

A note on

Money, Money Supply and Monetary Policy

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Introduction

This paper attempts to give in brief a fairly simple picture of the monetary aspect of the Nepalese economy. Here we leave the sophisticated mathematical analysis of money supply concept and monetary policy adopted by the monetary institution. This paper is divided into four Sections: definition of money, money supply in different periods, determinants of money supply and the monetary policy adopted.

Defination of Money

We can not meaningfully define money by saying that in the traditional economy there was barter. Moreover, the definition is more complicated because from the early days it has been appearing with different forms, faces and performed different functions at different periods, places and situations.

Traditionally money was known as medium of exchange. In the absence of money every day exchange would be both tedious and costly. Hence we can say that money has lessened the difficulties of barter economy and has made exchange less painful.

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Now there has been three distinct categories of the definition of money. The first type of definition is very simple and a old one, hence it is known as narrow definition of money. This definition says that money is anything which has the general acceptability. This includes items like currency consisting of paper notes and coins in the pockets and purses of the public. It also includes demand deposits consisting of checking accounts in commercial banks. Since demand deposits and currencies are freely convertible with each other, both are money to an equal degree and are accepted in payments for goods and services.

Thus in short the narrow definition of money says that money is anything which has general acceptability and consists of two items namely currency and demand deposits.

The second category of definition is the broader definition. Under this, money empirically consisting of currency, demand and time deposits in commercial banks. The broader definition is broader in the sense that it includes an additional item that is, time deposits. Monetary economists like Milton Friedman David Miselman have followed the second category of definition. They tend to level it as the empirical definition of money.

The third category of definition is the more broader definition of money. The very term suggests that this definition has included more variables than the above definitions. Accordingly, the more broader definition of money defines money as the sum of the currency, demand deposits, the time deposits at commercial banks and saving accounts of financial intermeditaries. This definition is preferred by Gurley and Shaw.

The first category of definition is levelled as M1, second category of definition as M2, and the third as M3.

Money Supply

In practice first definition i.e. M1 is widely accepted and adopted by different countries including USA. According to this version the total of the currency and demand deposits held by public is known as total money supply.

Table 1
Money Supply in USA (Feb. 1976)

(U.S. \$ in billion)

Components	Total	Percentage
1) Currency (incirculation)	75	25.3
2) Demend Deposits (personal checking Account)	222	74.7
Total	297	100.0

Source - J.D. Gwartney, Macro Economics, Private and Public choice, Academic Press, New York 1 san Francisco 1 London p.

The above table 1 shows that total currency in circulation in USA is about one fourth demand deposit is there fourth of the total money supply. This shows that demand deposit is by far greater than currency in circulation which is a healthy sign of developed banking system.

In Nepal also we have same traditional version regarding money supply, Though the history of money, specially of coins is too long as in other countries but the usage of notes is our recent fashion and demand deposits still are not matured in Nepal. Nepal Rastra Bank (NRB) was established in 1956 as a central Bank. We find reliable statistics regarding total money supply only after 1956, published by this bank.

Table 2
Money Supply in Nepal (July 1957, 1967, 1977, 1980)

(Rs. in Million)

Components	Total			
	1957	1967	1977	1980
1) Currency (in circulation)	67.7	368.6	1193.2	1799.3
2) Demand Deposits (personal Checking Accounts)	24.2	199.7	659.7	1031.1
Totat	91.9	568.3	1852.9	2830.4

Source - Quarterly Economic Bulletin, Nepal Rastra Bank.

Table 2 shows that total money supply increased by 16.1 percent annually during 1957 to 1980. However the annual increment in total money supply during the first decade (1957-67) is 19.9 percent in contrast to the annual increment of 12.6 percent during the second decade (1967-77). It means money supply increased by a higher rate during 1957 to 1967 than 1967 to 1977. Money supply increased by a lower rate i.e. 15.2 percent during 1977-80. Currency increased approximately by 27 times during 1957 to 1980 while demand deposits increased by approximately 43 times during the same period. Here we can suspect that banking habit of the people is increasing over the years. However the domination of currency is still there.

Table 2 shows that demand deposits consists of about one third and currency consists of two third of total money supply while table 1 shows currency consisting of one fourth and demand deposits three fourth of total money supply. There is a contrasting situation. It seems to be some short of correlation between the use of demand deposits and the development of the country.

Determinants of Money Supply

The above analysis shows that money supply is increasing but not at an uniform rate over the years. Now it would not be irrelevant to see the factors affecting money supply. Theoretically, supply of currency (known as primary money) bears a positive relationship with the purchase of foreign currency and gold, printing of currencies to meet other government expenditures extension of loans of commercial banks and discounting the paper for member banks. Supply of demand deposits, (often known as secondary money) bears a positive relationship to the amount of primary (base) money and negative relationship to the ratio between deposits and currency with the public and ratio between reserve and deposits in the banks.

The main causes for the rapid increase in money supply in Nepal in different years are because of tremendous increase in assets i.e. foreign assets, claims on government and bank credit to private sector as shown in following table 3.

Table 3

Factors Affecting Money Supply (July 1957, 1967, 1977, 1980)

Factors	(Rs. in Million)			
	1957	1967	1977	1980
1. Foreign Assets, Net	62.3	408.5	1875.2	2231.9
(a) Foreign Assets	(62.3)	(408.5)	(2232.7)	(2806.0)
(b) Foreign Liabilities	-	-	(357.5)	(574.1)
2. Net claims on Govt.	14.5	5.8	749.8	1258.3
(a) Claims on Govt.	(59.3)	(88.7)	(917.6)	(1421.3)
(b) Govt. Deposits	(44.8)	(82.9)	(167.8)	(163.0)
3. Claims on Govt. Enterprises	-	38.0	511.0	1131.0
(a) Financial	-	(3.8)	(177.5)	(429.4)
(b) Non-Financial	-	(34.2)	(333.5)	(701.6)
4. Claims on Private sector	21.4	136.2	864.2	1916.5
5. Time Deposits (-Increase)	11.1	73.1	1370.1	2454.9
6. Net Capital and other Items (-Increase)	+ 4.8	+ 52.9	777.2	1252.4

Source - Quarterly Economic Bulletin, Nepal Rastra Bank.

Net foreign assets increased approximately by 36 times in 1980 in comparison of 1957. Simple growth rate for the increment in net foreign assets stand approximately as 35 during this 23 years period. Similarly Net claims on government, claims on government enterprises & private sector also increased tremendously during this period.

Foreign assets is increased due to the receipts of foreign cash grant, favourable term of trade with India and the balance of payments surplus. Increase in claims on government, private sector and government enterprises i.e. increase in domestic credit as a whole is because of the increasing activities in these sectors.

Money supply bears an inverse relationship with time deposits and net capital and other items. So increased money supply may be offsetted by increase in these variables.

Monetary Policy

It is said that "Money is a good servant but bad master." So it must be controlled & supplied according to the need of the economy. Now a days, monetary authority controls the volume of money supply by means of monetary policy. Monetary policy, defined as a "policy employing the central bank's control of the supply of money as an instrument for achieving the objectives of general economic policy" (H.G. Johnson) includes bank rate, cash reserve and liquidity ratio, open market operation etc. Nepal Rastra Bank, the monetary authority, can alter the volume of money supply according to the need of economy by means of its following monetary weapons.

(1) Reserve Requirement Ratio—The most effective monetary instrument in the hand of Nepal Rastra Bank is Reserve Requirement Ratio. Commercial banks are required to keep in reserve (cash plus deposit) some percentage of total deposit liabilities with NRB. NRB can alter total money supply changing this ratio according to the need of the economy. It was first time introduced in 1966 to regulate & control commercial bank's credit. Commercial banks are directed to maintain at least 8 percent of their total deposit liability as reserve with NRB in 17 Sept. 1966. Later in mid July 1974 this ratio was reduced from 8 to 5 percent and again increased from 5 to 7 percent in September 1978.

It was also directed to commercial banks to keep the reserve with NRB by opening a new "special Account."

(2) Interest Rate—NRB changes the volume of money supply and diverts the flow of funds to desired priority sectors by means of rate of interest. In August 1966, NRB directed commercial banks to make an upward revision in their interest rate. Again NRB drastically revised interest rate upward in 28 April 1975. The main objective to increase interest rate was to attract greater amount of private savings by offering positive real interest rates and to discourage the use of savings in non essential consumption expenditures and unproductive type of investment. The revised interest rate was able to institutionalise the scattered and small savings of public and helped to improve monetary imbalances in a short period to some extent but it initially brought contraction in bank credit. So the rate of interest was slightly revised downward in order to increase the flow of funds to sectors of higher priority in different times after 1976.

(3) Refinance Rate—Nepal Rastra Bank, as a guardian of banks provides the loan to commercial banks if they need and charges interest on that loan. The very interest rate is known as refinance rate (discount rate). For the first time, this rate was fixed at 6 percent in all types of borrowing on 14 the January 1967 and this rate continued to April 14, 1971. But presently this rate ranges between 4 to 14 percent for different loans and the rate for over due refinance is 2 percent more than specified rate. NRB can change the volume of money supply and divert the flow of fund to desired sector by changing the refinance rates to commercial banks.

(4) Since 1978, NRB has been adopting another method of credit control of commercial banks by imposing the ceiling on their credit. It imposed a ceiling on commercial banks credit by directing them to keep their total outstanding credit as on mid July 1978 upto a maximum of Rs. 1300 million. The ceiling would include credit to private sector, Government financial enterprises and Rice Export companies. The ceiling for mid July 1979 and 1980 was Rs. 1920.0 and Rs. 2366.2 million respectively where the ceiling cover the credit to private sector and all non financial public enterprises including Rice Export companies. The statistics for mid July 1978 show that the bank credit to above mentioned sectors remained within the ceiling because bank credit during that period was Rs. 1273.3 million. However the bank credit exceeded the ceiling by the amount Rs.52.9 and 198.0 million respectively on mid July 1979 and 1980. Still being a direct measure, it is much more significant and is expected to be more or less effective though the magnitude is yet to be assessed.

(5) Open Market operation

Open market operation is considered as most volatile instrument in the hand of central banks of developed countries to control the stock of money supply. If central Bank thinks to increase (decrease) money supply, it enters to market and buys (sales) government securities. But in a under developed country like ours, where large sector of economy is not monetised and not developed security market, central bank cannot achieve the desired goal by means of open market operation.

Conclusion

Thus money which is known by every one is defined differently. However in practice, its narrow definition is accepted by most of the countries—which includes currency and demand deposits held by public as two variables of money supply. We have also the same version where currency and demand deposit are considered two constituents of money supply. In Nepal, total

money supply was 91.9 million (currency 67.7 and demand deposit 24.2 million) in July 1957 and 2830.4 million (currency 1799.3 and demand deposit 1031.1 million) in July 1980. Thus both currency and demand deposits are increasing because of the increase in assets and developing banking system. In contrast our economic growth rate is very low. It means increase in money supply is exceeding the increase in real goods and services, Now we have a situation where more money is chasing with less output. So we can say that increased money supply is also responsible for undesirable inflation which we have here in Nepal. To check inflation or to fulfill the objective of growth and exchange stability money supply should be controlled according to the need of the economy NRB, the monetary authority of Nepal is trying to control money supply and to divert the flow of fund to desired sectors by means of monetary instruments as reserve requirement ratio, interest, rate refinance rate and open market operation. However, NRB is not fully able to achieve its desired goals by means of above monetary weapons because of the presence of large non-financialised sector, not developed banking habit of mass people and under developed financial market. Similarly monetary policy is not so much effective in Nepal due to predominance of external factor. Thus the success is mainly limited to the mobilization of deposits through positive real interest rates.

References

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Book Review

S.N. Eisenstadt, Tradition, Change and Modernity, WILEY-INTERSCIENCE, WILEY, LC 73-7560, 1973 \$ 14.00 (ISBN 0-471-23471-0).

Professor S. N. Eisenstadt's book **Tradition, Change and Modernity** is a study on social change. It is a compilation of fifteen essays that were written over a period of ten years. It focuses on "modernizing" societies of the Third World. In the attempt to study this dynamic concept in a historical and comparative perspective, the author demonstrates the need for a rethinking in the methodology of the subject.

The author, in approaching this highly complex field of study, which is known to be highly fluid and also a less agreed upon concept in sociology, bases his argument on two points: First, "change" as a process has "structural orientations" and cannot be dichotomized into "traditional" and "modern" and second, the "characteristics" of change when juxtaposed in a historical perspective shows "continuities" of essential structures which fall on a pattern. The approach taken by the author is macrolevel as the study probes into three other aspects of change—organizational, structural, and symbolic.

Much of the writing on this field can be said to be parochial, biased, and questionable. Western concepts have been used to study extant societies of the "developing" countries. Until recently this method of "borrowing and applying" inconcrete case studies has been challenged at it has proven to be inadequate in embracing traditional and conditional traits of the case understudy. It has proven to be inadequate to identify and predict patterns. The author cannot escape this pitfall in his approach either, despite his awareness of the problem of transplanting across cultural boundaries. In the initial few chapters of the book, there is quite an elaborate analysis of the concept of Protestant ethics and at the end the author is unable to relate it to the study of "transformative" capabilities of two oldest societies of the world—China and India.

Of course, the author shows concern regarding the limited tools that are at hand. He

appraises briefly some of the studies made in this field. He provides critically some major drawbacks concerning them which I find quite impressive although not very illuminating. As a matter of fact, the end result of this book to me is an incomplete work, and the book should be taken "tentatively."

The book is not convincing. Although Professor Eisenstadt is apt in saying that "modernization" as a concept cannot be taken lightly and cannot be explained in terms of few indices such as "stages," "increased participation," "universal education," "higher social mobilization," "economic development," "stability," and many more, nowhere in the book do I find practical illustrations to exemplify his position as what the alternative should be when these indices are inadequate measurements of "modernization." Nowhere in the book do I find any convincing illustrations, or his fundamental assertion that the concept of modernization cannot be taken universally nor do I find a convincing answer as to how the various characteristics of change can be put on a comparative scale. My only dissatisfaction with the book is that I do not find illustrations to back up many of the theoretical expositions in the book except for few.

However, there are positive sides of the book too. The author is quite right in suggesting flaws, limitations, and inadequacies in the use of available and limited concepts of social change in classical sociology. In showing that "development" is not a unilinear process and not all traditional values and symbols change to the same degree in all societies, he has one truly important message to convey which can be said to be his central argument of the book: tradition has important symbols which continue for a long time in history despite efforts to discard them—the case studies of China and India show this.

No doubt the book is an eye opener to those advanced graduate students who have grasped the irrigating, often-misused jargons of behavioral sciences and who have grasped the nuances of the English language to understand those jargons. For a beginners like myself, I tend to wander about. It is in Chapter Eight that I find myself completely submerged as theoretical concerns are related to practical case studies.

In this chapter, adaptability of the Chinese and Indian societies are analyzed; i.e., how well these societies respond politically to changes impinged by internal and external forces. China is found to be less "adaptive" than India as the latter shows amazing adaptability both by the "center" and the "periphery." Traditional symbols in both the societies are found to be very strong even when they undergo some major political transformations. For instance, the symbolic rejection by the Chinese emperors to reform several aspects of the Chinese institutions in order to

cope with the Occidental influences is seen to perpetuate even in later period when Koumintang held power. Similarly, symbolic institutions such as family, religions, and traditional loyalties are cherished by the people of China even during totalitarian rule today .

On the other hand, India's responses to modernity are highly variegated and more adaptive. Traditional structures such as caste, ethnic bond, family ties, and many more traditional symbols of solidarity and cohesion have been found to move in both directions: adjustment and rejection towards change. The puzzle here is how India has been able to strike a balance which is found to work pretty well without resort to coercive measures as prevalent in Communist China.

Overall, the book is not for casual reading. The use of words that are highly jargoned occasionally obscures the true intended meaning of the author. I find the language of the book strangely recycled. If Professor Eisenstadt had only expressed abstract ideas and theoretical propositions, of which there are many in the book, on a simplistic plain with due respect to short sentences and illustrations to back up his argument, I am positive, the book would be well received by students studying social change.

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