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Chapter 5

Lessons from Financial Deregulation Policy, Financial Development and Crisis – Case of Indonesia –

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Abstract

Indonesia and other Southeast Asian countries introduced the drastic financial deregulation policies during 1980s, which enhanced financial sector development and domestic savings and investment in these countries. However, the financial deregulation policy together with economic boom led massive capital inflows. This massive capital inflows and reversal caused serious financial crisis. We conclude that massive capital inflows continued because the interest arbitration equation did not work in these countries and wide interest rates differentials remain for nearly 10 years. We highlighted that the wide interest rates differentials were caused by the inefficient and weak banking sector. In addition, we also discussed the policy responses and their effectiveness. The Indonesian government relied mainly on the monetary policies, which were not effective in pegged and open economy. On the contrary the fiscal policies and the external debt management policies, which were effective, were not fully utilized. It should be reminded that the major donor such as the World Bank and the Japanese government could have played critical roles in fiscal and external debt management policies.

Keywords: Financial Deregulation, Indonesia

1. Introduction

This paper attempts to analyze the financial deregulation policies and the financial sector development in 1980s to 1990s. By introducing the financial deregulation policies in 1980s Indonesia achieved remarkable financial and economic development then experienced severe financial crisis in 1997. It is necessary to assess the financial deregulation policy and its implications to the financial sector.

The paper highlights two issues as for the causes of the financial crisis. The first one is direct and the second one is indirect causes. The direct cause of the crisis is massive capital inflows and its reversal. The indirect cause is the inefficient and weak banking and financial sector in Indonesia, which resulted in wide differentials of the interest rates between domestic and international markets that led to the massive capital inflows.

In order to verify the above issues the paper discusses followings. The first is to assess the impacts of the financial deregulation policies. The second is to discuss structural characteristics, behavior and problems of the banking sector in mid 1980s to mid 1990s, which are important factors behind the financial crisis in 1997. The third is to analyze the mechanism of the wide interest rate differentials between domestic and international financial markets, which led to the massive capital inflows. The fourth is to assess effectiveness of the macroeconomic policy measures taken by the government before the crisis. Lastly the paper summarizes the findings.

2. Financial Deregulation Policies and Financial Sector Development

In 1980s many Southeast Asian countries including Indonesia introduced the financial deregulation policies. These countries abandoned the financial repression policy and the government interventions. These deregulation policies were in line with the policy advice of the international organizations including the World Bank and the IMF (see World Bank 1989).

The financial deregulation policy was also necessary in Indonesia. In early 1980s, when its oil revenue started to decline as the oil boom came to the end, Indonesia needed to mobilize domestic resources through its financial sector. The Indonesian government introduced the first financial deregulation policy from 1983 to 1984. The commercial banks' interest rates were fully deregulated, so that the all banks were allowed to set interest rate for both deposits and loans freely. As a consequence the real interest rates of the commercial banks turned from negative to positive in 1983 (see Figure-1 and Table-1). In addition ceiling of commercial bank loan was abolished. This

resulted substantial increase in the commercial banks deposits and loans. The financial deregulation policy played a critical role in development of the Indonesian financial sector (see Figure-2).

Following the first financial deregulation policy the second deregulation policy was introduced in 1988. The second deregulation policy aimed to encourage competition among the commercial banks by deregulating new bank entry. The second deregulation policy in 1988 eased new bank entry including reduction of minimum paid up capital of the commercial banks and allowed foreign banks to open joint venture banks in Indonesia. As a result Indonesia private sector mainly business conglomerates groups as well as foreign banks opened a large number of new banks and branches. The commercial banks lending to the private sector also started to jump after the financial deregulation policies (see Hamada 2003).

It is important to highlight that the financial sector development supported increase in savings and investments (see Figure-3). High investments supported by high savings was the key factor contributing for rapid economic development in Indonesia during 1980s to 1990s. The World Bank pointed out in its book "East Asian Miracle" that exceptionally high investment accompanied by high saving ratio was one of the most unique and important features of the miracle economic development in the East Asian region (see The World Bank 1993).

3. Financial Deregulation Policy and Banking Sector

3.1. Financial and Socio-economic Development stages and Problems of the Banking Sector

The financial deregulation policies introduced in 1983 to 1984 and 1988 have accelerated development of the Indonesian financial sector. At the same time, rapid financial development and sharp increase in commercial banks' credits in the late 1980s to 1990s resulted in an increase in non-performing assets of the commercial banks. This section discusses the mechanism of accumulating non-performing assets, which resulted in the weak banking sector.

At the early stage of economic development financial resources are self finance, i.e. financed by its own source. When the economic development stages advances as the Asian emerging market economies experienced in the 1980s to 1990s, their own resources may not be enough to meet financial requirement for their rapid economic development. So that it becomes necessary to mobilize external resources from outside of their own resources. We call the financial system in the early development stage as "internal financing" and the latter stage as "external financing". The Asian emerging market economies, which achieved rapid economic development in 1980s to 1990s, required rapid shift to

the external financing.

The internal and external financings have different characteristics and supported by different socio-economic institutions. It is useful to review these characteristics of the two systems. Table-2 sets out major characteristics of these financial systems (see Komatsu 1996). At the stage of the internal financing most of economic transactions are limited in segmented region or within a certain group, and based on bilateral and face to face basis. Therefore interest rate differentials among transactions (and also among regions) are relatively large and their adjustment speed is slower. There is no well developed legal system existing at this stage. However, “unlimited liability system” exist within the segmented region or within the family group. Although it is based on the traditional socio-economic customs, there are certain rules within village and family group. It is also important to highlight that there is no well developed accounting and information system at this stage, however, within the segmented region or within the family group almost all information is perfectly shared jointly among the members. In other words economic and financial transactions may work well without accounting and legal systems within the segmented markets and family.

On the other hand, the financial transactions in the developed countries are based on external financing and non-bilateral basis. There is well developed financial market in the developed economy where the interest rate differentials are small and their adjustment speed is much faster. The legal and accounting systems are well developed and support financial transactions in the markets. Financial transactions in the market system are beyond segmented region and family members. So that well developed information and legal systems are critical in securing smooth transactions.

When the financial deregulation policy was introduced and the financial market started to grow rapidly as we have seen in Indonesia during late 1980s to 1990s, the existing social-economic system (i.e. informal information and unlimited liability systems) and behavior of the players (bankers, depositors and borrowers) remained almost unchanged. At the same time financial resources started to flow much faster by seeking investment opportunities for higher returns in the deregulated market without well developed information and legal systems (including prudential regulations and bank supervision). Under such situation, even though individual market players behave rational and compatible to their incentives the financial transactions may fail and lead to large nonperforming loans.

In the next section we explore the above discussions into practical examples in the Indonesian banking sector. We explain typical behavior and pattern of the state owned banks and the private business group banks, which

caused large non performing loans in the Indonesian banking sector. Even after the deregulation policies the state owned banks played important role, sharing around 40% in terms of total banking sector assets. Another 40 %of the total assets is owned by the business group banks.

3.2. Information Asymmetry and Moral Hazard of the Banking Sector

3.2.1. Structure and Behavior of State Owned Banks

Table-3 shows the structure and behavior of state owned banks (see Komatsu 1998). This explains a typical mechanism of accumulating non-performing assets of the state owned banks. Although the financial deregulation policies were introduced in 1980s, the management of state owned banks and, particularly, the typical behavior of senior managers and borrowers (including pressures form powerful politicians) remained without major change (see Figure-4 (a)).

The government appoints senior management of the state owned banks, and some of them have once held or even are currently holding posts in the government offices or the Central Bank. Government guidance and instruction strongly affect management strategy. The banks decisions are often made from a political point of view, which may contradict the commercial and the financial discipline. Under this situation, the most important factor affecting the decision of the bank managers is the intentions of the government and the politicians rather than credit analysis. In other words the bank managers have no incentives to develop credit analysis, which is a major banking function. Such attitude of banks, without sufficient credit analysis, tends to increase non-performing loans. When problem loans emerge and payment arrears start to take place, the bank managers incline to hide them by rolling them over or by extending new loans. This is a typical "forbearance policy". This mechanism encouraged the increase of non-performing loans further and aggravates the problems. The ministry of finance and the central bank are responsible for bank supervision. As the structure and behavior discussed above, the ministry of finance and the central bank have no incentives to develop and implement a better bank regulations and supervision. Even though there were banks prudential rules existed in Indonesia, they had no incentives and intentions to enforce them.

From the point of view of depositors and international lenders, state owned banks are perceived as sovereign risks, the safest of all. It is considered that there is a government safety net under them. A tacit understanding exists that the government will not let the state owned banks go bankrupt. With such understanding depositors and lenders (including international banks) continued

to provide funds into state owned banks without reviewing their risks, which led to the rapid expansion of the bank credits. (Typical example is failure of BAPPINDO (government owned development bank) in 1995.)

The above relationship among the bank managers, the depositors / international lenders, and the bank supervisors is called "moral hazard". As explained above, political intervention and bureaucratic behavior of the managers caused an increase in non-performing assets during the late 1980s to 1990s in the state owned banks. This is a classical case of “governmental failure”.

State owned banks' accumulation of non-performing assets has accelerated since 1990. Under financial deregulation, state owned banks must compete with other banks based on the market mechanism. Both state owned and private banks offered high interest rates to absorb domestic deposits, and they also increased funding from overseas, and in turn increased their lending. As discussed earlier, the state banks behavior, which is characterized as “government failure” remains unchanged. Lending without proper credit analysis increased, and consequently, non-performing assets increased drastically. This is the major reason why non-performing assets accumulated in the state owned banks after the financial deregulation.

3.2.2. Structure and Behavior of the Business Group Banks

In Indonesia, two types of bank exist, state owned banks and private banks. Most of the private banks belong to business conglomerate groups such as overseas Chinese groups. Chinese business groups play dominant roles in the private sector economy in Indonesia. Some big business groups already had their own banks before the financial deregulation, but many established banks after the financial deregulation policies in 1988 when the bank entry was relaxed.

Ownership and management are not clearly separated in the business group banks. A member of the owner family or a person close to it usually becomes the senior management of the bank. Typical function of these banks are absorbing deposits from the public and lending them mainly to firms within the group. In this case both lenders and borrowers belong to the same group and have a close relationship. It is not a modern banking system with financial intermediation, but it is more like bilateral financing within a group, or even banks act as a conduit of financial resource for their group companies. The business group banks are not undertaking financial intermediary function, which is a core role of the modern banking system. Within the group, the information is symmetrical and perfect, however, for the concerned depositors, who are certainly outside the group, the information is asymmetrical (see Table-3 and

Figure -4 (b)).

Although non-performing asset ratio of private banks was relatively low compared to state owned banks, it increased after the financial deregulation throughout 1990s. Several private banks went bankrupt even before the financial crisis in 1997. It appeared that rapid development of the private banks has also led to a sharp concentration of the bank loans to its own group, which caused an increase in vulnerability of the private banks. Ultimate borrowers of the business group banks are family firms. Although they are formulated in as an independent modern limited company, the relationship between the bank and the group firms is “unlimited”. Since these banks are established to channel funds to group firms, the ratio of loans to group firms reached excessively high, much higher than the legal lending limit set by the central bank. However, there are number of ways to circumvent the prudential rules.

Within the business group, the firms hold a close relationship similar to a family structure where the members bear unlimited obligation (unlimited liabilities) to each other, while the bank bears only limited liabilities to their depositors and international lenders since it is formed as a limited company. So that the private banks are only liable up to their capital vis-a-vis depositors and international banks, while they have an unlimited relationship vis-a-vis their borrowers (i.e. their group companies). It is natural for the group bank to give priority to the borrowers, the firms within the group, with which bank bears unlimited liability. When loans to group firms turned into trouble, the bank tended to continue lending by raising fund, even at the high cost, in order to rescue the troubled firm, with which the bank bears unlimited liabilities. This is called "soft budget problem" of the banks (see Kornai 1999). Once a group firm collapses, damages are serious and often lead to failure of the bank. However, the bank’s liability is limited up to its own capital. From the point of view of the business group, newly created banks, whose equity is relatively small, is relatively less important compare to the group firms, which are core of the group. The newly created banks were in weak position relative to the borrowers, i.e. group firms, therefore it is difficult for the banks to assess risks and monitor the borrowers.

Within the business group, both lenders and borrowers share all of the business group’s information. The information is symmetrical and perfect. On the other hand, the group does not disclose all of its information to the public, i.e., depositors and lenders. The information is asymmetrical and imperfect in this case. Having insufficient information, outside depositors do not know which bank is vulnerable or sound. They tend to deposit money in the banks offering higher interest rates. The inconsistencies between development of a

modern financial markets and traditional social behavior cause moral hazard and thus cause the accumulation of non-performing assets in the business group banks (see Table-4).

3.2.3. Weak Banking System and Large Interest Rates Margins

The weak banking system did not only cause accumulation of bad and doubtful loans but also accelerated reliance on foreign capital of the major Indonesian companies. Major Indonesian companies including banks, which have access to the international financial markets, started to rely more on foreign borrowings. Table-5 and 6 indicate commercial banks interest rates on deposits and loans and bank margins. It is evident that the Indonesia commercial banks charge higher margin at around 4 to 5 percent for the rupiah denominated loans and at around 3.5 to 4 percent for US dollar denominated loans. These margins are much higher than those of the international financial markets. The higher margin and higher cost of borrowings, particularly in the domestic currency encouraged US dollar borrowings mainly from the international financial markets, which led to currency mismatch of the Indonesian economy. (More detail mechanism of foreign borrowings are explained in the next section)

When Thai Baht devaluation took place and contagion hit Indonesian rupiah, the balance sheet of the banks and their borrowers, which heavily relied on the foreign liabilities, were deteriorated suddenly. This led to sales of equities and induced more currency runs and further balance sheet deteriorations. This is so called process of “self-fulfilling crisis.” (Krugman 1997)

3.2.4 Currency Mismatch and Self-fulfilling Crisis

As we discussed in the next section a large and continued interest disparity between domestic and foreign market (after adjusting to the exchange rate risks) remained for more than ten years in Indonesia. It was inevitable that massive capital inflows continued and the Indonesian economy was relied heavily on foreign indebtedness. Once the exchange rates started to devalue, the balance sheet of the borrowers automatically deteriorated. The balance sheet deteriorated as foreign as well as domestic investors started to withdraw fund, which accelerated speed of devaluation and balance sheet deterioration. This is called “self-fulfilling crisis” caused by the currency mismatch.

In case of Indonesia the external borrowing was mainly through the corporate sector and not the banking sector. The external borrowing of the banking sector was controlled under the offshore borrowing ceilings (PKLN). The corporate sector, which relied heavily on the foreign currency borrowings and exposed to currency mismatch, was in trouble. Thus NPLs of the banking system increased. This certainly affected balance sheet of the banking system.

Then the bank run occurred.

In Indonesia the bank run was said to be triggered by the closure of the 16 banks in November 1997. However, reason of the closure of these 16 banks was not the above mentioned balance sheet problem, but more fundamental mismanagement of these bank. In any case bank run started and self-fulfilling crisis spread and the Indonesian banking system collapsed in 1998 (see Table-7).

4. Massive Capital Inflows

In this section, we discuss why massive capital inflows continued during the late 1980s to 1997. The massive capital inflows resulted in vulnerability of the economy and thus led to the financial crisis in 1997 (see Komatsu 1998 and 2003).

Economic textbook assumes that the interest arbitration equation holds to equate domestic and international interest rate with a forward cover. This is the mechanism to stabilize one way capital flows. However, in many Southeast Asian countries, including Indonesia, the interest arbitration equation did not hold. We must explain why this happened in these countries.

The interest arbitration equation can be expressed in the following equation:

$$i = i^* + fp \qquad (1)$$

(i : domestic interest rate; i* : interest rate in international markets represented by the US dollar at the London Inter-bank Offering Rate, LIBOR; fp : a forward exchange rate premium)

Forward foreign exchange was traded only on a bilateral basis in Indonesia and there was no official statistics for forward premium available. Through various discussions with Indonesian banks and institutions, it can be concluded that the level of domestic interest rates (i) has remained far higher than the sum of the international interest rate and the bilateral forward exchange rate premium (i* + fp) for most of the time until the summer of 1997. In theory, the forward premium can be divided into two factors; expected exchange rate changes and risk premium. Since there was no good indicator for the expected exchange rate, an actual rate of rupiah depreciation was used as a substitute for the expected exchange rate changes. Then the above equation can be written as follows:

$$i = i^* + e + rp \qquad (2)$$

(e : actual change in foreign exchange rate as a substitute for the expected depreciation rate; rp : risk premium)

The last item of the equation (2), (rp) is equal to (i - i*- e), which represents an implicit risk premium. It is evident that the risk of holding

Indonesian rupiah, i.e. the risk premium, has declined from 1980s to 1990s as the Indonesian economy continued to develop and its economic management remained in line with those of the World Bank. It is also evident from observing the behavior of foreign investors and the ratings given by the international rating agencies that their perceived risk premium has declined substantially through mid 1980s to the mid 1990s (Radelet, S. and J. Sachs 2000). However, as you see from Table-8, the calculated implicit risk premium has not reduced and even increased to around 12% in 1990 to 1993 and remained at around 6% in 1993 to1996. These calculated risk premiums were much higher than the perceived (or actual) risk premium by investors. In other words, the left hand side (domestic interest rate) of the equation (2) has been continuously higher than the right hand side. This fact shows that the interest arbitration did not work smoothly throughout this period. This is the reason why massive capital inflows continued and the external indebtedness increased without limit. The above imperfection in the interest arbitrage has resulted mainly from imperfect adjustments in domestic financial and foreign exchange markets.

Perfect arbitration in interest rates under the free capital mobility, assumed by standard textbooks did not hold in Indonesia over the 10 years from mid 1980s until 1997. This fact was also observed in many other countries, particularly in developing countries where domestic financial markets and foreign exchange markets are still in the early stage of development. As a result, one-sided capital inflows continued for a long period until the crisis broke out.

Now we turn to the interest rate arbitration equation from the Indonesian borrowers' point of view. The relationship can be expressed by adding domestic banks' margin (m) over the deposit rates and margin in the international financial markets (m*) over the LIBOR respectively to the both sides of the equation (1).

$$i + m = i^* + fp + m^* \qquad (3)$$

Indonesian firms, which have access to the international financial markets, faced the equation (3). As discussed earlier domestic banks margin over the deposit rates remained between 4 to 5 percent while the margin over LIBOR offered in the international financial markets were much less, at most 2 percent. The right hand side of the equation (3) becomes much higher than the left hand side. The interest rates differentials are even higher from the Indonesian borrowers' point of view. This encouraged major Indonesian firms to rely more on the external financings. As a result of the shift of major Indonesian firms to the international financial markets, the domestic banks were left to deal with lower quality of borrowers. This maintained domestic banks margin even

higher, which again encouraged major Indonesian firms to rely more on borrowings from the international markets. This mechanism caused the excessive reliance of the Indonesian firms on the foreign capital and worsening of the Indonesian banks' loan portfolio.

5. Economic Policies in Dilemma

The above section explained why capital inflows continued and the foreign borrowings increased without control during late 1980s to mid 1990s. As a consequence the Indonesian economy was overheating and current account was deteriorating. The last issue we examine in this paper is whether the Indonesian government took necessary policy measures in order to manage such an overheating economy and whether those policies were effective.

The Indonesian economic ministers and senior economic technocrats, who have been fighting against political pressures to promote the deregulation policies starting from early 1980, had difficulties in re-introducing direct controls including capital controls. (They also considered that the capital control is not effective under the Indonesian geographical and ethnical conditions) They try to manage its economy through macroeconomic policies, i.e. monetary policies, fiscal policies, exchange rate policies and external debt management policies. This section examines effectiveness of these policies (see Komatsu 2002).

5.1. Monetary Policies

The Indonesian government often used monetary policy to stabilize the overheating economy and adjusting current account deficits. After the second financial deregulation policy in 1988, money supply increased sharply. Massive capital inflows also accelerated surge in the money supply. The primary economic policy response during the course of early 1990s was tight monetary policy to slow down the overheating economy. This policy appeared effective in 1991 when the policy was accompanied by the other policy measures i.e., the external borrowing management policy (PKLN, which will be explained more in detail later).

However, monetary policy alone can not be effective under the pegged exchanged rate system with free capital movements. The Mundell-Fleming model answers to this problem (see Figure 5 (a)). Initially the economy was in equilibrium at the GDP y0 and interest rate i0. At this point the Indonesian economy was overheating with large current account deficits. A tight monetary policy was introduced, which shifts LM curve to the left where the new equilibrium is at the lower level of GDP y1 and at the higher interest rate

level i1. Higher interest rate level, however, induced capital inflows, which resulted in increase of money supply under the pegged exchange rate system. Increase in money supply shift LM curve back to the original position. Therefore the tight monetary policy was not effective in Indonesia before the crisis.

5.2. Fiscal policy

Now we should look at effectiveness of the fiscal policies. Figure 5 (b) explains the effectiveness of the fiscal policies. Again, original position of the Indonesian economy was at y0 and i0, where the economy was overheating. A tight fiscal policy shift IS curve to left and new equilibrium is at y1 and i1. The new GDP y1 and interest rate level i1 are lower than the original levels, thus capital inflow would seize and even capital outflow. So the GDP would remain at the lower level as well as the current account deficits. Therefore we can conclude the tight fiscal policy was effective before the crisis. However, the Indonesian government did not utilize this policy. Why? Answer to this question is straight forward. It is not so easy to tighten fiscal expenditure in the developing counties where there are permanent shortages of infrastructure. There is relatively small scope for the developing country government to take tight fiscal policies while economy was facing infrastructure bottleneck for economic development. In early 1990s the capital inflows reached more than 4% of GDP. Fiscal tightening to offset such magnitude was extremely difficult.

It is also necessary to recall that the major components of the fiscal investments in developing countries. A large portion of the fiscal investments was financed by the official aid. The CGI, Consultative Group for Indonesia, where member countries together with the international organization played important role in assisting and monitoring economic development and policies of Indonesia. Lower aid commitments mean smaller fiscal investments in the future years, i.e. tightening of the fiscal conditions. However, donor countries did not send the signal by cutting the aid commitments in the CGI meetings. It appears that both the Indonesian government and the donor governments were constrained by inertia of the “fiscal incrementalism”. For example, from the point of view of the Indonesian government, to obtain larger CGI commitment was seen as a sign of continued support from the international community to Indonesia. On the other hand, from the donor side, to increase aid commitments means to enhance power of the aid agencies. The budgetary process including aid budget is based on the “fiscal incrementalism” in the donor governments. This process encourages the donor governments to continue maintaining or even increasing aid commitments year by year. Lack of the tight fiscal policies during 1990s appears to be a result of political

pressures in both the Indonesian government and donor country governments.

5.3. Exchange Rate Policies

The Indonesian government has kept the free foreign capital movement policy since early 1970s. It was very difficult to re-introduce direct capital controls in Indonesia because such capital control may cause uncertainty of the overseas Chinese, who plays key roles in Indonesian economy. In addition the direct control was viewed as contradictory to their policy stance that is deregulation as discussed earlier in this section. The capital control was taboo in the Indonesia.

Indonesia's exchange rate policy was under the managed floating system, which was pegged mainly to US dollar. The central bank widened the intervention band time to time to reflect market forces. As you expect, however, widening the band has led to the appreciation of rupiah, not depreciation when massive capital flows into the system. Many economists criticized that the Indonesian government over-valued its exchange rate by maintaining the pegged exchange rate system. From this point of view they advocate that the government should have floated its exchange. This is, a wrong statement. As we see from the above, the floating exchange rate would have caused further appreciation of rupiah, not depreciation, when massive capital continued to flow into the economy. The appreciation of rupiah was very difficult to swallow for the Indonesian government because such policy would affect negatively to non-oil export promotion. (Of course, the Indonesian government could have gone through a painful adjustment process; the appreciation of rupiah - slow down in non-oil exports - slow down of the economy - lower external borrowings. But, this appears to be a hard landing scenario.) This is the reason why the Indonesian government maintained the pegged exchange rate system.

5.4. External debt management policy

The Indonesian government introduced so called "off-shore borrowing ceilings (PKLN)" in 1991. The PKLN was aimed to control external borrowings of the following sectors; (1) government, (2) commercial banks, (3) state owned companies and (4) semi-government companies such as privatized public companies and infrastructure projects. The pure private companies were only exception of the ceilings. The introduction of the PKLN together with the tight monetary policy effectively controlled the external borrowings and the Indonesia economy in 1991. However, the application of the PKLN became less and less rigid during the course and in 1995 the external borrowing ceiling was not renewed. (the PKLN ceiling announced in 1991 covered up to 1995) This made the PKLN ineffective and external borrowing increased continuously.

Why is this happened? There were increasing pressures to undertake more projects in which the former president's family and powerful politicians were involved. It is also necessary for the government to implement more projects in order to distribute benefits the projects to the regions when the general and presidential elections were coming closer. What was the CGI donor governments' position? They tend to take less cautious and less strict position on this issue since major companies in the donor countries were also involved in all of the big projects. The PKLN ceiling, which was the center of the external debt management policy, was loosened and became ineffective in mid 1990s.

Summarizing the above discussions the Indonesian government relied mainly on the monetary policies which were not effective in controlling its economy while the government did not fully utilized the fiscal policies and the external debt management policies, which were effective in managing economy.

6. Summary and Conclusion

Indonesia introduced the drastic financial deregulation policies during 1980s, which enhanced financial sector development and domestic savings and investments. This was the major factor contributing to the East Asian miracle growth. We consider therefore the financial deregulation policy was necessary for financial and economic development in Indonesia. However, the financial deregulation policy together with economic boom in Southeast Asian economy led massive capital inflows and heavy increase in foreign indebtedness. This massive capital inflows and reversal caused serious financial crisis in the region. The heavy foreign indebtedness led to currency mismatch and self-fulfilling crisis when the exchange rate started to deteriorate. Then the bank run was inevitable since the borrowers of the banks were turned to be non-performing.

Why such massive capital inflows continued for nearly ten years? Our conclusion is that because the interest arbitration equation, which is assumed in the textbook, did not work in these countries. It was inevitable to have massive capital inflows when wide interest rates differentials (adjusted by the risk premium) between domestic and international financial markets remains for such a long time. We also highlighted that the wide interest rates differentials were caused by the inefficient and weak banking sector. We conclude therefore it is necessary to develop more resilient and efficient banking system together with the financial deregulation policies. Such banking system should be supported by better information system, legal system and bank prudential regulations, which are compatible to countries socio-economic development stage.

In addition, we also discussed the policy responses and their effectiveness.

After introduction of the deregulation policy the Indonesian government had to rely mainly on macroeconomic policies to manage its economy and difficult to re-introduce direct control measures such as capital controls. The Indonesian government (as well as other Southeast Asian countries) inclined to rely more on the monetary policies, which was not effective. On the contrary the Indonesian government did not utilize the fiscal policies, exchange rate policies and external debt management policies, which were more effective. Latter policies are certainly more painful for the Indonesian government therefore difficult to implement. We should be reminded that the major donors like the World Bank and the Japanese government have been contributing substantial amount of official assistance in the government development expenditures in this period. Therefore the donors could have played critical roles in influencing Indonesia's fiscal policies. Such as low commitments of new assistance at the CGI meetings or to slow down implementation of the already committed assistance could have substantial impacts on the Indonesia's fiscal expenditures. This may also be seen as a clear signal of the donors' concerns to the international financial markets.

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Table-1. Real interest Rate, M2/GDP, Claims on Private Sector/GDP, Saving/GDP, Investment/GDP (%)

	Deposit Interest Rate	Change in CPI	Real Interest Rate	M2/GDP	Claims on PrivateSec/ GDP	Saving/ GDP	Investment/ GDP
1979	5.1	21.8	-16.7	16.3	9.7	27.4	20.9
1980	8.2	16	-7.8	17	9.4	29.2	20.9
1981	10.2	7.1	3.1	16.7	10.2	33.3	29.8
1982	8.6	9.7	-1.1	17.7	13	27.7	27.9
1983	14.8	11.5	3.3	18.9	13.5	29	28.7
1984	17.1	8.8	8.3	20	15.7	29.7	26.2
1985	15.2	4.3	10.9	23.6	17.6	29.8	28.1
1986	14.6	8.8	5.8	24.9	19.6	27.2	28.2
1987	17.5	8.9	8.6	26.4	21.8	32.9	31.3
1988	17.8	5.5	12.3	28.2	26	33.9	31.5
1989	17.1	6	11.1	32.6	32.5	37.5	35.1
1990	17.5	9.5	8	40.1	46.1	36.6	36.1
1991	23.3	9.5	13.8	39.8	45.8	35.9	35.5
1992	19.6	4.9	14.7	39.3	45.5	38.2	35.8
1993	14.6	9.6	4.9	43.4	48.9	32.5	29.5
1994	12.5	8.6	4	44.9	51.9	32.2	31.1
1995	16.7	9.4	7.3	48	53.5	30.6	31.9
1996	17.3	8	9.3	52.2	55.4	30.1	30.7
1997	20.0	6.7	13.3	55.4	60.8	31.5	31.8
1998	39.1	57.7	-18.7	59.5	53.2	26.5	16.8
1999	25.7	20.5	5.3	57.6	20.3	19.5	11.4
2000	12.5	3.7	8.8	53.4	19.4	31.8	22.4
2001	15.5	11.5	4	50.2	17.7	31.5	22
2002	15.5	11.8	3.7	47.4	18.9	26.8	20.9
2003	10.6	6.7	3.9	46.9	21	24.6	25.3
2004	6.4	6.2	0.2	45.7	23.8	32.2	23.3
2005	8.1	10.4	-2.3	52.8	29.4	26.3	22.2

Source: IMF, IFS Yearbook 2005 and IFS May 2006

Table-2. Financial Development and Characteristics

	Less developed Financial Sector	Developed Financial Sector
type of finance	internal financing	external financing banks, capital markets
market characteristics	family economy bilateral transactions segmented markets large interest differentials	market based (anonymous transactions) interest rate determined by markets adjustment speed faster small interest rates differentials
social & legal characteristics	legal & accounting system not developed. unlimited liabilities within a family	confidence on currency & banks legal & accounting system developed limited liabilities prudential regulations
information	imperfect and asymmetry but, within family perfect and symmetry	more perfect and symmetry more disclosure and transparent
investment & saving	no division between investment/saving low saving and low investment	division between investment/saving saving & investment determined independently. high saving and high investment

Table-3. Type of Banks and Characteristics

	State owned banks (SOBs)	Business group banks
Separation of bank ownership and bank management(principal and agent)	Separated. But, many government officers are seconded. Many political appointees.	Not separated.
Conflict of interests Bank owner-bank management	No conflict of interests. Bank management and government officials are on the same boat. But, conflict with national interest.	No conflict.
Conflict of interests Bank owner-bank creditors (depositors)	Conflict.	Conflict.
Information asymmetry borrowers (firms)-bank	Asymmetry.	Perfect symmetry.
Information asymmetry bank creditors (depositors)-bank	Asymmetry.	Asymmetry.
Liabilities, bank to bank owner	Limited.	Unlimited.
Liabilities, borrowers(firms) to bank	Limited.	Legally limited, in reality unlimited.
Liabilities, bank to bank creditors (depositors)	Limited.	Limited.
Disclosure	Not much demand.	Not willing to disclose.

Table-4. Moral Hazard and Bank Regulations

	State owned banks (SOBs)	Business group banks
Moral hazard	Moral hazard by government interventions.	Moral hazard by family group behavior.
Soft budget	Limited.	Asset substitution for high risk-high return project.
Credit analysis and intermediation	Limited. No incentives for credit analysis under government interventions	Limited. Banks merely channeling fund. Banks are not in position to screen credits.
Monitoring by banks	Not necessary	Not in position, bank is inferior to firms.
Market discipline	Does not work.	Limited since not much disclosure.
Bank's management efforts	Do not work.	Work. But, only for family group.
Capital adequacy ratio	Does not work.	Works.
Bank safety-net	Does not matter. SOBs are sovereign risks.	Encourages moral hazard and adverse selections.
Others	Bank autonomy is important. Forbearance. Classical government failures.	Minimum capital requirement is important. Legal lending limit is important. Bank's position is important in order to monitor borrowers.

Table-5. Rupiah Interest Rates, Deposit, Lending &Margin

Table-5. Rupiah Interest Rates, Deposit, Lending &Margin

	3 month Deposit				Working Capital				Consumer Credit				Margin (Work.Capital-3M Deposit)			
	State	Private	Foregin	All	State	Private	Foregin	All	State	Private	Foregin	All	State	Private	Foregin	All
1988	16.16	19.65	18.9	17.75	20.2	23.8	23.3	22.3	n.a.	n.a.	n.a.	n.a.	4.04	4.15	4.4	4.55
1989	16.2	17.63	16.62	17.06	19.7	21.7	19.5	21	n.a.	n.a.	n.a.	n.a.	3.5	4.07	2.88	3.94
1990	20.59	21.62	19.5	21	21.2	25.1	22.8	21	n.a.	n.a.	n.a.	n.a.	0.61	3.48	3.3	0
1991	21.25	21.99	20.11	21.88	25.1	28.2	23.7	25.1	n.a.	n.a.	n.a.	n.a.	3.85	6.21	3.59	3.22
1992	18.62	20.37	16.8	19.51	22.16	26.02	21.99	24.05	n.a.	n.a.	n.a.	n.a.	3.54	5.65	5.19	4.54
1993	12.8	15.83	11.4	14.53	19.37	21.72	16.71	20.52	n.a.	n.a.	n.a.	n.a.	6.57	5.89	5.31	5.99
1994	9.89	13.81	10.18	12.64	16.77	18.52	15.07	17.75	n.a.	n.a.	n.a.	n.a.	6.88	4.71	4.89	5.11
1995	13.93	17.37	14.68	16.8	16.86	20.13	17.68	18.88	n.a.	n.a.	n.a.	n.a.	2.93	2.76	3	2.08
1996	14.92	17.8	14.01	17.25	17.02	20.49	17.65	19.21	n.a.	n.a.	n.a.	n.a.	2.1	2.69	3.64	1.96
1997	20.69	20.31	14.88	20.33	18.49	23.72	20.7	21.98	n.a.	n.a.	n.a.	n.a.	-2.2	3.41	5.82	1.65
1998	39.36	41.59	28.81	39.97	25.09	36.37	43.34	32.27	n.a.	n.a.	n.a.	n.a.	-14.27	-5.22	14.53	-7.7
1999	25	26.21	21.54	25.31	26.22	32.58	29.59	28.89	n.a.	n.a.	n.a.	n.a.	1.22	6.37	8.05	3.58
2000	13.33	13.2	11.21	13.24	19.85	20.53	15.95	18.43	n.a.	n.a.	n.a.	n.a.	6.52	7.33	4.74	5.19
2001	17.47	16.94	12.35	17.24	19.15	19.16	19.09	19.19	16.43	21.55	32.91	19.85	1.68	2.22	6.74	1.95
2002	13.65	13.77	9.89	13.63	18.85	18.21	15.71	18.25	16.8	21.67	34.61	20.21	5.2	4.44	5.82	4.62
2003	7.11	7.2	6.66	7.14	16.18	14.66	11.02	15.07	16.04	18.8	34.5	18.69	9.07	7.46	4.36	7.93
2004	6.47	6.98	5.81	6.71	14.32	13.13	9.33	13.41	14.62	15.93	32.9	16.57	7.85	6.15	3.52	6.7
2005	11.71	11.95	11.67	11.75	15.71	16.95	14.5	16.23	15.23	16.06	32.01	16.83	4	5	2.83	4.48

Source: Indonesian Financial Statistics.

Notes: 1. State: State Banks, Private: Private National Banks, Foregin: Foregin and Joint Banks

2. From 2000 onward all interest rates on the deposit, working caital and consumer credit are average rates of December each year. Up to 1999 all interest rates are period average.

3. Up to 1991 private national banks indicate private national banks with foreign exchange certificates, but, from 1992 onward the private national banks include all private national banks.

Table-6. Dollar Interest Rates, Deposit, Lending &Margin

	3 month Deposit				Working Capital				Consumer Credit				Margin (Work.Capital-3M Deposit)			
	State	Private	Foregin	All	State	Private	Foregin	All	State	Private	Foregin	All	State	Private	Foregin	All
2000	6.59	6.44	4.81	6.11	9.55	9.86	10.17	9.97	n.a.	n.a.	n.a.	n.a.	2.96	3.42	5.36	3.86
2001	5.36	4.91	2	4.35	9.27	8.69	6.91	7.78	9.8	9.55	6.11	9.21	3.91	3.78	4.91	3.43
2002	2.73	2.69	1.92	2.65	9.93	7.7	5.17	7.12	10.16	7.86	8.66	9.94	7.2	5.01	3.25	4.47
2003	1.68	1.4	1.67	1.54	8.6	5.93	4.28	5.9	9.21	6.06	11.93	9.87	6.92	4.53	2.61	4.36
2004	2.86	2.51	2.1	2.14	8.03	5.81	4.53	5.83	7.23	5.74	9.62	7.99	5.17	3.3	2.43	3.69
2005	4	3.47	3.63	3.68	8.08	7.51	6.56	7.17	5.87	6.09	10.23	8.09	4.08	4.04	2.93	3.49

Source: Indonesian Financial Statistics.

Notes: 1. State: State Banks, Private: Private National Banks, Foregin: Foregin and Joint Banks

2. All interest rates are average rates of December each year.

Table-7. Major Events of Banking Crises in Indonesia

Date	Events	Articles of the Jakarta Post
November 1.1997	Closure of 16 banks	November. 3. *Government statement on bank closure, Police ready to anticipate possible riot.* (The banks closed include Bank Harapan Sentosa, Bank Andromeda, Bank Pacific, Bank Astria Raya, Bank Guna International and Bank Dwipa Semesta.)
January 27. 1998	Blanket guarantee. Indonesian Bank Restructuring Agency (IBRA) established.	February. 2. *BI imposes ceiling on forex deposits and liabilities,* February. 3. *Cleaning up banks,* February. 23. *Depositors reimbursed.*
April 4. 1998	Suspension of operations of 7 banks	April. 5. *Seven ailing banks suspended.* (The banks whose operations were suspended were Bank Kredit Asia, Centris International Bank, Deka Bank, Bank Subentra, Bank Pelita, Hokindo Bank and Bank Surya.)
May. 1998	Runs on Bank Central Asia and Bank Central Asia under control of IBRA	May. 29. *BCA put under IBRA control after massive run.*
August 21. 1998	Suspension of operations of 3 banks	August 22. *Govt nationalizes BCA, Danamon.* (The banks whose operations were suspended were Bank Dagang Nasional Indonesia (BDNI), Bank Umum Nasional (BUN) and Modern Bank.)
March 13. 1999	Closure of 38 banks	March 13. *Indonesia shuts down 38 banks-finance minister.*

Source: The Jakarta Post

Table-8. Interest Rate Arbitration

	Rupiah Deposit Rate 3 months	LIBOR 3 months	Changes in Rp/US$ End of Period	LIBOR+changes in exchange rates.	Risk Premium
1979	5.1	12.1		12.4	-7.3
1980	8.2	14.2	0.0	14.2	-6.0
1981	10.2	16.9	2.7	19.6	-9.4
1982	8.6	13.3	7.5	20.8	-12.2
1983	14.8	9.7	43.5	53.3	-38.5
1984	17.1	10.9	8.0	19.0	-1.9
1985	15.2	8.4	4.7	13.1	2.1
1986	14.6	6.9	45.9	52.7	-38.1
1987	17.5	7.2	0.5	7.7	9.8
1988	17.8	8.0	4.9	12.9	4.9
1989	17.1	9.3	3.8	13.1	4.0
1990	17.5	8.3	5.8	14.1	3.4
1991	23.3	6.0	4.8	10.8	12.5
1992	19.6	3.9	3.5	7.4	12.2
1993	14.6	3.3	2.3	5.6	8.9
1994	12.5	4.7	4.3	9.0	3.5
1995	16.7	6.0	4.9	10.9	5.8
1996	17.3	5.5	3.2	8.8	8.5
1997	20.0	5.8	95.1	100.9	-80.9
1998	39.1	5.6	72.6	78.2	-39.1
1999	25.7	5.4	-11.7	-6.3	32.0
2000	12.5	6.5	35.4	42.0	-29.5
2001	15.5	3.8	8.4	12.2	3.3
2002	15.5	1.8	-14.0	-12.2	27.7
2003	10.6	1.2	-5.3	-4.1	14.7
2004	6.4	1.6	9.7	11.4	-4.9
2005	8.1	3.6	5.8	9.4	-1.3

Source: IMF, IFS Yearbook 2005 and IFS May 2006

Note: Exchange rates are at the end of period.

Figure 1. Real Interest Rate

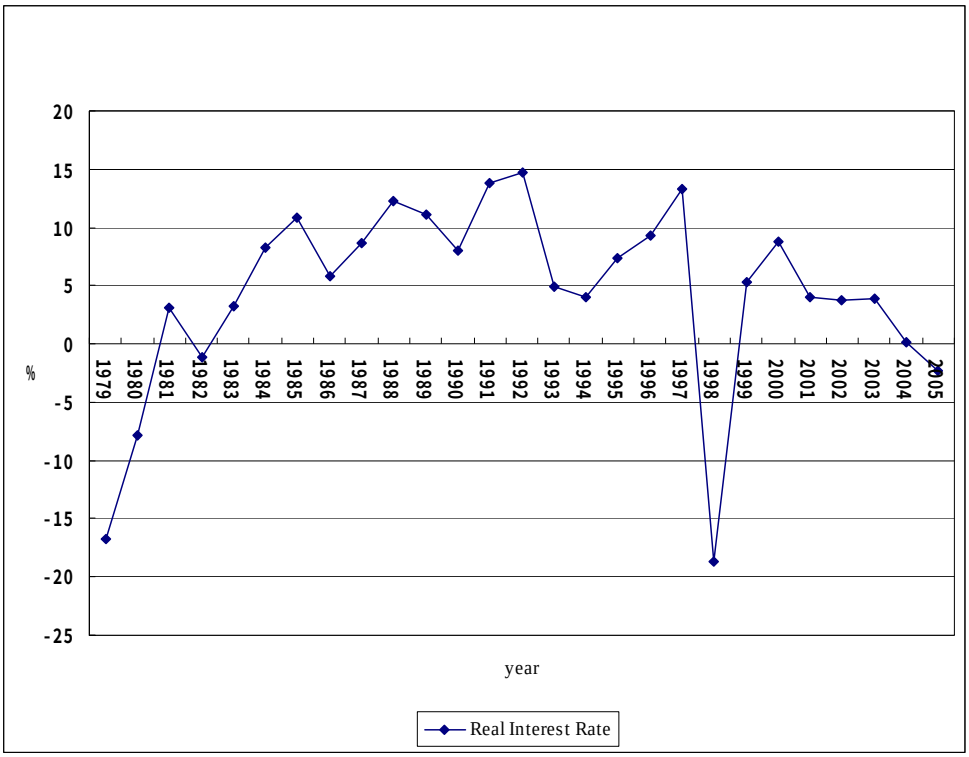

Figure 2. M2/GDP, Claims on Private Sector/GDP (%)

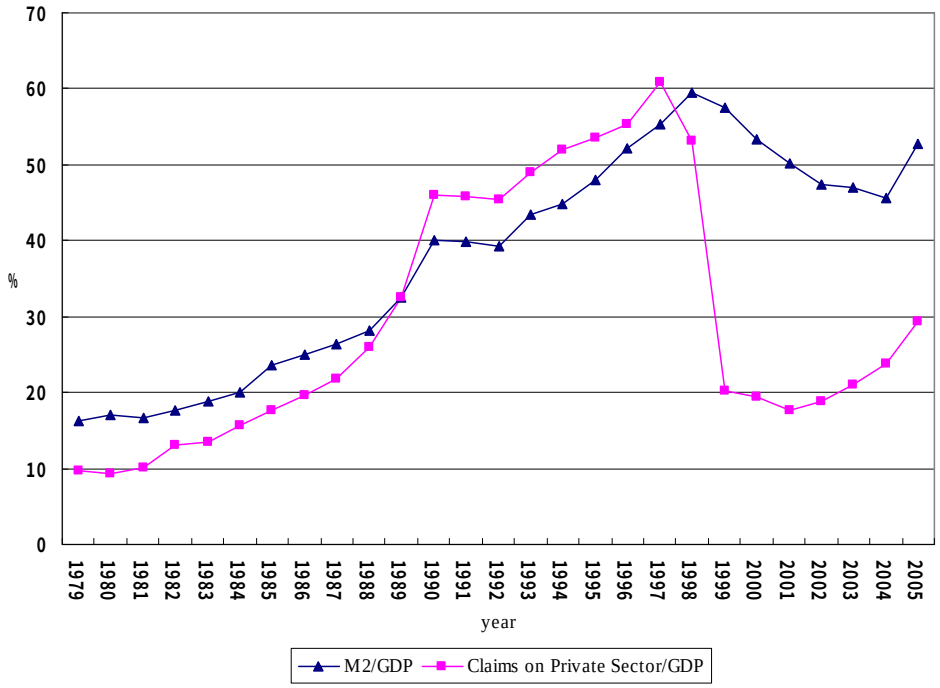

Figure 3. Saving/GDP, Investment/GDP (%)

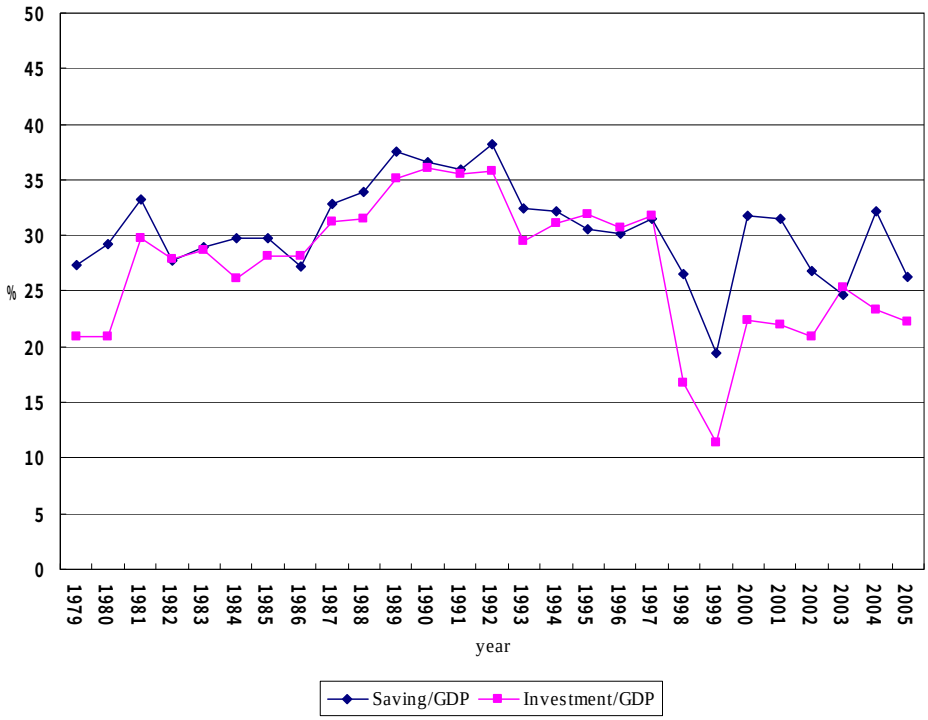

Figure 4 (a). Mechanism of Accumulation of Non-performing Assets State Owned Banks

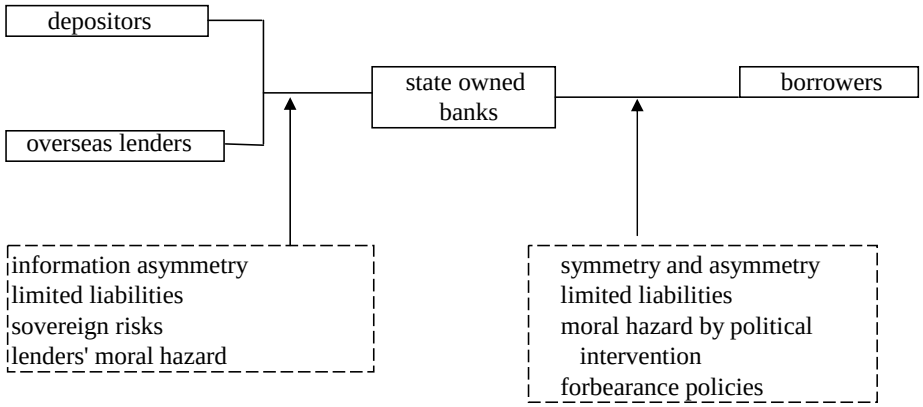

Figure 4 (b). Mechanism of Accumulation of Non-performing Assets
Private business group banks

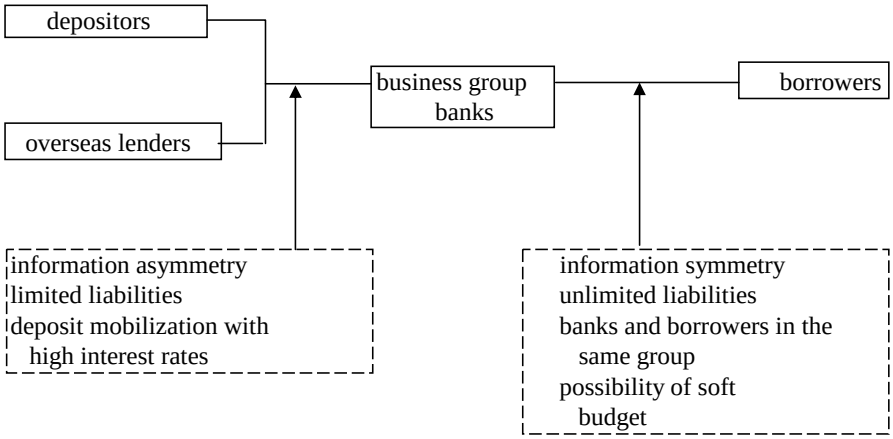

Figure 5 (a). Tight Monetary Policy

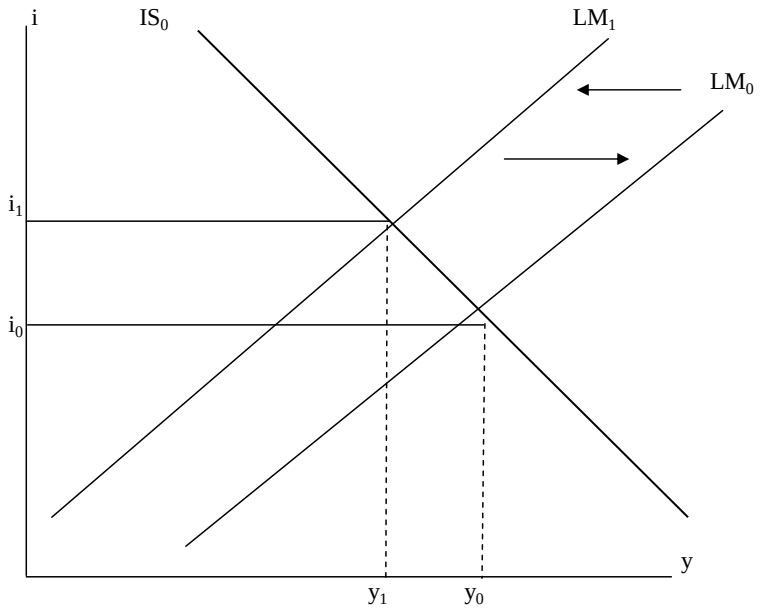

Figure 5 (b). Tight Fiscal Policy