guinea's, which alone carried on the whole Trade of the Kingdom for some time, and answered every man's Bills and Occasions, without Complaint of Scarcity, ……. …… By the Non-Currency of Bank and Banker's Bills, Goldsmith's, and other Notes, the Nation may be deprived of nigh a Million of Current Credit more, which makes Four Millions and an Half, besides the great Sums of Money dayly exported: This makes a great Hole in the necessary running Cash of the Kingdom, required to answer our Domestick Commerce and Occasions. …… And in their own words we may truly say, That, Instead of real Gold and Silver we had before, we have now a Fairy Treasure in our Glorious New Money, that no sooner appears but vanishes.(35)

Consequently Davenant proposed that the issuance of banknotes of small amount issued by the Bank of England and the Act for Negotiability of Bills of debts to encourage replacing coins by credit-moneys, establish the monetary structure composed of 'Credit, publick or private by which the bulk of trade is carried on', with 'The Species rarely Intervening ;' as the case in Holland and the cities of Italy.

> And any a New Fund to Enlarge the Credit of the Bank of England, obliging and Directing them to issue out small Bills from Fifty to Five pounds ; these passing about currently in all payments, as certainly they will, may make the badness of Money a Less grievance to the People, and so far for public Credit. / Private Credit which turn'd so great part of Our business, would be much Enlarged, have more consistency, and Operate better ; if there were an Act of Parliament for transferring Debts or Bills of Debt from one person to another according to the practice of Most Trading Countrys, and if Such a Law were made, Bills under hand and Seal would be Demanded for all Goods bought upon trust, and if the Law would so settle this Matter, that Such Bills might become a Legal Security, they would pass here currently as Bank bills do, and Transferred from party to party, and in a great Measure stand in the room and place of Money, as they really do in other Nations.(36)

It is interesting to see a pamphlet written in 1700 criticizing the expansion of credit-money circulation those days. The author explained that the parity, advantageous to gold, produced a scarcity of silver coins, and the land rent was paid almost in gold coins. He also warned more seriously against the exclusion from circulation and export of coins by the excessive issue of paper currencies.

> This method of dealing affords just cause for suspicion, because by permitting Silver and Gold to be sent abroad, and Notes and Bills to

be the Instruments and Measure of Commerce at home, …… : for we have thereby made Silver, which should be the measure of Trade, Merchandize, and made Paper which is Merchandize, the Measure of Trade, and thereby a very material alteration in the chief Fundamental, upon which the gaining and preserving of Wealth depends and the Honour of the Nation.(37) But Paper Money and Paper Riches, do not more deserve to be reckoned part of the nations Capital ; …….(38) These sorts of Riches, are but imaginary, or empty things, as they referr to the Nations Stock, but on the other hand, dangerous, because they have the same tendency to lead us into Luxury, and extravagancies as if they were real : …….(39) If Paper Money do the service, as now in London ; upon The Country Trade depends, then Paper must reap the profit, in all the steps and progress of Trade : ……. …… or why we do now choose, to give all the priviledges belonging to a Standard, rather to Paper, than to Silver, is unanswerable, …….(40)

The following two issues the author pointed out should draw our attention. The first is the sphere of silver coin circulation. 'Coins of silver are suited for the minutest payments, which cannot be done by Paper Money; such Notes must be restrained to a certain Sum, tho' they should not be imposed as a good Tender, for any Sum under fifty Pounds; yet it would occasion great Difficulties to such Persons who may want that Sum, for Marketting and petty Expences.'(41)

The second issue concerns about the fact that persons supporting paper currencies were the ones carrying on foreign trades and exporting bullions. 'The Advocates for Notes would insinuate that it is our interest, to use Paper Money at home, and send our Silver and Gold abroad, for carrying on the large Trade with Foreigners. It is not strange that this argument, should prevail with those, that prefer Paper Money for payments at home before Silver money; …….'[42] 'To the said Report (The report concerning the free exportation of gold and silver in Foreign coin and bullion, 12^{th} Dec. 1660), a Paper was an next of reasons for allowing Bullion to be freely exported, contrary to the ancient Statutes.'[43]

Therefore it is evident why restorationists insisted on recoinage at the old standard which would dismantle the silver coin circulation. The parity favorable to gold after 1660's, encouraged the spread of circulation of paper currencies like goldsmith notes and drawn notes. This supported their conviction. Restorationists who represented the interest of merchant capital had been struggling to establish 'a completely decontrolled and automatic metallic standard' by the freedom of export of foreign coins or bullions, the abolition of the mint charges in 1660's, the establishment of the Bank of England in 1694, and binding up Pound Sterling with a certain weight of precious metals.

(20)(21) Locke, *Some Considerations, op. cit.*, pp.157, in Kelly, *op. cit.*, Vol.1, pp.319-320. Houblon also says that transactions with foreigners were done on the basis of intrinsic value of coins (J. Houblon, *Observations on the Bill against the Exportation of Gold and Silver, and melting down the coin of the Realm*, Dec. 6, 1690).

(22) Charles Davenant, *A Memorial Concerning the Coyn of England, November, 1695, in Two Manuscripts with an Introduction by* Abbott Payson Usher, 1942, p.25

(23)(24)(25) *ibid., pp.*26, 45.

(26) *ibid.*, p.24.

(27) Locke, *Further Considerations*, op. cit., pp.18, 37, in Kelly, *op. cit.*, Vol.2. pp.421, 433.

(28)(29) *ibid.*, pp.40, 51-52, in Kelly, *op, cit.*, Vol.2, pp.435, 442.

(30)(31) C. Davenant, op. cit., pp.17, 18.

(32)(33) J. McCulloch, "Note on the Re-coinage of 1696-1699", in *A Select Collection of Scarce and Valuable Tracts on Money, edited by* J. R. McCulloch, 1856, Reprinted in 1966, p.265.

(34) Earl of Liverpool, *op. cit.*, p.79.

(35) *A Letter Humbly Offedr'd To the Consideration of all Gentlemen, Yeomen, Citizens, Freeholders, &c.* ……, 1696, pp.17, 18.

(36) C. Davenant, *op. cit.*, p.62.

(37) *Some Observation's on our Trade, and on the use of a Standard,* 1700, pp.48-49.

(38)(39) *ibid.*, pp.54, 58. The author gives the list of Paper Money and Paper Riches as follows. "Goldsmiths Notes, Exchequer Bills, Malt Tickets, Million Lottery Tickets, Annuity Tickets, Bank of England Bills, Million Bank Bills, Orphans Bank Bills, Soldiers Debenture, Seamens Tickets, Tallies in the Exchequer, Old East India Company Bonds, New East India Company Bonds, Stocks in the Old East India Company, Stocks in the New East India Company on the Loan, Stocks or shares in that Trade, Stocks in Hudsons Bay Company, Stocks in African Company, Stocks in the Lutestring Company, Stocks in the Linnen Manufacture, Stocks in the Paper Manufacture, Stocks in Convex Lights, Stocks in the New River Water, Stocks in the New River Water, Stocks in the Thames Warter, Stocks in Hamstead Water, Stocks in Sir carbery Prices Mine, Stocks in the Bank of England, Stocks in the Million Bank, Stocks in the Orphans Bank or Fund, Stocks in the Land Banks." (*ibid.*, pp.52-53.)

(40) *ibid.*, p.85.

(41) *ibid.*, p.168.

(42) *ibid.*, p.104.

(43) ibid., p.112.

IV The Central Issue of the Controversy

(1) Intrinsic Value and Extrinsic Value

Finally I will analyze the central issue of Locke & Lowndes dispute; the value of money. Commodity prices, bullion prices and exchange rates did not fluctuate in proportion to the deterioration of silver coins in the latter part of the 17th century. How should we understand the relation between intrinsic and extrinsic value of money?

Although Locke says at the opening part of *Further Considerations* published in 1696 'Silver is the Measure of Commerce by its quantity, which is the Measure also of its intrinsick value,' it is known for a fact that fluctuations of prices and exchange rates, and the debasement of coins at that time did not support his assertion. And he could not theoretically disprove devaluationists at all.

To interpret the value of money in terms of the intrinsic value of the silver content of money stands on the same principle of Marx's metalism. Marx explained the phenomena of prices and exchange rates under the circulation of clipped coins as follows. He attributes it to the small number of clipped coins that prices didn't rise to level determined by the coins.

> durch die Regierungen finden wir wiederholt, daß die Preise nicht in dem Verhältnis stiegern, wie die Silbermünze verfälscht wurde. Einfach, weil das Verhältnis, worin die Münze vermehrt wurde, nicht dem Verhältnis entsprach, worin sie verfälscht war, d. h. weil von der niedrigern Metalkomposition nicht die entsprechende Masse ausgegeben war, sollten die Tauschwerte der Waren künftig in ihr als Maß der Werte geschätzt und durch dieser niedrigern Maßeinheilt entsprechende Münzen realisiert warden.(1)

Davenant says that the rise of prices and the fall of exchange rates were not caused by the deterioration of coins.(2) This recognition seems to have been business common sense to merchants in those days. Merchants recognized that exchange rates were related to the face value of coins, i.e. the extrinsic rather than intrinsic value of money. A pamphlet written in 1696 also denies that the intrinsic value of coins is the measure of exchange rates and bullion prices. "The Exchange does not regard the intrinsic Value, but the extrinsic Value and Denomination it bears in the respective Countries."(3)

J. Hodges who criticizes Locke's doctrine also denies that money has an intrinsic value, and says that the value mankind puts upon money is generally extrinsic instead of intrinsic to money.

> That Silver, considered as Money, hath, speaking properly, no real intrinsick Value at all. …… That the whole Value is put upon Money

> by Mankind, speaking generally, is extrinsick to Money, …….[4] That the King and Parliament, or any King by himself, where there are no settled Laws and Customs of the Place to oppose it, have a reasonable, just, free, unlimited Right and Power to put what Value they please upon Silver in Money in their own dominions, and to raise or lower that Value, as they find convenient, in the same Quantity of silver, without doing any Wrong to the Right, Property or Interest of the People. …… This Power of putting a higher Value upon less Quantity, and a lower value upon more Quantity of Silver in Money, hath been practiced without Challenge by the Supream Magistrate in all Nations and ages.[5]

What does Hodges try to affirm ? Needless to say, he recognizes that a rise in the mint price pushes down exchange rates and produces export-drive effects. 'The raising the Value of Money is an universal equivalent Encouragement for Export of them all, ……. / It was also very remarkable how soon the Effect of raising the Value of Money in Ireland, appeared here by altering the Exchange: …….'[6]

Hodges, like Locke, admits that the bullion content is the important issue as far as foreign trades are concerned. But he says that with respect to domestic trades the bullion content of coins doesn't matter much as long as clipped coins are accepted as the legal tender. He pointed out that the Hollanders had a sufficient quantity of silver coins for domestic trades with this method.

> It seemeth also to deserve great Consideration, that the Hollanders who have far outwitted all their Neighbours, …… in the matter of management and ordering of their Coin, nevertheless of all their vast Trade, have found it convenient to keep up amongst them a constant Equivalent to raising the Value of Money. / For they wisely observing the difference betwixt the Interest of a NATION as to Money

with respect to Foreign Trade, where it will always be look'd upon as no better than Bullion, and with respect to Home Trade and Domestic Occasions, for which every Government hath Power to order their own Money, as they see most convenient for their own Circumstances, do accordingly keep up amongst them the coining of two sorts of Money. Whereof the one is called Bank-Money, which is of the common Standard and Fineness, being design'd for, and chiefly appropriated to Foreign Trade; and the other is called currency Money, which hath a great Allay in it, being ordain'd for, and altogether appropriated only to home Uses: And tho it pass equally with the other in small Payments, yet it is in greater Payments, four, four and half, or five per Cent. Of less Value than the Bank-Money, and is thought to be over-valued also in that because of its common Currency.(7)

The Hollanders were said to keep enough coins for public and private transactions of home trades by giving silver money a value higher than intrinsic value and giving a little allowances to bullions which were sold to the mint. On the other hand they maintain the standard and fineness of money for foreign trades. Therefore as far as domestic currency is concerned, Hodges emphasized that the rise in the mint price doesn't disturb domestic trades. "Hence it appears that the reasons drawn from the Disadvantage of Trade against all Raising the Value of Money must be ill digested, ……."(8)

Devaluationists insisting on the rise in the mint price recognized the importance of metal content of coins as well. "All Coin in any Kingdom, but where 'tis Coin'd, only goes by Weight; and for same Weight of Silver, the same every where still will be bought, and so there will with the same quantity of Goods.'(9) Nevertheless they asserted that the deterioration of coins doesn't affect rates of exchange immediately. There was common understanding among disputants with regard to this issue, including Davenant who was a restorationist.

On the other hand, restorationists including Locke actually recognized that the quantity of metal included in clipped coins was not the standard of prices and exchange rates, and didn't measure them, because they agreed that clipped coins were circulating at their face value. Locke explained the contradiction between the above argument line of reasoning in his intrinsic value theory as follows :

> To which I Answer, that Men make their Estimate and Contracts according to the Standard, upon Supposition they shall receive good and lawful Money, which is that of full Weight: And so in effect they do, whil'st they receive the current Money of the Country.[10]

J. Houblon, who was also a restorationist and a director of the Bank, mentioned that all the contracts, businesses, and sales were made on the basis on intrinsic value of heavy coins, in particular with foreigners, even if clipped coins circulated at par.[11] Devaluationists as well as restorationists did not bear the bullion content of coins in circulation as importante in value of money in circulation. Then what relation was there between value of money and the bullion value of clipped coins ? Even if there is a big disparity theoretically between devaluationists and restorationists as to whether they recognized intrinsic value of money, there seems to be no difference practically regarding their understanding about the standard and measure of money. Rather the both groups seem to hold a common view about money in general.

Davenant mentions that clipped coins for retail transactions pass at par prescribed by law and custom as long as people put their confidence on their government, as most transactions are made by credit.[12] Furthermore, the intrinsic value of money, according to his argument below, is determined by long-term custom and mutual agreement of people.

> Denomination Stamp and Coine is no more then a Declaration from the Soveraign that such a peice is of such a weight and fineness and serves only prevent uncertainty and ffraud and in no other Sence can be said to put a value upon it. / But the true Naturall and Intrinsick value arises from the Operation it has in all Dealings by Long Custome and Common Consent.(13)

In that case what kinds of recognition did these persons who had a profound knowledge of trade and business in those days hold about the value of money?

(1) K. Marx, *Zur Kritik Der Politischen Ökonomie*, 1859, Dietz Verlag Berlin, 1968, SS.123-124.

(2) "Therefore the posture of the Exchange abroad, and the Difficulties which Warr brings upon Trade may be rather thought to occasion the dearness of most commodities, than any corruption of our Money. / Not but that the badness of the coine does all the while operate a little, tho by wayes hard to be judged of, and by degrees very uncertaine.", *op. cit.*, p.25.

(3) *A Letter humbly Offer'd to the Consideration of all Gentlemen, Yeoman, ...*,1696, p.20.

(4)(5) James Hodges, *The Present State of English as to Coin and Publick Charges*, 1697, pp.146-147, 278-279. Horsefield and Kelly also pay attentions to Hodges' assertion. However, they don't discuss that Hodges puts the importance on bullion content of money in spite of his denial of the intrinsic value of money, and that restorationists deny the function of monetary standard of clipped coins. Cf., J. K. Horsefield, *British Monetary Experiment, 1650-1710*, 1960, p.227, P. H. Kelley, *op. cit.*, Vol.1, p.91.

(6) Hodges, *ibid.*, p.101.

(7) *ibid.*, pp.103-104.

(8) *ibid.*, p.106.

(9) (Thomas Neale), *For Encouraging the coining of Silver Money in England, And after for keeping it here, 1693, in Kelly, op. cit.*, Vol.2, p.615.

(10) Locke, *Some Considerations, op. cit.*, p.156, in *Kelly, op. cit.*, vol.1, p.319.

(11) *Observations on the Bill against the Exportation of Gold and Silver, and melting down the Coin of the Realm, 1690,* Japanese edition translated by H. Takemoto, in *The Journal of Osaka University of Economics,* No.123, 1978, p.218.

(12) Davenant, *op. cit.,* pp.26, 27.

(13) *ibid.,* p.15.

(2) Imaginary Money and Real Money

In the 17th & the 18th century, Merchant Manuals were often published in England. Merchants learnt on money and the exchange rate from them. We can find how merchants and traders of those days understood value of money, investigating the following manuals.

G. De Malynes, *A Treatise of the Canker of Englands Common Wealth, 1601.*

Id., *Consuetudo, Vel Lex Mercatoria, or The Ancient Law-Merchant, Divided into three Parts: According to the Essentiall Parts of Trafficke, 1622.*

Id., *The Maintenance of Free Trade, According to the Three Essentiall Parts of Traffique; Namely, Commodities, Moneys, and Exchange of Moneys, by Bills of Exchanges for other Countries, or ……, 1622.*

Id., *The Ceter of the Circle of Commerce. Or, A Refutation of a Treatise, Intitled The Circle of Commerce, or The Balance of Trade, Lately Published by E. M., 1623.*

L. Roberts, *The Merchants Mappe of Commerce, Wherin the Universall Manner and Matter of Trade is Compendiously Handled ……, 1638, 1677, 1700.*

J. Marius (Publike Notary), *Advice Concerning Bils of Exchange, Wherein the Whole Practical Part and Body of Exchange of Money is Anatomized, 1651, 1655.*

John Scarlett, *The Stile of Exchanges Containing both their Law &*

Custom, As Practised Now in the Most Considerable Places of Exchange in Europe; Unfolding divers MYSTERIES and Directing every Person, howsoever concerned in a BILL of EXCHANGE, to what he ought to do and observe, in any case, in order to his own security, 1682.

A. Justice, *A General Treatise of Monies and Exchanges; …… with An Account of all Foreign Banks and different species and Denominations of Monies, with their Current and Intrinsick Value; and of the Method and Practice of Foreign and Domestic Exchanges ……, 1707.*

Richard Hayes, *The Negociator's Magazine: or, the Exchanges Anatomiz'd, London, 1719, 1740.*

William Stevenson (Teacher of Bookkeeping), *A Full and Practical Treatise upon Bills of Exchange, Together with An Account of the Nature of the Bank of Amsterdam, and how Payments are made and received in it, Edinburgh, 1764.*

Malynes elucidates in his book written in 1601 that the direct comparison of the weight and fineness of money like Crown, Ducat, and Dollar of Germany, France, and Netherland gives "always value for value, which therefore was called Par".(14) In the famous *Lex Mercatoria* (*1622*) he also emphasizes it as "The true ground of Exchange". But in addition to this, he describes what was common sense for merchants of those days and have been lost sight of by scholars of todays.

> and hereby shall we find how much fine silver or gold our pound sterling containethe, & what quantitie of other Moneies of Germanie, Italie, France, the Low-countries, Eastland, and elsewhere weare to have in Exchange to countervail the same in the like weight and fineness answerable unto ours, be it by the Pound, Doller, Crowne, or any other imaginarie or reall coyne, giving always value for value,

> and receiving the like, which is called Par.(15)

In Part 3 of this voluminous book he gives the face values of various imaginary moneys and par values of exchange of European countries. Then it is interesting to ask what the imaginary money is, and whether the imaginary money is concerned with the intrinsic and extrinsic values of money.

L. Roberts, like Malynes, says that coins of each country, whether real or imaginary, are 'brought into one and self same qualities' by comparison of weight and fineness of coins on the knowledge of exchange, and 'bee it by the pound, doller, ducat, crowne, or any other imaginary or reall Coine, (are given) always a value for value, and (receive) the like, which is called by Exchangers …… the Parr, ……'. However, the par doesn't always reflect real value of circulating coins, though he placed special emphasis on the comparison of weight and fineness of coin. This fact is said to be 'one of the most mysterious parts …… in this art of Exchanging'.

> for they being Exchangers, indeed, know perfectly the weight and fine both of our English and of foreign coines, and comparing the same together, make therby to themselves the true calculation of the Par aforesaid, wheresaid, wherein they are not directed by the current valuation of coins, which is often seene to be inconstant and uncertaine: nor by the toleration of moneye, either here or beyond the Seas, going sometimes and in same places current above the said valuation, and this indeed is one of the most mysterious part that is included in this Art of Exchanging, the Merchant ought considerately to learne and distinguish.(16)

Roberts' explanation is common to Locke's theory mentioned above, that is to say, 'that Men make their Estimate and Contracts according to the Standard, upon Supposition they shall receive good and lawful Money, which is that of full Weight: And so in effect they do, whil'st they receive the current Money of the Country.' There are two kinds of par according to his manual. And the par value of exchange isn't prescribed by real value of clipped coins that do not maintain the same value.

> That the true Royall Exchange for moneys by bils of Exchanges, is fairely and substantially grounded upon the weight, fines, and valuation of the moneys of each severall Countrey, according to the Parr which by Bankers is understood to be value for value, as the truth thereof is seene in our Exchanges in England, ……: but besides this reall Parr of Exchange, there is also a Merchants Parr, which in due place I shall declare.(17)

> Now this Par in Exchanges may be here properly (in generall) said to be of two distinct kinds; the one as appertainting to the State and Prince, and belonging to the profit and losse of the Kingdome; and the other to the Merchant or Exchanger, and appertaining to the profit and losse of private estate and interest: the first, I hold proper and fit the knowledge of Counselloors and States-men; and the other, is proper and fit the knowledge of the Trading-Merchants: ……. / The first Par in Exchange, …… the Prince Par, or the Soveraignes Value for Value for value, is grounded upon the weight, finenesse, and valuation of the Money of each severall Kingdome, Cities, or Place; ……, be it by the Pound, Doller, Duccat, Crown, or any other reall or imaginarie Coine, giving alwayes a Value for Value, and receiving the like; …… The second Par, I call the Merchants or Exchangers Par in Bills of Exchange, and is grounded partly upon the Soveraigne or Princes Par above mentioned, but principally upon the current value of the said Coines, the plenty and scarcities thereof, the rising and falling, inhancement and debasement of the same: and therefore such Merchants as are Exchangers, doe endevour by certaine rules of

Exchanges, to equalize the valuation of the Monyes of one Prince or Countrey with another :[18]

The example which Roberts gives to find out how much the Crown of France is really worth in Antwerpe, is the following. There are two kinds of Crown money in Lyon, France. One is Crown of 67 Souls (in other words, 3 li. 7 Souls) Tournois, and "as presuppose, this Crown is worth by exchange, according to the course thereof, 100 Grosse of Antwerpe." And then the other "Crown of 60 Souls (in other words, 3 li.) Tournois, used, is worth, multiplying and dividing as the rule, 89 37/67 Grosse of Antwerpe, which is indeed the true value of the Crown." Merchants would make loss or gain if the Bill of exchange would be made for less or more that 89 37/67 Gross. Thus that 89 37/67 Gross is the Par in Exchange between two countries, in the Crown of France, and in the Gross of Antwerpe. "And this Par is the matter whereupon all Merchants Exchanges for profit and loss is grounded, and the Par, or Value for Value, ……".[19] This means that there is a special Crown which is used for foreign exchange transactions.

Following this explanation, examples of foreign exchanges of European countries are illustrated over 150 pages. On the occasion of making exchanges for Venice and Lyon from London, moneys used for market quotations are imaginary moneys like Venetian Ducat of 6 lire 4 soldi of banco money and Crown of gold of the Sun of 3 Li. Tournois. And the par calculation was not influenced by clipped moneys in the circulation, so long as the monetary standards were not changed.

Marius also repeats the same explanation about par value of exchanges in the section of "Upon what the Exchange is valued", and points out that "Now most Countries using severall kinds of monies, different in value one from another, the Exchange is valued or rated upon some one certaine, most considerable species or sort of money for each

Country or Town," about moneys used for exchange business. And he also illustrates moneys and par values of foreign exchanges used in each country for London.[20]

Par values of exchange for Amsterdam, Middleborough, Lile, and Roterdam per £1 sterling, are 33 shilling 4 pence Flemish Money, and par value of 60 soulz (3 Livers Tournois) French Crown is 6s. Pound sterling. The one of Livorno exchange is 4s. 6d. Pound sterling (54d. sterling) per Dollar (Peace of Eight), one of Venetian Ducat (6Livers 4soulz of Venice) is 4s. 3d. (51d.) Pound sterling, and Hamburg exchange par £st. equals 4 Rickx Dollar 33s. 4d. (Flemish). Lastly the par value between Antwerp and Paris is 89 37/67 Grosse per French Crown of 60 soulz (3 Livers Tournois).[21]

From the above explanations we can understand that the intrinsic value of money as the standard of exchange is not determined by the uncertain metal weight of clipped coins in circulation. The standard for foreign exchanges is an imaginary quantity of metal supposed by custom and mutual agreement among merchants. Davenant's statement that 'the true Naturall and Intrinsick value arises from the Operation it has in all Dealings by Long Custome and Common Consent' reflects the above notion.

This is confirmed by John Scarlett too. He comments in detail about foreign exchange transactions in Europe, and describes how exchange rates are calculated by money of account. The par value of exchange is 'what is the reputed Par, according to the intrinsick value, or as is generally received among Merchants' and the comparison of intrinsic value of money agreed by merchants is emphasized.

> In all Exchanges, the Coyns in one places, as well as another, are Certain and immutable ; and the change of the Course, either higher or lower, depends upon the present Value of Coyn in the Place where the Bill is directed to.[22]

On the other hand, as for the money that is really paid, the payment in ready Money outside banks and the one in Bank Money inside banks are described. Particularly in Amsterdam and Hamburg the payment in bank money was insisted upon in the case of bills of exchange over certain amounts of money. Bank Money usually had a premium against Current Money, and there was a difference in value between bank money and real coin. "(T)here is three or four in the hundred difference betwixt Bank and Current Moneys, in respect of the Value."(23)

And at the end of Chap. 45 in Scarlett's book London exchanges are explained in detail by comparison with silver value of 20s.=£1. The difference between real moneys and imaginary moneys could be understood. For example, the author draws the attention to the fact that there are two kinds of Duccat in Venice. One is Duccat de oro or banco equivalent to 52d. Sterling, and the other is Duccat de curranto equivalent to 40d. Sterling. Foreign exchanges are made with the former money. "The course of Exchange for Venice from London is generally 50d. to 51d. Sterling in circa for their Ducat in banco." In foreign exchanges such as Sevilla, Cadiz, and Madrid of Spain, Imaginary Ducat (1Ryal=34Marvedies) equivalent to 375 Marvedies was always used, and the par value of Ducat of 375 Marvedies was 66d. Sterling. In addition, there was an Imaginary Coyn, "Castiliano", equivalent to 485 Marvedies, and it was used just for exchange businesses with Casile.(24) Nevertherless the metal value compared with each other is the imaginary one.

At the beginning of the 18th century A. Justice emphasized that 'money in general is divided into two sorts, Imaginary and Real,' and 'a Pound is an Imaginary Sum in England.'

> Money in general is divided into two sorts, Imaginary and Real. By Imaginary Money I understand, all the Denominations used to express any sum of Money, Which is not the just Value of any real Species ; and so a Pound is an Imaginary Sum in England, because

there is no Species current, in this Kingdom, precisely of the value of a Pound.(25)

As there were two kinds of money, there were also two kinds of par value. The par of 'Real Money' is 'The Equality of The Intrinsick Value of the real Species of any Country with those of another', and 'The Par of Exchanges' is 'The Proportion that the Imaginary Monies of any Country bear to those of another'. In other words the par value of exchange was prescribed by money of account separated from circulating coins in reality. The par value of exchanges was certain even if real moneys would be clipped, so long as credit was maintained, and there wasn't a change in money of account among countries concerned. For example the par value of exchange was about £1 of pure silver 3.580 ounces=37 Schellingen Banco when intrinsick Values of Imaginary Moneys in Netherlands and England, Gulden (Florijin) and Pound Sterling were not changed. And the real exchange rates fluctuated with the current price of money, as the demand for and supply of foreign exchanges changed according to balance of trades and military remittances.(26)

Thereafter, merchant manuals by R. Hayes(1719) and W. Stevenson (1764) discussed Imaginary Moneys and Real Moneys of European countries in detail. 'The central issue of the entire controversy' as to whether 'purchasing-power inhered in the silver content of the coins' would be solved by itself, if we would understand the meaning of 'The Pound is Imaginary'. And also Marx did not have to explain the purchasing-power of money in terms of the amount of clipped coins in circulation.

F. P. Braudel and F. Spooner explain imaginary money as follows.

Prices indeed can be understood only within the monetary systems which serve as framework and means of expression. No currency, no prices! But currency was 'a mystery which few people can understand', as the Sieur de Malestroit wrote as early as 1567. And even today there is little agreement about the importance to attach to arguments based upon monetary considerations. /…… Moneys of account exist today as accounting systems, but in the form of complex, specialist techniques, of which generally only experts are aware ……. On the other hand, in the period with which we are concerned, 'imaginary' currencies were part of everyday life across the whole of Europe. For those unfamiliar with the subject, it is difficult to understand how necessary such moneys of account were. / All prices, all accounting systems and all contracts—or at least almost all —were formulated in terms of an accounting unit, that is to say in a money which was 'not necessarily represented by metal currency', but which acted as a measure for the coin in circulation.(27)

From the Middle ages until the early Modern ages across the whole of Europe almost all prices "were formulated in terms of imaginary money as money of account, and it acted as a measure for coin in circulation." These facts are very important for the understanding of money.

The following money are imaginary moneys; there are French Livre tournois (=20 sols or sous, 1 sol=12 deniers), English Pound Sterling (=20 shillings, 1 shilling=12 pence), and German Mark (or Pfund=20 Schilling, 1 schilling=12 Pfennigs). For example, a debt of 65 livres tournois prescribed by French money of account (imaginary money) is equal to 100 testons when it is paid by teston silver coins of 13 sols tournois (65 x 20 / 13=100).

H. Van Der Wee introduces the historical facts about how merchant groups and public authorities adopted the money of account separately from real coins so that they would evade confusions of the monetary economy caused by debasement and revaluation of coins, besides the double minting system (for example, the concurrent circulation of

Flemish pound groats and Brabant pound groats in the Low countries).

> Sometime the weight of gold in the gold coin introduced as a unit of account continued to form the criterion of value of the unit of account. Thus the value of this unit of account became detached from the value of the current money of account; according as the current money of account was debased or revalued in respect of the gold coin in question, the gold coin, used as a unit of account, acquired a higher or lower rate respectively in current money of account. If the real gold coin disappeared from circulation, the gold coin remained in use solely as a unit of account; in other words, this unit of account then represented a certain weight of gold derived from the gold content of the former real gold coin.(28)

And the value of the money of account is gradually given a value which is different from the money value of coins in circulation, because the conversion of value among coins becomes difficult. Money of account is separated from coined money as the abstract money of account which adjusts value changes among gold coins and silver ones.

Afterwards the abstract money of account developed much more when it united with bank money (deposit money) of early deposit banks which came out of monetary confusions of the Middle Ages. According to F. C. Lane, it was illegal to divorce the bank money from coined money, but they could not but accept such a situation by the want of stable currencies, and the payment and receipt by bank moneys became broadly accepted in the commercial world.

> …… banchi di scritta, those which did business by writing transfers of deposits from one account to another. Payments from one merchant to another were made by the two parties appearing before the banker and personally ordering the transfer made on his books. This was a great convenience both because it avoided the slow

counting out of imperfect coins and because the entry on the banker's book was an official record of the whole transaction, which made unnecessary any other legal papers. / These banchi di scritta was essential to the economic life of the city.

...... They permitted bank money, the bank ducat, to become a unit of value and means of exchange which was distinct from any unit of coinage, and was bought and sold in the money market at a price of its own. Such a divorce between the bank money and the coined money was, strictly speaking, illegal, but was made possible by the recognized shortage of good coins.(29)

(14) G. de Malynes, *A Treatise of the Canker,* 1601, pp.8, 9, 15, 37.

(15) Id., *Lex Mercatoria,* p.382.

(16) L. Roberts, *The Merchants Mappe of Commerce,* 1638, Part. 1, p.49.

(17) *ibid.,* p.48.

(18) *ibid., Part 3 Exchanges,* pp.35-36.

(19) ibid., Part 3, p.37.

(20) J. Marius, *Advice Concerning Bils of Exchange, The Second Edition,* 1655, p.4.

(21) *ibid.,* pp.4-5.

(22) J. Scarlett, *The Stile of Exchanges,* 1682, p.15.

(23) *ibid.,* pp.49-50.

(24) *ibid.,* pp.363-372.

(25) A. Justice, *A General Treatise of Monies and Exchanges,* 1707, pp.1-2. He says that "The Pound is Imaginary" (ibid., p.54).

(26) *ibid.,* pp.3-4, 4-5.

The silver weight of Gruden and schilling, both real and imaginary moneys of the Netherlands, were very stable during the 17th and 18th centuries, and par value of exchanges of their silver species with Pound Sterling, English money of account, was calculated by comparison of each other. Dutch real coin, Rixdollar (Rijks Daalder of 50 Stuivers), weighed 0.7757 ounces of pure silver is 8 1/3 schellingen, because 120 stuiver was equal to 20 Schellingenn. Therefore par value of Netherlands silver pound becomes 8 1/3 x 3.5806412/0.7757=38.46 Schellingen. The exchange rate was made with bank money of the Amsterdam Bank which was a kind of the imaginary money, whose value was usually higher than coined money.

For example, if it had agio of 3.75%, the par value of foreign exchanges was £1=38.46 / 103.75=about 37 schellingen banco (D. W. Jones, *op. cit.*, p.69, Stephen Quinn, "Gold, Silver, and the Glorious Revolution: arbitrage between bills of exchange and bullion", *Economic History Review,* XLIX, no.3, 1996, p.475).

Because the ratio of gold and silver was 14.93 in Netherlands and 15.58 in England, the par value of exchange in gold pound becomes 38.46 x 14.93 / 15.58=36.87 schellingen. There is the difference of 4.3% between gold exchange rate and silver one. And so the payment by silver to the Netherlands from England and the one by gold to England from the Netherlands are profitable (Jones, *op. cit.*).

According to J. McCusker, the par value of £100 is equal to 1,111 Gulden (=Florin). This leads to £1=37 1/3 Schellingen (J. J. McCusker, *Money and Exchange in Europe and America, 1600-1775, A Handbook,* 1978, p.44).

(27) F. P. Braudel and F. Spooner, "Prices in Europe from 1450 to 1750," *The Cambridge Economic History of Europe,* Vol.IV, edited by The late E. E. Rich and C. H. Wilson, 1967, 1980, p.378.

(28) Herman Van Der Wee, "Monetary, Credit and Banking Systems", *The Cambridge Economic History*, Vol.V, ed., by E. E. Rich and C. H. Wilson, 1977, p.293. Katsumi Izutani, *The History on the Genesis of Bookkeeping by Double-entry,* Moriyama Syoten, 1980, fully analyses the process by which the money of account becomes the abstract money of account from coined money.

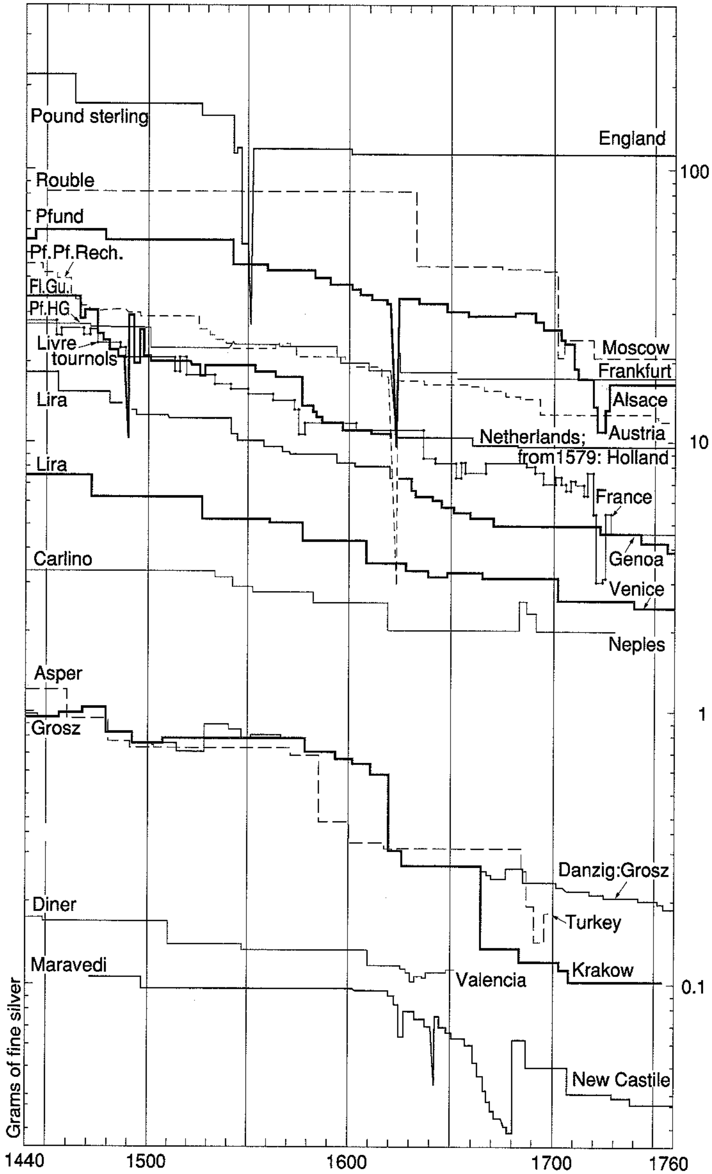
(29) *Venice and History, The Collected Papers of Frederic C. Lane,* edited by A Committee of Colleagues and Former Students, Foreword by Fernand Braudel, 1966, pp.71-72, 81. cf., Reinhold C. Mueller, "The Role of Bank Money in Venice, 1300-1500", *STUDI VENEZIANI,* N.S. 3, 1979, p.94.

V **Conclusion**

Chart 4 shows the change of silver weight of imaginary moneys, the moneys of account in Europe. Silver weight of English money of account was almost maintained regardless of the wear and tear of coined money since the recoinage by Elizabeth I. We also can see that prices, gold and silver prices, and exchange rates did not change in proportion to deterioration of coined moneys in the latter half of the 17th century. Real coins decreasing in silver content did not work as the standard of prices and

CHART 4

Moneys of account in Europe, classified by their weights in grams of fine silver.



(F.P. Braudel and F. Spooner, Prices in Europe from 1450 to 1750, in The Cambridge Economic History of Europe, Vol. Ⅳ, edited by E.E. Rich and C.H. Wilson, 1980, p.458) foreign exchanges. Therefore, it is evident why restorationists like Locke and Houblon attached great importance to intrinsic value of money, and they insisted that all contracts, business, and sales were completely based on intrinsic value of money even under the circulation of clipped coins.

Furthermore, the reason why the monetary situation changed suddenly after the end of 1694 − 95 is clear. It is because is that the debasement of Pound sterling as money of account became the official opinion expressed in the Fourteen Resolutions drafted on March 14 by the Lower House Committee after the opening of Assembly in November 1694. The fluctuation of commodity prices, bullion prices, and exchange rates during 1695 is poorly explained by the imbalance of supply and demand, so as the necessity of military remittances caused by war, according to Davenant. In addition, the reversal of exchange rates seen in figure 6 after Lowndes' Report submitted to the Regency Conference at the end of September 1695, can be explained by the government decision not to change the par value of Pound Sterling.

It was natural that the movement of various prices did not have any relation with the debasement of coined money, because real coined money was not the standard for prices and foreign exchanges. The Pound Sterling was imaginary money. The imaginary money did real work, and real coins decreasing intrinsic value turned to imaginary ones.

It is clear that both devaluationists and restorationists who, were familiar with the business world, understood enough of the movement of money value those days. Therefore, it appear that there was not a big difference in their understanding of the real economy, despite the severe disputes which prevailed among them. Devaluationists paid attention to the abstract character of the Pound Sterling as account of money whose value was imaginary and extrinsic. Restorationists insisted that the value of money was tied with a quantity of metal of fixed weight and was intrinsic even if money of account was imaginary those days.

Hodges as the devaluationist, had grasped the abstract character of money like J. K. Horsefield pointed out. However the understanding about abstract nature of money had been forgotten until the beginning of the 20th century when A. M. Innes and G. F. Knapp appeared, because the establishment of the gold standard system made Metalism the approved theory.(1)

(1) A. M. Innes, "What is Money? ," *The Banking Law Journal,* May, 1913, Id., "The Credit Theory of Money," *The Banking Law Journal,* 1914, G. F. Knapp, *The State Theory of Money,* 1905, 1973. Shiro Yoji, "Modern Money and the Origin of Money," *Economic Journal of Saga University,* Vol.35, No.5•6, 2003.