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*Loan Pushing and Triadic Relations*

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**ABSTRACT**

This paper is an attempt to define and explore the phenomenon of loan pushing in international lending in the Seventies. The earliest descriptions of loan pushing are anecdotal; this paper surveys the various facets that emerge through this and suggests a possible definition that serves as the basis for the theoretical model in the next section. This model, inspired by the confessions of a banker, explores a triadic relationship between a corporation in the lender country, the lender bank and a borrower in a developing country and suggests that a rational, profit maximising commercial bank could end up "pushing" loans on to the borrower. The changes in international commercial banking in the Seventies that facilitated this kind of loan pushing are discussed next. To the extent that the loan pushing doctrine is valid, it implies that the commercial banks are at least as responsible for the massive lending boom of the Seventies as the borrowers and thus ought to be made to bear the cost of adjustment as well.

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## Introduction

The process of sovereign lending in the Seventies appears to consist of voluntary and mutually agreeable contracts between the transnational commercial banks and credit seeking developing countries. The suggestion that there could be in this process an element of aggressiveness on the part of the commercial banks, who actively and systematically 'pushed' loans on to developing country borrowers, may at first sight, seem inconceivable. If a borrower voluntarily enters into a loan contract, he is obviously doing so because the contract is beneficial. If such is the case, then would it be correct to characterise the process as one of loan pushing? Also, the commercial banks are supposed to be rational profit maximisers. Thus the amount of lending cannot be more than "optimal". What is then meant by loan pushing? These are a few questions that immediately come to mind.

It has been argued that international credit can contribute to increasing donor exports. [See, for instance, Winkler (1929), Hyson and Strout (1968), Gwyne (1983), Taylor (1985), Darity and Horn (1988), Basu (1991), Basu and Deshpande (1995)]. This is indeed one of the arguments used to explain the phenomenon of loan pushing (however, not the only one). The aim of this paper is to explore the idea of loan pushing a little more deeply by first trying to understand the concept along with a brief review of the literature in the area (Section 2). The confessions of a young banker (Gwynne, 1983), provide the basis of the theoretical model (Section 3), which considers a triadic relationship between a commercial bank in a creditor country, a debtor (nation) and a corporation in the creditor country and the compulsions of loan pushing arising therefrom. Section 4 tries to decipher the new banking philosophy that prevailed during the Seventies which facilitated loan pushing. Section 5 offers some concluding remarks.

## 2. What is loan pushing?

There is a small body of literature on loan pushing [Kindleberger (1978); Darity (1985); Taylor (1985); Lombardi (1985); Darity and Horn (1988); George (1989); Basu (1991)], where for the most part loan pushing is discussed as *one* of the many aspects of the international debt crisis[1]. Loan pushing is thus not exclusively (and widely) researched and most of the discussion is, in fact, descriptive and open ended. Hence, we do not find a commonly accepted definition around which the literature is centred.

Kindleberger (1978), for instance, mentions the concept of loan pushing by observing that in the early stage of the debt build up, "multinational banks swollen with dollars...... tumbled over one another in trying to uncover new foreign borrowers and practically forced money on the less developed countries." Darity (1985) traces the idea, that banks force loans on to borrowers, to the literature exploring financial flows in the 1920's from lenders in the United States to borrowers in Germany and Latin America. He develops his analysis by identifying six major features that according to him are common to the 1920s as well as the 1970s.[2] He quotes Max Winkler's work to describe an incredible instance of loan pushing in the 1920's: A Bavarian hamlet was reportedly seeking a loan of $125,000 to improve the town's power station. After much persuasion, the mayor of the town was convinced of the desirability of contracting a larger loan. The result was a $3,000,000 issue, successfully sold on the American market!

The available work on the subject highlights several facets of loan pushing, which while they are revealing, do not bind into an unambiguous definition of the term. Basu (1991) bases his discussion on the following definition: "loan pushing occurs whenever the lending banks try to supply more credit to borrowing countries than the latter would take at the *prevailing interest rate*." This definition is predicated upon rigid interest rates and to that extent, the model in the next section is similar.

One of the features identified by Darity relates to the promotional-cum-persuasion aspect. The contemporary debt build up offers plenty of instances of loan pushing similar to the one that Winkler described for the 1920's. The most well known is the story told by Gwynne, a young ex-officer in a mid-sized US bank, in charge of making a loan to the Construction and Development Corporation of Philippines (CPDP). Although he was aware of the fact that he would be making the loan on a shaky ground, he decided to ignore danger signals and go ahead with the loan, mainly because of internal pressure. One of the bank's best domestic clients was an earthmoving-equipment corporation which was sure that the loan would be used by the CPDP to buy its equipment. And so, Gwynne made the unsound loan, which, as he knew from the outset, was not repaid. He explained his action thus: "As a loan officer, you are principally in the business of making loans. It is not your job to worry about large and unwieldy abstractions, such as what you are doing is threatening the stability of the world economy. In that sense, a young banker is like a soldier on the front lines: he is obedient, aggressive and amoral" (Gwynne, 1983).[3]

The anecdotal accounts bring to the fore various features of loan pushing in different contexts. It is likely that even if one definition of loan pushing for all contexts is not possible, context specific definitions may be possible.

How exactly were loans pushed?

Most of the major debtors in the contemporary debt crisis have been countries with a previous record of severe indebtedness and default. Thus the essence of loan pushing seems to have been the following: devising a particularly attractive set of incentives, especially to those borrowers who have been formerly either denied access to capital markets or would have been denied such large quantities of funds, if their previous record had been taken into account.

Gwin (1984) points out that these bank loans offered the borrowers in the developing world more financing with less policy interference than when official lenders were the primary source. Not only was the volume of funds higher, but agreements could be concluded more quickly -- in weeks or months rather than years, with lower spreads and higher maturities. The conducive factor to all this was that in real terms, interest rates on loans were at or near zero through most of the 1970's and actually negative in the last years of the decade.

The need on the part of the borrowers complemented the eagerness of the lenders to lend. This need stemmed from several factors: be it for capital imports or meeting BOP difficulties. How much of this need was genuine and how much of this was inflated to facilitate misuse in order to support the extravagance of the ruling elite in the debtor country is a question that this paper cannot settle, but the fact is that it enabled loan pushing to go through without a hitch.

Ultimately what resulted was a massive boom in lending, the magnitude of which has been documented in Deshpande (1995). Thus, while the question of whether the amount lent to each country was optimal or not can certainly be debated, the fact that the process resulted in the borrowers taking more loans than what was in their *collective* self interest in now apparent. Splitting the interests of the borrowers so that they act against their collective self interest may also be a form of loan pushing.

It could be argued that by doing so, the banks were also acting against their own collective self interest by making themselves vulnerable to default. Here, however, there are several reasons that demonstrate that many of the banks were in a completely secure position of being pure gainers.

One of these is the, by now well known, fact of the banks having implicit insurance for their loans through the expected support from the IMF. Also, lending was being done with a new banking philosophy that gave bankers the (false) confidence about their debtors never going bankrupt. Both these points are discussed later in the paper.

What is relatively unknown, but constitutes a severe indictment of the banks is the following phenomenon. Most of the big sovereign debtors are also those with substantial capital flight -- a factor that should *reduce* the creditworthiness of the borrowing nation. Why then did the banks lend large amounts of money to these countries? Bank loans usually found their way into projects that benefitted the local elite, who in turn, deposited their ill gotten gains in the same banks through the IPB -- the international private banking channel -- a new asset that was introduced after 1981. These assets were the banks' true insurance against repudiation of debts.[4] Thus, "banks got their pound of flesh both coming and going".

### 3. A theoretical model of loan pushing

In the last section, I had outlined the experiences of a young banker involved in giving a loan to a Philippine company. I will now use this first-hand account to formalise the relationship between the major actors in the debt build up. I consider a triadic relationship between a commercial bank in the donor country (say, the US), the borrower and a US corporation[5].

I first set up the standard lender borrower problem between the commercial bank and the debtor. Here, profit maximising behaviour of the lender results in a certain quantity of loan. With the entry of the corporation into the picture, the commercial bank, again in a bid to maximise profits, ends up giving out a larger loan than before. This happens due to the fact that the relationship between the bank and the corporation (the latter keeps its deposits with the former) now affects the profit calculations of the bank in a particular way that has been outlined later. If the first (dyadic) exercise gave the "optimum" amount of loan at the going interest rate desired by the borrower, and if the triadic interaction results in a greater loan at the same interest rate, it constitutes, what may in some sense be described as, loan pushing.

Let the agents involved in this model be designated as the following: Agent 1 - the (US) commercial bank; Agent 2 - the (Philippines) debtor; Agent 3 - the (US) corporation.

Consider first the interaction between 1 and 2, without 3 playing an active role. 1 offers a loan L at an interest rate i to 2. There are two periods in the model: the loan taken in the first period has to be repaid in the second. I assume a monopolistic lender who performs two functions: lending to the debtor and accepting deposits `D' from the corporation. This is in contrast to the way in which the standard lender-borrower problem is modelled, where lenders are supposed to compete over a limited number of borrowers, to the point of driving profit down to zero. In these models, credit is rationed in equilibrium. The assumption of competition between lenders has been questioned (Basu (1991); Darity and Horn (1988)), and one can model the lender as a monopolist with some validity, since the bulk of international lending in the Seventies was done by large, well organised syndicates of banks.

Credit rationing (or excess demand) in equilibrium in these standard models is obtained also because the rate of interest is supposed to act as a screening device through the adverse selection effect. The expected return to the bank depends on the probability of repayment and thus the bank would like to identify borrowers that are more likely to repay, higher rate of interest reflecting a lower probability of repayment (See, for instance, Stiglitz and Weiss (1981)). As far as international lending through the Euromarket is concerned, the evidence, as it is, points to the contrary: that of declining spreads over LIBOR for borrowers in Latin America, whose creditworthiness was certainly doubtful.

Thus in the model that follows, I make no assumption about the rate of interest rising as the probability of default increases. Accurate modelling of the lending boom of the Seventies would in fact require, from the banks' view, the assumption of the probability of default being zero. (This is discussed in the next section as the Sovereign Risk Hypothesis, which dominated the new approach to banking in the Seventies). This assumption is implicitly made in what follows.

In the absence of any lending (borrowing), let $C_1$ and $C_2$ describe the period 1 and period 2 consumption of the debtor.

If the loan is taken, then the utility of Agent 2 can be written as

$$U(C_1 + L, C_2 - (1+i)L)$$

For Agent 1, the problem is to maximise its profits, which can be denoted thus

$$T(L,i) = (1+i)L - C(L) + \pi(D(L))$$

where C(L) is the opportunity cost of lending and $\pi(D)$ is the profit derived from keeping deposits of the corporation. In Gwynne's account, the corporation threatens to withdraw its deposits if a certain amount of lending is not done to the debtor. To make the threat credible, the assumption is that the bank gets a surplus in its dealing with the depositor, which it will lose were the corporation to carry out the threat. In this scenario, as the deposits are contingent upon the amount of lending done, $D'(L) > 0$. However, in the standard lender borrower problem, since the deposits are unrelated to the amount of lending done, then $D'(L)=0$. In either case, $\pi(D(L))$ can simply be written as $\pi(L)$ with $\pi'(L) > 0$ in the former case and $\pi'(L) = 0$ for the latter case.

Thus the profit function modifies to

$$T(L,i) = (1+i)L - C(L) + \pi(L)$$

For agent 1, the objective is to

$$\max T(L,i) = (1+i)L - C(L) + \pi(L)$$

subject to

$$U(C_1 + L, C_2 - (1+i)L) \geq \tilde{U}$$

where U is the reservation utility of the debtor - the utility that the debtor would get if he went without the deal. At equilibrium, I will offer 2 no more than $\tilde{U}$. This can be proven by contradiction. Suppose 2 gets more than $\tilde{U}$ at equilibrium. Then it is possible for 1 to raise i so that 2 still accepts 1's offer. But this means greater profit for 1. Which means that the original situation could not have been an equilibrium. This implies that in equilibrium, the above would be a strict equality.

The problem now becomes

$$\max_{i,\,L} \; T(L, i) = (1+i)L - C(L) + \pi(L) \tag{1}$$

subject to

$$U(C_1 + L, C_2 - (1+i)L) = \tilde{U} \tag{2}$$

Consider equation 1. Clearly, for each L, there exists at most one i such that 2 is true. Hence over a certain domain, i is an implicit function of L defined by 2. Let us write the implicit function as

$$i = \phi(L) \tag{3}$$

The bank's problem now is to max (1) subject to (3).

In other words,

$$\max \; (1 + \phi(L))L - C(L) + \pi(L)$$

The first order condition is

$$\phi'(L)L + 1 + \phi(L) + \pi'(L) = C'(L)$$

In the dyadic relationship between the bank and the debtor, the corporation plays no active role and as explained earlier, in the above first order condition, $\pi'(L)=0$. Let the equilibrium amount of lending in this case be $L^*$.

In the triadic model, the corporation plays an active role. As described by Gwynne, if the loan is used to buy goods produced by the corporation, it would be interested in a higher loan being given to the debtor. To ensure this, the corporation can threaten the bank, that unless a higher amount is lent to the debtor, it would withdraw its deposits from the bank. This threat can be meaningful if the withdrawal of deposits by the corporation results in a reduction of profits for the bank. In our scheme, this can be expressed as $\pi'(L)>0$.

Let the solution to the second problem be $\tilde{L}$, and look at the first order condition. Assuming that in addition to $\pi'(L)>0$, $C'(L)>0$ and $[1+\phi(L)]L$ is concave, it follows that

$$\tilde{L} > L^*$$

The rationale behind these assumptions is the following: a larger loan would come with larger costs ($C'(L) >0$ ). For this problem, equilibrium would be defined by the point of tangency between the reservation frontier and the highest iso-profit curve. For the equilibrium to be a unique maximum, the profit curve would need to be concave and $(1+\phi(L))L$ defines profits for a monopolist with zero costs.

Thus we see that loan pushing can be entirely consistent with profit maximisation. In other words, it should not be viewed as an `irrational' act or a mistake on the part of the bankers. This, however, should not be interpreted to mean that the banks merely followed sound economic logic and if things went wrong later, they cannot be held responsible for the consequences of their actions. It can be argued that pure profit maximisation (like that for a producing firm) was not always the objective for a bank; even in the theoretical modelling of the banking firm, the differences with the producing firm have been clearly outlined. (For an excellent survey, see Santomero (1984); to get a flavour of the ways in which the bank is modelled, see for instance, Stiglitz and Weiss (1981); Diamond (1984); Calomiris and Kahn (1991)).

In the next section, I argue that the end of the Sixties heralded a new approach in international banking, which was conducive to loan pushing.

## 4. The new approach to banking

It is important to highlight some of the key differences between ordinary domestic lending and the international lending that took place through the Euromarket. There being no central bank or authority in the Euromarket, there is no control over the activities of the market. Second, Eurocredits were based on floating interest rates (LIBOR plus a spread), thus at any point, the sovereign country can face a sharp rise in its interest repayment burden.

A normal regulatory rule followed in domestic lending is that no more than 5% of the bank's capital may be lent to any one borrower. Even if we assume that this was followed for each borrower, attention was not paid to the fact that when foreign loans - whether public or private - are made to the developing countries, they have to be repaid in certain hard currencies, and such foreign exchange can generally be obtained only from the Central Bank of the country. Thus all loans are, in a sense, made to the Central Bank. Thus the exposure levels for the leading debtors turned out to be much greater than the prudent limit.

Although this fact was not taken into account in determining the maximum amount of lending to any country, it certainly was not unknown, as is clear from the Sovereign Risk Hypothesis[6]. The Sovereign risk hypothesis said: "Any country, however badly off, will `own' more than it `owes'. Countries simply could not go bankrupt; even if they occasionally had some short term cash flow difficulties, the cure would be sound programmes and the time to let them work" (quoted in Lever and Huhne, 1985).

It was not as though this was the first time ever in history that international lending was taking place, although this was certainly the first time that commercial banks were involved on this scale. However, certain facts, by this time were historical knowledge. For instance, it was well known that certain countries had defaulted on their external debt commitments earlier (Mexico in 1933, Brazil in 1937, and Argentina in 1943, to name a few). These have turned out to be the largest debtors in the Seventies as well. Thus, it appears that these economies were beset with structural problems that necessitated their continuing dependence on external finance. But does it require the benefit of hindsight to be able to suggest this?

The most likely course for the lenders would have been to review the development experience of these countries to confirm their creditworthiness.

In defence of the banks' (erroneous) decisions, it is often argued that the banks did not have the necessary information to evaluate the creditworthiness of borrowing countries. Assuming for a moment that this was true, it can be asked whether the banks were at all behaving rationally as financial intermediaries. Mobilisation of funds through the financial intermediaries is supposed to increase efficiency, with their access to specialised knowledge that is not available to individual depositors. If the banks now make a plea about absence of specialised information, then a strong critique can be made of their role as agents responsible for the recycling of petrodollars.

The fact, however, is that it is *untrue* that the banks did not have the information. The bank syndication departments prepared an information or placement memorandum in which a country's economic or political situation was described. These memoranda were often compiled with the help of economists, on the basis of data collected in the debtor country and information published by the multilateral agencies like the IMF, the World Bank etc. According to Bogdanowicz-Bindert and Sacks (1984), the internal documents prepared at the money centre banks were much more elaborate, detailed and candid than information memoranda used to persuade the regional banks to join the loan syndicates. The latter were written as sales documents and were primarily intended as a formality. Thus,"they served to pave the way for a decision that was in large part already taken: to increase international exposure."

In fact, Wriston very candidly admitted the actual motivation of the bankers, as embraced in the "Citibank Concept": "Our strategy is not one of making loans, our strategy is one of making money" (Lombardi, 1985). Between 1970 and 1980, the Citibank Concept was adopted by the majority of the world's top banks and the smaller banks simply followed suit.[7] It must be recognised that this is <u>not</u> the approach that has always guided banking in a market set up[8]. The role that for instance, Schumpeter assigned to banks, stands out in stark contrast:

"....the banker must not only know what the transaction is which he is asked to finance and how it is likely to turn out but he must also know the customer, his business and even his private habits, and get, by frequently talking things over with him, a clear picture of the situation" (Quoted in Diamond (1984)).

What happened was just the opposite, as Gwynne's account indicates. He mentions that the new norms of banking were such that "your job performance is rated according to how many loans you make." Thus he recommended the loan to the Philippine company even when he knew that the leverage ratio for that company was 7:1 (2:1 is considered dangerous) and he thought that "it would be pure insanity to make this loan." He goes on to say that "American banks through the agency of loan officers like me have made a number of questionable loans in countries whose BOP is so far in arrears that according to Citicorp's Walter Wriston, "ability to repay" is no longer the main consideration. All that matters now is "access to the marketplace", meaning the ability to borrow even more. This is a convenient rationale.....the theory goes something like this: as long as a country can continue to borrow money, it will, in effect, be able to "roll over" its debt indefinitely.....the banks will be paid on schedule and the country will not become insolvent" (Gwynne, 1983).

Schumpeter warned of the disastrous consequences of such an approach. ".... traditions and standards may be absent to such a degree that practically anyone can drift into the banking business, find customers, and deal with them according to his own ideas...This in itself... is sufficient to turn the history of capitalist evolution into a history of catastrophes" (Quoted in Diamond, 1984).

<u>The other advantages of international lending</u>

The bulk of commercial borrowing by developing countries in the 1970's came from syndicates of banks, put together from the money centres. Apart from the fact that risks were shared as a result of this, the larger banks had a special interest in arranging syndicates, as the banks could receive loan fees at the outset to set up the consortium of lenders. The larger the loan, the greater the earnings for the banks acting as syndicating agents. Darity and Horn (1988) quote studies which show that fees for arranging the loans averaged about 1% of their value. (This is no small amount: 1% for a $200 million loan would be $2 million). This was the scale of earning for merely arranging a syndicate. Thus over the period 1972-80, an average of 66 new banks entered the international loan syndication market every year. International bank lending expanded at an annual rate of some 20% per year -- in almost direct proportion to the growth of the Eurodollar market (Lombardi, 1985).

Another advantage obtained from the fact that the large money centre banks were able to avoid listing their non-performing loans as "non-performing" in their regulatory reports. This was because loans to LDCs could be rolled over through automatic or near automatic refinancing or rescheduling arrangements to avoid having to deduct them from their assets. Gwynne (1983) points out that even if a loan is rescheduled, interest payments keep coming. "And it is interest that hits the bottom line of a bank's profit and loss statement. This means that Citibank can have a very good year even though many of its loans may be in serious trouble. The banks may have been imprudent in making the loans in the first place, but they are both clever and scrupulous when it comes to protecting the value of their assets." Thus the figures on "losses" from LDC loans could be deceptive and this deception became necessary for the commercial banks for two reasons: first, the rolling over of loans would postpone the day of reckoning (i.e. postpone the possibility of default) and, second, underplaying the actual losses would prevent depositor confidence from collapsing.

Also, as Lissakers (1984), points out, the international operations sections of bank annual reports were "masterpieces of obscurity". The banks were not required to divulge to stockholders how much money they had loaned to individual countries, what the maturity distribution of country loans was or the proportion guaranteed by the US government. The annual reports provided no basis on which an investor or a depositor could make even a crude judgement about the soundness of a bank's foreign operations. According to Calomiris and Kahn (1991), the ability of the depositors to make early withdrawals, when they get adverse information about bank asset value, acts as a disciplining device for the bank. The above story shows how this device became completely ineffective.

Finally, loans to LDC's have potential international insurance agents -- the International Monetary Fund and the Federal Reserve (the latter for the US banks). This means that if the debtor finds that it is simply unable to repay, then the banks feel reasonably assured that the IMF will act as lender of last resort and effect a rescheduling of the loan. Also, the banks know that the conditionalities that accompany the rescheduling, demand adjustments only from the borrowers. From the banks' point of view, even if this involves some write-off, a total default is averted. Despite all efforts, if the debtors still default and a major commercial bank is placed on the verge of bankruptcy, then the Federal Reserve is expected to come to its aid. At the political level, the bankers may have acted upon the confidence that their national governments would force defaulters into payment, through imposing sanctions.

## 5. Concluding remarks

The loan pushing adventure has placed the banks on the brink of a crisis by making them vulnerable to default by major debtors. The scale of lending and borrowing has also, in retrospect, proven to be unsustainable. Between January 1980 and September 1987, 50 developing countries had renegotiated their foreign debts through multilateral negotiations (World Bank, 1987-88). The debt strategy that has governed these negotiations has, unfortunately, taken a partial view of the debt crisis and placed the onus of adjustment only on the debtors. To the extent that the loan pushing doctrine is valid, the banks ought to be made to bear a part of the cost of adjustment as well.

## References

Basu, K., 1986: "One kind of power", Oxford Economic Papers, 38.

---------, 1991: "The International Debt Problem, Credit Rationing and Loan Pushing: Theory and Experience", Princeton Studies in International Finance, No.70.

--------and Deshpande, A., 1995: "The Strategic Role of Credit as an Instrument of Trade", Japanese Economic Review, Vol. 46, no. 4, December.

Bogdanowicz-Bindert, C.A. and Sacks, P.M., 1984: "The role of information: Closing the barn door?" in Feinberg, R.E. and Kallab,V.(ed.) "Uncertain Future: Commercial Banks and the Third World", Transactions Books

Calomiris, C.W. and Kahn, C.M.,1991: " The role of demandable debt in structuring optimal banking arrangements", American Economic Review, June.

Darity, W.Jr., 1985: "Loan pushing: Doctrine and theory", International Finance Discussion Papers, no.253, February.

------------, 1991: "Banking on Capital Flight", in Davidson, P. and Kregel, J.A. eds, Economic Problems of the 1990s: Europe, the Developing Countries and the United States, Edward Elgar.

----- and Horn,B.,1988: The loan pushers: The role of the commercial banks in the international debt crisis, Cambridge, Mass., Ballinger.

Deshpande, A., 1995: "Rethinking Strategy for Global Debt Crisis", Economic and Political Weekly, Vol XXX, No. 21, May 27, 1995.

Diamond, D.W., 1984: "Financial Intermediation and Delegated Monitoring", Review of Economic Studies.

George, S., 1989: "A fate worse than debt", Penguin.

Gwin, C., 1984: "The IMF and the World Bank: Measures to improve the system" in Feinberg, R.E. and Kallab,V. (ed), *op cit.*

Gwynne, S.C., 1983: "Adventures in the loan trade", Harper's Magazine, September.

Hyson, C.D. and Strout, A.M.,1968: "Impact of Foreign Aid on U.S. Exports",Harvard Business Review, vol.46.

Jain, A.K., and Gupta, S., 1987: "Some evidence on `herding' behaviour of US banks", Journal of Money, Credit and Banking, February.

Kindelberger, C., 1978: "Manias, Panics and Crashes: a history of financial crisis, New York, Basic Books.

Lever, H. and Huhne, C.,1985: "Debt and danger: the world financial crisis", Penguin.

Lissakers, K., 1984: "Bank regulation and international debt" in Feinberg, R.E. and Kallab,V. (ed);*op cit* .

Lombardi, R.W., 1985: "Debt Trap: rethinking the logic of development", Praeger.

Santomero, A.H., 1984: "Modelling the banking firm: a survey", Journal of Money, Credit and Banking",vol.16, no.4, Nov.

Stiglitz, J.E. and Weiss,A., 1981: "Credit rationing in markets with imperfect information",American Economic Review,71,June.

Taylor,L., 1985: "The theory and practice of developing country debt: An informal guide for the perplexed", Journal of Development Planning, No. 16.

World Bank 1987-88: World Debt Tables.

Winkler, M., 1929: Investments of US capital in Latin America, Boston, World Peace Foundation Pamphlets, 1929.

Notes:

1. The exception is Darity's work, which is a major study aimed solely at studying loan pushing.

2. These are (1) the promotional-cum-persuasion aspect, where the initiative to borrow comes from the lenders. Thus borrowers receive more credit than they themselves regard as feasible or necessary at the outset. (2) This implies the existence of surplus of funds, that unable to seep into normal outlets, made their way into the less developed regions. Darity explains that from the early `70s, the supply of funds to the Eurodollar market was abundant and the demand for funds from traditional borrowers in the developed countries did not keep pace with the expansion of credit availabilty. This was true even with very low interest rates. (3) The foreign lending involved nepotistic connections and corruption in the arrangement of the loans. (4) The loans performed a market- making function for numerous US producers since the loans created financial capacity in the less developed countries to purchase the output of the US enterprises. (This issue has been investigated in some detail in Basu and Deshpande (1995)). (5) When concrete evidence of softness in the ability of the borrowers to meet their obligations became visible, the lenders initially tried to resolve the situation by continuing to lend. (6) Eventually, lenders withdrew from providing funds i.e."revulsion" took place.

3. There are other illustrating instances. For instance, the case of Zaire, related by another young banker, Richard Lombardi, ex-vice president of the First National Bank of Chicago. In the early 1970's, the commercial banks were attracted by Zaire's rich copper-cobalt deposits and the country's head of state, Joseph Mobutu, "banked on the banks". By 1975, the country could no longer service its foreign bank debt, nor maintain its interior transport system, nor pay for its education. Between 1975 and 1978, copper and cobalt production had fallen by some 25%, the production of tin and strategically important columbium and tantalum ran below capacity, and the mining of manganese stopped altogether due to collapsing transport systems, lack of supplies, parts and technicians. Meanwhile, the banks' money had been spent on a world trade centre in downtown Kinshasa, an underground parking lot, a fleet of jet aircraft, an elaborate airport next to the head of state's native village, and for the importation of growing quantities of food, automobiles and arms (Lombardi, 1985).

4. For a comprehensive and lucid exposition of this aspect of the flow of lending, see Darity (1991).

5. The triadic structure is similar to the one in Basu (1986) which is concerned with analysing the rural credit markets.

6. The chief exponent of this was Walter Wriston, Chairman of Citicorp in 1967, America's leading banking group, but this was embraced by the other banking magnates as well.

7. Jain and Gupta (1987) have tried to test the hypothesis that banks "herded" or demonstrated a pack instinct by emulating each other's lending behaviour. By looking at the international lending decisions of the US banks during 1977-82, they found positive evidence of herding and concluded that the large money centre banks acted as leaders in the herding process.

8. To understand the change in the perspective governing banking, it would be interesting to take a look at the emergence of "money centre banks". In 1967, the First National City

Bank became a one-man holding company known as Citycorp. The object of this exercise was to permit the bank to expand its operations outside its traditional business, viz, that of lending money. In the late 1960's and the 1970's, Citibank expanded its business into leasing, credit cards, management advisory services, insurance and travel. As a result of this, the composition of bank assets and liabilities changed drastically. By the end of 1982, demand deposits represented 6% of Citibank's liabilities, down from 50% two decades earlier. Citibank had become what is known as a money centre bank, meaning that it was more of a financial intermediary, than a banker. Thus, it largely financed its loan portfolio, not from its deposit base nor from its shareholders' equity, but from purchased money, bought either from the Eurodollar market, or from other domestic money centre banks. This reliance on purchased funds enabled the banks to increase substantially their loan volume, aggregate income and profits. (For a detailed account of this process, see Lombardi, 1985).

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