

Functional and structural complementarities of banks and microbanks in L.D.Cs

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Abstract: The prime objective of this paper is to explain the concept of monetary payments as a foundation of an analytical construction of microfinance institutions (microbanks) and official banks (banks) functional complementarity in Less Developing Countries (L.D.Cs). The second objective is to show that in L.D.Cs production process, part of the non spent generated income is preserved after the payment operation, in the form of deposits accounts near microbanks and banks. The share preserved near microbanks, when it is not used to finance consumer expenditure and the income generating activities, is often invested in a portfolio of deposits account near banks. Microbanks are structurally complementary to banks. They are, for this purpose, a "*super deposits accounts de facto*" for households which do not have access to banks financial services. From a functional point of view and taking into account their role in microfirms production cost funding, microbanks cause monetary income generation. They are "*banks de facto*" and are functionally complementary to banks in L.D.Cs.

Jel Classification: E42, E44, O11, O17

Keywords: *Microfinance institutions, non monetary intermediaries, official banks, money creation, Banks, microbanks, complementarity, monetary intermediation, financial intermediation, West Africa, Less Developing Countries.*

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Introduction

The preponderant role of microfinance institutions (*M.F.I*), in developing economies these last years caused a relevant literature. Many recent works stressed their effectiveness to provide finance to micro-generated income activities and to support economic development and living standard improvement in developing countries [Lapenu and Al., 2004].

All the economists agree on the fact that *M.F.I* are intermediaries which finance income generating activities of small firms which do not have access to bank financial services [Burkett (1989), Besley, Coate and Loury (1993,1994), Besley (1995), Besley and Levenson (1996), Ghatak (1999), Morduch (1999, 2000), Lelart (2000a, 2000b, 2002, 2005a, 2005b), Doliguez (2002), De Aghion and Morduch (2005), Aniket (2005), Basu, Blavy and Youlek (2004), Barboza and Bareto (2006)]. Thus, within the framework of reforms policies, it is necessary to try to find arrangements which can make possible the creation of dynamic links between them and banks [Germidis, Meghir and Kessler (1991), Gladston (1994), Seibel (1996), Varghese (2005)]. All these reasons justify why the supports received by *M.F.I* from Non Governmental Organizations (N.G.O) are welcome [Hardy and Al., 2003].

Generally, the monetary and financial structure in L.D.Cs was subject to a particular analysis since about thirty years. The first analysis trying to apprehend L.D.Cs monetary and financial aspects are the well-known McKinnon [1973]¹ and Shaw [1973] thesis. In spite of the notorious contributions of these relevant works, they do not clearly explain what can be the real monetary and financial world in L.D.Cs. The expected effects of financial reforms which emanate from this thesis, did not meet the expectations in most developing countries and more particularly in Western Africa countries [Lambert and Condé (2002)].

It is from this critical point of view that the "neoliberalist" analysis [Taylor (1983), Wijnbergen (1983), Buffie (1984), Lim (1987), Betty and Hong-Bum (1992)] seems to constitute an alternative to the "neoliberal" hypothesis and thus appears to be a foundation of an analytical framework which integrates the official banks and *M.F.I* in a structural concept of money and finance and their links with the production process in L.D.Cs.

Two main questions are examined in this paper. How can we interpret, on a new view, the *M.F.I* function beyond the simple role of financial intermediary in which they are generally recognized? Which are the consequences of this new interpretation on the monetary and financial systems analysis in L.D.Cs?

To answer these two questions, we propose to proceed by a three parts development. In the first part, we make a feedback of the basic analysis of complementarity between *M.F.I* and official banks in a structural or an institutional view. We explain, in the second part, the concept of payment and its links with money issue process as a foundation of *M.F.I* monetary function analysis. In a third part, we proof analytically the monetary function of *M.F.I* in L.D.Cs.

1. From institutional distinction to structural complementarity's of M.F.I and official banks in L.D.Cs

A meticulous observation of the contemporary economies of L.D.Cs shows that the *M.F.I* are, on a first point of view, savings vectors between saver-lenders and borrower-spenders which do not have access to official banking financial services. Moreover, *M.F.I* often have the deposit accounts near the official banks and invest the collected funds there since they are not intending to credit operations. The *M.F.I* have financial function and are structurally complemented to official banks, despite their institutional or structural difference. What distinguishes from a structural view *M.F.I* from the official banks in L.D.Cs?

¹ See also, McKinnon R.I., [1993].

1.1. The institutional distinction of M.F.I and official banks

It is true that the M.F.I which make productive microfunding do it on a saving basis (a non spent part of household's income in the form of portfolios of deposit account hold near them). However, does this operation truly differ from that of the official banks in their credit operations to firms production cost funding? The answer to this question is related to a precise conception of the nature of money issue. But before starting discusses this question and its links to M.F.I intermediation interpretation, we consider now what structurally distinguishes it from the official banks in L.D.Cs.

1.1.1. Official banking institutions in L.D.Cs

Let us mention that the official banking structure in the L.D.Cs, generally, and in particular in West Africa², consists of a central bank, trade banks, development banks, savings banks, insurance companies and postal banks. The official monetary and financial system is dominated by trade banks and development banks, with a principal structure which is characterized by a great participation of the State and foreign banking firms which often hold majority of the shares. These official banks financial services are largely intended to the governmental company and to some large private companies. Compared with the M.F.I operations with respect to the households and microfirms funding, the share of official banks credit operation remains relatively weak [Nissanke, 2001].

1.1.2. M.F.I in L.D.Cs

The M.F.I are small organized units or self-help groups of finance, more or less institutionalized specialize in credit operations for microfirms and low income households. They are essentially cooperative type organizations, credit associations refund by N.G.Os and the self-help group such as rotating saving and credit association (R.O.S.C.A's). These organizations are, generally, qualified as "*informal*" or "*semi-formal*", because they are not subject to the legal statutes of a financial institution and not constrained by reserve requirements. In this same line of activities, we can find the individual lenders and deposits collectors. These private organizations or private lenders respond to particular customer's financial request, generally excluded from the official banking structure. They offer savings like basic financial services and use it as loans funding [Lafourcade et al., 2005, p. 1]. The credits granted are intended to microfirms production cost funding as well as the households consumer expenditure. Briefly, let us mention that several other organizations, like the commercial banks, the specific controlled financial institutions and N.G.Os also intervene in the microfinance sector in L.D.Cs generally and more specifically in W.A.E.M.U countries³, [Lelart, 2005, op.cit]. Apart from this institutional or structural foundation of M.F.I and official banks distinction in L.D.Cs, the distinction is also made, in general, between banks and the so-called non-banks intermediaries, from an analytical point of view.

1.1.3. The institutional distinction of banking institutions and the other financial intermediaries on an analytical view

The official banks and the other financial intermediaries (M.F.I in L.D.Cs for example) distinctive analysis are not recent. In the analysis, concerning the consequences of the increasing number of financial intermediaries in the process of economic development, proposed by Gurley and Shaw in 1960, a particular attention was focused on the preponderant role of so-called "*non-monetary*" or "*non-bank*" financial intermediaries, more precisely, in chapter 6 of *Money in a Theory of Finance*. The authors show that non-banks intermediaries create non-monetary indirect "debt" in the form of financial claims whereas the banking intermediaries create monetary indirect "debts", the whole in a

²We will often refer to this geographical area like example of less developing countries.

³The W.A.E.M.U is the Western African Economic and Monetary Union. This union is constitute by countries like the Benin, Burkina Faso, Côte.d'Ivoire, Niger, Mali, Senegal, Togo. Guinea Bissau is also this union member but because of their recent joining and that data are not available for this country, we do not take it into account in this analysis.

context of portfolios diversification and competitive market. When the official bank institutions create an indirect "debt" on themselves, the authors speak, then, about monetary creation, whereas, the "non-banks" financial institutions create an indirect debt which is not monetary in nature. The so-called "non-banks" intermediaries do not create money in their credit activity because they are not subjected to reserve requirements or a specified interest rate administration by monetary authorities [Gurley and Shaw, 1960, p.198-199].

This point of view⁴ was qualified in the economic literature as "*new view*" and is defended by authors like Tobin [1967], Black [1970, 1975], Fama [1980] and many others like Mckinley [1957] and Shelby [1958].

According to these authors, in a constrained or non-constrained (by administrative control) monetary and financial environment, there are no such relevant differences between banking institutions and the other portfolio asset managers. The bank deposits accounts and the other portfolio of assets are perfectly competitive [Fama, (1975, p.325), (1980, p.41)]. In such a system, the banks, as well as the other financial intermediaries, are only accounts managers which channel wealth between various economic units in a double-entry book-keeping system characterized by debits and credits [Fama, 1980, op.cit, p.42]. The banks role, as well as that of the other portfolios managers, is primarily passive in the sense that it consists in bringing closer saver-lenders and borrower-spenders [Fama, 1980, op.cit, p.46].

In a monetary and financial environment where the banking intermediaries are subject to reserve requirements⁵ considered here as a direct tax on banks deposits returns owing to the fact that it lowers the return on deposits by the fraction of deposits in the form of reserve requirement, it can exist a difference between the banks and the other portfolios managers [Fama, 1980, op.cit., p.47]. The banks can choose not to offer account services management in addition to those of portfolios management. They are, nevertheless, pure intermediaries owing to the fact that, if they are competitive, profitability they draw from account services management compensates or minimizes the reserve requirement constitution costs. Without other forms of restriction, nothing special can differentiate the bank deposits from the other financial intermediaries' assets portfolios. The bank deposits and the assets portfolios are perfect substitutes with the same risks affected to them. The consequence is that the banking institutions are perfectly comparable in their function to the other asset portfolios managers. The banks remain passive intermediaries, the operation of which do not have any effect on the economic real sector activity [Fama, 1980, op.cit., p.48].

In the same line of analysis, Tobin [1967] argues that even banks credit activities can be subject to a double regulation in terms of reserves requirement and interest rate administration, and can be, in this respect, imperfect substitutes with other portfolios of assets, they have not been penalized therefore. Tobin argues that since the banks can have the capacity to transform ordinary portfolio of assets into specific one in the form of deposits (whose services are not free) or to offer less voracious deposits in reserves requirements, they can be perfectly competitive to the other forms of portfolios managers. There are, in this respect, no functional distinction between banks and non-banks institutions. However, although there are no functional differences between the banking institutions and the other financial intermediaries, the reserves requirement imposition and the banking interest

⁴Our goal here is not to return on debate which opposed "new view" to "old view" defender authors like Aschheim J, 1959, pp: 59-71; Guttentag J.M., Lindsay R, 1968. See on this subject, Selgin G A. 1986, pp: 80-86.

⁵Reserves requirement are regarded here as a direct tax on the profitability of the bank deposits, owing to the fact that they cut down part of the total profitability of the deposits, corresponding to the profitability which should generate the fraction of deposits in reserves near Central Bank. Generally, the reserves requirement aims to force banking institution to hold, in the form of central money, a fraction of the elements registered in the liability and/or the asset of their balance sheet account. In general reserves are required on banks deposits account and/or on credit operation. In the euro currency area, these reserves are about 2% on the liability components of commercial banks, and they are fully remunerated. In the developing countries such as W.A.E.M.U for example, reserves requirement are applied to the whole of official commercial banks and the financial institutions which distribute credit. The M.F.I are not reserves constraints near Central Banks. The reserve required base ratio is on deposits and on short-term credits. The reserve ratio is change across time in W.A.E.M.U area. This ratio is at 1,5% for commercial banks at the beginning of the experimentation in W.A.E.M.U to attend 9% in the years 2000. The reserves requirement is not remunerated in W.A.E.M.U countries. This information can be found for euro zone currency area on www.ecb.int and for W.A.E.M.U, on www.bceao.int.

rate ceiling make it possible to distinguish them on an institutional view. This distinction has nothing to do with the monetary nature of the banking liability [Tobin, 1967, p.10].

Apart this explanation of no existence of relevant distinction between banks and non-banks in a functional view, authors arguing the non-uniqueness of banks' functions stress that a monetary and financial system in which only banks are subjected to reserve requirements and interest rates ceiling can not be efficient [Tobin and Brainard, 1963, p.392].

A similar idea is taken into account by the "neostructuralist" [Taylor (1983), and Wijnbergen (1983)], in their critical analysis of the financial liberalization hypothesis [Shaw, 1973 and McKinnon, 1973, 1993]. In their view, the M.F.I sector known as an informal financial market or unorganised money market, owing to the fact that they escape the reserve requirement system, are more competing than the official banking intermediaries in their credits activities in a financial liberalization context. Generally, the reserve requirements correspond to a percentage of the bank deposits made up in the form of deposits near the Central Bank. They aim to reduce the money creation capacity of commercial banks and to guarantee their liquidity. If the so-called informal financial institutions (nonbanks intermediaries or M.F.Is for example) are supposed more competing than the official banking institutions, owing to the fact that they escape the reserve requirement, it is not precisely because they have a function of similar nature to that of the official banking institutions?

The difficulty of "neostructuralist" analysis to elucidate the intelligence of their intuition lies in the fact that it remains a confusion of monetary and financial nature in the banking function. Indeed, when official banking institutions as well as M.F.I finance households consumer expenditures, they make credit operations which nature is purely financial. This kind of banking activities does not cause new money issue. Consequently, if we suppose that only new money issue is subject to reserve requirement, the credit operations of a financial nature cannot be subject to reserve ratio. There cannot be, therefore, an imperfect competition between the official banking institutions and M.F.I. On the contrary, when official banks as well as M.F.I issue credits to finance firms and microfirms productive activities, does it not have credit operations which cause monetary income generation? At this stage of the analysis, we know that M.F.I have a financial function and are therefore structurally complementary to official banks in L.D.Cs. We show this analysis prospect in the next subsection.

1.2. Financial intermediation of M.F.I and their structural complementarity's with official banks

Functional and structural complementarities of M.F.I called "informal" or "semi-formal" in general and official banks caused very little attention in developing monetary and financial literature. The analyses which apprehend this aspect of L.D.Cs aspects of money and finance put forward the existence of vertical and horizontal links between M.F.I and official banks [Bell (1990), Straub (2005), Varghese (2005, op.cit)]. This line of M.F.I and official banks complementary analysis is on a structural view.

The horizontal link analysis of M.F.I and banking institutions credit channels in L.D.Cs were made by Clive Bell in 1990 in the case of India credit markets study. M.F.I credit market channel and the official banking institutions would be horizontally linked owing to the fact that the money lenders financial activities in the M.F.I sector are sometimes founded on loans near the official banking institutions.

The M.F.I and the official banks credit channels are horizontally linked owing to the fact that the activities of money lenders in the M.F.I sector can compete with those of banks. It is supposed from this point of view that borrowers tend to make "back and forth" movement from one source of loans to other. In other words, the authors explain that the economic units initially try to reach the bank loans and in case of failure are turned to M.F.I loans sectors. The economic units can also have opportunities to, simultaneously, hold loan contracts in M.F.I and official banks [Bloise and Reichlin, 2005].

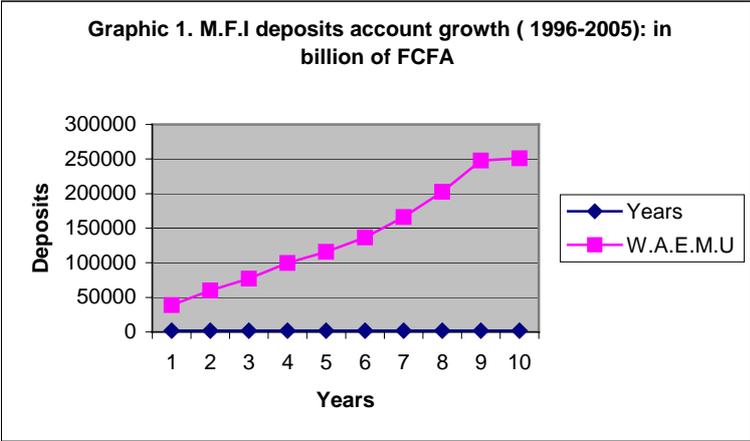
The same interactions between banks and microbanks are valid in western African countries. The situation in western African countries can be less compared to the situation describes by Bell for India. However in the case of western African countries, the official bank loans for the M.F.I are carried out within a more organized framework where several M.F.I (village banks) are organized in a mutual insurance company or self-help group to be able to reach the official banks loan as in Burkina

Faso for example, [McKnelly and Kevane, 2002]. The similar facts are also observed today in India within the framework of the vast program launched by the Indian government to facilitate access to external sources of credit for self-help groups [Bansal, 2003]. In addition to the horizontal relations which can exist between M.F.I and official banks, the author also stresses a vertical interaction between these institutions in L.D.C's.

The credit channels between official banks and M.F.I are vertically linked because of the extension of funds coming from the formal or official banking institutions and redirected towards the small contractors via informal lenders operating in the M.F.I sector. It is supposed, in this perspective, that the informal lenders borrow funds in the institutional sector of banks and lend them to small borrowers who have a high degree of confidence or which are considered to be legitimate or credit worthy. The idea of the authors is as follow: there is a hierarchical contract founded on the fact that the rural lenders are able to hold reliable information on the borrowers rationed by the institutional sector of the banks more than this last can do. The informal lenders in the microbanks sector thus constitute a channel for the banks sector in the information retrieval on the lenders considered to be *a priori* non-credit worthy [Besley (1995), Fuentes (1996), Floro and Ray (1997)].

It is from the point of view of these forms of links that analysis of conditions which make it possible to reinforce these complementary relations instead of promote competition, are necessary precondition for a well functioning banking system in L.D.C's [Varghese, 2005, op.cit.].

We can also add to Bell's analysis that the vertical relation between M.F.I and official banks is not in a unique direction. In other words, the M.F.I does not make borrows only near the official banking institutions and lend them to microfirms. They also collect deposits near the excess economic units, which they deposit anew on a deposits account open near the official banking institutions. The structure of the collected deposits these last ten years in W.A.E.M.U countries is illustrated in graphic1:

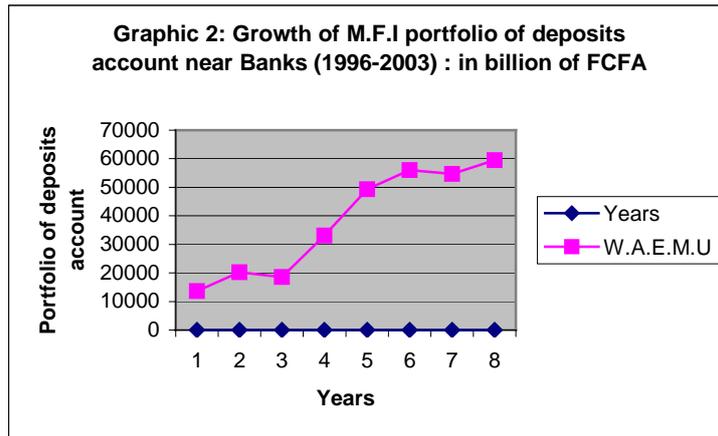


Data source: Statistics on the M.F.I. (2002-2005) and Monographs on the M.F.I (Various publications on the Monographs 1998-2003). Data available on www.bceao.int

The structure of graphic 1 shows that the deposits within M.F.I increased these last ten years from 38 billion CFA franc (FCFA)⁶ approximately in 1996 to 250 billion FCFA in 2005. The deposits were primarily used to finance microfirms' production costs. Thus, the accumulated saving is the most significant source of microfirms funding in W.A.E.M.U countries.

When the collected deposits are not intended to household's consumer expenditure finances and for microfirms production costs funding, they are generally deposited in the form of portfolio deposit accounts in the official banks (see graphic 2 below for the growth of M.F.I portfolios accounts near the official banks).

⁶CFA franc (FCFA) is the currency used by Africa and Caribbean French community. It is the currency used in particular by the W.A.E.M.U countries. The FCFA is pegged on Euro currency in a fixed parity. The official value of one euro in FCA is 695, 7 FCFA.

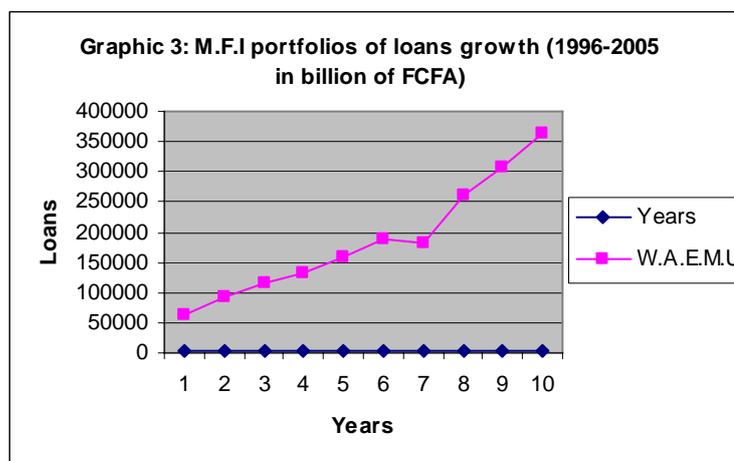


Data source: Statistics on the M.F.I (2002-2005) and Monographs on the M.F.I (Various publication on the Monographs 1998-2003). Data available on www.bceao.int

M.F.I deposits near banks increased from 13 billion FCFA approximately in 1996 to 59 billion approximately in 2003. The official banks refund, indeed, the M.F.I in their credit granting limits. One can interpret the M.F.I deposits accounts near banks as free reserves which are used to rich banks refunding following the example of commercial reserves banks near the Central Bank except that in the M.F.I case, they are free and can on the occasion be used like guarantee for refunding. Three main information derive from these last considerations. They are as follow.

a. The M.F.I provides deposits account to economic agents which do not have access to an official banking system. They represent at this moment and on a structural point of view, "*super deposit accounts de facto*" for economic units who do not have access to official bank deposit accounts. They are structurally or institutionally complementary to the official banks institutions in L.D.Cs.

b. The M.F.I, in their credit operations finance the microfirm's production cost. They also finance household's consumer expenditure. This last form of expenditure is not of significant analytical interest for this paper's purpose. We consider, therefore, that when the M.F.I does not deposit the collected funds near the official banks, they lend them to microfirms for productive motive.



Data source: Statistics on the M.F.I (2002-2005) and Monographs on the M.F.I (Various publication on the Monographs 1998-2003). Data available on www.bceao.int

c. The M.F.I can also borrow funds from the official banking institutions; they spend it, however, in the microfirms production cost funding.

These two last point are of great importance in this analysis. The M.F.I finance income generating activities whose nature is necessarily monetary. Two research lines make it possible to proof this proposal in an analytical view point.

The first is that of Gurley and Shaw [1955, 1960]. The authors proposed an iconoclast analysis (more precisely in chapter 6 of "*Money in a Theory of Finance*") in which they laid a particular stress on the role played by financial intermediaries called "*nonbanking*" or "*non monetary*" in their credit activity. In their explanation, the authors insisted on the creation of indirect debts by any type of financial intermediaries. When they are official banking institutions, the nature of the "indirect debt" is monetary whereas if the object of creation is the fact of the so-called nonbanking financial institutions (M.F.I in L.D.Cs contemporary economics for example), it is simply an indirect debt whose nature is not monetary. However, the design of the nature of the debt lacks precision. The indirect debts are issued, according to the authors, by the financial institutions on themselves. What the analysis fails to specify, but that one can imagine implicitly, is that the "debt" issue has necessarily a "credit" in counterpart. The understanding of this detail is made possible thanks to a second research line which stresses the concept of payment to explain the monetary nature of the banking function [Schmitt, 1984]. If one takes into account this last consideration, the money creation is solely not an act of debt issues, but it is about the simultaneous "debt" and "credit" issue. We have there, following this light modification of the Gurley and Shaw hypothesis, a second research line which allows us a new interpretation of banks and microbanks function in L.D.Cs.

This new view means quite simply that the banks are not the only agents which intervene in the operation of "debt-credits" issue. The "credit - debt" or "assets-liabilities" issue is a joint and instantaneous action of banking institutions, the production sector including the producing services, and the firms which organize the production plans. The intermediation action of financial institutions thus takes place between the firm's liability and the receivable of the producing services, these economic agents being naturally interlinked by a payment operation. The operation which causes the simultaneous "asset-liability" issue is of the nature of a money creation operation. In practice, the "asset-liability" issue is always related to the income production, and thus, with the product [Cencini, 2001, p.86].

The relation we just explained before, connecting the banks and the production sector, are not exclusive from an analytical point of view to the links between M.F.I and microfirms in L.D.Cs. That means that the M.F.I, in the same way as banks, cause the "credits-debts" or "assets-libilities" issue when they finance microfirm's production costs. Consequently, if the "credit-debts" issue by the official banks is of the nature of money creation, can't we say that the initiation of the same operation by the M.F.I is also of the nature of money issue?

2. Towards design of M.F.I monetary function

The monetary and financial systems in L.D.Cs are characterized by the coexistence of an official financial system and a nonofficial financial system, often opposed in the interpretation of their intermediation function. The official banking institutions issue money in their credit operations to finance firms production cost, whereas, M.F.I, although they proceed to operations of the same nature do not.

2.1. Design of M.F.I like pure financial intermediaries

This point of view is in particular very close to the analyses of the authors like Nsabimana [2004, p.45], Lelart [2002, 2005b]. These authors argue that M.F.I do not create money in their intermediation function in the sense that they need to collect saving before make loans. *A contrario*, official banks do not need to collect saving before granting credit. Official banks can create liquidity and lend it to economic units, [Lelart, (2002, p.15), (2005b, p.62)]. Nevertheless, Lelart argues that,

sometimes, M.F.I like R.O.S.C.A can fund more than they can receive, and deserve really their name of "*moving bank*" consequently [Lelart, 2005b, p.13].

If it is true that the microfinance joined informal finance and that their savings operation are of the nature of bank operations, the distinction between banks and M.F.I cannot be functional. If the R.O.S.C.A can fund more than they can receive deposits, that wouldn't simply mean that they create something in their function of "village banker" similar to that of official banks?

Let us suppose that the R.O.S.C.A can fund more than they can receive. Let us consider thereafter that funding is intended to the financing of microfirms' production costs. Would not it mean that M.F.I, in their credit activities, cause investment excesses on the saving in the sense that new money income is generated and, consequently, that they create a specific money?

From the same point of view as Lelart, Nsabimana, and the banking function uniqueness defender authors, Bossone [2001] affirms that banks are special in the sense that they operate upstream the production circuit and do not make intermediation on existing liquidity but add liquidity to the system each time they finance firms production cost, whereas the non-banks financial intermediaries do not. The non-banks only bring together saver-lenders and borrower-spenders without adding anything new to the production process financing [Bossone, 2001, op.cit., p. 869-870]⁷.

According to Bossone, following Lelart and Nsabimana, banks create money as financial intermediaries whereas "nonbanking" institutions (the M.F.I in L.D.Cs contemporary economies) are only financial intermediaries which do not create money. The only difference between the Bossone analysis and that of the others is that the banks (official banking institutions in the developing countries for example) are upstream the production circuit and allow its starting whereas the "nonbanking" institutions are downstream the circuit, and allow its closing. However, Bossone takes care to specify a little further in its analysis that this distinction between banks and "non-banking" intermediaries would be without any relevance in a financial market economy [Bossone, 2001, p.870, op.cit.].

According to the author, in an economy with hierarchical structure and where banks are at the top of production process, by emitting in a moment (t) "finance" necessary to the starting of this production circuit process (firms production cost funding), financial intermediaries known as "non-banking" intervene in a moment ($t+1$) by funding investment, i.e., they make it possible for firms to collect money spent in the production cost financing and to balance, thus their debtor position of short term with respect to official banks.

In a financial market economy however, according to Bossone, banks and non-banks intermediaries' functions are of an identical nature [Bossone, 2001, p.869-870, op.cit.]. Although, the author does not mention it, this idea, implicitly, mean that the two kinds of financial intermediaries, by funding productive expenditure of firms, can create money.

We already said that the money creation operation does not concern the actions of banks alone. Such a design of the money creation operation is not exclusive to M.F.I operations in L.D.Cs. In practice, the financial intermediary (official banks or M.F.I) receives money of the initial lender and transmits it to the final borrower. As intermediaries between saver-lenders and the borrower-spenders, the financial institution makes an operation which has its origin at the saver-lenders level. The conclusion is true, whether the financial institution is defined in its person or her function; in both cases, it is located at the level of the lenders and the borrowers, agents with which it is in financial relation [Schmitt,1984, p.409].

As tried to make us understand by Gurley and Shaw in 1960, and by other contemporary economists, money is created by credit issues. It is conceptualized as being receivables or dues from banks. The preceding money definition is registered in the liability of the banking institution. On this point, there is no ambiguity in the thought of the economists on this question. On the other hand, double-entry book-keeping accounting, from its principle, requires that the liability of the bank must be balanced by assets. It is precisely on this level that all the difficulties and all incomprehension appear. There is not unanimity on the contents of the credit of one author to another. One can find there in a separated way, gold, the currencies, loans to external economics units, loans to government

⁷A similar idea on the particular role of the banks to create "finance" without use of preliminary resources, contrary to the other financial intermediaries is also shown by Davidson P. [1965,1967,1986, 2002].

administration, loans to firms, loans to households, the fixed assets, the clear inventories, and many other real financial assets.

The source of this confusion is, itself, related to analytical confusion of two functions within the same banking institution, which enables it on the one hand to issue money and on the other hand, to operate like financial intermediary by allocating credit between saver-lenders and borrower-spenders. However, the unprecise nature of money creation in the economy is not specific to the Bossone analysis. It falls under a historical debate of the conceptual analysis of the money creation operation.

2.2. Do banks have the possibility to create a positive purchasing power?

Historically, two schools are distinguished in the conceptual analysis from the money creation operation. A first thesis supports that during a money creation, credit and debt are appeared simultaneously like a result from the banking intermediation operation, the debt being the counterpart of the credit and vice versa.

The second thesis supports that Banks' debt defines positive money (or positive purchasing power) and that the money created at a moment (t) will be destroyed only at a moment $(t+1)$ which is posterior to (t) . This school is that which one can connect to Schumpeter's [1911/1999] thesis on the role of the credit as a positive purchasing power advanced by the banking system to the innovating entrepreneur who makes the request of it. The purchasing power at the entrepreneurs disposal is not founded on an existing source of funds. The ideas hear are obvious: banks should have a power to create a positive asset in the sense that money is an asset.

Similar ideas are found today in the postKeynesian economic literature. This analytical framework applied to "non-banks" intermediaries' function is developed by Bossone.⁸

The first thesis appears to have ability to contribute to make perfect the research issue opened by Gurley and Shaw [1955, 1960] for a relevant analysis of monetary and financial aspects analysis in L.D.Cs contemporary economies.

The operation of money creation has its starting-point at the lender level, the producing service whose remuneration constitutes his center piece. In other words, money can appear only in an operation which takes into account not only the banks but also the lenders (producing services who are income holders) and the borrowers (firms or microfirms who organize the production).

We can say, at this moment, that banks' intermediation is founded on the link of payment between the producing services and firms or microfirms. Since this banking intermediation is interpreted as an operation whose nature is money creation, we can say that the money issue is carried out via the workers' remuneration or via the payment process.

2.3. The payment operation like inductive movement of money creation

In order to understand the money creation in the payment operation, let us reconsider at new the relevance of Gurley-Shaw analysis [1955, 1960].

2.3.1. Re-examination of Gurley-Shaw hypothesis

The authors explain that the banking institution creates positive money in the form of assets which is hold by economic units with excess capacity in a debt intermediation view. Money is seen here as an asset (of saver-lenders on a banking institution) or liability (debt of a banking institution with respect to saver-lenders). The debt, in this respect, is that created by banks as an engagement on themselves. However, does the banking institution have the capacity to create an obligation on themselves without it being compensated instantaneously

⁸See Bossone B, 2001, op.cit. See also Moore [1988, p.295], for the same analytical distinction between banks and nonbanks intermediaries.

by an opposite engagement? We answer this question by illustrating the simple following example.

Let us suppose that a banking institution in L.D.Cs (that is to say W.A.E.M.U countries), allocates a credit of $xFCFA$ to a firm for wage expensive. The bank accounts can be represented as follow.

Balance sheet1.

Bank			
<i>Liability</i>	<i>Asset</i>		
<i>P.S</i>	$xFCFA$	<i>Firm</i>	$xFCFA$

We have the *Balance sheet1* above representative of the banking institution account following his credit operation. The bank account shows us that firms are structurally indebt whereas the producing services (P.S) are structurally creditors. In practice, the banking institution shows the producing services who are holders of the deposit accounts, that they are creditors for $xFCFA$; at the same moment, shows to the firms, that they are indebted for the same amount.

In the Gurley-Shaw analysis, the banking institution creates for the benefit of saver-lenders an asset which takes the form of a debt. The object of this debt, if we look closely at the authors analysis, is the $xFCFA$. We will see thereafter that in practice the $xFCFA$ is only the nominal money of the real object of the debt which is in fact the good produced and stored nears the firms.

Let us take again our *Balance sheet 1* example. The operation described in the advertisement made by the banking institution to its customers means quite simply that $xFCFA$ are owed by the banking institution to the producing services insofar as they are simultaneously due by the firms to the banking institutions instantaneously.

With reference to the terms of Gurley and Shaw [1960], and if we were not mistaken in our reading, the credit operation initiated by the banking caused debt transfer. A debt created by the banking institution on itself transferred thereafter to the firm in the credit operation. Logically, we can say that the credit operation causes the existence of two debts. In practice, if we consider the Gurley-Shaw hypothesis, we have banks' debt and the firms' debt. The bank is under obligation to producing services and firm is under obligation to banks. We can see here that the object of each of the two obligations is related to the same $xFCFA$ which is producing non spent income. Nevertheless the firms and the bank cannot be simultaneously indebt to producing services. The bank accounting in *Table1 above* shows that the banking institution simultaneously enters a debt which is not his own but that of the firm in the asset of its balance sheet and a credit (households deposits) in the liability of its balance sheet. In fact, the banking institution creates monetary asset and simultaneously monetary liability in the credit operation.

The credit operations between the banking institution and the economic units (producing services and firms) as described above are in practice flows and reflows of fund. There is on one side an instantaneous flow of the banking institution to the firms, and on the other side, an instantaneous flow of the producing services to the banking institution. The money created by the banking institution is not solely of the nature of a debt or separately of the nature of an asset as one can read it in the Gurley-Shaw analysis. It is simultaneously debt and the counterpart of this debt, i.e., the credit. The money issue by the banking institution is simultaneously an asset and liability.

Consequently, since in the Gurley-Shaw analysis, the asset or a debt created by the bank is of the nature of the money, we can show that the money issue is an instantaneously asset and liability issue. It appears henceforth illogical to say that the money is an asset or separately a liability. The logic of the double-entry book-keeping accounting principle in the banks operation needs to say that money is bound to be simultaneously asset and liability.

The loan of the banking institution to the firms is in practice the definition of a monetary asset on the firms or monetary debt on the bank whereas the flow of the producing services to the banking

institution is in practice the definition of a monetary asset of those on the banking institution. The two engagements are of the same nature, i.e. they have the same object, the *FCFA* in our example. The last consideration allows us to say that bank cannot create positive purchasing power in its credit operation and that the debt-credit or liability-asset or money is not born in the banking institution before being transferred to the economic agents [Cencini 1995, p.24].

Primary logic requires considering simultaneously a destruction which is the other side of what we see as only one operation, i.e the creation. Simultaneity in the money creation operation is interpreted here as an instantaneous creation-destruction that Schmitt calls a *monetary emission* [Schmitt, 1984, p.465].

2.3.2. Design of money issue like a creation-destruction process

We have thus concluded that money issue takes place in a creation-destruction process. We have in the credit operation described in *balance sheet 1*, the example of economic system which cannot be complete and closed unless there is a relation between the producing services and the firms. The close of the economic circuit process is effective at the moment when the firms transmit, in a payment operation, to the producing services the debt (money) emitted on them by the banking institution. The credit granted by the banking institution to the companies is interpreted as being of the nature of money creation operation. The operation of money issue can be qualified here as being a *"triad"* relation [Gnos and Rasera, 1985], which includes a banking institution and two economic agents, i.e., the producing services and the firms [Schmitt (1975, p.29), Bailly (1992, p.213), Cencini (2005, p.103)].

It can however happen that, in certain types of economy, such as developing economies for example characterized by a "dual" financial system, firms, and the producing services cause money creation without the intermediation of official banks. That is the case of the microfirms' productive activities funding by M.F.I. In this case, the credit operation consequences have a similar interpretation that of those caused by official banks credit operation.

To summarize, the payment process is a flow-reflow which results in a loan that the producing services grant to the firms. The comprehension of the process of money issue is in the payment operation and the result of this payment is a credit which the income holders make to the firms. Because of the monetary emission, the income holders have property owned on the banking institution and the firms are under obligation to the same banking institution. The result of the monetary emission operation is consequently simultaneously positive (credit) and negative (debt) for the economic units as a whole. This result is identically and simultaneously negative and positive for the bank. It is what confirmed to us the double-entry book-keeping accounting principle [Schmitt, (1996, p.133-136), Cencini (2001, p.26)].

The economic units consist of firms and the producing services, causes in the payment operation, monetary receivables for the last and obligation for the first. The joint action of the economic units and the banking institution defines an instantaneous flow-stock process. This instantaneous flow-stock process is of the nature of a monetary creation. Money thus occurs in a payment process and acquires its effective character only when a real object is associated to it (produced goods). We can say finally that money issue is an instantaneous flow-stock process which takes place in a conjunction action of firms, banks and producer services and is necessarily characterized by a payment operation whose object is the real produced good [Gnos, 2003]. In the payment operation, the banking institution seems to play a pure intermediary role. However, is the banking institution action only consisted of this pure intermediary role? The answer to this question passes through the design of Banks function as a monetary intermediary in the production process and as financial intermediary in the result of this production process. The implications of this new interpretation on the M.F.I function in L.D.Cs are shown in the next section.

3. The monetary intermediation of M.F.I and their functional complementarity's with banks

The M.F.Is play a particularly significant role in the developing countries. A similar idea is shared by Agenor and Montiel [1999]: What is the role played by the M.F.Is in developing countries? The authors answer, that, the M.F.I compensates the excess request for financial services in the official

financial sector. This fact is interpreted by the authors like a consequence of interest rates administration by public authority. In certain countries, M.F.I role is also significantly relevant, as that of the official banking institutions, in the sense that it can affect the macroeconomics policies transmission [Agenor and Montiel, 1999, op.cit., p.76] and in particular monetary policy transmission [Shaw (1954), Patinkin (1961, p.109-111)].

3.1. The M.F.I finance income production activities in L.D.Cs

An extension of financial liberalization policy, a variation of the rate of inflation, for example, can affect the interest rate on the unorganized money market as well as supply and demand of funds in this sector – retroacting on the interest rate as well as supply and demand of loanable funds in the official financial sector. The effects of the M.F.I relevant role can be extending to the real asset and durable good constitution [Agenor and Montiel, 1999, op.cit.]. Which is the destination of the M.F.I fund supply, and which is the signification of this fund supply? The answer of the authors to this question remains imprecise.

A similar thesis, related to the macroeconomic effect of the M.F.Is credits activities in L.D.Cs, is defended by the neo-structuralist authors [Taylor, (1983, op.cit), Wijnbergen (1983, op.cit.)] when they evoke, as aforementioned in this text, the reserve requirements' assumption from which the M.F.I escape and which make M.F.Is more competitive in their credit operations than the official banks. We also specified that the reserve requirements are, by definition, applied generally to the deposits or banks credit operations in order to control their money issue operation. The assumption, according to which the M.F.I while escaping the reserve requirements rule, are on the one hand more competing than the official banks and on the other hand disturb the effectiveness of the monetary policy is obviously true [Akpo, 2000]. Does not that mean, in consequence, that the M.F.Is cause money issue through their credit operations intended to finance microfirms production cost ?

Do M.F.I create money in their credit operations in developing countries? In other words, do M.F.I credit operations cause simultaneous "asset-liability" issue? In practice, the M.F.Is constitutes an impulse to income production in the microfirms sector in L.D.Cs, [Lelart (2000a, p.24), Gladston (1994, p.324). A part of M.F.I credit is thus intended for microfirms' production cost financing and likely to cause new income production. The proof is that M.F.I loans are often reimbursed and that new jobs are created, [Hemingway M., (2004), Lapenu and Al, (2004), Lelart (2005)]. Thus, today, when the concept of M.F.I is evoked, as well by economists as by international organizations actors, it is more often about their role in poverty reduction than their role to provide loans to finance consumer expenditure of households. The M.F.Is are supposed to be active actors in poverty reduction because their loans are intended for new incomes production financing – since it is only on the assumption of increase in the households' income that their poverty decreases. In certain cases, M.F.I apart from the financial services they provide to the microentrepreneurs, also provide training services of good management of their firms. The goal is to ensure a development of the microfirms economic activity and the produced income good management.⁹ The M.F.Is loans' activity thus has a macroeconomic impact in L.D.Cs.

In short, when the loans granted by the M.F.Is are intended for the financing of the consumer expenditure, there is no production of new incomes. However, when these loans are intended for the microfirms' production cost funding, there is obviously a new income production provocation. The services offered by M.F.I make it possible to break the poverty circle through access to credit [Barboza and Barreto, 2006, p.16].

There exists a consensus on the productive nature of M.F.I credit operations in L.D.Cs. The M.F.I loans activity constitutes an impulse to new money income production. This means that M.F.I in their credit operations to microfirms cause income production whose nature is bound to be monetary.

⁹It is the case of the operation of the popular financial microstructures to Benin and Mali. See on this subject, Ledgerwood L, (2001, pp: 78-79). See also Murdugh J, Aghion, B.A., (2005, Chapter 8).

3.2. The monetary function of M.F.I in L.D.Cs

Assumption: the M.F.I issue and "atypical" money when they finance microfirms production cost in L.D.Cs.

Proof.

We take into account the following considerations:

- We consider development economy without any contact with outside and in which the government tax resources are negligible. This economy produces at a moment (t) , an amount of income (R) . The incomes represent the payments of wages to the producing services.
- We suppose the existence, in our developmental economy, of an official institution banking (*Bank*) and a M.F.I who plays the role of the mediator between the excess economic units (the saver-lenders) and the deficit economic units (the borrower-spenders). The M.F.I can hold, moreover, a deposit account (atypical saver-lenders) near the official banks.
- The income production is organized by firm (F) which has access to the Bank financial services and microfirm (MF) which can have access only to the M.F.I. The firm carries out the whole payments (R) at the period (t) . The firm can also have access to the M.F.I services, but we do not this fact take into account in our demonstration.
- The payments are due to the producing services which do not have all access to the bank financial services.
- The goods produced by the firm and the microfirms are perfectly heterogeneous.

Consider that the firm pays wages for an amount of (R) at the period (t) under the instigation of Bank funding. Taking into account the preceding explanations on the conditions of currency appearance in economy, we can consider that there is a monetary creation in our economy which amount is (M_R) . For simplifying our demonstration, let us consider that the amount of the income produced at the end of the operation is of $xFCFA$.

A part of the produced income is carried by the income holders to the withdrawal of the part of the produces good which are in the form of stock in the firm. Let us suppose that this consumed portion of the income is equal to a portion of the total income product or:

$$C = cxFCFA \quad (1)$$

The amount of the total households' saving is by deduction:

$$E = (1-c)xFCFA \quad (2)$$

According to the fact that all the economic income holders do not have access to the Bank financial services, the M.F.I intervene in order to guarantee a complete intermediation in L.D.Cs. The unconsumed part of the income is deposited in the form of saving (E) near the two intermediaries of the economy (a part near the Banks and the other part near the M.F.I).

Let us consider that the unconsumed part of households' saving (E_{MFP}) which is deposited by the producing services (SP_{MFP}) near the M.F.I is equivalent to half of the total savings. That is to say:

$$E_{MFP} = \frac{1}{2}(1-c) \times FCFA \quad (3)$$

We can represent the Bank and the M.F.I balance sheet like hereafter:

Balance sheet 2

Bank			
<i>Liability</i>		<i>Asset</i>	
SP_B	$\frac{1}{2}(1-c) \times FCFA$	<i>Firm</i>	$(1-c) \times FCFA$
<i>M.F.I</i>	$\frac{1}{2}(1-c) \times FCFA$		

SP_B represents the producing services which have access to the banking service.

The M.F.I balance sheet is like hereafter:

Balance sheet 3.

M.F.I			
<i>Liability</i>		<i>Asset</i>	
SP_{MFI}	$\frac{1}{2}(1-c) \times FCFA$	<i>Bank</i>	$\frac{1}{2}(1-c) \times FCFA$

The part of the saving deposited in the bank and in the M.F.I can be loaned to deficit economic units which make the request of it.

Let us suppose now that the microfirm has a production plan for the following period $(t+1)$ and requires its funding near the M.F.I.

Let us consider for simplicity that the required amount is equivalent to $\frac{1}{2}(1-c) \times FCFA$ and that the request is perfectly accommodated by the M.F.I.

Let us consider then that the microfirm uses the borrowed amount to remunerate the producing services which took part in the production process at the period $(t+1)$ and the totality of the goods produced during the current time is sold.

In practice, the income produced during the time $(t+1)$ made it possible to consume the goods of this same period. The microfirm could, therefore, by the sale of the produced goods, refund the loan granted by the M.F.I. The situation of the period (t) thus did not change (see *Balance sheet 2 and Balance sheet 3*). The produced goods of period (t) can always be sold. However, the operation of microfirm funding caused the additional goods' production and consequently additional income generation. We already said that in our contemporary economies, the income is essentially of monetary nature. In practice, the M.F.I credit operation caused money creation, since the total product of the economy increased by an amount of $\frac{1}{2}(1-c) \times FCFA$. M.F.I, by funding microfirm production cost, create money in the form of central money because all their transaction are in its form of high powered money. The M.F.Is is consequently a bank *de facto*. We call them microbanks from now on. This new interpretation of the microbanks function is understandable due to the concept of payment developed in the preceding section.

In practice, the microfirm, by borrowing households savings, yielded part of their future incomes for an equal share of the current incomes of saver-lenders. We do not take into account the

amount of the interests within the framework of this demonstration, since it does not influence the economic unit's behaviour in our demonstration. The joint action of microbank and the microfirm causes actually a new category of expenditure and thus a new category of income production. In the case that no savings were the intermediation object by microbank, all the households' expenditures are devoted to the withdrawals of the produced goods. This consumer expenditure can also be effective by the intermediary of loans between economic units.

On the other hand the new expenditure for productive motives, caused by the joint action of microbank and microfirm, causes an atypical flow of payments in L.D.Cs. In fact, the production process caused by microbanks (the so-called not legally banking intermediaries), the producing services (holder of a new flow of payments) and the microfirm (organizing of a new production) interaction defines an economic circuit which is perfectly integrated in the economic circuit defined by Banks, the firm and the producing services taking place in the firm production process. The reason comes quite simply owing to the fact that the microfirm producing services can consume the firms products and that the firms producing services can consume the microfirms products.

The microfirm, while investing collected savings via microbank credit activities in new productive activities, use this saving to carry out wage payments. This joint action of microbanks and microfirm in the payment process is of the nature of money creation operation.

This prospect for money creation interpretation can appear difficult to perceive, but that is nevertheless as it occurs, and at each credit operation to productive motive, the things on the level of the official banking institutions. In practice the official banking institutions use necessarily income holders saving when they grant loans to finance firm's production cost. It is the double-entry book-keeping accounting principle, which formalizes the principle of resources and employment equality and which imposes consequently the equality of the credits granted by the banks, generally, to firms and the credits granted by the producing services to banks.

It is besides what Keynes confirms when he criticizes what he calls an "*optical illusion*" which consists in isolating the relation from the holders of bank deposits at their banks of the operation of credit carried out by these last to firm benefit, [Keynes, 1936/1971, p.104-105].

The advance of the future incomes to microfirm by microbank describes an instantaneous flow-stock. The microbanks, by advancing to the microfirm the necessary funds to his production implementation, creates in fact the numerical or nominal form of goods produced good, although this advance is founded on the saving, which is of the nature of a financial capital. The microbank issue, in practice, the numerical form of the future incomes produces by the microfirm in an instantaneous destruction-creation process. The microbank issues atypical nominal money in the form of central money. The financing operation induces a relation between three entities, microbanks, the microfirm and the microfirm producing services. We have in this respect a "*triad relation*", as Gnos and Rasera explain it [1985 op.cit.]. The microfirm production operation causes a payment relation between him and the producing services which take part to the production process. Finally, the payment operation induced by the microfirm production has real contents which are produced goods. The microbanks, in their credit operations, create a specific form of money and are, consequently, functionally complementary to Banks in L.D.Cs.

Even though Gurley and Shaw claim in the beginning of chapter 6 of *Money in a Theory of finance* that nonblank intermediaries do not create money, it is well what their analysis seems to explain, when they speak about the creation of a specific debt by these nonbanking financial intermediaries (comparable today to M.F.I in L.D.Cs). The authors write on this purpose that:

"...Each financial assets, quite obviously, is created by someone. The difference between the monetary system and nonmonetary intermediaries in this respect, then, is not that one creates and the other does not, but rather that each creates its own unique form of debt"[Gurley and Shaw , op.cit., p.198].

In other words:

"There are many similarities between the monetary system and nonmonetary intermediaries, and the similarities are more important than the differences. Both types of financial institution create financial claims; and both may engage in multiple creation of their particular liabilities in relation to any one class of asset that they hold. Both act as

intermediaries in the transfer of unspent incomes from surplus to deficit units. Moreover, as we shall show later, both are capable of creating loanable funds, of bringing about an excess stock of money... " [Gurley and Shaw, op.cit, p.202].

This non-specification of monetary function of the so-called nonbanks intermediaries in Gurley-Shaw analysis is due to misleading of the process of money income production. A slight modification of Gurley-Shaw analysis by integrating money income production process permits us to show that Banks and microbanks intermediaries create their own unique form of "credit-debt" or "asset-liabilities", since they, respectively, fund credit worthy firms and microfirms production cost. This "asset-liabilities" issue is of the nature of money.

It is what the Radcliffe committee report confirms on the role of the so-called nonbanking financial intermediaries in the economic activity and summarized by Kaldor [1960].

"[...] the emphasis on the whole liquidity position in contrast to the money supply...must be puzzling to all those who believe that non-monetary financial institutions are merely channels in the investment of funds, incapable of creating money or credit in the manner of the clearing banks whose deposits alone provide media of payment... Financial institutions, whether or not they provide direct media of payment, do invariably create liquidity – since it is peculiarity of all such institutions that their liability are considered as liquid assets by the lenders...whilst their assets are not treated as liquid liabilities...by the borrower...money substitutes...provide a substitute for holding cash...If this is so, there is no significant difference between the case for controlling the activities of the clearing banks and that for controlling those of the so-called non-monetary financial institutions". [Kaldor, 1960, p.19]

According to the preceding considerations, we can deduce the following general proposal.

Proposal: On one hand when, microbanks finance the consumer expenditure, they do not create anything but ensure saving transfer from saver-lenders to borrower-spenders. On other hand when microbanks finance the microfirms' production costs, they cause a specific nominal money creation in the form of high powered money since this one is used in their credit operation. This money issue can be quantified. Since the production cost funding cause income production, it is enough to calculate the microfirms' gross product (MGP). Since one knows the amount of the loan (pr_{MB}) intended to finance the microfirms production cost and consequently with the loan repayment, the amount of the interest paid (iMB), and versed incomes (R_{MF}) to the producing services. One can write that:

$$MGP \geq pr_{MB} + iMB \equiv R_{MF} \quad (4)$$

The nominal money issue caused by microbanks' credit activity can be regarded as equivalent to the microfirms' gross products. While taking into account what precedes, we can conclude that microbanks are functionally complementary to Banks in the economic activity funding in L.D.Cs. Generally, Banks and microbanks have monetary and financial function in their intermediary role in the macroeconomic process of income production in L.D.Cs.

3.3. The monetary and financial intermediation of Banks and microbanks

The banking institutions, generally, have two distinct functions but are complementary. In other words, Banks and microbanks have, according to their nature, a monetary function and a financial function.

3.3.1. Banks and microbanks monetary intermediation and their functional complementarity's

The banking intermediary, when it creates money, retakes what it creates instantaneously. Banks or microbanks create a debt on the firms and retake it instantaneously on the producing services in the form of portfolios of deposit accounts hold by this last. Money is created and destroyed in this sense, as we said previously, in a payment between the producing services and firms or microfirms. The banking institution appears thus in the operation as being a pure monetary intermediary, since the currency which it emits towards the firms or the microfirms is that deposited by the producing services.

The nature of these deposit-incomes is of financial nature. Consequently, an intermediation of the banking institution relating to the use of these deposits is regarded as financial intermediation. That does not exclude, however, the fact that the use of the unspent income can cause new income production as we had already underlined as a characteristic of banks and microbanks function. The principal point which we want to specify here and which is an intrinsic characteristic of the monetary function of banks and microbanks is related to the nature of money issue such as we exposed it in the preceding lines. In fact, what we can call money is created and destroyed in the same moment whatever the mode of creation [Bailly, 1990, op.cit., p.255]. In this respect, the monetary nature of the banking function leaves the place to the financial function. The financial function takes place as soon as the producing services acquire bank deposits in the form of income-deposits.

3.3.2. Banks and microbanks financial intermediation and their structural complementarity's

Let us take once again the example of *section 1* above. Let us suppose, therefore, that firms and microfirms, in order to implement their production plan request a loan near Banks and microbanks. They are, of this fact, under obligation to the banking institution. However, firms and microfirms are not monetary debtors. They can be considered as monetary debtor only if they have to instantaneously reimburse this money to banks or microbanks. However, it is not firms or microfirms which repay this monetary debt to the banks or microbanks; in fact the producing services (incomes holders), restore the money to banks or microbanks by holding portfolios of deposits accounts. These deposits carried out by the producing services are actually receivables which the latter hold on banks or microbanks. The producing services make, in practice, a loan to the banking institution. This loan is a credit whose nature is financial. Firms or microfirms are financially indebted vis-à-vis banks or microbanks. They can be discharged partially or totally from their debt in short or long term. The firms or microfirms become for this purpose financial debtors owing to the fact that repayment takes time. The money emission operation is, consequently, a monetary intermediation in its process, since the money issue by banks or microbanks to fund firms or microfirms production cost is instantaneously retaken on the producing services and the result of this money issue is a financial intermediation. By credit operations intended to consumer expenditure, Banks and microbanks definitively finance the flow of firms or microfirms produced goods. Banks and microbanks are, in this sense, financial intermediaries.

The first function is that of credit vector and of manager of means of payments, who take part in the income production process and the second one is that of financial intermediary which transmits savings by loans. The microbanks credit operation in L.D.Cs is perfectly adapted to the transmission of savings from saver-lenders to borrower-spenders.

If microbanks finance consumer expenditure, they have a financial function which is perfectly identical in its nature to that of the Banks. However, they also finance microfirms' production cost expenditure and as a consequences contribute to income production in microfirms sector. The accounting operations caused by microbanks are similar to those caused by banks credit operation intended to fund firms' production cost. The balance sheet of microbanks thus can easily be imagined. It is perfectly identical to the one illustrated in *balance sheet 1*. Microbanks issue, in this sense, a specific money in the form of high powered money in L.D.Cs.

Conclusion

M.F.I play a particular role in income production activities in L.D.Cs. The financial services that they provide are generally intended to economic units who are excluded from the official banking system. Among these economic units, one can find many microentrepreneurs. The M.F.Is issue "specific" money or asset-liability when they finance microfirms' production costs. The quantity of money created by M.F.I activity can be measured at the level of the microfirms' gross products. In this respect, M.F.I are functionally complementary to official banking institutions in the economic activity funding in L.D.C's. M.F.I are banks *de facto*. We called them microbanks. The M.F.Is also deposit collected savings in the form of portfolios of deposits account near the official banks. They are with this respect *super deposit accounts de facto* for economic units who do not have access to official bank deposit accounts in L.D.Cs. It is, moreover, in this line of thought, which we can defend that in the L.D.C's contemporary economies, the exclusion relation of the economic units called "poor" to the bank and the credit rationing of the small firms become quasi non-existent because of microbanks intermediation. It is also from this respect that it seems necessary to us that the monetary and financial environment reform policies in L.D.Cs must take into account these new considerations.

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