Unfixed Money: Revisiting Global Monetary History from Mezzoscopic Viewpoint Kuroda Akinobu, U Tokyo

Reductionism to either micro scope of individual level or macro one of state level has made us blind to what actually happened in making transactions to humans' cluster. Looking through history of money global wide, we can find that a money works depending on how to weave relationship among humans rather than on individual choice or governmental order. Cohesiveness in human cluster enabled to create a debt-oriented manner in making transactions, but it inevitably accompanied a narrow limitation of connecting named persons. In contrast, anonymous exchange could be made through using currency, but currency could not have flexible and infinite supply. Since the size of value with currency influenced its velocity heterogeneously, in order to arrange a set of denominations, infixed human cluster depending on currency-oriented manner tended to establish agreements on monetary usages quite locally. Here call the self-organised system depending on situation unfixed money. Global monetary history actually consisted of unfixed money far more than of fixed one which suited reductionism idea.

Money as Social Circuit: The Circulation of Objects and Credit in Early Modern Europe Laurence Fontaine, CNRS, CMH-ENS-EHESS,

Both coins and objects were circulating as a means of exchange at the same time in early modern Europe. In fact, both aristocrats and the working classes would rather use objects. This paper seeks to understand why theses social groups did so, investigating the cultural foundations of this choice, their practices and the consequences on the working of the economy.

Money and Credit in Medieval Europe and Colonial Africa: A Comparative Study Leigh Gardner, London School of Economics

Historically, local currencies and sources of credit have often been distinct from those used in international trade. This paper offers a comparative study of two such cases, in medieval Europe and colonial Africa. In both, highly seasonal income streams and limited government oversight of local uses of currency and credit facilitated the development of systems often described as dualistic. The historiography of colonial Africa has focused largely on currencies used in international trade, while medieval historians have devoted greater attention to the spread of the money economy at the household level. Responding to recent calls for reciprocal comparisons in African economic history, this paper uses a comparative study of medieval Europe and colonial Africa to build a more comprehensive picture of dualistic money and credit systems. As a broad comparison, its conclusions are necessarily speculative. Its aim is to illustrate the potential of comparative studies across time and space to build on our understanding of the process of monetization.

Coping with multiple currencies: cowries, beads and rupees in early colonial Uganda Karin Pallaver, British Museum

In the early colonial period the communication between the newly-established Uganda Protectorate and the East African coast were made very difficult by the absence of railways and roads. Indian rupees, which were circulating on the coast but not in the interior, had therefore to be carried to Uganda by human porters at exorbitant prices. Compared to other parts of the British empire, the monetization of Uganda was therefore very slow and was characterized by a long co-existence of pre-colonial and colonial currencies. For a long period the rupee circulated in Uganda only in the close neighbourhood of government stations, whereas African troops had to be paid in cloth, cowries were used in daily transactions even by colonial administrators, beads continued to serve trade purposes, whereas cattle was commonly used as a store of value.

The aim of this paper is to analyse the intersection of pre-colonial and colonial currency circuits in early colonial Uganda and the different roles performed by the multiple currencies in use.

The thaler and the rupee: silver currencies, merchant communities, and European influence in Zanzibar, 1850-1880

Catherine Eagleton, British Museum

The paper will draw on archival work carried out in January 2011, in the Zanzibar National Archives,

looking in particular at the relationship between the different currencies in use in 19th-century Zanzibar. It has usually been assumed that the various currencies in use had values that fluctuated, but in fact there is evidence that following a meeting in 1862, merchants and European consuls fixed the relative values of the silver and gold coins in circulation at Zanzibar, and these values were then ratified by the Sultan. The Indian rupee was slightly overvalued compared with the Maria Theresa thaler, and so - despite the fact that accounts were often still kept, and prices and fees quoted, in thalers - the rupee very quickly became the dominant currency in the area, and most other currencies stopped circulating on the island. Moreover, this system remained in place with the same fixed relative values throughout the fluctuations in the values of gold and silver in the 1870s, and in the aftermath of the hurricane that hit Zanzibar in 1872. By the late 1880s, when British dominance on Zanzibar had been confirmed by treaties with France and Germany, the rupee of British India was already the only coin in use in trade, and was fast becoming the coin of the East African coastal areas, as well as further inland.

Monetization and the commercialization and proletarianization of human relations in South Asia since 1200 CE Jan Lucassen, International Institute of Social History

In previous publications I have dealt with the relation between coin production and circulation and wage payments worldwide. One of the regions I have concentrated on is South Asia, in particular Northern India in the late eighteenth and nineteenth centuries. This work suggests a positive relation between the production and circulation of small silver fractions, billon, and copper coins, as well as cowries on the one hand and the spread of commercialised human relations like wage labour, sharecropping and similar income-yielding activities of the "labouring poor" on the other.

The question is how to compare periods and regions of high and low frequency of coin circulation. For South Asia since 1200 CE a basic body of literature seems to be available in order to come up with such a reconstruction of the production and circulation of small and medium change(i.e. less the equivalent of one rupee). On the basis of this mapping of high and low circulation subperiods and subregions it ahould be possible in principle to start a discussion on the concomitant change of interpersonal relations. Finally, a discussion is envisaged of the relations between such developments and wider debates of global silver flows and the "Great Diversion".

Porcelain token in Thailand: The Chinese society and the Thai global and local conditions in the long nineteenth century

Shimada Ryuto, Seinan Gakuin U

Thai monetary history provides a unique lesson for historical analysis of the development of money economy. In Siam, present-day Thailand, the current Chakri dynasty was established in 1782. In the meantime, a new type of coins appeared in circulation in the Siamese economy. This new coins was *pee* token coins, which were originally gambling tokens. During the nineteenth century, it became largely used for small transaction especially in Bangkok.

Pee token was initially used as gambling tokens: Indeed, pee tokens were produced by Chinese gambling houses (hongs) for the gambling played mainly by Chinese customers. Customers had to exchange these pee tokens for regular currency such as silver coins or cowry shell after their plays, yet in the course of time gambling tokens became in circulation in the outside of gambling houses.

Although the most predominant *pee* was porcelain token, there were several other types of *pee* tokens in terms of material for production. In the early decades, there were wax or clay tokens, and later glass, lead, brass and other alloy tokens were also produced. In the most of tokens, Chinese name or brand mark of gambling house was drawn on the surface, while it refers to the amount of value in Chinese and/or in Siamese characters on the reverse. Currently, it is considered that the variety of *pee* tokens amounted to more than one thousand at least. In 1871, the decree by Rama VI was issued to prohibit the circulation of *pee* tokens, however they remained in circulation until the early twentieth century.

The reasons for the circulation of porcelain token can be supposed as follows: First of all, we can point out a fact of the shortage of regular currency in the Siamese economy. Siam often suffered from the shortage of small denomination currency in particular.

In the early nineteenth century, Siam had two types of currency, which were silver coins and cowry shell. Gold coins and copper cash were not used as currency. Silver currency, known as *tical*, was the standard coin. This silver coin was issued by the royal authorities and thus can be regarded as the formal

money of the state. On the other hand, cowry shell was traditionally used for ordinary people for daily transaction. The Chakri dynasty took over this currency system from the Ayutthaya dynasty.

The shortage of cowry shell had been a serious problem since the eighteenth century, because the supply of cowry shell relied on the import trade. In fact, in 1744 the government had to issue baked clay coins when faced with shortage of cowry shell, although the issue of this baked clay coins was quite temporal. Around the 1760s, gambling token began to appear in circulation especially in Ayutthaya and Bangkok where lots of overseas Chinese resided. Gambling token partly replaced the role of cowry shell and, to lesser degree, silver coins. In addition, one more noteworthy point is that gambling tokens found a good place in the Siamese currency system. While silver coin was used for large-amount transaction and cowry shell was convenient as smallest denomination currency, gambling token was set as a sort of medium between silver coins and cowry shell.

The second reason as to why porcelain token was circulated is the growing economic power of overseas Chinese people in the society of Siam. Since the early eighteenth century, the Siamese economy had been strongly influenced from the Chinese economy. Under the condition that the foreign trade was a major financial source for the Ayutthaya and the early Chakri dynasties, the trade with China grew up in the course of time.

Along with the growth of the Chinese trade, the Chinese residents increased in the port towns, i.e. Ayutthaya during the Ayutthaya period and Bangkok during the Chakri period. In terms of social class, the Chinese in these port towns ranged from manual labourer such as coolie to wealthy merchants who were engaged in foreign trade and money lending. Such circumstance, therefore, required the establishment of gambling houses. Gambling was an amusement for coolies and it was a good business for wealthy overseas Chinese merchants. Already in the first half of the nineteenth century, the economic power of the overseas Chinese in Siam became the most influential to the Siamese economy. Due to the development of overseas Chinese power, Chinese gambling token came to the circulation. In other words, it might be argued that gambling token was credited by wealthy Chinese merchants in Siam.

To conclude, the porcelain token in Siam stands at a unique position in the history of currency. It was originally produced for gambling parlours, but it became circulated outside gambling parlours and even out of the society of overseas Chinese people. The token played a role of complement between the standard money of silver and the traditional small denomination currency of cowry shell. Although porcelain token seems to be a sort of primitive money such as cowry shell, it is essentially different from cowry shell. This is partly because porcelain token did not have historical background. It suddenly appeared in the eighteenth century, while cowry shell was used as currency for long time around the Indian Ocean. Moreover, it is also a significant point that Siamese porcelain token was a kind of nominal currency. The production cost of token did not reflect in the surface value of tokens. The production of a one-salung token (the highest value token) did not need the thirty-two time cost for the production of a one-solot token (the lowest value token), though the former had thirty-two time surface value of the latter. In this sense, porcelain token in nineteenth-century Siam shows a specific evolution of the Siamese money economy with offering a lesson to the history of currency as an example of a sudden appearance of non-governmental coins.

The "bocade", the currency of the Tucuman province in Argentina between 1985 and 2003: a case of monetary complementarity caused by locality

Bruno Théret, CNRS, Paris IX

First we shall recall the importance of provincial fiscal monies (bonos) issuing in the history of Argentina, and especially in the 1980's in the North West Provinces with the coming back to democracy, and again in the 1990's with the currency board's regime and its crisis at the end of 2001. Then we will show that this importance is correlated with the very specific federalist structure of the argentinian political system. As the apparition of such monies is noticed only in periods of strong social stress and political crisis, they generally are considered as emergency monies only. The case of the Province of Tucuman who issued this type of money for 18 years (1985-2003), is interesting because it appears as a permanent emergency currency, that is a structural complementary currency to the national currency. The Bocade has been very resilient since the 1985-2003 period was very unstable at the national level from a monetary viewpoint (there is first a new national money in 1985, the austral, finishing into a hyperinflation, followed by a

new money in 1991 - the peso - under a regime of currency board (strict convertibility at par with the US dollar) finishing, in turn, into a deep recession and a monetary fragmentation, and finally a large devaluation through "pesification" at the beginning of 2002). The tucuman Bocade went through all these contrasted periods with an apparent "success". In other words it was more stable than the national currency. The paper will investigate the functioning of this provincial monetary regime, and both its complementarity and relative autonomy vis-à-vis the national monetary regime according to the different periods. How were produced the confidence, credibility and trust in the local money? What were the social, territorial and political conflicts the local monetary regime was able to regulate? Isn't it a typical case of what can be called moneraty federalism?

Why did a product have different prices in the complementary monetary circuits in Argentina? (1996-2006)

Georgina Gomez, Erasmus University

In the period in which Argentina had multiple monetary circuits (1995-2002), a single product would have different prices in various currencies, not mediated by a single change relationship. This means that diverse exchange rates operated between currencies for different products. This divergence of prices calls for a revisit of the mechanisms of price determination. In economics, there are four prevalent theories on price formation: it responds to market supply and demand, it covers the costs plus a profit margin, it relates to the amount of money in circulation, or it links to the labour value contained in the product. Economic sociology contributes a set of theories that complement the explanations of economic theory: prices reflect ethical and moral elements, express the status attributed to consumption, and respond to the institutional framework that regulates exchange like quality standards and risks.

The proposed study followed prices in community currency and in formal (state) money in different exchange networks for six months in 2004. The research found that there was no single exchange rate between those two currencies but a whole set of them, one per type of product. Basic products used a higher exchange rate than second-hand clothes, for instance. Labour was almost always valued at zero opportunity cost. In addition, prices were local and embedded in common values. They were also dependent on the social relationships between buyers and sellers. The study concludes that price determination is both an economic as well as a social process, which means that money as unit of account is also bounded to the social relations that sustain it.

Day Two: The complementarity among monies caused by temporality, seasonality, and locality in making transactions (Japan Society for the Promotion of Science Research Project 22330102)

Paper Money Standard in 1935 China: Unification on the Top and Disunification on the Ground Kuroda Akinobu, U Tokyo

Explicitly or implicitly, teleology has dominated the field of monetary history. A dematerialization of currency has sounded to be evolutionary. In addition, a unification of monetary account has seemed to promise a reduction of transaction costs. Along these viewpoints the transition from the dependence on metallic currencies to the unified paper money standard in 1935 appeared to tell us that China had finally got on a track of reasonable monetary system following a long 'chaotic period'. However, the legal tender, *fabi*, was not sole currency in circulation at all even before Japanese invasion in 1937. After the declaration of the currency reform in November 1935, still, provincial paper monies and local private notes circulated side by side. In addition, some coupons for small denominations in local usages newly emerged and complemented what the formal currency could not supply. Popular acceptance of unified paper money in 1935, mainly consisting of 5 and 10 yuan denominations, historically depended on increasing circulation of notes by major banks among smaller financiers before 1935. Until then the banknotes often bearing a secret code had difficulty to circulate beyond the circuit of customers for each financier. Misbelieve in unification would lead the government to over-issue its paper currency without considering local reality.

Issuance of Private Note in Late Tokugawa Japan: the Case of the Itami Brewery Guild Kato Keiichiro, Ryutsu Kagaku U

A wide variety of paper moneys were issued in the Edo period including not only clan notes but also private notes. As for its issuers, clans were the major subjects. However, other issuers, such as merchants,

villages, towns and so on should not be neglected, as their notes would in nature have a different character from the government notes, as the issuers lacked authority.

The reason why private notes were issued and thought necessary has not been investigated enough. In some cases shortage of money was pointed out as an explanation based on the petitions to permit the issuing of private notes. However petitioning does not necessarily show their actual intent. So we have to investigate the petitioners' real intent based on additional documents. In this presentation I would like to consider the case of the town Itami.

Itami, which was located in the suburb of Osaka, flourished because of its Sake breweries during the Edo period. From the 17th century Itami was well-known for its excellent Sake. Almost throughout the Edo period, Itami had been one of the leading Sake production areas, known not only for its quantity, but for quality. Due to its successful industry the brewery guild became more autonomous from the government with the help of its economic power.

In addition to such an industrial development, there was financial progress in Itami. For example inhabitants of the town could pay taxes by cheque. They had current deposit accounts at local exchangers and drew cheques on them. Even for daily usage cheques were drawn.

However since the 1830s the Sake brewing industry experienced a depression due to the macro economical downturn in general, and peculiarly Itami brewers suffered from the "support" of the local government during the 1820s, when it gave loan the brewers financially to encourage them to expand their business.

In the year 1860, the Sake Brewery Guild planned to issue notes. Its only purpose was to help the Itami brewers in financial difficulties. It was never done to supply the means of payment against the shortage of currency.

The private notes had the same format as checks in circulation around Itami. So the name of the drawer - director of the Sake Brewery Guild- and the name of the drawee - one of local exchangers - were printed on their obverse. They had a printed face value of 1 monme(3.75 grams of silver) and 0.5 monme.

Before one year had passed, a serious incident occurred. The exchanger appearing on the notes went bankrupt. It is not surprising that the notes lost its credibility very quickly, although there is no documentary proof available for this. Further research is needed to explain this situation. One possibility is that the people simply found the notes convenient to use, as there had been a shortage of small currency.

Circulation of specific credit called 'Oe-Hoek' and 'Eo-Eum' and their development in the latest Choson dynasty

Oh Doo Hwan, Inha U,

This paper is to analyze the development of Korean credit note. During the transition period from the late 19th to the 20th century in Korea, there circulated various kinds of money including foreign silver monies. But the principal money among Koreans was copper cash called Yopchon(葉錢). Yopchon was small denomination, and heavy to transport as well as inconvenient to calculate. In addition, because the financial institution was undeveloped, the seasonal fluctuation of the exchange rate was severe and there was the possibility of financial depression in the period of collecting taxes in the harvest season.

To modify these problems, some kinds of credit called 'Oe-Hoek'(外劃) and 'Eo-Eum'(於音) were used in Korea. They had the common characteristics as paper notes representing certain amounts of money as written on them. But in principle, they were different in the sense that the former did not create debt while the latter did. But as time went on, they were intermingled and used as the medium of debt creation.

The literal meaning of 'Oe-Hoek' is to order a local government to give tax money to the third party outside of the government. 'Oe-Hoek' was a money order drawn by the central government, and could be paid at the local government office. In that sense, it was a kind of money order functioning as a bill of exchange through the network of local governments. In principle, 'Oe-Hoek' was drawn with the pre-paid receipt of tax. In that sense, it was not invented for the instrument of borrowing. But the crown of Choson dynasty in financial distress used 'Oe-Hoek' to get money beyond the budget. In short, the crown got tax money by creating debts through 'Oe-Hoek' from the government. And some local governments also abused tax money by misusing 'Oe-Hoek'. These worsened the financial situation of Korea.

The literal meaning of 'Eo-Eum' is 'secure as said'. 'Eo-Eum' had a characteristic as a certificate of deposit as well as a promissory note. It was drawn as a certificate of deposit with a personal letter in the earlier times. But later, it was issued without the letter and circulated widely as the instrument of credit

creation like promissory note nowadays.

As shown above, 'Oe-Hoek' and 'Eo-Eum' were drawn basically as certificates of deposits rather than as securities for borrowing. But 'Eo-Eum' as a certificate of deposit was not distinguishable from that of promissory note. In that sense, 'Eo-Eum' was easier to issue and circulate more widely than 'Oe-Hoek'.

'Oe-Hoek' and 'Eo-Eum' were credits for merchants not for consumers. And there was no name of the payee on 'Oe-Hoek' and 'Eo-Eum'. Therefore, they were negotiable and could circulate anonymously. But because the issue system for them was not institutionalized, and the form was not well-defined, consequently the extent of circulation was limited. In that sense, in spite of the negotiability of them, 'Oe-Hoek' and 'Eo-Eum' were in-between the named and anonymous security.

But as the modern financial institutions were imported, especially foreign merchants and banks tried to introduce 'notes' similar to those used in their home countries. In financially advanced countries, promissory notes were institutionalized and some of them were developed into banknotes and a privileged banknote became a legal tender. Foreigners wanted to integrate Korea into their own sphere of credit circulation. On the other side, Korean government and merchants tried to develop their own banking system and issue their own notes. They wanted to develop 'Eo-Eum' to 'the bill payable at sight' and eventually to the most developed form, banknote.

In this process, the form of traditional 'Eo-Eum' was changed. The anonymity of 'Eo-Eum' was enhanced and the size of 'Eo-Eum' decreased and the form became closer to the usual promissory note and its character became closer to the bank check. For example, the Korean traditional bank called Chun-Il Bank issued traditional 'Eo-Eum' and tried to circulate them widely. Though it circulated widely as the bank check, it failed to develop into banknotes. And the Korean government tried to establish its own central bank and issue banknote called 'note payable into cash(兌換券)', but it also failed.

On the other hand, foreign merchants tried to issue their own notes. Japanese and Chinese merchants were important. But especially, the Japanese bank, Daiichi Ginko succeeded in developing its 'tegaseki(手形)' called 'Korean money depository note(韓錢預手形)' to 'the bill payable at sight' and finally to the banknote and even to that of the legal tender.

As the Koreans failed to develop its traditional 'Eo-Eum' to the institutionalized banknote, 'Eo-Eum' remained as the private medium of credit, or at best like a bank check. 'Eo-Eum' issed by the Korean banks such as Chun-Il Bank or Han-Sung Bank were similar to the bank check, 'the bill payable at sight'. In contrast to 'Eo-Eum', 'Oe-Hoek' was prohibited by the colonial government, with the system of national vaults and modern financial institutions that were established in 1905. From this time, the tax money could not be used as the merchant capital through 'Oe-Hoek'.

In addition, as the situation of money market was different between Europe and East Asia, the payment system and the development of debt creation system were also different. Related with these factors, as the consumer credit of deferred payment was non-existent in East Asia, similarly the use of personal check is not common in East Asia nowadays, while bank check is widely used.

Monetary History in the Eastern Mediterranean in the Middle Ages, judging from imitated coins Hiroshi Kato, Hitotsubashi U, and Michiya Nishimura, Hitotsubashi U,

The conceptual framework of our research is simply shown in *Figure 1* on the triangle of the state, international Market and local markets.

Figure 1 Triangle: State, International Market and Local Markets

The monetary affairs are complicated phenomena in which those in the international and local markets, as respectively shown in the left and right parts, are deeply connected each other in reality. However, the monetary affairs in the international and local markets could be distinguished and be separately dealt with at least in theory.

The key concept of our research is the imitated coin. In history, the monies have been imitated by two means, the imitation of the design and the manipulation of intrinsic value (fineness and/or weight).

Being based on the dichotomic theory on the monetary origin, the state vs. the market, the imitated coins reflect the delicate relationship between the supplier of coin, the state or local community, and its user, the market.

In the theory in which the reputation of coins is guaranteed by the market, it is the intrinsic value of coins to guarantee the circulation of the coins. In this theory, the value of coins is almost synonymous with the value itself of coin's metals.

On the contrary, in the theory in which the reputation of coins is guaranteed by the state, it is the reputation of the political power or authority of the state to guarantee the circulation of the coins, which the state issues, in the market.

In the former theory, the value of coins is automatically estimated in the market. On the other hand, in the latter theory, the value of coins tends to be estimated by the monetary policy of the state.

The imitated coin is the phenomenon which is mainly observed in the circulation of coins guaranteed by the state. And, there is necessarily a time lag between the emergence of political newcomer and the circulation of the coin issued by the newcomer, although it is politically so strong.

In this context, the imitated coin is a phenomenon which is observed in the monetary market in the transitional period between the emergence of a political new comer and its acceptance in the market.

Therefore, the imitated coin is a subject suitable for the research on the coexistence of many monies and the complementarity among them in the international context of the transition from one monetary power to the others.

Being based on the numismatic evidences, four major phenomena of the imitated coins can be observed in the Eastern Mediterranean in the Middle Ages as shown in Figure 2. These four phenomena reflect the transition of monetary power in those days.

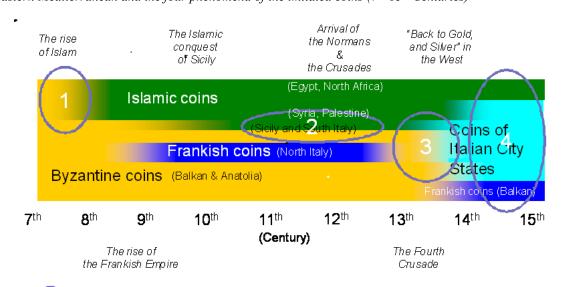
The first is the Islamic coinage in 7th century until the monetary reform by Abd al-Malik (Umayyad Caliph, ruled 685-705).

The second is the Sicilian and South Italian coinage and the Crusader ones in Levant from the 10th to 12th centuries.

The third is the coinage of the Italian city states and the Crusader ones in Romania (which means "the territory of the Byzantine Empire") in the 13th century.

The fourth is the coinage of the Byzantine Empire and the Mamluk Sultanate from the 14th to 15th centuries.

Figure 2 The hypothetical figure of the monetary circulation (mainly, of the high denominations) in the Eastern Mediterranean and the four phenomena of the imitated coins (7th-15th Centuries)



are the phenomena of the imitated coins examined in this presentation.

Use of Money in the Byzantine Empire: Some Cases of the Transactions Nishimura Michiya

The Byzantine Empire, which remained until 1453, was the continuation of the Roman Empire. The Byzantine money had therefore the continuity of the Roman one. Its origin is back to the early 4th century, the era of the Constantine the Great (ruled 306-337). The Empire used gold, silver and copper as materials for coins, and after the late 11th century alloy of these metals. Until the middle of the 14th

century, the monetary system of the Empire is summarized as a kind of primitive gold standard according to the edicts.

We can observe the temporality, seasonality and locality in making transactions on the Byzantine money. For instance, on the state finance, the gold coins clearly had the seasonal cycle of the payments of the salary in spring around Easter and the land taxation in September. Other cases can be found in the textual evidences, concerning the harvest, the fairs et cetera.

From the general survey of preceding studies on the Byzantine money, however, it seems to be difficult to examine precisely whether the temporality, seasonality and locality in making transactions caused the complementarity among monies or not. One of the reasons may be attributed to the absence of sufficient statistical data to explain the complementarity among monies.

This presentation examines use of money in the Byzantine Empire by the qualitative analysis. To be concrete, this presentation shows a mechanism on the land taxation called *charagma* from the 8th to 12th centuries and the some cases of the transactions mainly until the 12th century. This presentation is not exhaustive but aims to offer the springboard for further discussion.

On the one hand, it is generally said that the commerce and the monetary economy in the Empire were flourishing particularly in comparison with the contemporary Western Europe. On the other hand, the Empire has been solely characterized as a huge system of the redistribution by some scholars. On these two characterizations, there has been the controversy in the field of the Byzantine monetary studies from the final quarter of the 20th century to today. However, this presentation thinks that the controversy would be derived from obscurity of the different layers of monetary use and that the both aforesaid characterizations could be coexistent in the Empire.

Reconsidering al-Maqrizi's view on Money in the Medieval Egypt Kato Hiroshi

In contrast with the Byzantine economy, which was characterized by redistribution in terms of Karl Polanyi, the economy in pre-modern Muslim societies was a market-oriented economy. Muslim political unites understood well the economic and social functions of money, and considered monetary operation as one of the tools for implementing governmental policies.

The Islamic monetary history started from the monetary reform by 'Abd al-Malik, 5th Caliph of Umayad Dinasty (ruled 685-705). The monetary authorities issued three kinds of coins: gold dinar, silver dirham and copper fals. In principal, the gold dinar and silver dirham of the three coins were legal currencies which were under the control of the state, and the rate of exchange was officially established between them. On the other hand, the copper fals was the subsidiary coin for use in the small transactions of everyday life.

The worth of the three kinds of coins was estimated by standard money, the gold dinar or silver dirham. The monetary transactions involving the three kinds of coins were difficult, and sometimes, the monetary authorities tended not to keep the regal standards of the weight and purity of gold and silver coins. The monetary policies seemed to be well managed so long as the precious metals were abundantly reserved in the treasury.

However, Egypt has gradually run short of precious metals, gold and silver in 12th century. Conflicts appeared at the time of fiscal crisis when the state lacked an abundant stock of precious metals and often simply resorted to monetary manipulation by debasement of standard coins to maintain a source of revenue. From the end of 14th century to the beginning of 15th century was the period of a turning point in the monetary history of Egypt.

At that time, Egypt was in a critical situation because of the population decrease caused by the black plague, the sever power struggle, the ruin of villages, and the decline of industry. In those circumstances, Egypt was attacked by a serious economic crisis. Al-Maqrizi (ca. 1364-1442), one of the eminent historians in medieval Egypt and a student of Ibn Khaldun, published a book entitled *Kitab ighatha alumma bi-kashf al-ghumma* (Helping the Community by Examining the Causes of its Distress) in 1405, and in which he diagnosed "the famine and inflation since 1404", a period in which al-Maqrizi himself experienced, and offered a prescription of its treatment.

According to him, this economic crisis happened for three reasons: the corruption of politics, the rise of land price and the circulation of copper money. The most interesting description in the diagnosis of this economic crisis is the analysis of the circulation of copper money. This presentation aims to introduce *Kitab ighatha* as a text for examining the characteristics of the Egyptian monetary system in the Medieval Egypt.

Is Paper Money Just Paper Money? Local Variation Across the Paper Monies Issued by North American Colonies and Why These Differences Mattered: 1690-1775

Farley Grubb, U Delaware

The structural design of the paper monies issued by British North American colonies between 1690 and 1775 varied across colonies, as well as within a given colony over time. This was monetary experimentation on a grand scale. Paper money was not just paper money! To show this, the structural characteristics of all the paper monies issued from Georgia in the south through New Hampshire in the north between 1690 and 1775, including the national Congress' Continental Dollar in 1775, are cataloged. Special attention is paid to (1) was a redemption date set and if so what was the issue-to-redemption interval; (2) was there an emission date printed on the bill; (3) did the money pay an interest rate and if so what was that rate; (4) what was each paper money redeemable or valued in; (5) what was the nominal per capita amount issued; (6) what role did local legal tender laws play in the function and performance of local paper monies; and (7) was this information conveyed to the public by being printed on the face of each bill issued. Special attention is given to the various ways a paper money was anchored to real values, e.g. to future taxes, to sinking funds, to land-mortgages, to legal tender laws, etc., and how these anchors differed in performance. In addition, attention is given to the distinction between discounting and depreciation as articulated by Benjamin Franklin. Paper money anchored by future redemption out of a real-value sinking fund would trade contemporaneously at a time discount off its face value. This was not depreciation—though it was often confused for such. Paper money with a contemporaneous anchor, e.g. used for paying contemporaneous taxes or mortgage payments, did not function the same and when it traded below its face value—that was depreciation.

Harvests and Financial Crises in Gold-Standard America Christopher Hanes, SUNY Binghamton (co-author Paul W. Rhode)

Most American depressions and financial crises of the pre-1914 gold-standard era were caused by fluctuations in the cotton harvest due to exogenous factors such as weather. The transmission channel ran through export revenues and financial markets under the pre-1914 monetary regime. As a poor cotton harvest depressed export revenues it reduced international demand for American assets, which depressed American stock prices, raised interest rates, drained deposits from money-center banks and precipitated a business-cycle downturn. These conditions in turn created a financial crisis.

Seasonality of currency circulation, some examples from Antiquity to modern periods Georges Depeyrot, CNRS, ENS

The documents concerning the seasonality of variation of the value are rare, even very rare. Our aim is not to give a corpus of these documents and sources but to select some example and to show how the value of currency can change from one period to another. Two examples are given, one in Egypt during the 4th c. AD, when the cost of gold coins were changing according to the moment when the taxes were collected in gold (every 4 years). The second one is more documented: during the 18 th century France, the administration enquired about the coin circulation and the need of currency. The documents explained how, when and why the coins were missing from time to time, especially in summer.

Seasons, transport and the circulation of copper coins in Early Modern Castile Claudia Jefferies, City U London

This paper discusses the links between the transport and the agrarian sectors within the context of coin debasement in 17-th Century Castile. It is based on a statistical approach, which aims at reinforcing the views held by contemporary authors dealing with the problems that coin debasement brought to the real sector of this agrarian economy. The importance of landbourne and absence of waterbound means of transport in the arid kingdom of Castile strengthened the links between transport and agriculture. In addition, relative scarcity of draught animals brought the two sectors even closer together. The reduction of the value/ weight ratio of billon and scarcity of silver coins of small and medium denomination exerted

further pressures on the already scarce supply for transport. Qualitative documental evidence dealing with this phenomenon will be analysed. By taking into consideration the Castilian agrarian cycle, it will be attempted to determine the seasons within the agrarian year when bottlenecks in the transport sector were at its tightest. Through carrying out a statistical cointegration test and by analysing the variance of the resulting residuals, it will be attempted to explain the fluctuations of the exchange rate as a partial consequence of those bottlenecks.

French banknotes circulation: structural breaks and evolving seasonal patterns as a window on French history

Patrice Baubeau, CNRS, Paris X

The combination of two series, a long-term one on the overall banknotes circulation from 1840 onward, and a detailed one by banknote value for the 1866-1896 period, plus monthly money supply analyses for the 20th century, gives us an original glimpse on French history. Major structural breaks come in the series, which is no surprise, at key political and military moments. But the breaks themselves reflect something deeper: the evolving nature of the banknote, that is, its monetary power. This changing nature is best seen through two other lenses. First, the seasonal pattern of banknotes circulation gives hints about their uses and the main forces driving them into circulation. Second, we can see what kind of asset they collateralize, most notably through the growth and the temporal profile of their circulation.