Thomas Edison's "except one": the monetary views of Arthur Kitson revisited

David Hammes
Department of Economics, University of Hawaii at Hilo, Hilo, Hawaii, USA

Douglas Wills
Milgard School of Business, University of Washington, Tacoma, Washington, USA
Thomas Edison’s “except one”
The monetary views of Arthur Kitson revisited

David Hammes  
Department of Economics, University of Hawai‘i at Hilo, Hilo, Hawai‘i, USA, and  
Douglas Wills  
Migard School of Business, University of Washington, Tacoma, Washington, USA

Abstract

Purpose - This paper examines the monetary thought of Arthur Kitson (1861-1937) as expressed in his published works and in recently discovered answers he submitted in 1922 to a questionnaire from Thomas Edison, the US inventor.

Design/methodology/approach - Both original source material from the Edison Archive and published sources are used to examine the subject.

Findings - It is found that Kitson’s monetary thought is more orthodox than has previously been claimed by, among others, John Maynard Keynes, and more recently in the economics literature. It is also found that Kitson was the only person to support, without qualification, Edison’s plan to reform the US monetary system.

Originality/value - This paper casts a new light on Kitson’s monetary thought, showing the influence of Irving Fisher on Kitson. The paper also presents Edison’s questionnaire and Kitson’s contributory thoughts on a flat monetary standard that the questionnaire stimulated.

Keywords Monetary policy, Economic history

Paper type Research paper

This [Edison’s commodity-backed money] is the idea that Mr. Edison has so far been unable to get any bankers or other persons to understand except one. He further thinks that a great many persons seem to be in a rut and their minds refuse to act... This work Mr. Edison says he did for Mr. Ford and he is not highly interested in pushing it, but thinks in years to come people will come around to his views [emphasis added][1].

1. Introduction

The monetary views of Arthur Kitson (1861-1937) have recently generated renewed interest among economists as one of the precursors to the “new monetary economics” (Cowen and Kroszner, 1987; Summer, 1996; Dowd, 1998). His ideas, both monetary and social, have also recently been traced through Ezra Pound’s writings and radio rantings (Barette, 1999, ch. 10) and Boyle’s (2002) recent compendia of monetary views includes a small sample of his earliest writings on money and prices.

The authors wish to thank Professor Roger Sandilands for extensive comments on an earlier draft and Professor Zane Spindler for helpful comments. Of course neither is responsible for any remaining errors.
2. Kitson’s monetary ideas

Kitson’s known monetary ideas are presented in several books, A Fraudulent Standard published in 1917, being our main source. In it, he states that he is continuing much of what he previously wrote in A Scientific Solution of the Money Question (1896) where he first advocated freeing money from gold, silver, or backing by any specific commodity[2].

Kitson believed that the gold standard brought no benefits to the general public, instead he argued that much mischief could be perpetrated on the public by those who would manipulate the price of gold in their favor. The immediate issue of concern, and his motivating reason for writing A Fraudulent Standard in 1917, was his concern that England would go back on the gold standard following the First World War at a conversion rate which would raise the real value of government debt to levels that would impoverish the English tax payer and laborer and enrich private bankers and their shareholders.

Consequently, for this reason, and to continue his long-standing belief in the free issue of money, he sought to divorce money as a medium of exchange from money as a commodity, e.g. gold-based store of value. As Boyle (2002 p. 228) puts it:

... and the function of money be [Kitson] identified as causing all the trouble was in ability to provide a “standard of value”. Get rid of that and nobody can corner the market in whatever standard it is based on, and nobody can restrict the money supply... And if money is limitless, you can’t charge interest on it.

Kitson’s position prior to 1917 seems quite firmly rooted in the real bills doctrine as he advocated “free and mutual banking” with the private banks issuing notes against “the wealth or securities offered them, by the industrial and commercial classes for productive purposes...” (Kitson, 1917, page viii). Of course, this “wealth” could take almost any form and was not limited to precious metals.
In his system, Kitson believed that over-issue of currency and inflation would be limited by a Hayekian style of competition between private banks and, with "reasonable State supervision ... the results would work out satisfactorily, and through healthy competition [between banks] the public interests would on the whole, be better served than by State monopoly" (Kitson, 1917, p. viii).

However, Kitson’s belief, formed between 1894 and 1917, that the banking system was moving toward a monopoly (due, in his opinion, to “Pee’s stupid Bank Charter Act”), finds him calling for a nationalization of the banking industry in 1917 (Kitson, 1917, pp. viii, ix).

While Kitson believed that currency over-issue could not be an inflationary problem in either a competitive banking environment or properly run government banking system, deflation, caused by monetary systems tied to gold and the resultant fettered operations of governments and banks, could, and did, happen and were a problem; he felt that falling money supplies were the scourge of economies. Deflation reduces prices and output and increases the real value of debt, leading to further economic contraction. He viewed the gold standard and any banking system based on it, as inherently contractionary and thus, inimical to trade and exchange (Sartre, 1959, p. 229; Cowen and Krouner, 1987, p. 579, footnote 27; p. 585; Summer, 1990, p. 114). Compounding the problem as he saw it, a privately-owned, monopolized bank would have the inherent incentive to under-issue currency, thus raising its value in terms of the commodity backing, in hopes of increasing profits for its depositors and shareholders (Kitson, 1917, p. iv(3)).

The value of the currency in Kitson’s scheme — whether it features competitive private banks, or a nationalized banking network — was to be determined by the ratio of total wealth in the economy to the number of units of currency outstanding.

For advocates of some form of gold (or single-commodity) standard, determining money’s real value is a relatively simple process. In this system, the inverse of the price level of the commodity used as backing yields the value of the monetary unit. So, if the rate of exchange is five pounds per ounce of gold of a given fineness, then one pound is worth one-fifth of an ounce of this gold. If, after some time, it takes six pounds to buy an ounce of gold, we know that there has been an inflation of 20 percent over that time period.

With Kitson’s advocacy of all commodities backing the monetary unit, there is no single way to compute the real value of one unit of the monetary medium. In response to this problem, others, most notably Irving Fisher, spent a great deal of time devising price indexes which would indicate what was happening to the real value of the monetary unit in terms of a composite good. Kitson denied the need of, or use for, price indexes.

Kitson, unfortunately, was not very clear on the mechanics of how money’s value would be determined in his system. In response to the almost immediate criticism of his A Scientific Solution on this point, he devises:

... an abstract unit of account that can be defined by setting the value of any commodity on a given day equal to “one” and pricing all commodities in terms thereof (Cowen and Krouner, 1987, p. 579).

Kitson presents virtually this same "argument" throughout A Fraudulent Standard (see, for example, chapters 9 and 15). Problematically, the units in which this "one" is specified are left unstated. Clearly, Kitson thinks he has solved the issue by tying all goods to a numeraire, but this numeraire good itself is unanchored.
JES 32.1

Kitson's view of money as a unit of purchasing power, not based on an index of prices, but a unit representing a fixed proportion of the national wealth independent of any single commodity, is summed up thus:

In order that it may satisfactorily perform its necessary functions – particularly that of a value denominator and accurately register the variations in exchange values of commodities – money must be essentially a valueless token, similar to a railway or theatre ticket. The one pound Treasury note, of course, meets this definition, provided its issue is not restricted by such abnormalities as gold redemption, and so long as the supply is sufficient to meet all the demands of trade, industry and commerce. (Kitson, 1917, p. 100; emphasis in original)

Of course, railway or theatre tickets are far from being valueless as they are "backed" by and redeemable in, specific and single-commodities (a train trip from A to B on date T; or, a specific theatre performance on a given day and time). But, it is not value in this sense that Kitson means. He intends the money token itself to circulate as few resources as possible, hence have as little inherent value as possible. Kitson's money token will have value because it represents a proportionate share of the national wealth (Kitson, 1903, ch. 13) not because it is made of gold or any other single commodity.

His view that money will be "a value denominator and accurately registering the variations in exchange values of commodities", while at the same time "denying the need to compute a price index to implement the system" (Sumner, 1900, p. 113) understandably drew criticism from his contemporaries as well as current writers, see Coven-Kramer (1987, pp. 579, 586); Sumner (1900, pp. 113, 114); and Dowd (1992, p. 174 footnote 3). Sumner (1900, p. 113) sums up their frustration by noting that Kitson's renewed attempt to explain himself on the issue in 1917 was more specific, but not necessarily clearer.

Despite an apparent adherence to the real bills doctrine and his muddle regarding how to determine the value of a non-redeemable money without using a price index, we find in A Prudent Standard many notions of a monetary system and its relationship to economic activity that seem more modern than the above discussion and the critics' interpretations would indicate. This leads us to have more interest in Kitson than expressed by his contemporaries, Keynes, or the recent critics.

For example, Kitson (1907 pp. 5) notes the relationship between money and prices in a statement that might resonate with a modern quantity theorist:

...to reduce prices you must reduce the volume of the currency, including bank credit ... and consequently curtailing trade and depressing industry.

This is the "flip side" of his advocacy of freezing money from gold in order to stimulate economic activity with an increased money supply. In Kitson's view it is the paucity of money that creates economic depression, and money is "scarce" because it is limited by the gold supply and/or private monopoly issuers of money who try to increase the value of money above its competitive value.

Yet, while he clearly connects a decline in the money supply to a drop in prices, he could not be termed a modern "Monetarist" in that he denies that this decline in wages and prices will lead, through a market clearing process, to a return to full employment. Rather, he sounds somewhat Malthusian when he explains (Kitson, 1917, p. 4, emphasis in original):

... reducing prices ... means trade depression, lockouts, strikes, emigration, starvation, pauperism, riots, with the possibility of war!
Kitson (1917) does express further explicit support for the quantity theory. On page 114:

The latter theory (what he has termed the "quantitative" theory of money) has been definitely established and accepted by every up-to-date economist. In general terms, the theory is, that the value of money, other things remaining the same, varies inversely with the quantity in circulation. That qualifying phrase "other things remaining the same" includes velocity of currency circulation, quantity of goods offered for sale, etc. (emphasis added) (Kitson, 1917).

We also know from the quantitative theory of money that exchange-values remain invariant (i.e., money prices remain stable) so long as the two forces of supply and demand remain equal (Kitson, 1917, p. 128).

Following this thought a few pages later, Kitson writes (pp. 146, 147):

Now, in speaking of the money supply, one necessarily refers not merely to the quantity of money, but also to the speed of circulation... The quicker the circulation, the less the amount required to effect a given turnover... It will be understood therefore, that whenever we speak of the money supply, we mean not merely so much legal tender but legal tender plus credit multiplied by their velocity of circulation.

Kitson defines velocity, gives a numerical example, and cites Fisher's (1917) Purchasing Power of Money in this section.

Kitson (1927 p. 144) avers that inflation is a "constant menace" defining it as:

... an oversupply of general purchasing power resulting in a general advance of prices. It means an increase in the money demand for commodities generally, without a corresponding increase in their supply.

Yet, he appears to wish to err on the "up" side by asserting (p. 146):

Worriedly, however, that an increase of currency, by stimulating demand also stimulates production, so that supply soon overtakes the increase in demand, and hence the price level is restored to what it was prior to the increase in the currency.

For Kitson, inflation, if it is a problem at all, will be so only in a short run, before output adjusts to the increased demand. The aggregate supply curve is highly elastic; yet, consequent on a decrease in money, prices fall and disaster looms.

Harmonizing back to Kitson's example of theatre tickets as money, he seems to be clarifying here that if a theatre owner sells more tickets for a specific performance than he has seats available, that the extra seats - each as good as the average of the original seats - will somehow materialize rather than the value of the performance decline which would represent a decline in the purchasing power of the token ticket "money" or, in other words, price inflation.

Finally, in this chapter, Kitson (1917 p. 159) claims that inflation in Europe is unavoidable at that time given the war: "... the bulk of our labour products [war material] are being destroyed." So, he attributes the wartime inflation to a decrease in goods rather than an increase in the money supply.

From Kitson's known, published, works on money, the issue of whether or not he has, as he claimed, devised an invariable standard that is the unit of account is highly questionable. Dowd (1962 p. 174 footnote 3) sums up Kitson rather dismissively:

His work is badly flawed by an idiosyncratic theory of value and he failed to understand orthodox value theory or the nature of credit, banking, or interest.
In summary, Kitson's *Presidential Standard* proposes a non-commodity backed, fiat-money with a nationalized banking system providing both currency and bank credit. The purchasing power of money was to be maintained by an equality between the demand for and supply of money, though there would be no price index relating the value of money to a specific basket of goods, or any single commodity, at any point in time. Kitson believed that deflation was a larger problem than inflation and that temporary price inflation would be met by an increase in goods and services so that inflation was not a long run threat.

3. Edison's questionnaire

The erratic performance of the post-First World War US economy, particularly the acute deflation of the early 1920s, persuaded Thomas Edison that a better monetary system could be devised. His research convinced him that what was required was a currency backed by the commodities produced by American farmers. To garner support for his idea he sent an extensive and confidential questionnaire to 7/ of the country's best known academic economists, Federal Reserve officials, and bankers in February 1922.[7] Shortly thereafter Edison sent the identical questionnaire to a smaller group of individuals of which Kitson was one.[8]

To Kitson, an advocate of money backed by generalized purchasing power, not gold, Edison's questionnaire and reforming quest must have looked like a beacon of hope. While the Edison plan did not go all the way to Kitson's, it did generalize the backing of currency from one commodity (gold) to 36 commodities. Additionally, Kitson may have seen a move by the US to abandon the gold standard — had Edison's plan been adopted — as the death knell of attempts to place England back on the gold standard.

Edison was a man of immense popularity, respect, and genius, putting his personal prestige and weight behind a proposal that might just provide recognition for Kitson's theories. In many ways the two were quite similar. Kitson was also an inventor and industrialist, then well known for the Kitson Lamp which was used extensively in lighthouses and railroad locomotives. Kitson also spent a great deal of time working in the USA on projects ranging from incandescent lighting, telephones, and automobiles (see Sarette, 1999, p. 219; Cowes Kroener, 1987, p. 579, footnote 20). They also shared a somewhat jaundiced view of "academic economists" (Sarette, 1999, p. 221).

Edison went public with his plan in 1922 but received little support from the public, the government, or the media. Even his personally selected "research team" failed to provide any support. He quietly abandoned the plan later in the year. However, as the opening setup makes clear he remained convinced he was correct and expressed dismay at how none of the experts seem to understand his plan; none that is, except one, Arthur Kitson.

4. Kitson's answers

In these responses, we find that Kitson (1922) appears to maintain his "modern" view of money and further below he proposes a "solution" to the value, or price index, problem that he left in such a muddle earlier.

The first question that we'll consider is:

2. If the U.S. Government were to build freestanding concrete sectional warehouses a desirable place, using therefore money received from taxation, and should receive, goods and stores, for
Arthur Kitson revisited

To which Kitson replied (all emphases in all answers are in the originating):

Unquestionably such money would be sound. But, what do we mean by "sound money"? Certainly not what it is in clINK, but what it will preserve in the nature of satisfying the wants of the holders of money. The public do not want gold, they want food, clothing, shelter and a thousand of the necessaries and luxuries of life. Money should therefore be something more than a claim to such wealth as the holder desires to the face value of the note or coin in the country where it is issued.

3. Would the money thus issued be as sound as a dollar secured by, say, 50 cents worth of gold, and the promise of the Government? I mean in the ultimate analysis and not considering the gambling chance that it is very unlikely that everyone would want their gold at once.

Money so issued would be more secure than if the gold were behind it. Hence money thus issued by the Government and based upon the credit of the Government has behind it not merely the gold in the country but the wealth of that country including the gold, hence the Government bank note should be regarded as a far greater security than one issued by a banker against one commodity — whether it be gold, silver or pigeons.

Here one must assume that Kitson is saying that for an equal number of notes or coins, one of those notes backed by the full real wealth of a country must be worth more than a note or coin (from an equal number) backed by only one element (e.g. its gold holdings) of the country’s wealth.

Of course, this ignores — or assumes away — the worry of most flat-money critics who were concerned about the problem of restraining note issues. Would there necessarily be the same number of notes in both systems? The critics of Edison’s plan clearly thought that money in his plan would tend to be issued in the point where their real value would fall relative to notes issued under a gold exchange standard (see Hawtrey and Wilson, 2004b). While they would concede that the numerator (the real wealth) would be greater when considering all commodities, they maintained that without a "golden anchor", the denominator (number of units of notes and coins) would be proportionately greater such that one would observe a decline in the value of the monetary unit, i.e. inflation.

Kitson addresses this next:

4. If money is issued on selected necessities of life (food and in control of the Government) to the extent of 50% of their value, could there then be any inflation of the currency due to this particular issue? Would farmers over-produce so as to stock up these warehouses to get a loan of 50% of the value of their produce and thus inflate or multiply the currency?

The so-called “inflation” of money means more currency in circulation than society requires. Such inflation very rarely occurs. The average man spends such money as he has to meet his needs. He does not rush off and throw his money promiscuously about merely because he has a large quantity. If there is an over-supply it is shown by the increase in the volume of bank savings. Everyone with more money than he requires invests it either by depositing it at a bank or in buying securities. A tendency to over-produce would possibly occur under this system but such over-production would mean that everyone had a sufficiency of the
In a world and time of gold standards, on and off convertibility, and the concern of observers whenever a government did suspend convertibility, Kinsen may well be right, "such inflation very rarely occurs." However, observers were worried that if a country should explicitly declare a generalized commodity backing scheme, what would be the forces limiting currency issue? That is, would this be introducing a sovereignty system that was inherently inflationary as governments took advantage of seignorage and the benefits of declining real values of government debt?

Even in times of currency suspension, the prospect of future resumption limits the amount of money created, thus restrains inflationary tendencies. Once even that threat (however remote) is removed, a critic would ask: What is to restrain note issue and restrain inflation? Lastly, bank "savings" represent a source of drawable funds (and bank deposit creation) which, under ordinary circumstances, does not soak up an "over-supply" of money as Kinsen claims. Rather, banks channel those funds to borrowers and there is no necessary limit on bank deposits created.

What then, is to restrain note issue? To that, Kinsen has an answer. An answer that also addresses the price index problem unresolved in A Fraudulent Standard and his earlier works:

7. Suppose that through these Government warehoused the issue of money far exceed, per capita, the highest amount that so far has been issued and more that is necessary to transact business, would there arise any danger similar to what has occurred with currency not backed by reasonable amount of gold?

The present danger of an over-issue of currency is the increase in the prices of commodities. This could easily be remedied by the Government fixing prices of all commodities at a certain level which could easily be arrived by Committees appointed to adjudge these prices at a certain level of costs. An over-issue of currency under such conditions could not affect prices and therefore could do no harm.

In an effort to legislate perfect price stability, Kinsen changes his position on the value of the unit of account as outlined above. No longer is the unit of account to be a hastily-defined fraction of the wealth of a country, but now the value of the unit of account becomes the inverse of the fixed price of goods, with the prices of the goods to be determined and fixed absolutely by the government. Thus, by definition, measured inflation could not occur unless the administrative committees allow it. However, anyone who has experienced administered prices and price controls will know that price decreases do not necessarily restrain inflation.

This is a shift in thinking for the previously "free money" Kinsen, the one who believed that excess money in the short run would induce increases in the supplies of goods and services to push the price level back down or prevent it from rising in the first place. The government now is to set prices. This also is consistent with his view, expressed in A Fraudulent Standard, that the government should nationalize the banking system, hence, control note and credit issue. In this answer Kinsen argues that the government will control the quantity of currency, credit, and prices.

In his answer to Edison Kinsen advocates an over-determined system where the government can assure price stability both through judicious management of currency
and credit and controlling prices. If the judiciousness in monetary control is lacking, the government falls back on its price control power.

In response to a later (49) question, Kitson states:

The value of currency depends not upon what it is made of or what it is backed by but upon the number of units in circulation. The presence of gold or other commodities behind the currency may affect its exchange value in foreign countries but it does not affect its value or purchasing power in the country in which it circulates. This is due to the fact that money, per se, does not go abroad.

As in A Fraudulent Standard and its quantity-theoretic approach, the value of currency is inversely related to its quantity and its international value may depend on its backing.

In response to #13:

Do you think that civilized countries have, from experience and knowledge of economics, reached a stage where they could drop the fiction, unreality and chaotic state of a currency based on gold, and adopt a money, back of which is real useful wealth of twice the value of the money issued? Must we always remain on a gold basis? Is it beyond the wit of man to devise any equivalent method?

Kitson replies:

In my judgment the public are not interested in what is behind currency, all they want to know is whether it is legal tender and will satisfy creditors.

This highlights another source of “value” for money, again stemming from the government, and that is the “legal tender” status of money.

In these answers (as he did in 1917) Kitson calls for government controlled and supplied currency divorced from any single-commodity anchor. New to these answers, we find Kitson advocating a tight set of price controls in recognition that inflation may well be a long run problem if the currency is poorly managed and to give nominal prices an anchor[1].

On banking, Kitson stops short in these answers, of calling for the nationalization of banks, but certainly argues for control of banks:

1. When a bank discounts the note of a merchant and charges 7% (which is called interest) isn’t this a minnow? Does not the bank perform certain duties and services for this 7% that is worth it? Why call it interest? Why don’t they enlighten the public? A person saving money to a railway, taking bonds, gets interest but he performs no service like a bank. Yet both are called “interest.”

No bank should be allowed to charge any such percentage as 7%, for its services. The ancients called this “usury”, via, payment for use... Every great moral teacher from the time of Moses to that of John Ruskin has condemned usury (interest) as one of the greatest evils in national economy. It has been forbidden by every religion. As Lord Bacon says: “Every brings the treasure of a nation into a few hands... its existence is due entirely to laws which have given the monopoly of credit to the banking institutions[2].”

Again on fiat money/legal tender:

21. Do the words “fiat money” mean that money, not redeemable in gold or par, is fiat money?

There is no other money except “fiat money”. No other money is allowed to circulate by any of the world’s Governments. It exists and is created under the fiat of law... in other words
5. Conclusion

In light of this newly found material, and perhaps a slightly more sympathetic reading of *A Fraudulent Standard*, one must question the characterization of Kitson that is currently popular. Consider our present monetary systems. Most countries have governments dominated central banks issuing currencies and manipulating bank credit via open market operations, reserve requirements, and/or discount rate policies. Currency is backed by “legal tender” laws and the public’s willingness to accept it. It is the valueless token money that Kitson called for. Most economists would agree that the purchasing power of nominal balances is inversely related to its quantity and that (un)inflation is less of a macro-economic problem than deflation. Except for the call for price controls and nationalization of the commercial banking system, which Kitson advocates in his answers to Edison (but which, for price controls, is not found elsewhere), there is no substantial difference between Kitson’s views expressed in these answers in 1922 and the actual operation of today’s monetary systems in almost every country around the world. That, by the way, does not make them “optimal”, but they are “modern”.

In this sense, then, we believe that this new source of Kitson’s views on money, and a closer reading of his earlier source material, serve to remove him from the “doghouse” of “fraudsters” and place him in a more mainstream tradition of monetary economists.

Notes

1. Letter from Thomas Edison’s Assistant to Irving Fisher, 7 August, 1922.

2. Kitson also authored *The Money Problem*, 1903, which Summer (1990 page 117) identifies as “Originally published as *A Scientific Solution of the Money Question*”, and *The Bankers’ Conspiracy*, which started the World Crisis (2002), as well as numerous pamphlets, magazines, and monographs through the years 1894 to his death. All were dedicated to furthering his ideas on money and prices. We focus primarily on his ideas as presented in *A Fraudulent Standard* as it is accessible and we believe it to represent his ideas fairly. While *The Bankers’ Conspiracy* was published later, the authors have not been able to obtain a copy of this book. From Summer’s (1990) recent account—none of the other recent Kitson critics cite the book—Kitson states (at least to his economic ideas there relative to white he wrote in *A Fraudulent Standard* in 1917.

3. He gives no theoretical justification for this view. His thinking may be that there is some interest-income maximizing quantity of banknotes (which translate into profits) for the bank (and its owners) and that this quantity is less than the quantity that would be supplied by a competitive banking system. But, at this point, he ignores the velocity of bank notes which would be a possible compensating factor.

4. In his earlier work of 1903 (e.g., chapter 13 on “Money supply and demand”) Kitson does not mention the velocity of money or use the phrase “quantitative theory of money.” Obviously, neither does he cite Irving Fisher. It is an open question as to whether Kitson read Fisher (and vice versa), but it is clear that Fisher’s influence changed Kitson’s thinking on money in the writing of *A Fraudulent Standard*. Fisher’s (1934) references to Kitson in Stable Money make it clear that Fisher was very well acquainted at that time with Kitson’s work.
We do not find reference to Kitson in either Fisher’s (1974) *The Theory of Interest* (1930) or *The Purchasing Power of Money* (1911).

5. This seems to imply that Kitson had a “bootstrapping” solution to the problem of unemployment: increase the supply of money, cause prices to rise, and output (hence employment) will rise *part passim*. This seems to indicate a confusion between real and nominal prices if nothing else.

6. The value of the performance may decline in several ways, for example, some ticket-holders may have to stand, others may be unable to enter, others may have to share seats, etc.

7. For a full account of Edisson’s plan, the questionnaire, and responses see Hamms and Wills (2004b). See the Appendix for the entire questionnaire.

8. Kitson responded and returned it 3 March, 1922. Edisson got Kitson’s name and the suggestion to send him the questionnaire from S.P. Partin, a Billings, Montana, newspaperman, who was also interested in questions of money. From a reference to Kitson in Partin’s letter to Edisson, it appears that Kitson and Partin carried on a correspondence. Partin learned of Edisson’s interest in money when he read a report of comments Edisson and Henry Ford had made on money and contacted Edisson via letter on 17 January, 1922.

9. This should interest those who, like Sumer (1990/1991), criticized Kitson’s plan for lacking a “nominal anchor”. We do not mean to suggest that Kitson’s “solution” makes his plan any more operational, in fact, price controls are a draconian solution to the “missing anchor” problem.

10. This illustrates the quotation from Boyle in section 2 of this paper, another goal of Kitson’s was to eliminate interest charges on lending.

11. Emphases and punctuation are in the original questions. There are approximately two questions per page with space in-between for answers. We first saw this questionnaire in the Henry Parker Willis Collection at the Rare Book and Manuscript Library, Columbia University, New York City. Copies are also in the Edisson National Historic Site Archives, Bankag Collection 1922, box 7, folders 4 and 5.

References


Kitton, A. (1929). "Answers to questions submitted by Mr. Edison," *Banking*, 1922, Box 3, Folder 31, Edison National Historic Site Archives, West Orange, N.J.


Sorens, L. (1990). *Found In Fragments: From Economic Realism to Anti-Realism*, University of Illinois Press, Urbana and Chicago, IL.

Further reading


Pantor, S.P. (1922). Letter to Thomas Edison, January 17, *Banking*, 1922, Box 7, Folder 3, also Letter to Edison, February 3, 1922, same box and file; Letter to Edison and Answers to Questionnaire, February 16, Box 5, File 15; Letter to Edison, May 25, 1922, Box 6, File 3; Letter to Edison, July 23, Box 7, File 1; all at Edison National Historic Site Archives, West Orange, NJ.

Appendix: Edison's questionnaire[11]

(1) What, in your opinion, would be the approximate market value of a Troy ounce of pure gold if all the Governments of the World should demetallize it?

(2) If the US Government were to build five new concrete sectional warehouses atducible points, using therefore money received from taxation, and should receive, grade and store, for stated periods of time, (say, one year), selected securities of the issue, a certificate or receipt for same, and should enact a law that the US District Treasury, or the Federal Reserve Bank, might issue 50% of the market value of these commodities in money, (such market value being based on the average selling price over a period of 25 years and so endorsed on the certificates), would this money, so issued, be sound money? If not sound money, give your reason.

(3) Would the money thus issued be as sound as a dollar secured by, say, 50 cents worth of gold, and the promise of the Government? I mean in the ultimate analysis and not considering the gambling choice that it is very unlikely that everyone would want their gold at once.

(4) If the answer to No. 2 is that the money issued on a US Government Warehouse certificate and held as security, is sound money, (the equity in which is owned by the owner of the certificate and upon which he has received 50% of the market value) would this equity be available of being discounted by a commercial bank? Would the currency thus received from the Federal Reserve Bank be sound money; the capital and surplus of the bank being in money issued in the first instance?

(5) If this second issue of money is unsound money, point out why it is more unsound than the present money, based partly on gold and silver and promises?
(6) If money is issued on selected necessities of life (baid and in control of the Government) to the extent of 50% of their value, could there be any inflation of the currency due to this particular issue? Would farmers ever produce as to stock up these warehouses to get a loss of 50% of the value of their produce and thus inflate or multiply the currency? (7) Suppose that through these Government warehouses the issue of money should far exceed, per capita, the highest amount that so far has been issued and more than is necessary to transact business, would there arise any danger similar to what has occurred with currency not backed by reasonable amount of gold?

(8) If England had government warehouses wherein were certain selected articles from her Colonies which articles America buys and will probably always buy, and such articles are inspected by and guaranteed by the English Government which should issue a special currency on the warehouse certificate at one-half the market value of the goods, would this special currency facilitate the exchange of commodities more than now with present difference in money?

(9) Would not this special currency, issued in the manner stated, by any stable government in which we have confidence, purchase more goods in the USA than their normal currency, based on a small quantity of gold and credit?

(10) Assuming that the US Government still owned many square miles of territory which, if irrigated, would be worth many times as much money per acre than land subject to the vicissitudes of climate, and should build a dam and reservoir for power and irrigation, leasing the land on rental and contracting out the power, and should issue currency to build the dam and irri gates and construct the power station, would this currency be sound money? It is backed by actual value which continues for ever. Would it not have a value as great as the 100 million of 6% Mortgage Bonds of the Union Pacific Railroad, the property of which is far less permanent bringing a lower income, leaving out of consideration the dangers which all such projects contain of being abused by legislative action in times of financial peril?

(11) If you answer that it is not sound money, is it for reason for its lack of ready convertibility, like the currency issued for goods in the warehouses which may be sold at one? Why is this lack of convertibility serious? Explain what bad effects would occur in case of a depression or panic, when, say 90% of our currency was issued for one-half of the value of necessities of life and 10% issued on projects like this land and irrigation operation, not separately, but both back of a uniform currency of one character and made unchangeable by amendment to the Constitution by popular vote, so that this ratio of 90% and 10% could not be changed.

(12) On the other hand, suppose the Government operated the dam and sold the land, charging rental for water, would this enhance the value of the currency issued to put the scheme in operation? The currency would be redeemed in this case rather quickly. Would this make this currency more sound and desirable?

(13) Do you think that civilized countries have from experience and knowledge of economics, reached a stage where they could drop any fiction, unreality and choose state of a currency based on gold, and adopt a money, back of which is real useful wealth of twice the value of the money issued? Must we always remain on a gold basis? Is it beyond the wit of man to devise any equivalent method?

(14) If all civilized countries have not reached that point, then state what countries, in your opinion, have advanced to that point.

(15) Could gold be demonetized in the U.S. at some future time, except for paying international balances, and a national currency established, based on real wealth, as stated, without any great disturbance?
Suppose such a currency was issued, as I have described, would this increase or diminish the profits of our banking system? Take into consideration the possibility of a great increase of wealth, possible from a 100% sound currency and its ready availability.

When a bank discounts the note of a merchant and charges 5% (which is called interest) isn’t this a misnomer? Does not the bank perform certain duties and services for this 5% that is worth it? Why call it interest? Why don’t they enlighten the public? A person loaning money to a railroad, taking bonds, gets interest but he performs no service like a bank. Yet both are called “interest.”

If by some financial system brought into being and made the low by legislative action, where all the money issued cannot be 100% sound, and this money is loaned to a railroad, taking bonds payable, principal and interest, in gold, is there not a chance that in this exchange the lender is getting more interest and more security of his principal than he is entitled to?

Before the war German currency was on a gold basis; today she has many billions of gold in the Reichsbank, but she still on a gold basis? If not, at what particular state of her holdings of gold did she cease to be on a gold basis?

Do you believe that governments should base their money on gold after we have seen in accounts of special disturbances, such as our country taking most of the gold to itself, usurping the commerce of the world, and bring about a state of affairs that they can’t trade with each other, do you think it beyond the power of man to improve on his crude mechanism (i.e.) of commerce?

Do the words “fast money” mean that money, not redeemable in gold at par, is fast money?

If this is correct, no country has enough or ever had enough gold to redeem all its money in gold, or par. How much of the whole body of money is good money and how much fast money?

Gold can be made a standard, but is it not possible to make any known piece of matter a standard of value. Nothing is known that will not vary in value to man or men. Is there any truth in this statement?

If so, what value is gold as a standard of the currency issued against it is in excess of the gold whose value is constantly varying?

The subject matter of Andrew D. White’s work called “Fast Money Inflation in France” is used as a terrible example. Is it not true that they see two sides to this question, of which White gives only one side? For instance, White before the issue of assignats, was hopelessly bankrupt and would have been wore off without assignats than with them. There were great compensations for the depreciation of assignats, which ultimately caused France to become one of the richest nations. The fast money of our Revolution became worthless directly and 100% good indirectly. This is no argument for fast money, so, in my opinion, all general money within a country should have practically twice the value of its par behind it.

Germany has issued and is now issuing enormous quantities of fast money. This appears to be serious. Yet all the people are working furiously. America, it is said, has no fast money. Four million men are idle, living off the workers and we have depression in business. The same case in England. Point out why this is so and what will probably be the final result.