Financial deregulation, banking development, and the likelihood of banking fragility: the case of Indonesia

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NOTE

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CHAPTER 3

THE 1997 FINANCIAL AND BANKING CRISES

3.1. Introduction

Development of the monetary and financial sectors following financial deregulation depended heavily on development of the banking sector. Financial deregulation assisted by removing financial repression, increasing competition among banks by opening the banking industry to new entrants, and increasing intermediation function of the banking sector. Financial deregulation, however, contributed to increasing non-performing loans and the number of banks that violated the legal lending limit regulation. These factors contributed to the weaknesses of the banking sector during the process of financial deregulation.

The objective of this chapter is to analyse the origins of the 1997 financial and banking crises and developments in the monetary and banking sectors after 1997. The discussion covers the government responses to the financial and banking crises.

The organisation of this chapter is as follows. Section two examines the origins of the 1997 financial and banking crises. Section three investigates the government response to the financial and banking crises. Section four examines the development of monetary and banking sectors after 1997. Section five is the conclusion of this chapter.
3.2. The Origins of the 1997 Financial and Banking Crises

There was fantastic economic growth in Indonesia for a relatively long time up to the onset of the currency crisis which started in the middle of July 1997. In addition, high economic growth was also accompanied by moderate inflation rates, which were single digit from 1990 up to the onset of the currency crisis in July 1997.

The currency crisis contributed to changing economic conditions dramatically and generated other crises. The managed exchange rate system collapsed and a floating exchange rate was adopted in August 1997. There was a dramatic slowdown in economic growth, a dramatic increase in domestic prices, and rising bad debts in the banking sector which contributed to the collapse of many banks. McLeod (p.334, 1998b) argued that the crisis in Indonesia seemed to be a new style crisis\(^4\), which differed from earlier crisis. Therefore, it is argued that the root of the 1997 financial and banking crises in Indonesia was not related to the “classical” economic fundamentals\(^5\) such as high inflation rates or a large government deficits, but was essentially due to economic weaknesses which initially started from the currency crisis. The currency crisis is often become a trigger to the financial and banking crises in emerging countries (Mishkin (1999a)).

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\(^4\) McLeod (1998b) argued that there are three features distinguish the new style crisis from the old style crisis as follows. First, the new style crisis can occur with great suddenness without any significant prior shift in readily observable economic indicators. Second, the magnitude of the impact from the new style crisis on economic variables might be dramatic. Third, there are less clear signs for new style crisis than old style crisis.

\(^5\) Hill (pp.7-9, 1999) argues that almost economic and financial indicators are comfortable during pre-financial crisis in 1997. Therefore, there was no “early warning” indicators for financial collapse. Moreover, Hill argues that there was no serious exchange rates misalignment.
Sachs, Tornell, Velasco (1996) and Tornell (1999) found that for a country to be affected by contagion of the currency attack is not random but is associated with weak economic fundamentals. Therefore, it is argued that the weaknesses in the economic indicators in Indonesia before 1997 made it vulnerable to currency attack, and the currency crisis affected non-financial and financial firms leading to the financial and banking crises.

Table 3.1 presents the major indicators for the real and financial sectors. Table 3.1 indicates that Indonesian economic growth was high. The average economic growth was above 7% from 1990 up to 1996. The high economic growth was accompanied by a moderate inflation rate. The government was succeeding in managing the inflation rate at single digit level until the onset of the currency crisis in 1997. In addition, the government maintained a prudential budget policy. The government budget had a tendency to surplus. In the three years before the crisis erupted, the government budget showed a surplus of more than 1% of GDP, and in 1995 the surplus was more than 2% of GDP.

The “success” of the economy as demonstrated by high economic growth for a long time and moderate inflation rates, however, contributed to a paradox:

“High economic growth may make an economy more vulnerable to a crisis. For instance, high growth rates may induce overly optimistic beliefs that the economic expansion will persist unabated in the future. Such expectations can drive both a consumption and investment boom, as well as large capital inflows that make it easy to finance the increasing demand. In such circumstances, an external shock that leads to a sudden change in expectations can cause a rapid reversal of capital flows and trigger a currency crash” (Corsetti, Pesenti, and Roubini (1998a)).

High economic growth might lead to over confidence both from domestic and foreign investors and contribute to increasing demand for credit including demand for foreign borrowing. An excess confidence among foreign investors about the domestic
economy may add to the supply of foreign borrowing and it contributed to increasing net capital inflow to the private sector during 1990 to 1996. A major part of net capital inflow, however, was not transmitted through the banking sector but directly to the private sector as they could borrow directly from international markets.

Part of the inflows was used to finance investment. An increase in investment was followed by an increase in saving. The increase in saving especially in the private sector was slower than investment and consequently it led to increasing the saving-investment gap. Table 3.1 suggests that both government saving and public investment showed fluctuations from 1992 to 1996. Government saving was higher than government investment from 1993 to 1996, which was shown by a surplus on government saving over government investment. On the other hand, private saving tended to decline from 1992 to 1995 but increased substantially in 1996. Private investment fluctuated, but also increased substantially in 1996. Overall, private investment was higher than private saving from 1992 to 1996. It was indicated by a deficit in the saving-investment gap. The deficit in the private saving-investment gap increased to 5.9% of GDP in 1996 compared to 2.1% of GDP in 1992.

A substantial increase in investment is generally favourable for an economy. It implies that increased foreign borrowings of the private sector were used to finance new investment rather than to finance consumption. The problem, however, was in the allocation and efficiency of these investments. If an investment boom is related to the traded goods sector (outward oriented sectors), current account imbalances might be sustainable, as the country has the ability to repay foreign debt with future trade surpluses. If an investment boom is related to domestic sectors, however, the ability to repay foreign debt is limited (Corsetti, Pesenti, and Roubini (1998a)). If investment which is financed by foreign borrowing tended to be inward looking investment, it
inherently has currency risk when there is a large depreciation of the domestic currency. Consequently, it contributed to unsustainable private investment and created foreign borrowing problems.

Table 3.1: Major Indicators for Real and Financial Sectors

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</thead>
<tbody>
<tr>
<td>GDP growth (%)</td>
<td>9.0</td>
<td>8.9</td>
<td>7.2</td>
<td>7.3</td>
<td>7.5</td>
<td>8.2</td>
<td>7.8</td>
</tr>
<tr>
<td>Inflation rate (%)</td>
<td>9.5</td>
<td>9.5</td>
<td>4.9</td>
<td>9.8</td>
<td>9.2</td>
<td>8.6</td>
<td>6.5</td>
</tr>
<tr>
<td>% Government Fiscal Balance to GDP</td>
<td>0.4</td>
<td>0.5</td>
<td>(0.4)</td>
<td>0.6</td>
<td>1.0</td>
<td>2.4</td>
<td>1.3</td>
</tr>
<tr>
<td>% Government saving to GDP</td>
<td>5.8</td>
<td>6.3</td>
<td>6.3</td>
<td>7.1</td>
<td>6.1</td>
<td>6.1</td>
<td>5.8</td>
</tr>
<tr>
<td>% Government investment to GDP</td>
<td>6.1</td>
<td>5.4</td>
<td>4.8</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Deficit (-)/Surplus (+)</td>
<td>(0.3)</td>
<td>0.9</td>
<td>2.3</td>
<td>2.7</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>% private saving to GDP</td>
<td>19.0</td>
<td>18.6</td>
<td>14.7</td>
<td>15.2</td>
<td>20.3</td>
<td>20.3</td>
<td>20.3</td>
</tr>
<tr>
<td>% private investment to GDP</td>
<td>21.1</td>
<td>20.9</td>
<td>18.7</td>
<td>21.3</td>
<td>26.2</td>
<td>26.2</td>
<td>26.2</td>
</tr>
<tr>
<td>Deficit (-)/Surplus (+)</td>
<td>(2.1)</td>
<td>(2.3)</td>
<td>(4.0)</td>
<td>(6.1)</td>
<td>(5.9)</td>
<td>(5.9)</td>
<td>(5.9)</td>
</tr>
<tr>
<td>Ratio of credit to GDP</td>
<td>46.0</td>
<td>45.1</td>
<td>43.5</td>
<td>45.6</td>
<td>49.4</td>
<td>51.6</td>
<td>55.0</td>
</tr>
<tr>
<td>Growth of credit (%)</td>
<td>54.2</td>
<td>16.3</td>
<td>8.9</td>
<td>22.3</td>
<td>25.7</td>
<td>24.2</td>
<td>24.9</td>
</tr>
<tr>
<td>Growth of real credit (%)</td>
<td>40.2</td>
<td>5.8</td>
<td>3.7</td>
<td>11.0</td>
<td>14.6</td>
<td>14.0</td>
<td>17.1</td>
</tr>
<tr>
<td>Bank's foreign assets (billions of Rp.)</td>
<td>11,681</td>
<td>11,072</td>
<td>13,011</td>
<td>11,339</td>
<td>12,875</td>
<td>17,096</td>
<td>20,820</td>
</tr>
<tr>
<td>Bank's foreign liabilities (billions of Rp.)</td>
<td>12,645</td>
<td>11,935</td>
<td>16,207</td>
<td>20,447</td>
<td>24,886</td>
<td>26,952</td>
<td>29,744</td>
</tr>
<tr>
<td>Net bank's foreign liabilities</td>
<td>964</td>
<td>863</td>
<td>3,196</td>
<td>9,108</td>
<td>12,011</td>
<td>9,856</td>
<td>8,924</td>
</tr>
<tr>
<td>Ratio of M2 to foreign reserves</td>
<td>5.14</td>
<td>5.04</td>
<td>4.97</td>
<td>5.57</td>
<td>6.03</td>
<td>6.57</td>
<td>6.33</td>
</tr>
<tr>
<td>Ratio of M1 to foreign reserves</td>
<td>1.45</td>
<td>1.34</td>
<td>1.20</td>
<td>1.41</td>
<td>1.57</td>
<td>1.56</td>
<td>1.41</td>
</tr>
<tr>
<td>% of govt. foreign debt to total debt *)</td>
<td>66.1</td>
<td>61.8</td>
<td>55.1</td>
<td>41.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of private foreign debt to total debt:*)</td>
<td>33.9</td>
<td>38.2</td>
<td>44.9</td>
<td>58.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bank</td>
<td>23.3</td>
<td>18.7</td>
<td>15.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Non-Bank</td>
<td>76.7</td>
<td>81.3</td>
<td>84.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% short term foreign debt to total</td>
<td>15.9</td>
<td>18.0</td>
<td>20.5</td>
<td>20.2</td>
<td>18.1</td>
<td>20.9</td>
<td>25.0</td>
</tr>
<tr>
<td>% of short term debt to Foreign Reserve</td>
<td>149.3</td>
<td>154.6</td>
<td>172.8</td>
<td>159.7</td>
<td>160.4</td>
<td>189.4</td>
<td>176.6</td>
</tr>
<tr>
<td>% of debt service and short term debt to foreign reserve</td>
<td>282.9</td>
<td>278.8</td>
<td>292.0</td>
<td>284.8</td>
<td>278.0</td>
<td>309.2</td>
<td>294.2</td>
</tr>
<tr>
<td>Official foreign reserve (million of US$)</td>
<td>8,661</td>
<td>9,868</td>
<td>11,611</td>
<td>12,352</td>
<td>13,158</td>
<td>14,674</td>
<td>19,125</td>
</tr>
<tr>
<td>Foreign reserve (month non-oil &amp;gas imp.)</td>
<td>5.1</td>
<td>5.0</td>
<td>5.4</td>
<td>5.4</td>
<td>5.0</td>
<td>4.3</td>
<td>5.2</td>
</tr>
</tbody>
</table>

*) figures of this rows are fiscal year started from April to March. For example % of government foreign debt to total debt in 1996 should be read as % outstanding of government debt to total debt at the end of March 1997.

Sources: Bank Indonesia, Indonesian Financial Statistics, Various Issues
Bank Indonesia, Tinjauan Triwulan Luar Negeri Indonesia, No. I/Triwulan III, 1998/1999
Bank Indonesia, Annual Report, Various Issues, and
Table 3.1 indicates that foreign borrowing by the private sector tended to increase. A ratio of foreign debt of the private sector to total foreign debt increased from 33.9% at the end of March 1994 to 58.7% at the end of March 1997. Consequently, foreign debt of the private sector became higher than foreign debt of government sector at the end of March 1997.

A large increase in foreign debt of the private sector was mostly related to non-bank firms. A ratio of foreign debt of non-bank firms to foreign debt of the private sector reached 84.1% at the end of March 1997. On the other hand, a ratio of foreign debt of the banking sector was “only” 15.9% of the total foreign debt of the private sector at the end of March 1997. It is one of indications that most capital inflow was not transmitted through the banking sector but directly to the private sector. It did not mean that foreign borrowing of the banking sector declined, foreign borrowing by the banking sector also increased which is shown by an increase (absolute) in net foreign liabilities of the banking sector during 1990 to 1996. However, the increase in foreign borrowing by the banking sector was much less than the non-bank private sector. Therefore, the proportion of foreign borrowing by banks was much lower than the foreign borrowings by the non-bank private sector. The detail of outstanding of foreign borrowing is presented in Table 3.2.
Table 3.2: Indonesian Foreign Borrowing (million US$)

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>I. Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of total debt</td>
<td>66.07</td>
<td>61.78</td>
<td>55.06</td>
<td>41.30</td>
<td>39.41</td>
</tr>
<tr>
<td>II Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of total debt</td>
<td>9.06</td>
<td>8.90</td>
<td>8.39</td>
<td>7.55</td>
<td>9.29</td>
</tr>
<tr>
<td>a. State</td>
<td>3,587</td>
<td>2,922</td>
<td>3,043</td>
<td></td>
<td>5,024</td>
</tr>
<tr>
<td>b. Private</td>
<td>5,430</td>
<td>6,009</td>
<td>6,579</td>
<td>7,802</td>
<td></td>
</tr>
<tr>
<td>2. Non Bank</td>
<td>20,717</td>
<td>29,691</td>
<td>38,915</td>
<td>50,886</td>
<td>64,601</td>
</tr>
<tr>
<td>% of total debt</td>
<td>24.87</td>
<td>29.32</td>
<td>36.56</td>
<td>39.93</td>
<td>46.81</td>
</tr>
<tr>
<td>a. State Owned Ent.</td>
<td>5,009</td>
<td>4,903</td>
<td>3,646</td>
<td>3,842</td>
<td></td>
</tr>
<tr>
<td>b. Private</td>
<td>24,682</td>
<td>34,012</td>
<td>47,240</td>
<td>60,759</td>
<td></td>
</tr>
<tr>
<td>3. Domestic Securities</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14,306</td>
<td>6,201</td>
</tr>
<tr>
<td>% of total debt</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11.22</td>
<td>4.49</td>
</tr>
<tr>
<td>III. Total Debt</td>
<td>83,298</td>
<td>101,277</td>
<td>106,456</td>
<td>127,449</td>
<td>138,016</td>
</tr>
</tbody>
</table>


Table 3.2 indicates that foreign borrowing by the government sector tended to decline, while foreign borrowing by banks and the non-bank private sectors tended to increase. Foreign borrowing by banks and the non-bank private sectors, from 1994/95 to 1996/97, increased by 6.71% and 71.39% respectively. It implies that a large increase in foreign borrowing by the private sector was related to the non-bank private sector. Most of the increase in foreign borrowing of the non-bank private sector was associated with the “pure” private sector (not related to state owned enterprises). A large increase in foreign borrowing by the non-bank private sector before the onset of the 1997 financial and banking crises was related to a lack of government regulation of “pure” private sector foreign borrowing. In addition, an increase in foreign borrowing by the “pure” private sector was accompanied by increasing short-term foreign borrowing.
Table 3.1 suggests that the ratio of short-term foreign borrowing to total foreign borrowing reached 25% compared with 15.9% at the end of 1996 and 1990 respectively. It is argued that all short-term foreign borrowing was associated with foreign borrowing by the private sector as the government continued to be prudent its foreign borrowing and concentrated on long-term foreign borrowings. As most of the increasing foreign borrowing of the private sector was associated with the non-bank private sector, it suggests that the transmission of foreign borrowing of the private sector was not through the banking sector but directly to the non-bank private sector. The large short term foreign borrowings of the private sector were vulnerable to the contagion effect of the currency attack led to the financial and banking crises. Singapore’s Senior Minister Lee Kuan Yew stated in the early 1998:

“It was totally unnecessary what has happened there (Indonesia), because there were no fundamental deficits in the economy. There were expanding, growing 6% to 8%. Their budget deficit, current account deficit, inflation: All were under control. What they did not know was they had …expanded lending faster than was wise”.

A short term foreign borrowing, if used to finance long term investment and/or is inward oriented, is vulnerable to external shock. If foreign creditors suddenly lose their confidence and do not intend to rollover their credit, it could create economic problems, unless covered by high foreign reserves. Table 3.1 suggests that the ratio of short term borrowing to foreign reserves exceeded 100% during 1990 to 1996. Moreover, the ratio of foreign borrowing plus debt service to foreign reserves was close to 300% during the same period. It indicates that foreign reserves were not enough to cover repayment of foreign borrowings if creditors suddenly refused to rollover the credit.

26 in (p.164, Frazer (2000)).
A low level of foreign reserves is one of economic weaknesses which contributed to the collapse of the managed exchange rate system. If there was a large foreign reserve, an attack on the domestic currency would reduce foreign reserves and the managed exchange rates would be maintained. In other words, large foreign reserves which are associated with the availability of funds are needed to defend the domestic currency. Therefore if there was a large foreign reserve, a reduction in the capital account can be met by running down foreign reserves (Sachs, Tornell, and Velasco (1996)).

Table 3.1 suggests that stocks of foreign reserves, when compared to short term foreign borrowing indicated financial fragility. The percentage of short-term foreign borrowing to foreign reserves was higher than 100%. It implies that foreign reserves were not sufficient to cover short-term foreign borrowing in case foreign creditors were not willing to rollover their credits. However, the Indonesian foreign reserves were moderate if measured by the stock of reserves in terms of the months of imports of non-oil and gas. The reserve was around 5 month imports of non-oil and gas during 1990 to 1996.

The low foreign exchange reserves was also indicated by a high ratio of broad money supply (M2) to the stock of foreign exchange reserves. During a currency crisis or financial panic, all liquid assets have the potential to be converted into foreign exchange. The ratio of M2 to foreign exchange reserves was relatively high, at 6.3 in 1996. The low foreign reserves relative to the money supply is also indicated by the ratio of M1 to the stock of foreign exchange reserves which higher than 1. It implies that the availability of foreign reserves was limited when bank depositors convert to foreign exchange. The limited foreign exchange reserves contributed to the failure of

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27 This ratio is suggested by Guillermo Calvo as an indicator to determine a country's vulnerability to panic and this ratio has been used by Sachs, Tornell and Velasco (1996).
the monetary authority to maintain a managed exchange rate system and force a move to a free-floating exchange rate. Furthermore, the currency crisis deepened and to defend the domestic currency monetary policy was tightened by increasing interest rates. Under those circumstances, the soundness of the banking sector plays an important role in determining economic conditions (Sachs, Tornell, Velasco (1996) and Tornell (1999)). If bank balance sheets are weak, an increase in interest rates and depreciation of the domestic currency will further weaken the bank’s balance sheet.28

One of proxies to measure the weaknesses of the banking sector is the ratio of credit to the private sector to GDP (Sachs, Tornell, Velasco (1996), and Tornell (1999)). It is argued that a large increase in credit from banks is often related to financial deregulation. A large increase in credit from banks in the short period following financial deregulation was associated with excessive risk taking by the banking sector. Consequently, a lending boom following financial deregulation will contribute to a large holding of non-performing loans and increase the vulnerability of the balance sheet of the banking sector.29

Table 3.1 suggests that the ratio of credit to GDP shows a tendency to increase from 46% at the end 1990 to 55% at the end 1996. An increase credit to the private sector was also reflected by an increasing tendency in real credit growth. Real credit growth in 1996 was even more than double real economic growth, which is growth of real credit was at 17.1% compared with the growth of GDP at 7.8% in 1996. Caprio and

28 Deterioration in banks' balance sheets might deepen currency crisis since the central bank finds it more difficult to defend its currency against a speculative attack. An increased interest rate to defend the domestic currency will further weaken banks' balance sheets. Therefore, the deterioration in the banking sector is a key fundamental that causes the currency crisis to occur (Sachs, Tornell, Velasco (1996), and Tornell (1999)).

29 Tornell (1999) argues that a large increase in bank lending in the short period will increase non-performing loans. First, banks have limited capacity to evaluate projects. Second, regulatory agencies have limited monitoring capacity and resources, and there exists a limited supply of “good” projects with high expected returns relative to their variance.

30 This real credit is deflated by the consumer price index.
Klingebiel (1997) found that countries where real credit growth is higher than twice the rate of economic growth, are associated with the existence of banking problems in those countries. A high ratio of credit to GDP and growth of real credit indicates the weaknesses of the Indonesian banking sector, even before the onset of the 1997 financial and banking crises.

High credit growth in the short period, if followed by reducing prudential controls on the banking sector’s ability to allocate credit can be associated with an increase in non-performing loans and contributed to the unsoundness of the banking sector. In addition, if there is a political interference in the supervision process, credit will be allocated inefficiently to those firms which have links to politicians.

If many bank’s borrowers, simultaneously, are also relying on unhedged foreign borrowing directly, a large depreciation of the domestic currency will reduce their net worth and could lead to negative net worth. Negative net worth of the bank’s borrowers contributes to the problem of the financial sector as the borrowers cannot repay their debts to the foreign creditors as well as to the domestic banks. As a result, bad debts in the banking sector increase substantially and in turn can create a banking crisis.

Mishkin (1999a) argued that a currency crisis is often a trigger to financial and banking crises in emerging countries due to asymmetric information problems\(^{31}\) which

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\(^{31}\) Johnston, Chai, and Schumacher (2000) argue that the potential problems caused by asymmetric information are generally classified as follows:

- Adverse selection occurs when the greatest potential risks are more likely to get a credit from banks.
- Moral hazard occurs when the banks are not bear the full cost of their actions and it tend to increase the additional risk.
- Free-rider problems occurs when the agent who collect the information of the risks is unable to prevent other agent from using that information.
- Principal-agent and monitoring problems occur when the principal cannot control perfectly the actions of the agent to whom the principal delegates the responsibility.
- Rational herding occurs when the decision is based on the information on the other agent rather than information on the underlying transaction themselves.
- Contagion occurs when shock in one market influence prices in the other market.
cause deterioration in the balance sheet of non-financial and financial sectors. It is mainly related to the debt contracts which are often short-term and in foreign currency denominations. These indicators were present in Indonesia before the onset of the 1997 financial and banking crises. As discussed earlier, Tables 3.1 and 3.2 suggest that foreign borrowing of the private sector tended to increase up to the end of March 1997, and there was a substantial part of short term foreign borrowing. Therefore, the indicators of large short term foreign borrowing and in foreign currency denomination were there before the onset of the 1997 financial and banking crises. Consequently, a currency crisis can trigger to financial and banking crises as a large uncontrolled domestic currency depreciation contributes to further deterioration in non-financial and financial firms' balance sheets.

A large depreciation of the domestic currency deteriorates non-bank firms' balance sheets through increasing the equivalent values of their foreign currency liabilities. The managed exchange rate system before August 1997 contributed to the willingness of the private sector to take currency risks as the depreciation of the currency was relatively constant. This experience discouraged hedging of foreign borrowings by the private sector and consequently when the currency crisis hit most of the foreign borrowing was unhedged. Moreover, if the most revenue of the non-bank firms is in domestic currency, a large depreciation of the domestic currency will reduce their net worth and can even contribute to negative net worth. The deterioration of the non-bank firms' balance sheets will impact to the deterioration in the banks' balance

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33 Indonesia, in practice, attempted to target the real exchange rate by depreciating the rupiah versus the US dollar to broadly offset inflation differentials between the two countries. The variability of the nominal exchange rate around the trend was less than 0.25% throughout the 1990s (p.35, Alba, Bhattacharya, Claessens, Ghosh, and Hernandez (1999))
sheets as many big borrowers simultaneously rely on foreign borrowing and credit from domestic banks. Therefore, a large exposure of credit to the private sector, which is indicated by the ratio of credit to GDP in Table 3.1, will ended in increasing non-performing loans and in turn lead to the banking crisis.

Djiwandono (1999) argued that the Indonesian crisis basically originated from an ordinary currency crisis, when the rupiah suffered from sudden pressure in July 1997, after the floating the Thai baht in early July 1997. Moreover, he argued that the process of the crisis developed in Indonesia as follows (pp.117-118, Djiwandono (1999)).

- It started with market pressure on the rupiah as part of the contagion effect and the government responded by widening the intervention bands.

- The market reaction to the widening bands was in contrast to its past pattern and the pressure on the rupiah continued and finally Bank Indonesia floated the rupiah. The currency intervention was continued and Bank Indonesia conducted the monetary tightening.

- After Bank Indonesia intervened in the market and conducted monetary tightening, the problems started to spread to the banking sector. The banking industry started to distress and confidence in the banking sector declined drastically.

- After some time, the problems spread to real sector since the banking sector reduced their lending and lending interest rates rose dramatically.

In addition, it is argued that the real sector also faced problems associated with increasing their equivalent foreign debt due to depreciation of the rupiah.

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34 Previously, if Bank Indonesia widened the intervention bands, it followed by appreciation of the rupiah.
Therefore, their ability to repay their debt to the banking sector reduced dramatically and in turn increasing non-performing loans of the banking sector. Hence, poor economic fundamentals and the weaknesses in the banking sector before 1997 which vulnerable to the currency attack in 1997 leading to the financial and banking crises are as follows.

- Large unhedged foreign borrowings by the private sector, with very substantial part in the short term foreign borrowing.
- A relatively low stock of foreign exchange reserves compared with the outstanding short term foreign borrowings.
- A relatively high ratio of broad money (M2) to foreign exchange reserves.
- Weaknesses in the banking sector which were indicated by a large ratio of credit to GDP and high growth of real credit. The weaknesses of the banking sector were also accompanied by lack of supervision and minimal law enforcement as indicated by the relatively large number of banks that violated the legal lending limit (LLL) regulation. As discussed in the previous chapter, there was an increasing tendency for banks to violate the LLL regulation. For example, 46 out of 250 banks violated the LLL regulation at the end of 1994, increasing to 52 out of 239 banks at the end of 1996. The number of bank violated the legal lending limit regulation increased dramatically after 1997, due to a large depreciation of the domestic currency, and 137 out of 208 banks violated the LLL regulation at the end of 1998.

The above economic indicators suggest that the Indonesian economy was vulnerable to the contagion of the currency attack. When there was a currency attack, which initially as a part of the contagion effect in the region, the government was unable to draw down foreign exchange reserves as these were very limited. If there were large foreign exchange reserves, the depreciation of the domestic currency could be controlled by running down the foreign exchange reserves. Instead, an increase in interest rates
further weakened the banking sector. Consequently, with high foreign borrowing and a weak banking sector, the currency crisis triggered the financial and banking crises in Indonesia and the final result was a total economic crisis.

3.3. The Government Response to the Financial and Banking Crises

The government responded to the currency crisis very quickly by widening the intervention bands from 8% to 12% on 11th July 1997 and it finally abandoned the foreign exchange bands on 14th August 1997. The system then moved to a freely floating exchange rate system. Other policies were used, such as a ceiling on non-resident forward selling, postponing major infrastructure projects to protect the budget, and tightening monetary policy. Those policies did not work to defend the domestic currency and its value continued to fall, and the government finally decided to approach the International Monetary Fund (IMF). The first agreement with the Fund was signed at the end of October 1997. Since then, the policy to overcome the financial and banking (economic) crises has been under the IMF program which was described in the “Letter of Intent of the Government of Indonesia”.

35 Detail of the monetary and banking policy from July 1997 up to March 1999 is presented in Table 3.1a in Appendix.
36 The IMF program covered restructuring in financial and real sectors. In addition, the program also required the abolition of subsidies to the then politically well-connected (p. 206, Frazer (2000)).
The policy under the IMF program in the monetary and financial sectors can be summarised as the following.

Monetary policies:

- Tight monetary policy to support the exchange rates but it would be flexible if there are signs of inflation or the exchange rate moving to a more favourable level\(^{37}\).
- Promoting the central bank’s autonomy\(^{38}\).

Financial sector policies:

- There are four strategies in restructuring the financial sector as follows\(^{39}\):
  - Closing unviable banks.
  - Establishing proper procedures and policies to deal promptly with weak but viable financial institutions.
  - Resolving problems of the state banks and regional development banks.
  - Improving the institutional, legal, and regulatory framework for banking operations to ensure the emergence of a sound and efficient financial system.
- Recapitalisation program for potentially viable private banks, this policy included the resolution of non-viable private banks\(^{40}\).
- The merger, reform and recapitalisation of the state banks\(^{41}\).
- Strengthened banking supervision system\(^{42}\).

\(^{38}\) Bank Indonesia will be given full autonomy to conduct monetary policy (Letter of intent of the Indonesian government, January 1998). In addition, the government will institutionalised the central bank’s autonomy (Indonesia - Memorandum on Economic and Financial Policies, September 1998).
There are a four pillars policy in restructuring the financial sector (p.84, Bank Indonesia (1999)):

- Bank restructuring program, especially the bank recapitalisation plan
- Improvement of internal conditions
- Revision of legal apparatus
- Enhancement of bank's supervision function

In addition, the instrument to overcome the banking problems initially was to use liquidity support from the central bank. However, the need for liquidity support increased dramatically in a very short time. There is a major agreement that the liquidity support from the central bank, as a lender of last resort role, should be given to illiquid banks but not to insolvent banks. An example of the success of the lender of the last resort role is in the USA in the aftermath of the stock market crash of October 19, 1987. The readiness of the Federal Reserves to serve as a source of liquidity support for the economic and financial system on 20 October 1987 assisted the market to function well (Mishkin (1997)).

Dziobek and Pazarbasioglu (1997), however, found that using liquidity support from the central bank for restructuring the financial sector was not successful in many countries. Dziobek and Pazarbasioglu (1997) found that most of the countries with good progress in their financial restructuring was associated with using the instrument as follows: extensive use of mergers and/or closure of insolvent banks, established loan workout units, minimised reliance on liquidity support from the central bank, the central bank was not the sole agency for the restructuring program, bond instruments were widely used, and appropriate incentives for managers and owners were provided.

As the liquidity support increased dramatically in the very short period, the government responded by taking over liquidity support and the instruments to
restructure the financial sector moved to instruments which were widely used in the countries which made substantial progress through closure of insolvent banks and use of bond instruments for recapitalising potentially viable banks. The discussion of the government response to the 1997 financial and banking crises under the IMF program focus on the closure and recapitalisation program of the banking sector and promotion of the autonomy of the central banks.

3.3.1. The Bank Closure and Banking Recapitalisation Program

The first implementation of the IMF program was the closure of 16 banks on November 1, 1997, just one day after the agreement with the IMF. This closure policy was intended to isolate clearly unviable banks from the rest of the banking system (Indonesia – Memorandum on Economic and Financial Policies, 31 October 1997). It implies that the closure of 16 banks was intended to send a signal to the public that the rest of banks were “sound”. However, the response of the public was unpredicted and it contributed to a bank run.

There are various arguments have been launched against the closure of the 16 banks in the early November 1997 as follow (pp.60-61, Djiwandono (2000b)):

- The policy was incorrect as there was no scheme of deposits insurance.
- There was a perception that there were more weak banks than those being closed and there were banks in worse positions that were not closed.

43 The 16 banks, comprising around 2.5% of the assets of the banking sector, were selected from an initial list of around 30 banks that were insolvent, but the political pressures ensured the removal of some well-connected banks from the list (Enoch (2000)). In addition, there was no deposit insurance during that period but the government provided loans to repay small depositors, which were depositors with up to Rp.20 million (equivalent to US$6,000 at then foreign exchange rates).
• There is some argument that the closures were politically motivated in order to put Soeharto's family to shame so that he would not be re-elected President.

Those above perceptions contributed to the unexpected result of the bank closure policy in November 1997. The closures contributed to increasing bank panic which was indicated by a dramatic increase in demand for currency, which is shown by the currency in circulation which increased by 42.2% from Rp.26,351 billion to Rp.37,469 billion from the end of November 1997 to January 1998.

Banking panic contributed to the liquidity shortage in the banking sector, especially national private banks. The bank run was mainly associated with national private banks as state banks were implicitly guaranteed by the government and consequently they maintained depositors' confidence. A run on one bank may spill over to others. Bank run started on the second half of August 1997, when the process of the “flight to safety” began and consequently more than 50 banks failed to comply with the minimum reserve requirement by the end of August 1997 (Djiwandono (2000b)). Therefore, the government provided safety nets for banks including the lender of last resort function.

The liquidity support from the central bank during this crisis period was a facility from the central bank as a lender of last resort to maintain payment system stability as there was a mismatch in liquidity as a result of large withdrawals of deposits from the banking sector (Djiwandono (2000a)). Liquidity support from the central bank was provided to more than 130 banks by the end of October 1997 and 160 banks by the end November 1997 (Djiwandono (2000a)). It is argued that the lender of the last resort is necessary as long as it is related to the illiquid problems but not related

44 State banks are often regarded as safer than national private banks, consequently there was a flight to the safe banks.
to insolvent banks and are not creating moral hazard for the banks' owners. However, more than 75% of total liquidity support was accounted for by only 7 banks and each of these banks had borrowed a minimum of US$240 million and 4 banks had borrowed US$600 million (Enoch (2000)). This liquidity support contributed to increasing the moral hazard to the banks which received support:

"A report presented to parliament in August 2000 by the Supreme Audit Agency (BPK) asserted that more than 95% of BI's last resort loans to 48 private banks that borrowed from it during the crisis were wrongly used. These alleged uses included financing foreign exchange speculation, illegal lending to related business, repaying subsidiaries' loans, the expansion of branches, and the acquisition of fixed assets. The report claims that more than two thirds of the loans went to support five banks with close links to former President Soeharto, and that some banks disguised their true position to conceal the fact that their assets were less than their borrowing from BI" (p.56, Fane (2000b)).

An important factor in the large withdrawal of deposits was associated with a drastic drop in public confidence in the domestic banking sector. Moreover, to assist in restoring public confidence, the government took temporary measures to guarantee the banking sector\(^{45}\). The government also established the Indonesian Bank Restructuring Agencies (IBRA) and its assets management unit. The government guarantee was effective in restoring public confidence which is indicated by the minimal bank runs when the government closed further banks in March 1999, under the banking recapitalisation program\(^{46}\).

\(^{45}\) In January 1998 the government took temporary measures to give a guarantee to all depositors and creditors of locally incorporated commercial banks. The guarantee applied both to private and state banks and also to banks under restructuring. The government guarantee was intended to be replaced by deposit insurance. The adoption of government guarantee might create moral hazard problems (such as the Saving and Loans in the USA) to the banking sector to take excessive risks by increasing deposits rates. To address this problem, the central bank set a maximum deposit rates under the period of government guarantee.

\(^{46}\) The closing 38 banks on March 1999 differed from the closing 16 banks on November 1997. The closing 38 banks on March 1999 was associated with the banking recapitalisation program by the government.
Unlike the closing of 16 banks in November 1997, the closing of 38 banks of 1999 used transparent criteria and the government guarantee contributed to the positive public reaction which was indicated by the lack of major runs on banks. The government set transparent criteria for the banking recapitalisation program. The banks were divided into three categories based on their respective capital adequacy ratios (CAR): A, B, and C. Banks of type A are banks that have a CAR minimum of 4%, type B is banks that have a CAR from -25% to up to less than 4%, and type C is banks that have a CAR of less than -25%. In addition, the bank recapitalisation program was designed for Indonesian incorporated banks, while joint venture and foreign banks were not included in the government recapitalisation program. The government was committed to including state banks and government regional banks in the recapitalisation program.

The type A banks are not included in the government recapitalisation program since their CAR was regarded as "acceptable" in this period but banks in type A will be reviewed regularly to ensure that they remain in good financial health and continue to observe all rules and regulations.

The B type banks are eligible to be included in the recapitalisation program. On the other hand, type C banks are designed to close or/and merge with other banks or the owner can add capital in order to achieve the B level to meet the criteria for inclusion in the recapitalisation program since only the B type banks are subject to the recapitalisation program. In addition, there is an another criterion, that they have a wide branch network of banks. If category B or C banks have a wide network, they might not be closed but might be taken over by the government. A wide network of banks might be indicated by the number of branches.
Not all category B banks, however, are included in the recapitalisation program. There are certain requirements for category B banks to be included in the recapitalisation program. The minimum requirement includes passing a fit and proper test\textsuperscript{47} for its owner and management, and passing their business plan including plans to achieve a CAR of 8% by the end of 2001\textsuperscript{48}. The assessment also covers the role of the shareholders and/or new investors to inject a minimum of 20% of the capital inadequacy to achieve a 4% level of CAR. The government will supply 80% of the capital inadequacy to achieve a 4% CAR, in the form of bonds, through the recapitalisation program. Based on those criteria, on March 1999 the government closed 38 banks, took over 7 banks and committed to recapitalising 9 national private banks. Details of the performance of 38 closed banks, 7 taken over banks, and 9 recapitalised banks under the March 1999 policy are reported in Tables 3.2a, 3.3a and 3.4a in Appendix.

The net worth of most of the 38 closed banks was negative. It indicates that their assets were not sufficient to cover their liabilities. 21 out of the 38 closed banks were from type B banks with a CAR range between -10.6% up to -25% but the bank's owner could not inject 20% of funds to achieve a CAR of 4% and the remaining are from the type C banks.

All recapitalised banks must be from type B banks as only type B banks were eligible to participate in the government recapitalisation program. Therefore the CAR of the 9 recapitalised banks ranged between -8.2% and -23.1%. Most of the recapitalised banks were judged to still have positive net worth. It implies that the 9 recapitalised

\textsuperscript{47} Detailed discussion of the variables in the fit and proper test is in Bank Indonesia, Report for the Financial Year 1998/99, p.109.

\textsuperscript{48} Discussion of business plan that has to be submitted to Bank Indonesia can be seen in Bank Indonesia, Report for the Financial Year 1998/99, pp.108-109.
banks still had the ability to cover their obligations\textsuperscript{49}. The bank recapitalisation program was relatively transparent. The transparency is an important factor to obtain credible policy and the credibility of the central bank plays an important role in achieving effective monetary policy under an autonomous central bank regime.

3.3.2. The Independence of the Central Bank

One of the main planks of the IMF programs in the East Asian countries affected by the 1997 financial crisis was to promote central bank independence\textsuperscript{50}. The independence of the central bank can be viewed as one way of committing monetary policy to focus mainly on the objective of price stability (p.8, Cukierman (1992)).

The theoretical argument for central bank independence is based on the intention to lower or eliminate the potential for undesirable political opportunism associated with the political economy of the business cycle (Hillman (1999)). To lower political interference, the central bank should be independent from the politicians and consequently the Governor of the central bank should not only be competent but also apolitical\textsuperscript{51}.

There is no single measurement, however, to identify the degree of independence of a central bank. The independence of the central bank can be separated into goal and instrument independence. Goal independence is the ability of the central bank

\textsuperscript{49} The shareholders of Bank Niaga, one of the recapitalised banks, was not willing to inject the 20\% of capital requirement. Consequently, Bank Niaga was taken over by the government.

\textsuperscript{50} One of the IMF programs in Thailand, South Korea and Indonesia was to provide legal provision for central bank independence.

\textsuperscript{51} The apolitical appointment of the Governor is intended to ensure that the Governor has the personal objective of choosing socially optimal policies and will be able to resist political pressures and pressures from special interest groups to do otherwise (pp.79-80, Hillman (1999)). Therefore, the apolitical Governor is important to ensure that the monetary policy optimally can be related to the society rather than to political interests.
bank to set its own goals for monetary policy, and instrument independence is the ability of the central bank to determine the instruments of monetary policy independently to achieve the goals\textsuperscript{52}.

Mishkin (1999b) argues that the independence of the central bank should be limited to instrument independence in order to be consistent with the process of democracy. Therefore, the government should set the inflation target that should be achieved by the central bank and the government should be formally committed to the target. Moreover, the government should let the central bank be free to determine the instruments used to achieve the target. The government, however, should not intervene with the central bank in their task to achieve the target. It is argued that instrument independence depends on the political will of the government not to intervene in determining the instruments that should be used by the central bank to achieve the targets that have been set by the government.

The terms of goal and instrument independence are close to the political and economic independence proposed by Grilli, Masciandaro and Tabellini (1991). They provided measures to identify the political and economic independence of the central bank. Political independence is mainly measured by the capacity to choose the final goals of monetary policy, while economic independence is measured by the capacity to choose the instruments to pursue those goals.

\textsuperscript{52} in (p.36, Mishkin (1999b)).
Grilli, Masciandaro and Tabellini (1991) argued that the political and economic independence of the central bank depends on the following factors. The political independence to choose the final goal of the policy is primarily influenced by the following:

- The procedure for appointing the Board and the Governor of the central bank.
- The relationship between the central bank and the government.
- The formal responsibilities of the central bank.

The economic independence to choose the instruments of monetary policy is mainly determined by the following:

- The acceptability to government in determining how much to borrow from the central bank.
- The nature of the monetary instruments under control of the central bank.

The promulgation of the Act of the Bank Indonesia number 23 of May 1999, is the fundamental change to the ways the central bank operates in Indonesia. To analyse the degree of the independence of the central bank in the Act of Bank Indonesia of 1999, the measure developed by Grilli, Masciandaro, and Tabellini (1991) is applied. It is argued that the Act of Bank Indonesia of 1999 has provided a legal basis for political and economic independence to the Central Bank of Indonesia (Bank Indonesia).

The political and economic independence of the Central Bank of Indonesia which has been legally provided by the Act number 23, 1999 can be shown from the following. The political independence is shown as follows.

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53 The Act No.23, 1999, concerning Bank Indonesia replaced Act No.13, 1968, concerning Bank Sentral (Central Bank). In addition, in the time of writing, the Act No.23 of 1999 concerning Bank Indonesia is under discussion for amendment by the House of Representative.
• The clear single objective of the Bank Indonesia\textsuperscript{54}, which is to achieve and maintain the stability of the currency. The single objective of the central bank is a fundamental change compared with the past multi objectives of the central bank in the previous Central Bank Acts (Act number 13, 1968).

• The appointment of the Board of Governors\textsuperscript{55}, which is reflected in the procedure for appointing the Board of Governors. The Governor is nominated and appointed by the President with approval from the House of Representatives. The approval of the House of Representative is the fundamental change to the appointment of the Board of Governors compared with previously when the President had total power either to appoint or dismiss the Board of Governors without the approval of the House of Representatives. It is argued that the approval of the House of Representatives indicates a democratic process. The Board of Governors is apolitical but they are elected by the persons who were elected by the people (members of the House of Representatives) and are accountable to House of Representatives.

• The term period of the appointment of the Board of Governors\textsuperscript{56}, which is reflected in the appointment of the Board of Governors, including the Governor, for 5 years\textsuperscript{57}.

• The Board of Governors does not represent political interests\textsuperscript{58}.

\textsuperscript{54} Act No.23, 1999, concerning Bank Indonesia, article 7.

\textsuperscript{55} Act No.23, 1999, concerning Bank Indonesia, article 41.

\textsuperscript{56} Act No.23, 1999, concerning Bank Indonesia, article 41.

\textsuperscript{57} The term of office in India, Japan, UK, Switzerland is 4 years respectively. Malaysia, Pakistan, Singapore is 3 years respectively. On the other hand, Germany and Netherlands are 8 and 7 years respectively (Source: Table 12.2, p.211, Chandavarkar (1996)).

\textsuperscript{58} Act No.23, 1999, concerning Bank Indonesia, article 47.
• Accountability of the Central Bank’s actions\textsuperscript{59} to the public and House of Representatives.

On the other hand, it is argued that the Act of Bank Indonesia has also provided legally for economic independence which is shown as follows.

• Formulation of monetary policy and use the appropriate monetary instruments\textsuperscript{60}. The freedom to determine the instruments associated with the nature of the monetary instruments under the control of the Central Bank.

• Implementation of exchange rate policy\textsuperscript{61} by considering the exchange rate system.

• No credit to the government\textsuperscript{62}. If the government has strong influence leading to borrowing from the central bank, it might influence the money supply and lessen the autonomy of the central bank to achieve its goals.

• Time limits on credits\textsuperscript{63} to the banking sector.

Based on the above criteria, the Bank Indonesia Act of 1999 has provided a high degree of independence. It is indicated by the clear single objective of the central bank and strengthens legal provisions for rejecting intervention from other parties in achieving its objectives. It implies that, at the theoretical level, the central bank has both goal and instrument independence. On the other hand, the independence of the central bank needs to be accompanied by accountability. The accountability of the central bank is shown in the requirement to publish its achievement of past monetary policy and targets for the following year, publicly.

\textsuperscript{59} Act No.23, 1999, concerning Bank Indonesia, article 58.
\textsuperscript{60} Act No.23, 1999, concerning Bank Indonesia, article 8,9, and 10.
\textsuperscript{61} Act No.23, 1999, concerning Bank Indonesia, article 12.
\textsuperscript{62} Act No.23, 1999, concerning Bank Indonesia, article 56.
\textsuperscript{63} Act No.23, 1999, concerning Bank Indonesia, article 11.
The central bank also has responsibility to submit a report regarding the implementation of its task and authority to the House of Representatives every 3 months. However, there is no explanation, in the Bank Indonesia Act of 1999, if there is a lack of achievement. For comparison purposes, the independence of the Central Bank of Indonesia (Bank Indonesia) is compared with other countries which is reported in Table 3.3.

Table 3.3 indicates that, theoretically, the Act of Bank Indonesia of 1999 has provided the independence to the Central Bank of Indonesia consistent with the most central bank in developed counties; and it was a significant measure resulting from the 1997 financial and banking crises.
Table 3.3: The Degree of Central Bank Independence

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<tr>
<td>Instrument and goal</td>
<td>Instrument independence</td>
<td>Instrument and considerable goal independence</td>
<td>Instrument and considerable goal independence</td>
<td>Complete goal and instrument independence</td>
<td></td>
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<tr>
<td>independence</td>
<td></td>
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<tr>
<td>Objective/</td>
<td>Internal and external</td>
<td>Price stability,</td>
<td>Internal and</td>
<td>Price stability</td>
<td>Price stability</td>
</tr>
<tr>
<td>Targets</td>
<td>Internal and</td>
<td>support government</td>
<td>Price stability</td>
<td>maximum</td>
<td>first and foremost</td>
</tr>
<tr>
<td>price stability</td>
<td>price stability</td>
<td>policy</td>
<td>and maximum employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>can override banks in emergency</td>
<td>can override only by changing law</td>
<td>can override only by changing law</td>
<td>Instructions or influence from Federal Reserve's term of reference</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>can override by changing the law in emergency</td>
<td>can override only by changing law</td>
<td>can override only by changing law</td>
<td>Instructions or influence from Federal Reserve's term of reference</td>
<td></td>
</tr>
<tr>
<td>Supervises Banks?</td>
<td>Yes(^64)</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Board/Council</td>
<td>6-9 member</td>
<td>9 member: 8 from Bank</td>
<td>17 member: 9 from Bank in lander</td>
<td>12 member</td>
<td>6 member Executive Board and the Governors of EU Central Bank</td>
</tr>
<tr>
<td></td>
<td>5 from Bank</td>
<td>8 from Bank</td>
<td>Federal Open Market</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 from external appointment</td>
<td>9 from Bank in lander</td>
<td>Market Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To whom accountable</td>
<td>House of Parliament</td>
<td>Public</td>
<td>Congress</td>
<td>Public through treaty</td>
<td></td>
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<tr>
<td>Public</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Meetings</td>
<td>Minimum once a week</td>
<td>Monthly</td>
<td>Forthnightly</td>
<td>8 times annually</td>
<td>minimum 10 times a year</td>
</tr>
<tr>
<td></td>
<td>Consensus and if not be reached, the Governor has final Decision</td>
<td>One member one vote, minutes publish</td>
<td>One member one vote, no minutes</td>
<td>minutes publish a year</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>publish after 6 weeks</td>
<td></td>
<td>Proceedings confidential</td>
<td></td>
</tr>
</tbody>
</table>

Source: Begg and Green (p.130, 1998) and Act No.23, 1999, concerning Bank Indonesia

\(^64\) The supervision task of the central bank is intended to move to an independent supervisory board of financial services sector which will be established not later than end December 2002.
3.4. Development of the Monetary and Banking Sectors after 1997

Economic growth was slower in 1997 but still positive, but economic growth became negative in 1998. The negative economic growth was mainly associated with a dramatically lower level of domestic demand. The sharp decline in domestic demand was associated with reduced consumption as well as a sharp drop in investment expenditure (Table 3.4).

Table 3.4: Gross Domestic Product by Expenditure at constant 1993 prices (in billion of rupiah)

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<tbody>
<tr>
<td>Consumption:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>238,505</td>
<td>265,096</td>
<td>288,698</td>
<td>308,817</td>
<td>294,741</td>
</tr>
<tr>
<td>Government</td>
<td>208,062</td>
<td>234,245</td>
<td>257,016</td>
<td>277,116</td>
<td>267,913</td>
</tr>
<tr>
<td>Gross dom. fixed cap. Formation</td>
<td>30,443</td>
<td>30,851</td>
<td>31,681</td>
<td>31,701</td>
<td>26,828</td>
</tr>
<tr>
<td>Change in stock</td>
<td>98,589</td>
<td>112,386</td>
<td>128,699</td>
<td>139,726</td>
<td>90,071</td>
</tr>
<tr>
<td>Export of goods and services</td>
<td>14,836</td>
<td>15,853</td>
<td>5,873</td>
<td>3,342</td>
<td>(11,066)</td>
</tr>
<tr>
<td>less import of goods and services</td>
<td>97,002</td>
<td>104,492</td>
<td>112,391</td>
<td>121,158</td>
<td>134,707</td>
</tr>
<tr>
<td>Gross Domestic Product</td>
<td>94,291</td>
<td>114,035</td>
<td>121,863</td>
<td>139,796</td>
<td>132,401</td>
</tr>
</tbody>
</table>

Table 3.4 indicates that gross fixed investment fell substantially in 1998. As investment was partly financed by foreign sources, a sudden reversal in foreign financing and increasing risk premium contributed to reducing investment. At the same time, banks faced mounting bad loan problems and low capital-asset ratios and were less able to supply funds.

On the other hand, exports increased and contributed to growth in 1998. Increased exports might result from a large depreciation of the domestic currency and consequently exported goods became cheaper in the international market. The large
depreciation of the domestic currency and the slower investment reduced imports substantially. As a result, the external demand provided support for economic activity in 1998. In addition, further discussion of monetary and banking development following the 1997 financial and banking crises is focused on the development of exchange rates, interest rates, and the franchise value of banks.

3.4.1. Exchange Rates

The exchange rate was floated on 14 August 1997 and gradually depreciated until November 1997 when it reached Rp.3,648/US$ a depreciation of 48.9% from the June 1997 level. The depreciation in the domestic currency, however, was influenced by many factors which included non-economic factors. The rumors about the health of the then President Soeharto contributed to uncertainty and the currency plunged to Rp.10,375/US$ in January 1998, a depreciation of more than 300% from the level of June 1997. The changes in nominal foreign exchange rates is presented in Figure 3.1.
Figure 3.1 indicates that the depreciation peaked in June 1998 at Rp.14,900/US$, a fall of more than 500% from the level of June 1997. This unrealistic depreciation of the rupiah during May-June 1998 was related to the domestic political situation as President Soeharto, who was in power for more than three decades, stepped down in May 1998. After that, the domestic currency started to appreciate gradually but was still volatile and non-economic factors contributed to the volatility of the foreign exchange rates.

3.4.2. Interest Rates

Interest rates were increased following the onset of the currency crisis in 1997. The SBI rate was increased which was intended to defend the domestic currency against depreciation. Deposit rates increased gradually and were followed by increasing lending rates.

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Data based on the level of foreign exchange rates at the end of respectively months.
The adjustment in lending rates, however, was slower. Therefore, changes in lending rates were relatively slower than deposit rates. Consequently, an increased deposit rate resulted in a negative spread as the difference between lending and deposit rates became negative. The development in a variety of interest rates is represented in Figure 3.2.

Figure 3.2: Selected Interest Rates (% per annum)\(^{66}\)

Figure 3.2 suggests that the negative spread between lending and deposit rates started about June 1998. As deposit rates gradually slowed, the negative spread was eliminated and the spread became positive again in June 1999. The negative spread in interest rates contributed to deepen the vulnerability of the banking sector and in turn deepened the banking crisis.

\(^{66}\) Rd = 3 months time deposit rates, RL = Lending interest rates, Overnight = Overnight rates, SBI = the SBI rates.
3.4.3. Franchise Value of Banks

There are two measurements to assess the lowering of the banking franchise value after 1997. The measurements are based on the ratio of cash assets (total reserves) to deposits liabilities (saving through the banking sector) and the ratio of credit to total assets (Rojas-Suarez and Weisbrod (1995)). A high ratio of a bank’s reserve to saving through the banking sector indicates a weak franchise value. In addition, a lower ratio of credit to total assets indicates weak franchise value and it implicitly suggests that the intermediation function of the banking sector did not function optimally.

The behaviour of the franchise value of banks which is measured by the ratio of reserves to saving through the banking sector and the ratio of credit to total assets is presented in Figures 3.3 and 3.4 respectively.

Figure 3.3: Ratio of Reserves to saving through the banking sector

![Graph showing the ratio of reserves to saving through the banking sector from 1989 to 1999.]

Source: Bank Indonesia, Indonesian Financial Statistics, Various Issues

67 Data to calculate franchise value is based on December, except for 1999 is based on June.
Figure 3.3 indicates that the ratio of reserves to saving through the banking sector gradually slowed after 1989. The slowdown in this ratio is related to the lowering of the minimum reserve requirement policy from 15% to 2% in October 1988. The slowdown in the ratio of reserves to saving through the banking sector indicated that there is gradual adjustment in the reserve policy of the banking sector to slightly above the minimum reserve requirement regulation. On the other hand, an increased ratio of reserves to saving through the banking sector from 1996 up to the middle 1997 is related to increasing minimum reserve requirement regulation. It suggests that there was strong franchise value before 1997. After 1997, the ratio of reserves to saving through the banking sector was slightly above the minimum reserve requirements. The ratio of reserves to saving through the banking sector in 1999, however, increased to around to 6% which is roughly 1% above the minimum reserve requirement and it is argued that this is still in moderate levels. Therefore, the franchise value of the banking sector which measured by the ratio of reserves to saving through the banking sector remained relatively strong. This indicator of franchise value, however, might conflict with the other measurement that is the ratio of credit to total assets.
Figure 3.4: Ratio of credit to the private sector to total assets

Source: Bank Indonesia, Indonesian Financial Statistics, Various Issues

Figure 3.4 suggests that the ratio of credit to the private sector to total assets was relatively high before 1997. The ratio was relatively stable at an average of more than 80% during 1989-1997. It suggests that the franchise value of the banking sector pre the 1997 financial and banking crises was high. It indicates that the intermediation of the banking sector during pre-crisis period was "working well". The assessment of the intermediation function of the banking sector, however, should also be related to the portfolio of credit to the private sector and the soundness of bank's practices in extending credit to economic sectors. An intermediation function of the banking sector not accompanied by a sound practices in the allocation of credit will result in a fragile banking sector and in turn contribute to the fragility of the financial sector.

On the other hand, the ratio of credit to total assets after 1997 was reduced dramatically. A dramatic decrease in this ratio might also related to the removal of troubled loans from banks' balance sheets. The ratio of credit to total assets was only around 34% at June 1999 compared with 81% at the end of 1996. It suggests that there was a substantial decline in the supply of credit to the private sector. In addition, the
annual growth rate of credit to the private sector in June 1999 decreased by 59.9% compared with an increase by 26.1% in June 1997. Besides, the ratio of credit to saving through the banking sector (loan/deposits ratio) declined to 41.3% in June 1999 compared with 108.5% in June 1997. These measures indicate that there was deterioration in the franchise value after 1997. An extreme decline in the ratio of credit to total assets suggests that there was considerable financial disintermediation after 1997. This extreme disintermediation was especially related to the national private banks (Figure 3.5).

Figure 3.5: Ratio of Credit to Assets by Group of Banks

Source: Bank Indonesia, Indonesian Financial Statistics, Various Issues

A weak franchise value after 1997 up to June 1999 is especially related to national private banks and regional banks. It is indicated by a severe decline in the ratio of credit to total assets of national private banks and regional banks from 73% and 63% at the end of 1997 to 28% and 39% at the end of June 1999.

SB=state banks, NP=national private banks, RB=regional development banks, FB=foreign banks, and JVB=joint venture banks.
On the other hand, the franchise value of state, foreign, and joint venture banks are also declined slightly but not dramatically. The ratio of credit to total assets declined from 81%, 59%, and 83% at the end of 1997 to 78%, 48%, and 77% at the end of June 1999 for state, foreign, and joint venture banks respectively. The ratio of credit to total assets of state banks, however, dramatically declined to 28.6% at the end of 1999 which might relate to the removal of troubled loans from banks' balance sheets. Therefore, it implicitly suggests that state banks, national private banks, and regional banks were relatively most affected by disintermediation after 1997 up to 1999. Hence, most of the banks faced a serious loan portfolio problem and consequently they needed to recapitalise after the surge in non-performing loans and operational losses in the aftermath of the crisis.

3.5. Conclusion

Country affected by the contagion of the currency attack is not random but is associated with poor economic fundamentals (Sachs, Velasco, Tornell (1996), and Tornell (1999)). The weaknesses of the economic variables and banking sector made Indonesia vulnerable to contagion for the currency attack in 1997. The currency crisis is often generate to the financial and banking crises in several emerging countries (Mishkin (1999a)) including Indonesia. The large depreciation of the domestic currency weakened the balance sheets of non-bank firms and banks. A large depreciation contributed to reducing the net worth of borrowers and this in turn led to the financial and banking crises. Therefore, the large credit growth from the banking sector during the pre-crisis period ended in mounting levels of non-performing loans.

The government’s response to the banking crisis was initially by providing liquidity support from the central bank. However, this policy was not effective in
overcoming the problem. Therefore, in the early stage of the financial and banking crises, the government approached the International Monetary Fund (IMF) and consequently the policies to overcome the financial and banking crises were under the IMF program which submitted through the Letter of Intent of the Government of Indonesia.

Under the IMF program, the main instrument to restructure the financial sector were associated with the closing, taking over, and recapitalising banks by issuing government bonds. These policies to restructure the financial sector are consistent with the experience of countries which have made good progress in overcoming their banking crisis.

On the other hand, one of the monetary policies under the IMF program was to giving the autonomy to the Central Bank of Indonesia. The promulgation of the Act of the Bank Indonesia number 23 of May 1999 has provided a legal basis for political and economic independence to the Central Bank of Indonesia (Bank Indonesia). In addition, the existence of the 1997 financial and banking crisis substantially affected the development of the monetary and banking sectors. There was a dramatic decline in banking intermediation role after 1997 especially related to state banks, national private banks, and regional government banks.