David Ricardo, Alexander M. Lindsay and J. M. Keynes on India Gold Exchange Standard

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Abstract

The Indian monetary system had already attracted the attention of nineteenth century economists like Léon Walras (1887) and Alfred Marshall (1899). Nevertheless one of the most influential economists for the monetary debate in India was David Ricardo (1816, 1821). In this article we will be analyzing the evolution and establishment of the gold exchange standard in India through the work of three economists: David Ricardo (1772-1823), Alexander Martin Lindsay (1844-1906), and J. M. Keynes (1883-1946). The start point is Ricardo's Proposals for an Economical and Secure Currency, published in 1816, and his "Ingot Plan", which influenced A. M. Lindsay who supported the instauration of a gold exchange standard in India from 1876 to 1898, in particular before of the Fowler Committee of 1898 on Indian Currency. Indeed, although Lindsay and Keynes can be linked by Ricardo's influence and by their advocacy for India's freedom to choose a Gold Exchange Standard, Lindsay and Keynes eventually differed in their subsequent theoretical evolution. We will compare these three authors' diagnosis of the Indian monetary system and their respective contributions to the formulation of the Gold Exchange Standard, which became dominant after the Genoa Conference of 1922.

Key words: Ricardo, Lindsay, Keynes, Currency, Gold-Exchange Standard, India.
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Introduction

The Indian monetary system had already attracted the attention of leading nineteenth century economists like Léon Walras (1887) and Alfred Marshall (1899). This article analyzes the evolution and establishment of the gold exchange standard in India through the work of two young economists: John Maynard Keynes and his contemporary Edwin Walter Kemmerer. Keynes took an interest in the Indian currency problems during his short stay at the civil service in the India Office (1906-1908). Based on his experience, he wrote *Indian Currency and Finance* (1913, referred to below as ICF), which was his first book and first academic success, hailed by Marshall (together with the Indian Currency Report it influenced) as "a prodigy of constructive work" (see Chandavarkar 1983, 1984, Dimand 1991, Cristiano 2009, Carabelli and Cedrino 2010-11). Thanks to this success Keynes was already 1913, at the age of thirty, a member of the Royal Commission on Indian Finance and Currency (saluted by Marshall as "the youngest member of the youngest Royal Commission"), secretary of the Royal Economic Society and editor of the *Economic Journal*. Kemmerer, an American quantity theorist who spent most of his career at Princeton, reviewed Keynes's book in 1914 and wrote a 150-page chapter on India in his *Modern Currency Reform: A History and Discussion of Recent Currency Reform in India, Porto Rico, Philippine Islands, Strait Settlements and Mexico* (1916), in which he compared the gold exchange standard in American and British colonies and Mexico. Both economists referred positively to a nineteenth century author, Alexander Martin Lindsay (born 1844, died 1906), deputy secretary and treasurer of the Bank of Bengal, who from 1876 to 1898 advocated the establishment of a gold exchange standard in India, notably in 1898 before the Fowler Committee on Indian Currency (see Leavens 1939, pp. 79-80). Therefore, we also base our research on Lindsay's writings (Lindsay 1876, 1878, 1892, 1898), particularly on his book *Ricardo's Exchange Remedy* (1902), on and some public documents on Indian currency. Although they were linked by Lindsay's influence and by their advocacy of a Gold Exchange Standard for India, Kemmerer and Keynes differed in their subsequent theoretical evolution. We will compare these three authors' diagnosis of the Indian monetary system and their respective contributions to the formulation of the Gold Exchange Standard, which became dominant after the Genoa Conference of 1922.

Some economists have noticed links between Keynes and Lindsay such as H. S. Foxwell (1913), J. L. Laughlin (1927), J. Mertens (1944) and more recently R. W. Dimand (1991) and R. Gomez Betancourt (2008), but none have insisted on the anteriority, originality

and the connection to the gold exchange standard established by the United States in their colonies.

This paper is divided into four sections. We will start by presenting the main arguments of the metallic standard debate starting with the Herschell Committee (1892-1893), followed by a discussion of the Fowler Committee (1898-1899) up until the publication of the ICF prior to the First World War (WWI). We will then examine Kemmerer and Keynes' general arguments in favor of the gold exchange standard, focusing on their diagnosis of the Indian monetary system and their common references to Lindsay and showing their first steps in as expert advisers on monetary reforms. Our third section will strive to explain the inelasticity of the money supply problem, the quantity theory of money and seasonal variations of the money market. An overview of the Indian banking system's organization, will lead us to understand why Keynes thought India needed a central (or State) bank and what was Kemmerer's position. Finally, we will show that, despite their subsequent opposed positions in economic theory, both authors played –in their way- the role of *money doctors*, sharing similar concerns and Lindsay as a common influence. Their propositions lead us to compare the methods used by British economists in India with the ones used ten years before by American economists in the Philippines for monetary reforms, the importance of the different lobbies and the differences between the Core and Peripheral countries on gold standard in that time.

1. Looking for a "full blooded gold standard" as in England

Between 1870 and 1898 India was a silver metallic country with a free coinage of the silver rupee. Nickel coins, bronze coins and Government bank notes also circulated. As a British colony, India's monetary system was closely connected to the British one and to the commercial and financial relationships with London. So, India depended on England but at the same time had a strategic role in the British imperial system. Indeed, India, as an agricultural country, had a balance of trade surplus and the net earnings of the foreign trade allowed the government of India to pay regularly the Home Charges to England. These Home Charges represented a third of its budget and had to be paid for the debt interest, administrative equipment, pensions to retired officials, and military expenses. These home charges had to be paid by the Indian government in sterling, with a gold fixed value, whereas their revenues were in depreciated silver. Even if the Indian government had important sterling funds in London, it was greatly concerned by the parity between the rupee and the sterling, which depended on the gold value of silver. This was stable until the 1870's, but, the

depreciation in the gold value of silver provoked the depreciation the Indian currency's sterling value, exchange instability of the rupee, a fall in British investment in India because of this continuous exchange risk and consequently budgetary problems for the Indian Government.

Two committees constituted the official doctrine in India: the Herschell Committee (October 27th, 1892 to February 2nd, 1893) and the Fowler Committee (April 29th, 1898 to July 7th, 1899). In 1892, the Herschell Committee proposed adopting a gold standard in India and suspending the free coinage of the rupee (suspended in 1893). The committee wanted to break the link between the rupees and the silver. The Indian government linked the Indian currency to gold by guarantying to give rupees against gold at the rate of 15 rupees per 1 British sovereign, or 1 shilling and 4 pence per rupee (1s. 4 p.). The Herschell Committee did not recommend a gold currency because of the costs of this kind of system and of Indian banks' low development. In 1899, the Fowler Committee[2] recommended completion of Herschell's reform and proposed a "full blooded gold standard" which mainly implied three conditions: Indian metallic standard should be gold; gold should circulate; and the majority considered that the par of exchange should be 16d to the rupee. (Keynes 1913, p. xx), i. e., they suggested a gold standard with a gold currency and coinage based on the so-called British model[3]. The Indian government followed the Fowler committee's advices and declared the British sovereign legal tender at 1s. 4p. But finally this Committee's wishes were not fulfilled because gold coins did not circulate and the Indian gold Mint failed. Eventually, an original monetary system was set up in India at the beginning of the twentieth century: a gold exchange standard (GES) based mainly on what Keynes called the "Lindsay Scheme".

2. Kemmerer and Keynes on Gold exchange standard: the alternative model

While India's official doctrine was inherited from the 1844 British Act, and these two committees wanted to implement a full blooded gold standard, other economists such as Irving Fisher, Kemmerer, and Keynes were doing everything to find an alternative to the fixed

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[2] During the Fowler Committee hearings, Lord Rothschild and Alfred Marshall were in favor of the Gold Standard.

[3] Other propositions were formulated as of 1875, but they were not followed up according to M. De Cecco because of the opposition of the British exporters lobby (De Cecco 1974, p. 65). According to Keynes (1913, p. 4), it was the first step towards the establishment of a Gold Standard based on the British model: "It seemed to follow that their ultimate objective must be the last -namely, a currency of gold. The Committee of 1892 did not commit themselves; but the system which their recommendations established was generally supposed to be transitional and a first step towards the introduction of gold."

exchange rate rule of the Gold Standard[4]. For Kemmerer (1944, p. 134) the gold standard is the monetary system in which units of value, whether prices, wages, or debts, are expressed as a fixed quantity of gold. This definition does not include certain elements usually associated with the gold standard, such as gold coin circulation, the definition of the legal tender, free coinage, and the convertibility of bank notes into gold. With regard to these elements, Kemmerer (1934, p. 4) writes: "these things are all customary accompaniments of the gold standard. They are useful devices for maintaining it. However, the gold standard could exist without any or all of them… Furthermore, a currency might have all these attributes and still not be a true gold standard." Kemmerer explains that what remains fixed in the gold standard system is the weight of the monetary unit's metallic content, and not its value. The law has to provide for carefully determined units of measure, i.e. the amounts of gold corresponding to each monetary unit. However, its value is assimilated to its purchasing power. He uses the example of distinct units of measure, i.e. the pound or the kilogram, to illustrate measures with fixed weights. The gold dollar, for instance, is the value assigned to a given weight of gold at a given moment. The main problem that could arise is the variation of this value. The monetary unit is thus defined with respect to a fixed weight, but not a fixed value.

According to Kemmerer, two conditions are necessary in order to reach what he called the "automatic" mechanism of the gold standard. First, the state must fix the amount of gold contained in the monetary unit. For a dollar, for instance, it became 25.8 grams of gold 9/10ths fine or 23.22 grains of pure gold. Kemmerer argues against all kinds of restrictions or taxes on gold imports and exports: the authorities must not impose seigniorage. Second, coinage must not be limited, i.e. minting houses must be obliged to use all the gold they receive[5].

In his 1944 book, Kemmerer identifies three types of gold standards, which depend on whether all or only some of the characteristics defining the GS are present. The first system is

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[4] Fisher proposed the Compensated dollar plan, Kemmerer and Keynes the GES. See Fisher (1911, 1920) and de Boyer des Roches and Gomez Betancourt (2013).

[5] The authorities must also be mindful of the relationship between the value of gold and the amount of gold produced. Gold production is regulated through variations of production costs and not through variations of gold prices. For other types of goods, production increases when prices increase (and falls when prices fall). Gold stands as an exception among all types of goods since its price cannot change: it is fixed by law. Kemmerer explains how the price of gold remained fixed at $20.67 per ounce from 1879 to 1916, even though gold production increased fourfold over this period. Provided that the price is fixed, and not the value, under the GS, gold producers will keep on receiving the same amount of money at the Mint. However, values may vary, in particular if the gold value falls. In this case, the prices of other goods increase. Gold production may be found to decrease as a result of a decrease in the producers' benefits. By contrast, the gold value increases only if there is a decrease in the prices of other goods as well as in the cost of gold production. The production thus tends to increase as soon as the value of gold increases.

the *Gold Coin Standard* (GCS)[6], also called Gold Specie Standard (GSS) or Gold Standard (GS)[7]. In this system, gold coins circulate within a country, bank notes are convertible into gold coins without restriction, and coinage is unlimited at costs generally determined by the law. The second type of metallic standard, which is the one our analysis is focused upon, is the *Gold Exchange Standard* (GES). The main purpose of this system is to ensure the stability of the exchange rate. Following Lindsay, Kemmerer defines the GES as a system in which there is neither free coinage of gold nor domestic gold coins in circulation, although the latter would not compromise the effectiveness of the mechanism. Currency reserves consist of short-term interest-raising investments in foreign stock markets. The third type is the *Gold Bullion Standard* (GBS). It relies neither on domestic gold circulation, nor on unlimited gold coinage. Gold is stored in the issuing bank and only serves to maintain the stability of the exchange rate. Bank notes are convertible only above a certain amount (equivalent to a bullion) and exclusively for exportation. This system was elaborated and presented by Ricardo (1816),[8] but implemented much later. It served as a transition between the GCS and the GES. For our purpose here, we compare the first system (GCS) with the second (GES), an analysis that Kemmerer himself previously undertook. For Kemmerer, "[t]he gold exchange standard is a variety of gold standard, since the unit of value is the value of a fixed quantity of gold in a free gold market. Its outstanding characteristic is that it provides for redemption of the various forms of fiduciary money drafts on gold funds located abroad, rather than in gold coin or gold bullion at home … The GES is essentially a mechanism for providing a gold standard without a gold currency" (Kemmerer 1933, p. 1).

The aim of Kemmerer -and of the other American members of the GES Commission- was to propose a system that retained the main advantages of the GCS but could be adopted by economies that either did not have the possibility to sustain gold circulation and gold reserves, or could not ensure convertibility into bullion. In 1903, 28-year-old Kemmerer implemented his first GES in the Philippines. He took inspiration from many intellectual sources for the definition of the GES such as Ricardo (1816), Lindsay (1878), Jenks (1904)

[6] Ricardo and other economists after him heavily criticized the GCS. Under this monetary system, a country was required to have a large stock of gold at its disposal since it was the base of credit. Alternatively, gold money may be kept in a bank entitled to issue bank notes. The bank may then agree to grant a certain amount of credit by issuing extra bank notes or buy drafts with new bank notes so that the amount of credit granted may exceed the amount of gold in the reserve.

[7] In the United States, the establishment of the gold standard came out of a theoretical controversy between the proponents of the gold standard and the proponents of bimetallism (and those in favor of the silver standard). This debate turned into a major political argument in the early 20th century. See among others Bordo and Schwartz (1984), Eichengreen (1985).

[8] On the GBS see Charles Rist (1938, pp. 194-196).

and Conant (1909). Nonetheless, Kemmerer himself was a forerunner and theoretician of metallic standards and one of those who most contributed to the definition and diffusion of the GES as a concept.

As for Keynes, he was only 30 years old when he published his first economics book, the ICF, in which he argues against the official doctrine that favored the installation of a gold standard in India based on the so-called English model, defined at the end of the 19th century. On the contrary, Keynes attempts to highlight the fact that the Indian monetary system, as it developed in the 19th century and beginning of the 20th century, is original. For Keynes the GES, "the model of the future", needed to be formally recognized and strengthened, thanks to a rational management of reserves and to the creation of a Central Bank. Thus, the author insists on the obsolescence of the gold standard in India, but also in the metropolis.

Keynes also differentiates between three gold-based currency systems. First, there is the gold-based currency system as it existed in Great Britain. In this system, the gold coin has three uses "… as the medium of exchange for certain kinds of out-of-pocket expenditure, such as that on railroad traveling, for which custom requires cash payment; for the payment of wages; and to meet a drain of specie abroad" (Keynes 1913, p. 12). The gold coin, however, is not the primary medium of exchange, contrary to what was envisioned by the supporters of the Act of 1844. The principal medium of exchange is the check, a device that provides the British monetary system with its highly desirable quality of elasticity. To meet potential drains of specie abroad, the bank of England relies on changes in the bank rate. Since Britain is a net lender in the international money markets, a system of markets that, in Britain anyway, relies on middlemen (investment bankers and brokers), "[a] rise in the bank rate is equivalent to putting pressure on these middlemen to diminish their commitments" (Keynes 1913, p. 18). In this manner, drain of specie abroad can be stopped. Second, Keynes comments that some nations have adopted the form but not the substance of the British monetary system. These nations have introduced two modifications the British system to fit their particular needs: "The first is to permit a small variation in the ratio of exchange between the local currency and gold, amounting perhaps to an occasional premium of ¾% on the latter; this may help to tide over a stringency which is seasonal or of short duration without raising to a dangerous level the rate of discount on purely local transactions. The second is for the government or central bank to hold resources abroad, which can be used for maintaining the gold parity of the local currency, when there is a need for it" (Keynes 1913, p. 19; on the first modification, see Smith 1995).

Third is the gold exchange standard, the currency system of the great trading nations of Asia, that is based on four principles: (1) gold is an international currency, (2) nations must have ready access to gold in times of need, (3) nations may rely on a variety of forms for their local or domestic currency, and (4) nations must maintain an approximately constant rate of exchange between the local currency and gold. In Keynes' (1913, pp. 21-22) words: the gold exchange standard may be said to exist when gold does not circulate in a country to an appreciable extent, when the local currency is not necessarily redeemable in gold, but when the government or central bank makes arrangements for the provision of foreign remittances in gold at a fixed maximum rate in terms of the local currency, the reserves necessary to provide these remittances being kept to a considerable extent abroad. This is the monetary system that governed India in 1913, when Keynes completed his book.

The main point in common between Kemmerer and Keynes is that they drew on Lindsay by elaborating his plan for the GES. Kemmerer's work emphasizes the need to create a fund designed to ensure the gold parity of the Philippines currency under the GES. He coined it *the Gold Standard Fund*. Keynes also explains the importance of this fund for India. Throughout their explanation they draw attention to the differences between the way in which such a fund functions, and the *currency board* featured in other monetary reform proposals for the establishment of a GES. The stabilization fund proposed by both Kemmerer and later Keynes was an exchange stabilization fund.

However, Kemmerer follows Ricardo closer than Keynes in elaborating his quantity theory of money. This is a first difference between our authors: Kemmerer quotes Ricardo to justify his conception of the quantity theory of money, and the reforms he brought in colonies were part of a larger project to restate the quantity theory; whereas Keynes held an ambiguous position concerning quantity theory in ICF.

For Kemmerer, as for Ricardo and the economists of the *currency school*, gold is not sent abroad in order to pay debts, but in order to reduce the amount of money. His explanation of the gold point system is thus very similar to Hume and Ricardo's theories: gold movement is necessarily caused by a monetary policy, such as over-issuing, i.e., excessive issuing of money. For Kemmerer, surpluses of money must be sent out of the country. Note however that Kemmerer moves away from Ricardo in two respects. First, in contrast to Ricardo, he does not favor the GBS, and second, he proposes neither a currency board nor a national bank for the American colonies. Instead, he proposes a stabilization fund to maintain the currency's exchange stability. The central bank envisioned by Kemmerer differs significantly from the role it had in Ricardo's conception. Specifically, Kemmerer highlights the importance of the

elasticity of the money supply (1944: 219). He also draws attention to several other points: the possibility of continuing to issue credits, the political role of a central bank, and the necessity for all sectors of the economy to be represented.

The choice of which type of gold standard to implement in a country, depends on its specific needs and conditions. For Kemmerer, the substitution of one type of standard for another can be itself a monetary policy device used to stabilize the value of a currency. From this perspective, the GS (or Gold Coin Standard) is best suited to a completely open economy. Yet it is considered the most expensive system since it makes gold coin circulation easier. Given that the GES neither requires gold coin circulation nor gold reserves, it is the most economical of all standards. The GBS does not require gold for domestic circulation either, which prevents hoarding. However, it demands that all gold reserves be maintained and is, therefore, more costly than the GES. Kemmerer takes it for granted that rich countries will opt for the gold standard whereas poorer countries will choose the gold exchange standard. Countries in an intermediary position could choose the GBS.

A second big difference between our two reformers is that for Kemmerer, the GES could be considered the second best solution and not the "ideal currency of the future" as it was for Keynes. The GES is the best system for countries that were eager to avoid excessive fluctuations of their currency on the exchange market but did not meet the conditions required for the adoption of the GCS. These countries devised a system that ensured the convertibility of currencies into gold, while still using silver or paper money within the country's borders. According to Kemmerer, the GES is required for countries that cannot afford the GCS, but should always be considered a transitory stage towards the latter system.

Another difference between Kemmerer and Keynes is the importance they give to political aspects at this stage of their analysis. As Sayer (1957, pp. 57-58) noted: "Keynes did not seem to grasp the most crucial aspect of the phenomenon he observed –namely that a stable gold exchange standard could exist only so long as the political sovereignty of the centre countries *vis-à-vis* the periphery remained unchallenged." By contrast, Kemmerer could not conceive of a GES without taking into account the relationships of dependence that existed between the GS sovereign country and the GES dependent country. He became aware of the importance of colonial relationships in the establishment of this standard.

We nevertheless believe that both, Kemmerer and Keynes, played a central part in promoting the GS and GES systems and convincing the public of the advantages of these systems as proposed in reforms. These first experiences in colonies helped Kemmerer to establish GES in Latin American countries and Keynes to start his career as a monetary

economist. They went opposite ways: Kemmerer remained true to his convictions about the benefits of the GS throughout his life, while Keynes developed a general economic theory taking into account other spheres of the economy. The purpose of Kemmerer's last book (1944) aimed at shaping an enlightened public opinion, and sought to convince Americans of the advantages of re-establishing the GS. Keynes changed his main arguments between his very first book and his last writing on Breton-Woods.

Finally, another common point between the two *money doctors* is their belief that international trade, exchange, and finances are essentially based on trust. This accounts for their argument for currency convertibility into gold coins. One of Kemmerer's main differences with Keynes is that he was eager to trust a system in which stability was secured by an autonomous monetary system, capable of functioning without political intervention. Kemmerer was afraid that abandoning the GS would result in money devaluations. On one hand, he did not approve of the restrictions imposed on exports and imports, which is why he supported the extension of the free international market. On the other hand, he wanted absolute and radical control over a country's currency to be avoided (this occurred under the Roosevelt administration in the United States). Indeed, Kemmerer was strongly opposed to having a monetary system run by the discretionary power of the state, or worse, guided by the hidden desires of politicians.

3. The inelasticity of money supply: Seasonal variations in the money market

Lindsay had already noticed two main constraints with respect to the monetary supply in India. Firstly, the Indian habits of hoarding. The Fowler committee suggested introducing gold coins into circulation against which Lindsay argued that there was a risk that gold coins would replace the rupees: He (1892, p. ix) wrote: "there would be a very great risk of the whole stock of gold been drawn away in exchange for the silver coins…with a gold currency, India would be exceptionally liable to a heavy drain of gold abroad, because her foreign indebtedness was excessively heavy." Lindsay (1892, p. x) sets out three reasons for holding gold coins: "To replace silver coins in hoards, to replace silver coins in the local circulation, to remit abroad, when, owing to an unfavorable balance of foreign indebtedness, exchange fell to gold export coins than to buy bills". The second constraint that Lindsay pointed out was the payment of the home charges to London and the dependency that this created between the colony and the metropolis: "In these circumstances it is of vital importance to ascertain how a gold standard can be maintained on a satisfactory footing with the use of the minimum quantity of gold and the maximum quantity of silver… India might adopt a gold

standard without diminishing much the demand for silver and without increasing in the least degree the demand for gold." (Lindsay, 1892, Preface)

In addition to the problem of hoarding and dependence, Keynes added the urgency need to solve the inelasticity problem of India's money supply. According to him the inelasticity of India's money market resulted from the seasonal variations of the rate of discount, the contagious effects of what was happening in London, and the double transfer of risk between the colony and the colonial power.

> The fact that a temporary increase in the media of exchange can only be obtained by bringing in funds from abroad partly explains the high rate of discount in India during the busy season. […] if funds are to be attracted from abroad for a short period (say three months), the rate of interest must be high enough to repays the cost of remittance *both* ways, which in the case of places so remote from one another as India and London is considerable. If there were some authority which would create credit money in India during the busy season, it would not be necessary for the rate of discount to rise so high. (Keynes, 1913: p. 41)

Kemmerer (1916) also pointed out the lack of elasticity of money supply and compared the situation in India to the period preceding the creation of the Federal Reserve System in the United States. Under the American National Banking System (1863-1913), the US money market could not satisfy the seasonal demand for money[9]. The Americans and Indians both suffered from the seasonal fluctuations of the bank rate, because the supply of currency became scarce when people needed more for funding agricultural harvests. Indeed, according to Keynes, the Indian banking system was not adapted to the needs of the country, because there were important seasonal fluctuations between urban and rural areas due to the harvests. According to him, the use of bank notes and the scriptural currency is not developed enough in India at that time. Its paper currency system was based on the principles embodied in the English Bank Charter Act (1844) and the British monetary system. Nevertheless, there are three important differences between the two systems. First, "…the function of note issue is wholly disassociated in India from the function of banking" (Keynes 1913, p. 39). Second, "…as there is no central bank in India, there is no government banker" (Keynes 1913, p. 40). Third, "…Indian currency is internally (i.e. apart from the import of funds from foreign countries) absolutely inelastic" (Keynes 1913, p. 40).

Keynes criticizes the attempt to copy the British system in India because the former was not really adapted to the real conditions of the latter. The British system's inadequacy started with the separation of two departments: the issue and the banking departments. Indian bank notes were issued by the British government and had to be covered by gold or silver reserves. Thus, if India needed supplementary banks notes or rupees for its activities, the

[9] On the inelasticity of the US money market before the creation of the Fed, see Gomez Betancourt (2010b).

country turned to England in buying council bills through the banks in London or against sovereigns:

> "There is no method whatever by which the volume of currency can be *temporarily* expanded by some credit device *within* the country to meet the regularly recurrent seasonal demands of trade. Cheque-using countries meet the difficulty by increasing the volume of credit created by the banks; most note-using countries meet it by the central bank's discounting a greater volume of home bills than usual, and thus increasing its note circulation reserves. Except for a certain proportion of the business which is transacted by cheque (chiefly in the presidency towns), there is nothing corresponding to this in India". (Keynes, 1913: p. 40)

The British monetary system, through the introduction of checks, was able to offset this obstacle that the Act of 1844 put in the path of economic growth and development. India, therefore, had only two ways by which additional currency could be obtained "…by buying council bills in London or by bringing in sovereigns" (Keynes 1913, p. 40). Keynes introduced discretionary policies in his arguments. He wrote: "If there were some authority which could create credit money in India during the busy season, it would not be necessary for the rate of discount to rise so high" (Keynes 1913, p. 41).

A crucial point for us is Keynes' explanation that an increase of the money supply would not have a permanent effect on prices. Keynes states "that the volume of currency in circulation depends in the least upon the policy of the Government or the caprice of an official... if they miscalculate and lend more than they need, the new rupees must lie in the Government's own chest until they are wanted" (Keynes 1913, pp. 9-10). According to Keynes, some degree of elasticity of the money supply must be introduced.

> "Great advantages may be obtained if the surplus funds in the paper currency reserve be used, not as a permanent or quasi-permanent loan to Indian traders, but to provide *elasticity* in the seasonal supply of currency and to make possible the increase in the stock of purchasing power in the form on money which is *temporarily* required in the busy season, without having to raise it in London. *Permanent* additions to the currency must be obtained in the future as they are at present. But *temporary* additions, due to seasonal demand, ought to be provided by a suitable organisation of credit money in India herself". (Keynes 1913: p. 127) [Italics in the original]

Kemmerer agreed with this argument. But how to increase the supply of money? In Chapter 5 of the ICF, Keynes (1913, p. 77-79) provides the reader with a simple explanation of how the ordinary and extraordinary sale of bills by the Secretary of State affects the volume of currency in circulation. For him, the impact of these sales on the volume of currency in circulation is temporary; "…they cannot permanently increase the circulation without depreciating its gold value…" (Keynes 1913, p. 79), a result which "[the] business community would rightly regard…as a breach of faith…" (Keynes 1913, p. 83) Kemmerer

was also in favor of more elasticity but, as a quantity theorist, he was afraid that an increase in money supply would have an inflationary effect.

For Keynes the gold exchange standard could be and was managed by a currency system. He opposed the mechanical rule of the gold standard and envisioned a greater role for discretionary monetary management (Dimand 1995). We find in his 1913 book some premonitory elements in defense of a nationally managed currency that were further developed in the *Tract of Monetary Reform*, which was published ten year later. As for Kemmerer, he was very skeptical about the manipulation of money and considered the GES he established in the Philippines in 1903 as the example that there was no room for discretionary policies. For Kemmerer, a true GES should not and could not be managed.

4. A Central bank for the colonies: Organizing the Indian banking system

For Keynes, India had to have a central bank[10], and the central bank, in times of crises, would be a lender of last resort. He wrote: "I would emphatically apply to India the well-known doctrine which the powerful advocacy of Mr. Bagehot raised in England many years ago to an impregnable position in the unwritten constitution of this country – the doctrine, namely, that in a time of panic the reserves of the bank of England must, at a suitably high rate, be placed at the disposal of the public without stint and without delay" (Keynes 1913, p. 115).

In *Indian Banking* (Chapter 7 of ICF) Keynes posits that India's banking system is two-tiered. He describes each level of banking as being composed of four categories of banks. Though he summarizes the history and the main activities of each institution, evaluating their strengths and weaknesses, Keynes isn't completely sure of whether the data he has access to is accurate or not. Nor does he know for sure the degree of interaction that takes place between banks. However he provides a complete review of both the Indian banking system and the role played by the Secretary of State in connection with council bills, remittances and reserves. He follows this report with a six-point argument in favor of creating a central bank.[11]

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[10] "The ultimate solution probability lies in the establishment of a central bank for India which shall be the government bank and shall hold the banking and currency reserves at the same time." (Keynes 1913, p. 114)

[11] These are: "(i.) The existing divorce between responsibility for the note issue and that for banking generally is contrary to modern banking practice, and is, in several respects a source of weakness.

(ii.) In particular it leads to the keeping of two distinct reserves – the government's reserves and the bankers' reserves – with no clearly defined relation between them, so that the reserves of the latter may be insufficient, without the assumption by the former of the fact or the machinery of responsibility.

(iii.) It leads also to a want of elasticity in the system, since in modern conditions this elasticity is most commonly provided by exactly that co-operation between banking and note issue which is lacking in India.

As justification for going against the will of both the India Office and the Indian Council, Keynes suggests that these entities, far removed from the heart of the matter, are more interested in their self-preservation than in a better future for India.

To the contrary, Kemmerer wrote about the advantage of the GES Fund and did not propose the creation of a central bank for the colonies. He insisted on the benefits of the GES. Kemmerer (1933, p. 316) argued that the GES had several advantages over other metallic standards. This system was better suited to the specificities of the Philippines and other colonies as it allowed silver coin circulation, which was most appropriate for the small transactions then prevailing inside the colonies. One important argument in support of the GES, also shared by Keynes (1913) is its cutting-costs aspect. Many countries cannot afford a GCS or a GBS. Under the GES the only type of money in circulation is fiduciary money, which is much more inexpensive than gold coins. No gold coins or bars could be hoarded, nor would any reserve be kept in order to meet potential demands.

Additionally, Kemmerer pointed to the advantage of concentrating all reserves into one fund: the *Gold Standard Fund*. This is reminiscent of his proposals for the Fed, when he also suggested centralizing the reserves scattered throughout the United States in order to make them more available. In Kemmerer's words, "where ever dollar can be immediately used in times of need, whereas gold coin in circulation and gold bars in private hands are difficult to mobilize in emergencies, for the very emergency that creates demand for the gold is likely to cause the public to cling to it more tightly" (Kemmerer 1933, p. 316).

Another advantage for colonies on the GES was that they received a commission for the exchanges whenever the government sold drafts through the *Gold Standard Fund.* Moreover, interest was raised by the fund deposited abroad. Finally, the GES facilitated exchange between a sovereign country and its colonies, which promoted the development of trade between those entities. Importers and exporters could always be certain to find the currencies they needed at a fixed rate, which made the exchange process easier and definitely gave a new impulse to business.

(iv.) The absence of a state bank makes it difficult for the government to use its cash balances or any other part of its liquid funds to the best advantage – since it cannot prudently place the whole of its free resources in the hands of a private institution.
(v.) The absence of a central banking authority leads to a general lack of direction in the banking policy of the country: it is no one's business to look at the matter as a whole, to know the position of the market's component units, or to enforce prudence when it is needed. There is a multiple reserve system in theory, but hardly an adequate one in fact; and a danger exists that everyone is reckoning, in a crisis, upon everyone else.
(vi.) The absence of the advice and experience, which the officers of a state bank would possess, is a source of weakness to the government itself. There are no high officials whose business it is to make finance the chief duty of their life". (Keynes 1913, p. 166-7)

Kemmerer considered the GES a temporary system bridging the gap between inconvertibility and a gold standard. Therefore, the GES was viewed as a means rather than an end. For Kemmerer, the GES was only an attempt at adapting to a financial environment, ultimately a means to arrive at the better system of the *Gold Standard*. In short, the GES was considered a temporary system, whereas the GS was the ideal system. One of the reasons for this view was that the GS was seen as a sign of discipline with respect to other countries. Kemmerer describes the GS as an international sign of following sound financial policies and discipline. He explains how important it is for peripheral countries to have access to European and U.S. capital markets.

He is sensitive to the relationships of dependence resulting from the establishment of a GES. He is aware that a real supremacy is created, a hierarchy established between the sovereign country and the colony, i.e. between the GS-country and the GES-country. Kemmerer admits that a country loses a part of its sovereignty when it adopts the GES.

Whenever an economically weaker country holds the currency of another, whenever a majority of its trade involves the country that issues its currency as a partner or as an intermediary, whenever it lacks independent financial means that would allow, due to an autonomous credit policy, its business to run smoothly, it inevitably slips under its issuing country's hegemony.

Indeed, a country must be developed enough to consider adopting the GES. More specifically, it must engage in sufficiently active international trade in order to justify the need of regulating its exchange and currency. The main exchange flow must run between the country on the GES and the country on the GS. For Kemmerer, the GES system requires a significant exchange flow between the countries involved. The amount and origin of capital used in the country determine the amount of compensation to be made by the central banks. Under this view, the main purpose of the system is to stabilize the exchange rates between countries with different, but mutually interdependent, monetary systems.

India's lack of a central bank is clearly problematic to Keynes, who devises a temporary solution for the Indian government to implement until it can be created. His suggestion is two-fold. The Indian government should start by reducing its gold holdings and increasing the reserve portion permanently invested in its securities. This would allow the composition of the reserve backing the paper currency system to change. As a follow up

measure, Keynes' advice to the Indian government is to lend out part of the paper currency reserve nationally during the agricultural high season.[12]

Eventually, Keynes' alternative perspective became mainstream as it was embraced by the British and Indian governments. His proposals became more concrete as the Chamberlain Commission, of which he was a member, unavoidably broached the topic of India's need for a central bank, though it had not been charged with this specific task initially. In 1876, India's three Presidency Banks (the Bank of Bengal founded in 1809, the Bank of Bombay founded in 1840 and the Bank of Madras founded in 1843) were regrouped under the Presidency Banks Act. Following Keynes' vision, the newly formed conglomerate became the Imperial Bank of India in January of 1921 as a result of the Imperial Bank of India Act, and performed the functions of both a central bank and a commercial bank. Preserving the Presidency Bank's functions, this new bank would continue to oversee the note issuing process, manage India's public debt, effect remittances, accept payments and make disbursements on behalf of the Indian Government (Keynes 1971-89, vol. 15, pp. 128 – 219). The British Government did not, however, allocate all of the functions of a central bank to this new entity. This is to say that the Imperial Bank of India could be the Indian Government's banker, and could be a banker's bank, but could manage neither the note issuing process nor the foreign exchange market.

The British, the Americans, and their colonies: This time is not really different

Discovering Lindsay and his writings allows us to shed light on the place of Kemmerer and Keynes in the history of monetary thought and help us better understand the origins of the gold exchange standard notion. Lindsay, who has been largely neglected in literature about monetary reforms, is one of the very few 19th-century authors to whom Kemmerer and Keynes referred in their works on monetary reform between 1904 and 1916. A closer reading of his work gives new insights to our reconstruction of GES analysis. Lindsay appears as one of the missing links between Ricardo, the founder of the *Currency School*, on one hand, and Kemmerer and Keynes on the other. His influence is tangible in the quantity theory of money, their views on the role of central banks, and in their proposals for metallic standards.

[12] "I do not advocate the lending out in India of any part of this reserve, or of the cash balances, at the expense of the stability of the gold standard, or until adequate measures can be taken in other ways to ensure this. But I think the time has practically arrived when the whole of the liquid portion of the paper currency reserve is not required, in addition to the gold standard reserve proper, for this purpose. A busy season will come soon when the government might lend some part of its reserves in India without endangering in the least the stability of its system and to the great advantage of Indian trade. It ought, at least, to have the power to do this." (Keynes 1913, p. 43)

Kemmerer and Keynes agreed about the uselessness of applying a one-fits-all monetary system for different countries, because they were aware of the international monetary system's asymmetry. They also agreed that India did not have to imitate England, because: "England is in matters of currency the worst possible model for India; for in no country are the conditions so wholly different" (Keynes, 1913: p. 36). For Keynes, the colonial power was the exception; the gold exchange standard was the general tendency. He thought that India "… was the first to adopt it in a complete form" (Keynes, 1913, p. 23). E. W. Kemmerer explicitly disagreed in his ICF review. According to him, The Philippines had "… a simpler and purer form of the gold-exchange standard than India" (Kemmerer, 1914: p. 375). This time was no different and the debate for the ideal currency of the future was still open.

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