1. Laissez-faire Money or Free Banking

A question should be asked : If other goods supplied by the free market serve consumer interest better, then why should money not be supplied by the market? If deregulation is the main thrust in all fields of the economy, why then, it should not be so in the field of banking and finance, particularly in the provision of money?

This way of thinking has gained momentum for a variety of reasons: First, the failure of monetary authorities to give stable money was visible soon after the World War II. Consequently there has been, since 1970, a flood of economic literature giving the results of historical studies of the working of free banking in the past. Prof. Hayek's view emphasizes that "the past instability of the market economy is the consequence of the exclusion of the most important regulator of the market mechanism, i.e., money, from itself being regulated by the market process." Prof. Hayek therefore wanted an immense educational task to be carried out, aimed at the abolition of the state monopoly on money supply, which encouraged many economists to study and research "free money" or laissez faire banking. Secondly, soon after 1970, controls over international financial transactions began to go one by one resulting in a great expansion of world trade, which compelled various countries of the world to evolve several new and innovative ways of making payments for their trade transactions. Thirdly Prof. Hayek's view was confirmed when it was understood that the Great Depression of the 1930's, the inflation of 1960's and the stagflation of 1970's were all results of the failure of monetary authorities worldwide. And lastly, as against the wishes of the governments, international banking successfully invented various devices by securitization and derivatives to meet the growing demand for money in the form of near moneys, recently with the application of computers and information technology. E-money has entered the stage—the entire payment system across countries has become so rapid and beyond the control of any government authority that it becomes difficult for any one country, however big and mighty, to manage money effectively. No wonder, there is a widespread demand to denationalize money.

Rationale for Government Monopoly

What was the rationale for a royal prerogative or state monopoly of money? Or what is the case for state intervention in the field of money when the competitive market process is considered better for the rest of the economy? To answer this question, normally four types of arguments are put forth:

a) externalities in money
b) money as a public good
c) conditions leading to natural monopoly which may involve moral
hazards in the monetary system, and
d) fear of excessive competition leading to waste of resources and

inconvenience to the public.

The first two arguments may not keep us long; they can be answered straightway. The externality of money or money balances has been shown by Paul Samuelson who maintained that there exist positive private costs while there are no social costs in holding money balances. This discrepancy between social and private costs therefore makes it necessary to have government control on money. However, there is a snag in this argument. There are social costs for holding money balances such as costs of keeping watch over fraud and stealing. There are also private benefits such as those accruing from liquidity. It is true, social benefits are immense from having paper currency instead of gold coins: but such benefits cannot be charged just as we cannot charge for the use of language. Sometimes when the market expands and technology develops, we find ways to internalize these externalities just as it happened in the case of cable TV and telecommunications. Besides, the benefits available from money cannot be separated as social and private benefits.

As far as the public goods argument is concerned, the defining two characteristics of public goods: non-excludability and non-rivalness are not found with money or money balances. If money balances are given to A, they cannot be given to B, i.e. one can exclude people and if A consumes money balances, the same money balance cannot be consumed by B, i.e. it is rival in consumption.

In favour of the two major arguments, natural monopoly and fear of excessive competition, we may present several monetary and banking phenomena which led to the state monopoly of money. First, if there are several units issuing banknotes, several types of banknotes may be in circulation. It will be difficult for the public to know the solvency of each banknote. Probably their acceptability may differ from place to place and from person to person. No machinery may exist to detect fraud leading to many unscrupulous people entering the banking trade resulting in chaos and confusion in the field of monetary transactions, with the result that many banknotes either are not accepted or accepted at a substantial discount. Therefore to bring smooth acceptability and unfettered monetary transaction, only one authority (i.e. the state) may be asked to manage the issue of banknotes, so that only one uniform type of bank note remains in circulation and efficient machinery to detect fraud can be instituted.

Let us examine the business of banking. Banks have their liabilities i.e. deposits, to be paid on demand or immediately, say in period 1 while the banks' assets mature after some time, say in period 2. This time lag shows the inherent instability in the working of banks. How can any bank pay for its liabilities if there is a run of depositors for encashment? This indicates the need for some agency to provide liquidity at such times—a lender of last resort, without which there may be a further contagion effect leading to a general bank run, putting the entire banking system in jeopardy. If one bank fails to repay its deposits, depositors in other banks would also run for withdrawal of their deposits lest their banks too fail

to repay. It is an open secret that no bank, howsoever sound and solid it may be, can pay all its depositors if they ask for withdrawals at the same time. To save the entire banking system from disaster, it was felt that a Central Bank should step in, in order to make arrangement for immediate payments to restore confidence and stall general bank runs.

However, some economists view this phenomenon differently. In order to stall the genesis of such a bank run, there is a natural tendency on the part of a bank to economise the use of its own reserve. This is possible by expanding the bank so that more and more intra-bank payments arise involving only the transfers in account, i.e. crediting some accounts as receipts and debiting some other accounts as payment without touching the reserve. The limiting case is one huge bank with branches all over the country. Thus, there is an inherent tendency in the banking business to move towards a big bank as the natural tendency that may suggest a need for bank-monopoly. These economists feel that competition in banking cannot be sustained.

There is a third phenomenon in banking which arises when banks begin to act in concert, for creating money by way of loans to their customers —which may lead to waves of booms and depressions. If one bank increases its liabilities, its reserves would surely be depleted; but if simultaneously, other banks also do so, the first bank would receive more money, building up its reserve. If all act in concert, none should worry about its reserves because the multiplier related to reserve money and total stock of money would increase and banking system can manage with the same amount of base money or reserve. It means that the multiplier for determining total money supply would change leading to booms and depressions in the economy. The question is :

How do we avoid or control these waves of booms and depressions say without some conscious efforts to control money supply or influence the multiplier?

Related to this there is a fourth phenomenon, which raises the basic issue of banking system, i.e. the natural tendency towards over-issue of paper money. If banks are allowed to issue paper money for which the cost is negligible, while in exchange they receive valuable assets, yielding handsome returns, they will, if left unchecked, not have the incentive to issue as many banknotes as possible, leading to more currency in circulation than what is needed. In that case there is on one the hand the fear of unscrupulous, dishonest, evil forces entering the banking business and on the other hand, there is a fear of inflation, even hyperinflation in the economy.

To guard against such phenomena it was felt that the government or its agent, the central bank, should take a monopoly of bank note issue to bring uniformity in note issue and guard against fraud. Moreover it should also act as a lender of last resort to stave off crises of confidence and inherent instabilities in the banking system. It should also be entrusted with the responsibility of determining

the right quantity of money to avoid booms and depressions resulting from excess issue of money when banks act in concert or dishonestly issue money without proper reserves. To this end, the responsibility of the monetary authority was vested in the central bank. Thus the central bank has acquired a monopoly of note issue, its notes are legal tender, it is the banker to the government, it controls credit, and acts as lender of last resort.

How has the system of a central bank as monetary authority worked so far? To answer this question, Prof. Hayek wrote: “I think it is very urgent that it becomes rapidly understood that there is no justification in history, for the existing position of a government monopoly of issuing money. It has always—since the privilege of issuing money was first explicitly represented as a royal prerogative—been advocated because the power to issue money was essential for the finance of the government, not in order to give us good money, but in order to give to the government access to the tap, where it can draw the money in need by manufacturing it.” (Taking away 2 lakh Sterlings of Goldsmiths from the vaults of London Tower by a Stuart King in the 17th Century, and a similar incident in Italy during the 15th Century as well as the present practice of deficit financing on a large scale by almost all countries in the world is a sufficient testimony of Prof. Hayek’s view). If Prof. Hayek is right, can free money avoid all such phenomena and also give us some advantage over the modern system of government managed money?

History of Banking

Historically, we have had an experience of free banking in various countries during different periods of time. During the free banking experience, either gold or silver was used as base money and convertibility of banknotes to the base money was taken for granted. While the present day literature of free money makes studies under three different situations such as (a) Gold or Silver or some other commodity as base money, (b) Fiat money or moneys as base money and (c) free money without any base money. For (b) & (c), we do not have any historical experience except rational arguments based on certain developments, which are shaping in modern times but without proper testing. Therefore, we shall make a somewhat detailed study of the situation (a) and give a brief outline of possible developments in situations (b) & (c).

Let us take the question of competitive note issue. Historically there are several countries in which at one time or the other, there were conditions of free banking with the least restrictions by the government or the central bank. Scotland (1716-1844), New England (1820-1860), and Canada (1817-1914) are typical examples where during these periods free banking with commodity base money prevailed. In the US there was apparently free banking before the Civil War. Besides these countries, during the 19th century, Australia, China, Columbia, Switzerland, France, Sweden, Spain, Ireland were other countries where some amount of free banking was in existence.

Probably, most of the evils of free banking such as multiple-note issue, lack of information about the solvency of the bank, excess note issue, note issue as a result of speculation, narrow and restricted acceptability of banknotes, are found mostly in the US. In the US it did not work so well because there were several inhibiting restrictions such as prohibition of branch banking, contractual obligation to convert notes into gold on demand, prohibition on rate of interest to be paid on demand deposits; all these led to creating crises of confidence in banks. Moreover, there were conflicts between state and federal regulations, which did not allow banks to work smoothly and freely.

If we examine the Scottish experience as against the US experience, we find that by developing branch banking or by mutual agreements between banks, notes of different banks were made widely acceptable without any discount. There was also a private clearing system among banks by mutual agreement so that notes issued by members of clearing banks were widely acceptable without any difficulty. There was even a secondary market of different types of banknotes where information regarding solvency of different note issuers was obtained, and such information was reflected immediately in the prices or discounts of different notes. In the secondary market, insolvent, dishonest, inefficient units were detected and weeded out. In a regime of note issuing monopoly, the business community could not have adequate information about reserves or any other fraud taking place. At the same time, it could not obtain adequate information about the market situation so it would always fail to act in time to prevent loss of confidence.

Let us now refer to the Lancashire experience (1790-1830) regarding the use of discount bills of different amounts and also with different dates of maturity. The discount bills were issued by local traders and were circulated as money without any difficulty. On the contrary people found such discount bills more convenient since they bore some rate of interest and were money in the true sense. During that period Bank of England notes were available but were not used in circulation by the public. This shows that money is what people accept as money; not what the state declares as money.

During the period of the Bullion Committee discussions, we do not find any significant criticism of the working of the country banks in England and Scotland. David Ricardo in all his writings did not find fault with them while there was a good deal of controversy regarding the working of Bank of England. Ricardo was vehemently critical of the Bank of England's role in causing the depreciation of money and high prices of bullion and other essential commodities. Adam Smith, while examining the working of Scottish banks did not find any fault with them. On the contrary, to him, if convertibility was assured, there could never be any excess issue of notes. If bankers adhere to their norms, they meet the needs of trade and cannot have any over-issue. During this period, there were in Scotland, various inter-bank agreements to accept each other's banknotes at par; there

were clearing house bank arrangements where exchange at par of various banknotes was effected. And at several places, secondary markets of banknotes were developed where the solvency of each issuer was tested. If there is free money in modern times, one would expect development of various ways, such as issuing mutual fund accounts, or commercial papers, or bank receipts, or some mortgage-backed derivatives, dispensing the need of any commitment for base money which may act as near-moneys. Can we have a regime of free banking again?

F A Hayek and other economists have made various suggestions regarding the possibilities of establishing moneys which can guarantee the value in terms of purchasing power of different types of baskets of goods and services, thereby dispensing the need of any base money. This may seem to be imaginary at present, but may be a reality in the near future if we look to monetary developments that are taking place in international transactions. There is no gold standard at present, yet large-scale international payments are effected without difficulty.

Can we not conceive a situation of fiat money without the state monopoly of note issue? Or how can we keep the government aside and create an institution, which can supply us such fiat type money? This was a question posed even before Ricardo's times as early as the time of Bullion Committee discussions in the first and second decade of the 19th century. Ricardo did not want to give an authority of fiat money to Bank of England or to the government. He wanted to establish a National Board of Currency that would look after the issue of fiat money whose quantity is fixed under normal circumstances. If in the event of emergency this fixed amount is to be exceeded, it can be done with the permission of parliament and that to by specifying an amount by which the fiat issue is to be exceeded. In Ricardo's scheme, there was neither a central bank nor any power to the government nor any possibility of exceeding the fixed amount without the knowledge of the public. Ricardo did not want the use of bullion for internal circulation of money; he needed gold only to meet the requirement of international transactions and hence his Ingot plan which England adopted in 1925 about one hundred years after his death. This is one way of creating fiat-type money without base money. Ricardo wanted to do away with gold for internal transactions while the present system of international financial transactions using computer and e-money do away with gold in foreign exchange. Are we not much ahead on the way to fiat money without any base money at all?

Keynes was not the only man who described gold as a barbaric relic. So did Plato and even Ricardo did not want gold to be taken out from the depths of the earth, only to go as deposits in the depths of bank's vaults in so far as internal circulation of money was concerned. The euro-dollar development is a further step to do away with gold in international transactions.

Hayek also conceives of a situation where different types of fiat moneys may exist; if brand names are well developed. Then banks may issue their fiat money assuring its value in terms of some kind of purchasing power or linked to some index numbers. One can even conceive of the situation in which such fiat moneys that are redeemable in terms of value of certain commodity or a basket of commodities. We should remember that the purpose of saving is different for different individuals. Some savers may wish to ensure stability of value in terms of food items, or in terms of a general living index or in terms of a given basket of goods and services. Banks issuing fiat moneys can cater for such diverse needs, bringing in circulation different fiat type moneys. If Germany's hyper-inflation (1923-24) could be controlled by issuing currency with the backing of land, and in modern times for years together inflation at a rate of more than 30 to 40 percentage points can go on in Latin American countries with paper money—without any type of convertibility—then it is easier to think that Prof. Hayek's conception of money can easily work. Competition of banks for such fiat type moneys would ensure the survival of the fittest and weed out inefficient units. Thus, in a situation of commodity base money, or fiat-type moneys as conceived by Ricardo or Hayek, or value assured money without any base money, the free banking system may work. One can even show that it can work with all the smoothness or without any harmful state interference.

Working of the Free Banking System

If free money can be established, can it overcome the problem of systemic crisis (or bank run as it is normally known)? In this regard we should answer three related questions:

(1) Is the fear of bank runs so serious in the real world as it is usually made out to be?
(2) To what extent are the legal restrictions imposed by central banks or the state really responsible for aggravating the crisis or preventing its solution?
(3) In a free-money situation, can we devise new methods or arrangements with a view to preventing such bank runs at all, or to bring into operation immediate steps to stop it from aggravating?

Answers to these three related questions would not only indicate the feasibility but also the superiority of free money in practice. Historically such bank crises were never serious except in the US. In all other countries where free banking with commodity base money had worked such crises were rare, and only in exceptionally few cases, serious. Differing experiences between the US and other countries may have been due to the presence of a larger number of restrictions in the US. Sometimes such crises elsewhere had occurred due to over-confidence arising from the fact that the central bank would act as lender of last resort and bail out defaulters. Many countries where free banking was working avoided the occurrence of crises even without any central bank or without any other private arrangement working as a lender of last resort.

In the US, there were occurrences of wildcat banks and loss of confidence in banks from time to time. Many times such occurrences were due to lack of branch banking, so that banks were confined to particular local areas. Due to different state and federal laws a correspondence system could not be developed. Moreover legal restrictions were severe, such as prohibition of suspension of paying money on demand deposits and insistence on receiving demand deposits without paying any rate of interest, etc. There was no possibility of suspending redemption of notes or deposits temporarily or offering any rate of interest by way of compensation on delayed payment. Due to the different state and federal laws, many bankers were induced to adopt unfair means in banking and above all, there was no effective money market for immediate encashment of the banks' assets. At the same time action taken by the Federal Reserve System was mostly delayed and half-hearted. All these restrictions at cross-purposes were responsible for wildcat banking or somewhat frequent bank failures in US during the 19th century. While during the period of the Great Depression i.e. 1929-1935, it was the fear or rumour of depreciation of dollar that led to bank runs, there was no loss of confidence in the working of banks.

Many times restrictions imposed on banks to maintain reserves have led to bank runs with contagion effects. The famous story of a German Chancellor who asked two taxis to remain standing at every taxi stand while allowing the third to go with a view to ensure availability of taxis, found that in spite of adequate number of taxis in the town, no one could use them because on each taxi stand, two taxis remained non-working. Similarly, in case of reserves of base money, which may be adequate to meet the demand and even changes in demand. But the rigidity in rules of reserves may not allow them to alleviate the loss of confidence by helping each other. The commonsense of the business community, if allowed to work, could evolve practical solutions for helping each other. In a free money situation, the reserves will be freely used; the use of reserves of others could be obtained by giving higher rate of interest. This will be possible because banks will also be eager to avoid bank run spreading to them. If there is a development of asset-backed derivatives, the market in such derivatives would easily solve the situation. Studies of past experience have indicated that central banks have acted as lenders of last resort usually too late and the banks could never obtain enough and timely information about the demand for money. While in free banking, the remedies for changes in demand are applied at points where they should be really applied. Such action is being taken automatically and hence there is no chance for any initial change in demand to develop into a serious proportion by way of contagion action.

Let us again take another situation where banks are free to issue banknotes as well as to have deposits created by them. Many times there are changes in demand for banknotes as against bank deposits. Sometimes the public would like to have more of banknotes and less of deposits, although they do not wish to change their total stock of money. In the present system when the public

switches over from deposits to banknotes, banks' reserves may be depleted which may initiate a crisis because some of the banks would attempt to build up their reserves as they had to issue more banknotes. In free banking, there would be no such need. Banks themselves can switch over from deposits to banknotes and vice versa—without making any changes in their normal reserves, which they consider necessary to meet ordinary demand for base money. In the present system, we have a needless crisis, while in free banking there will not be any crisis because there is no cause for loss of confidence. Changes in demand between different types of moneys, or even near-moneys are likely to happen from time to time. This can be met without difficulty in free money, but not in the present system of managed money.

The current situation encourages reckless and dishonest people to enter the banking business because central banks, acting as lenders of last resort, have to save them even though they do not deserve any help. In fact such dishonest banks are saved in order to save the whole banking system while they cannot be weeded out for lack of a competitive system. Many a time, such crises have occurred because of an inflationary situation or changes in nominal rates of interest as a result of the monetary policy of the central bank. Thus, not the regulatory function, but the monetary function of the central bank becomes the cause for a crisis of confidence. It means that the central bank becomes the cause of crisis and then begins to kill it, achieving no useful purpose while creating lot of economic troubles. Thus those whose duties are to provide stability to the banking system create crises of confidence.

Can free money devise new mechanisms in order to deal with any possible bank run? It can. Imagine a change in the nature of checking services. Instead of issuing cheques payable to demand deposits, they could well be made payable in equity of mutual fund accounts. They could be made payable, say in units of Unit Trust of India, or in terms of commercial papers which are generally transacted in big volume on daily basis in money markets. Even some standard derivatives may be considered appropriate for checking services. These devices are not perfect substitutes for demandable bank debt because such derivatives involve the possibility of changes in value, while some deposit holders may prefer immediate payment without loss of value. A demand deposit system has another advantage: it keeps depositors eternally vigilant about the solvency of banks. Although such devices may help in preventing bank runs to some extent, we may need another type of bank-run proofing arrangement. In fact, we can have one such device if we are prepared to give up the condition of immediate payment on demand for a right to suspend the payment temporarily, say for 15 days or one month. Such a step involves payment of interest and the longer the period of suspension, higher the rate of interest. This kind of "option clause" system was used in Scotland during free-banking era to give breathing time to banks in danger to salvage their position. If such an arrangement is evolved, contagion action would be checked and bad banks can be weeded out without any side effects. In this connection it has been pointed out that the option clause available

in the Scottish Banks was never used and hence its efficacy cannot be safely vouched for. But, one can say that the fact that such an option clause existed may have been a strong deterrence against bank runs and hence was not used at all. Instead of being a deficiency the non-use of the option clause may well be a virtue in the banking system. It may happen that a bank may go under although it did not use the option clause. This may be so because the bank may feel that it had not acted as it should normally have and hence it may feel that it could not save itself by putting into effect the option clause. But if the bank is essentially sound it can save itself during the general bank-run by the use of option clause. At least it can prevent the contagion of the bank-run. A third run-proofing arrangement can be to ask banks to make an adequate capital base or some provision of double liabilities to shareholders of banks. At one time in the past, in Sweden and Scotland, such arrangements were made. We can evolve some arrangement of private deposit insurance so that depositors are assured of the safety of their deposits. The existing arrangement of tax-funded deposit insurance schemes by the government lacks competition and incentives, which private deposit insurance could provide and probably such arrangements may work better in a free money regime. Can we say that such run-proofing arrangements may work even when we have fiat-type moneys or competitive payment systems without base money? Probably, as in modern times, in almost all countries paper notes are not convertible in gold, they are fiat moneys and as we have discussed earlier in regard to Hayek's proposals, a guarantee in terms of general purchasing power may bring about a system without any base money. All the run-proofing arrangements discussed by us earlier could work without any difficulty in other two regimes i.e. in fiat type moneys and paper moneys without base money. In the era of computers and information technology there is a greater possibility that such arrangements could work better. We can also say that arrangements evolved in free money systems would solve the problem of industrial fluctuations more easily than in today's regime of managed money. We have noticed how central banks have failed to prevent inflation in 1970s and failed to solve it in 1980s. In most cases, central banks have worked according to political needs or to safeguard the interests of the state as perceived by them, instead of in the general interest of economic growth and stability. They have acted too late, and many times the lack of in-time information remained the principal reason for the failure of monetary policy. The Keynesian argument that an increase of money supply has a healthy impact on trade and commerce was first tried out as early as 1705 by John Law and failure of his policy was witnessed by the world as early as 1716, in France when John Law himself established his bank with that aim. (See article by J.K. Horsefield, "Duties of a Banker" published in paper in English Monetary History edited by T.A. Ashton and R.S. Sayer). John Law recommended his scheme for Scotland but Scotland did not accept it. While in a free money system, the rate of interest is allowed to be adjusted automatically to natural rate of interest resulting in no divergence between real and nominal rate of interest. This fact would eliminate chances of business fluctuations arising from monetary factors.

At this stae, a question can legitimately be raised: what is the purpose of such an exercise of free or laissez faire money when the world over the state is in total control of monetary system? Surely, one cannot even imagine that any body will give up this monopoly when they have so many benefits! Is there any hope that governments will give up their powers? Still, there are various reasons for us to go through such an exercise. First, this concept can act as a benchmark for monetary policy. It may indicate to the government concerned where regulations can be relaxed, or between the two alternatives available for restrictions which one should be adopted. Second one does not know when any country or even the international monetary payment system may face an unprecedented crisis. In such an event, the authorities concerned are ready to grasp at any straw. And therefore the world may adopt free money system if a well thought out alternative is readily made available. Have we not noted the change from command economy to market economy since the 1980s? Who knows such a change in banking and financial system may come about in the beginning of the 21st century? Third, even in the field of monetary system, we notice a good number of changes towards deregulation. For instance, the world over there is a demand for an independent central bank. The International Monetary Fund and the World Bank are no longer in control of the international payment systems. The international banking system has changed dramatically since 1975. Various derivatives have been evolved which minimise the use of fiat or bank money. There is already a march away from government money in the domestic market. The nature of commercial banks has changed radically. We now have bank receipts, commercial papers, credit cards of different types and various types of mutual funds, which today constitute the major portion of monetary transactions. Central banks have had to give up many regulations, and the use of banknotes and coins is becoming more and more limited.

Nobody talks of convertibility of paper money in gold in domestic transactions and even in international transactions, payment in gold no longer takes place. On the contrary, the payment is also received in Dollars or Yen and the major key currencies maintain their stable relationship by way of changes in the rate of interest. Can we not hope to hasten this process and obtain fiat type moneys with guarantee in terms of some values, which can work without central banks, or any monetary authorities, only through the market process? Can we hope to reach this stage in the beginning of 21st century? We are progressing far more rapidly than expected. When Hayek wrote about denationalisation of money he did not expect that information technologies would bring changes in financial systems of the world so swiftly.

We have the euro-dollar mechanism providing stateless money and safe and profitable investment avenues. We have the Internet, a communication system which is outside the control of any one country. We have the semiconductor chip enabling any individual to assess large amount of monetary data from all over the world in a very swift manner. We have public key encryption which enables any individual to communicate anywhere in the world without anybody else's

knowledge about it. We have a system of smart cards providing individuals the freedom to deal in electronic money for buying and selling without the knowledge of anybody else. All these developments work with a much lower cost and so swiftly that one can say that there is a "digital liberation." Computer bits which perform the functions of money work anywhere in the world and can work for any individual and work so swiftly and with so low a cost that it can safely be said that we can distinctly see the freeing of money from the clutches of government. We only await some ground rules to be established for the working of free money. Anyway, the Government is loosing its grip over money management and it will have to fall in line because electronically transacted debits and credits will become the principal mode of payment very soon. Thereby both private money and government money may exist side by side and inefficiency of government will soon make its money very insignificant and relatively less useful.

So far we have tried to show that from past experience competitive money can solve various problems which arise when we go for paper money and deposit banking. Can we expect the same results when the development is rapid due to synchronisation of the profound changes, which we find during the second half of the 20th century (i.e. the use of computer on a large scale and development of communications technology)? Both of them have led us to the development of e-money & e-commerce heralding the new information age. How do we see the development of money and banking with respect to free money regime in the 21st century? Will there be a regime of free money? Or, free money along with government money? Or, looking to government behaviour, will it try to throttle the development of e-money such that it can still control as before and continue the regime of managed money? These are pertinent questions need to be answered. The regime of managed money can be said to be artificial because the growth of money is due to its evolutionary process and hence it does not need any control, direction, or regulation. Obviously there cannot be a concept of monetary policy, or the "right quantity" of money or even money to act as "neutral money". Money has been brought into existence by the market process. It is an economic good and it is the market process, which would cure it if defects in its working were developed. It is the market process, which would decide what the right quantity of money should be. The monopoly of money by the state was unnatural, a hurdle in the evolutionary process and if it goes out in the 21st century it would be better for the use of money in the economy. Money as an economic good will give better services.

Development of e-money is a continuation of the same process of evolution of money. There is nothing revolutionary about it except its speed, cost-efficiency and privacy. It covers the whole world; connects two concerned parties without the intervention of any third party; works with the speed of light. It can be operated without any obstacle from national boundaries. It is truly universal. In short, it efficiently solves all the inconveniences of direct barter that we were trying to solve since long. We have not been able to provide a more efficient device than the use of e-money.

Right in the beginning we have had tobacco, barley, cowrie shells, as money. We then used metallic money, and of late paper money and deposit money. We need some token to work as medium of exchange for our transactions. Ideally the device should be speedy, portable, divisible, storable, Human ingenuity has always invented various devices to meet needs but every invention works both ways: meeting needs on one hand and creating some problems and difficulties on the other. During our endeavour, we try to obtain the first as much as possible and try to avoid the second as far as possible. So is the case with money too. No longer is it necessary for both parties, buyer and seller, to effect the Transfer of deposits from one account to another as was necessary up till the Re cent past. Again it is not necessary to do this work by writing a cheque or by telegraphic transfer. We can do this through smart cards without going to a bank or without writing a cheque or without sending a telegraphic transfer. Smart cards and microchips show our bank balance and also undertake transactions. Thus the advent of multiple forms of digital cash on smart cards, credit cards, debit cards and the internet has changed the monetary system. Although these new devices are not legal tender, they work more efficiently than the legal tender money. Currency as such is no longer required. On the contrary to use currency as medium of exchange is more inconvenient. There is a risk involved in holding currency; there is a loss of interest in holding it whereas there is no risk in having cash by a smart card and we earn a rate of interest in addition. Already there is a decline in the use of currency in most advanced countries. We have noted earlier how despite the existence of Bank of England notes, discount bills were used in the Lancashire area (1790-1830).

The same may happen if the government does not come in the way acting as a spoilsport. Truly, money is what money does. Smart Cards and credit cards are more accepted as money than the legal tender currency of the central bank. The use of e-money is so popular, speedy and widespread that it has already taken its roots in the developed countries like USA, Canada, Western Europe and Japan. It is now widely used in e-commerce in the emerging economies like South Korea, Taiwan, Singapore and Malaysia. China and India both have adopted it almost in all big transactions. Banks in India have already started issuing various types of electronics cards and use of the computer is visible even in the rural areas of India. The introduction of e-money is on so large a scale that it cannot be curbed by any government action. The time to nip it in the bud has gone. Now it is a grown up child and cannot be done away with. One country howsoever big and mighty it may be, it cannot take steps to curb the progress of e-money.

What is then the effect on central banks of the growth of this kind of e-money? It seems that even though the government may declare it's own currency as legal tender, the commercial world may not accept it as a common medium of exchange. At the most the central bank money may remain as one among many moneys. Its existence as a sole medium of exchange is gone. Moreover, there will not be any definite relationship between the government money and other

types of moneys or money-substitutes and hence by changing the amount of government currency, the government would not be able to change the total supply of money. Although the government is an important economic participant, and it can exert some influence in domestic transactions, it becomes relatively insignificant in international transactions. With increasing globalisation, monetary policy will have very little meaning or influence. The only wise course for the governments of various countries is to evolve ground rules for the working of e-money and see that they are observed by all. The sooner this task is achieved the better, because free money will soon come into existence not only in developed countries but in developing countries. At any rate, as Hayek wanted, the monopoly of government money should go, and if at all the government money exists, it may be as one of many moneys and not the only money.

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