

## Dealing With the Non-Performing Loan Problems: Taiwan's Experience

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## **Dealing With the Non-Performing Loan Problems: Taiwan's Experience**

### **I. Introduction**

This paper presents a critical analysis and assessment of Taiwan's experience in dealing with non-performing loan problems in the past few years. Contrary to the experience of most of the Asian economies that suffered from the onslaught of financial crisis that began in mid 1997, Taiwan presents a unique and an interesting case for researchers to study. First, Taiwan was not hit hard by the crisis and, in fact, weathered through that financial storm remarkably well. A case in point is its less than 3% non-performing loan (NPL) ratio during the years of 1997 and 1998. However, as other Asian economies were recovering from the crisis, Taiwan's financial health and strength went in the other direction. Again, in terms of the NPL ratio, it rose to over 5% in 1999, and continued its climbing to peak at the worrisome 8.6% in 2001 and 2002. Even with this alarmingly high NPL ratio, which tends to be viewed as a sign of an imminent financial meltdown, Taiwan was able to skirt a systemic banking and financial crisis. No only that, again, remarkably, despite these past two years of volatile and unsettling political struggle and turmoil, Taiwan's NPL ratio went down and now stands at the less than 4.3% juncture. This rather different and drastic pattern of changes in Taiwan's financial arena has received relatively little attention and motivates the writing of this paper. Therefore, the main question posed and to be addressed in this paper is "How did Taiwan do it?"

To begin, in the following two sections we will describe and thereby providing the institutional background and chronology of the events unfolding in Taiwan's financial sector in general and NPL ratio in particular in the past few years. In this part of the paper we will first highlight two un-materialized projections of looming banking crisis in Taiwan made by an economic journalist of The Economist and an economist of the Asian Development Bank. Then we will examine the changes in NPL ratios at the aggregate (macro) as well as at the disaggregated (micro) levels. This examination should illustrate that the aggregate NPL ratio may not reveal the true financial strain encountered by some banks. Next, we will proceed to address the intriguing question of how and why Taiwan was able to avoid the bank crisis and dealt with the NPL problems with certain degree of success. The main focus of our analysis in this section will be on the role played by the FRF (RTC) fund (through government budgetary appropriations and hence financed by taxpayers) and AMC (various asset management corporations which are profit-oriented competitive entities and presumably financed by private investors and responsive to market structure and environments.) While Taiwan seems to have succeeded (at least up to now) in averting impending banking crises, which would otherwise have occurred as predicted by outside observers, there are potential problems and danger associated with the methods used to bring down the NPL ratios. In the concluding section we will point out some of these problems and concerns underlying the respective approaches that were used to deal with NPL issues.

## **II. Background--Against all odds, Taiwan weathered through crises**

### **Taiwan survived 1997 Asia financial crisis safe and sound**

More than half a decade has passed since the onslaught of 1997 Asian financial crisis, yet its devastating impacts on currency, stock market, income growth, employment, and all walks of life are still felt in many countries. This so-called acute Asian flu came fast without due warning and spared no one on its path. Within six-month period after it first broke out in Thailand, it swiftly spread across almost all the emerging market economies of Asia. Beginning with Thailand, then Indonesia, Malaysia, Philippines, Korea, Singapore, Hong Kong, Japan, and Taiwan were all hit and saddled with varying amounts of damages. Take the combined rate of currency depreciation against the US dollar and stock price decline as a damage indicator, it dipped a whopping 97% in Indonesia and Korea, 80% in Malaysia, 75% in Thailand, 68% in the Philippines, 38% in Singapore and Japan, 29% in Hong Kong, and 24% in Taiwan.<sup>1</sup> Although no countries were immune from this region-wide calamity, the above figure shows that Taiwan sustained the least damages among countries in this region. Similarly, using other measures to gauge the damages inflicted by this disaster, Taiwan also appears to record by far the smallest decline. Thus, all indexes taken together, there is no doubt that Taiwan did survive through Asian financial crisis and fared better than other economies. This remarkable performance intrigued many analysts and policy makers. They wonder what makes Taiwan economy more resilient than other Asian countries to withstand the storm and why Taiwan can pull such a stunt encountering this monstrous beast and coming out safe and sound.

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<sup>1</sup> Liu and He, 1999, Ten Asian Countries :Before and After the Financial Crisis. Published by Accumind Consulting, Inc., Taipei:Taiwan.

Answer to the above questions can be found in an insightful article by Kuo and Liu (1998)<sup>2</sup>. According to Kuo and Liu, the economic structure of Taiwan is stronger in comparison to those of the troubled economies, as manifested by Taiwan's higher current account surplus and savings ratio, lower or virtually non-existent saving-investment gap, prudent exchange rate policy, and sound liberalization of capital movements, etc. All these contributed to a healthier financial environment and thus helped Taiwan avoid heavy damages throughout the crisis. Overall, Kuo and Liu note that the discreet economic policies implemented in Taiwan in the past decade prior to 1997, such as reduction of tariffs, relaxation of other import controls, financial liberalization, and upgrading of industries, resulted in the advancement of productivity and export expansion of technology-intensive industries, as well as improvements in financial systems. The upgrading of industries and enhancement of Taiwan's industrial competitiveness in the international markets certainly paved a firm foundation for it to weather the crisis. Furthermore, a series of liberalizing and restructuring measures designed and implemented since late 1980s played a vital role in establishing an economic system that could withstand external shocks brought by the Asian financial crisis.

However, a few years afterwards, as other hard-hit economies were recovering from the aftermath of the 1997 crisis, Taiwan's record of being able to stand out as a special case among Asian countries hit by the crisis did not look so envious anymore. In fact, with a plethora of strains in financial system springing up since late 2000 Taiwan began to face a serious problem – a possible banking crisis in the making. Many outside observers (including two analysts to be mentioned shortly) all predicted that, sooner or

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<sup>2</sup> Kuo and Liu, 1998, "Taiwan", in East Asia in Crisis: From being a miracle to needing one? Edited by Ross H. McLeod and Ross Garnaut, Routledge: London

later, Taiwan would be embroiled in another version of Asia financial crisis – its own version of banking crisis. Interestingly, in retrospect, none of these ending-day predictions turn out to be correct, and Taiwan, once again, managed to somehow slip through the financial landmine field without triggering massive explosions.

### **The Economist predicting an incoming banking crisis in 2001**

In an article in the December 2000 issue of The Economist Andreas Kluth predicted that Taiwan could soon encounter a banking crisis. He stated that<sup>3</sup>, “As the Chinese start preparing for the lunar New Year – by the ancient tradition a time for debts to be settled – the money may grow tight. And Taiwan could then get its banking crisis.” This article sent a shock wave to Taiwan and the stock market plunged immediately afterwards in response to the prediction. Basically, his opinion is that by the time of his writing the secured credit against shares or property and the non-performing loans in Taiwan had already risen to record highs, and once the value of collaterals continued to vanish at the same time as more debtors were defaulting, then the condition is ripe that there is a full-fledge crisis in the offing. He stated further that “Unluckily, in the late 1998, Taiwan’s own stock market bubble burst, and some 30 companies came near bankruptcy. Semiconductor prices have been falling, thus weakening Taiwan’s once-strong high-tech sector. Under this pressure, however, government refuses to let any of them go bust, preferring instead to force them into mergers with better banks in order to replace their management. This reluctance to let insolvent banks fail is reminiscent of Japan. It may end up infecting as-yet healthy banks.”<sup>4</sup> Thus, The Economist concluded that crisis is just

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<sup>3</sup> The Economist (US), 2000, “*Taiwan’s financial system-Too many debts to settle*,”v357, i8196, pp.97

<sup>4</sup> The Economist (US), 2000, “*Taiwan’s financial system-Too many debts to settle*,”v357, i8196, pp.97

around the corner and predicted that Taiwan may suffer a serious banking crisis during the lunar New Year of 2001.

Even though this article correctly stated some of the pressing problems that did exist in Taiwan at that time and could potentially lead to a banking crisis, its prediction was not borne out by the fact as the year 2001 came in and passed without incident of banking crisis. Also, the falling stock market was just a short-lived overreaction to the article and the market had steadily climbed up to its usual state. Why could Taiwan escape a possible banking crisis in 2001? Some analysts believe that this is because Taiwan has maintained a better financial foundation – Taiwan's companies were not burdened with high debt-servicing ratios, Taiwan had a vigorous and fast-growing high-tech industry, Taiwan had a healthier balance of payments structure and wholesome reserves to defend its currency, etc. All these really helped Taiwan to face and survive all kinds of troubles in financial sector, as they did in 1997 and again in 2001. We can also consider an alternative and very different perspective: perhaps a banking crisis would have struck Taiwan, just as The Economist predicted, had there been no warning from the outside observers and hence the government and banking sector were not alerted to take above mentioned preventive measures which de-fused the crisis. It is ironic that a credible prediction could be convincing enough to persuade decision makers to change course of action and end up with invalidating the would-have-been-true prediction. This perspective should provide impetus for policy makers not to take lightly and to respond promptly to constructive criticisms or even negative opinions or projections about the state of affairs, including some to be offered in the last section of this paper.

#### **ADB's Montgomery warning of a looming banking crisis**

A little over one year after the failed prediction by The Economist's Kluth, another research paper by an Asian Development Bank's staff economist (Montgomery, 2002)<sup>5</sup> predicted again that, due to the increased weakening of the banking sector, Taiwan had a high probability of facing a banking crisis coming soon. At the Asian Crisis Conference held in Taipei in 2002, Montgomery stated in her paper that Taiwan appeared to be heading for a banking crisis. Using the indicators proposed by Kaminsky and Reinhart (1999)<sup>6</sup> she claimed that in Taiwan's case almost 70% of the indicators were signaling an emerging banking crisis.

Although Montgomery recognized that Taiwan was able to maintain a moderate growth rate of 4.83% during the 1997 Asian financial crisis, she argued that the time had changed and 2002 was different than 1997: "The return on assets and return on equity of Taiwan's major banks have been declining since 1997. In addition, the non-performing loan ratio of Taiwan's major banks has been steadily increasing over the past decade and is now at an all-time high. As the banking sector problems grew, there is more likely for the banking crisis. These facts are similar to the experience in Japan." Japan was already in trouble; the ROE and ROA of Japanese banks began to decline in 1990 and had become negative by that time. (Hoshi and Kashyap 1999) So what would happen to Taiwan? She noted many similarities between Taiwan and Japan. The stock and real estate market bubbles burst both in Taiwan and in Japan. And both Taiwan's and Japan's banks were forced to adjust to very different business environments than before due to financial liberalization. Furthermore, the indicators designated by Kaminsky and Reinhart

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<sup>5</sup> Heather Montgomery, 2002, "*Taiwan's Looming Banking Crisis*," ADB, Journal of Economic Literature Classification codes: F31

<sup>6</sup> Kaminsky, Graciela L. and Carmen M. Reinhart, 1999, "*The Twin Crises: The Causes of Banking and Balance-of-Payments Problems*," American Economic Review, Vol. 89, No 3, June, pp. 473-500



(1999) to show early signs of banking crisis all reached record high (almost 70%) in both Taiwan and Japan. Thus, if Japan and Taiwan were so similar in many ways such as the macroeconomic conditions, financial liberalization, and the early warning indicators, and if Japan ended up with a banking crisis, then why could Taiwan avoid the inevitable?

This paper's doomsday message met with a torrent of objections by Taiwan's domestic economists. Some criticized Montgomery's research as inaccurate, exaggerated, and even the data was out of date. Others argued that the model used by Montgomery was not quite suitable to Taiwan. One of this paper's authors who happened to serve as the discussant for Montgomery's paper in the conference also disagreed with her predictions. Liu (2002a) applied a more updated data to the same model and concluded that the probability of a banking crisis striking Taiwan was only 20%. In the end, the looming crisis disappeared from the horizon and Taiwan once again escaped the predicted banking crisis.

### **Against all odds, Taiwan survived crises one after another**

It is true that the fact that Taiwan could survive the 1997 Asia financial crisis and could escape a series of imminent banking crises provides a convincing evidence that Taiwan must have really maintained better financial fundamentals and a stronger economy than normally thought. However, "an empty hole invites the winds", we should not negate, or take lightly, the credible observations and assessments given by outside analysts, despite their prediction errors. The above two articles all stated, and correctly so, that Taiwan's banking sector is not as strong as it appears to be on the surface, and the hidden problems and weaknesses of banking system could get worse if not dealt with

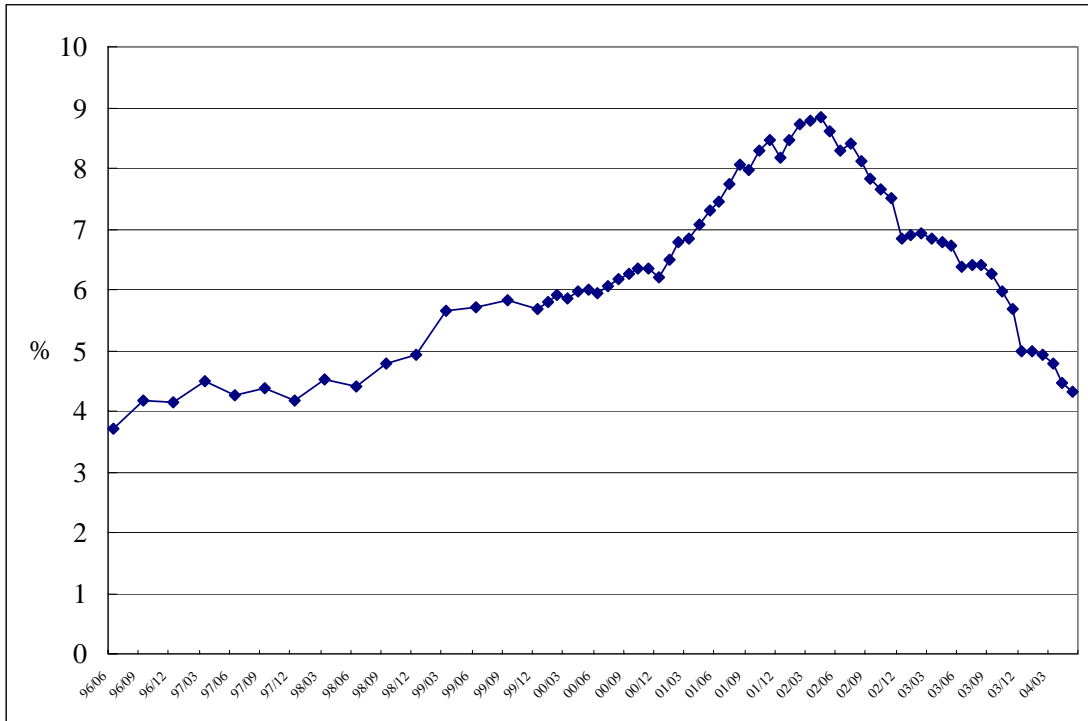
promptly. In the last section of the paper we will revisit the potential problems facing Taiwan's financial sector, in the context of reducing NPL ratios.

### **III. Conditions--The NPL ratios over time and underneath the aggregates**

We now turn to examine the conditions of Taiwan's financial sector focusing on the temporal and distributional patterns of the NPL ratios. Figure 1 shows the monthly variations of the total NPL ratio for all financial institutions in Taiwan from 1996 up to now. It can be seen that before June 2000 the NPL ratio stayed at a low-level (below 6%). Since then, along with the emerging banking problem (non-performing loan problem) the ratio started to climb, peaking at 8.28% in April 2002. That the NPL problem can worsen so drastically in a short 2 year period is quite alarming. Prompted by the rapidly deteriorating banking condition, from 2002 on the Government adopted various policy measures (including the setting up of RTC) to deal with the banking problem. These policies, along with the effort taken by private financial institutions, brought down the NPL ratio gradually. By May 2004, it declined to 4.32%, essentially returned to the same level as that in 1996.

The ratio mentioned above is an aggregate NPL ratio for all financial institutions in Taiwan, encompassing domestic banks, branches of foreign banks in Taiwan, investment & trust companies, and local financial institutions. Further investigation into the NPL ratios for domestic institutions separately reveals interesting patterns. Figure 2 displays the NPL ratio of domestic banks over time. It exhibits similar trend as the aggregate NPL ratio, albeit with a slightly lower ratio.

**Figure 1 1996~2004.5 Total NPL Ratio of Financial Institutions in Taiwan**



**Figure 2 1996~2004.5 NPL Ratio of Domestic Banks in Taiwan**

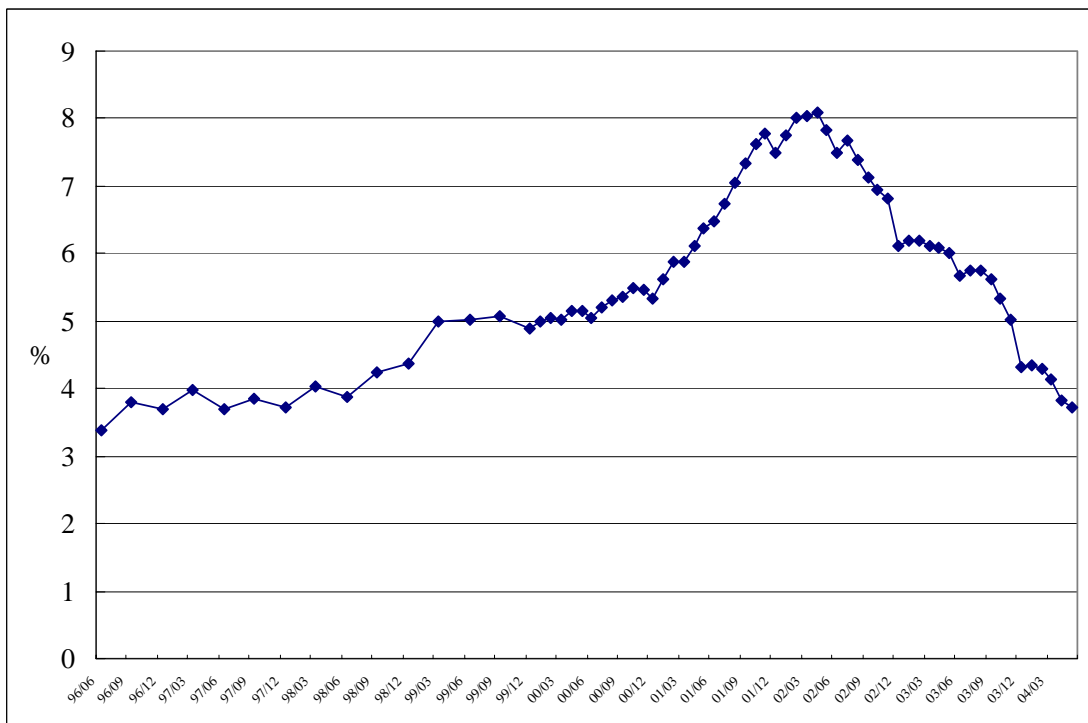


Table 1 presents the NPL Ratios of total financial institutions, domestic banks and investment & trust companies in 2003. This disaggregation clearly identifies the investment & trust companies as the type of institutions having non-performing loan crisis, with the NPL ratio over 40% recently. Fortunately, because the number of investment & trust companies is limited and the size of non-performing loans is relatively small, the aggregate NPL ratio (the ratio after combining all other institutions) would not be severely impacted.

Table 1 The NPL Ratio of Domestic Banks and Investment & Trust Companies in 2003

Unit: %

Month	Total NPL Ratio	NPL Ratio of Domestic Banks	Trust Companies
1	6.91	6.19	47.39
2	6.93	6.19	47.81
3	6.84	6.11	47.14
4	6.78	6.08	45.79
5	6.72	6.02	45.51
6	6.39	5.68	44.86
7	6.42	5.75	44.54
8	6.4	5.75	44.48
9	6.27	5.62	44.1
10	5.98	5.33	43.59
11	5.69	5.01	44.23
12	4.48	4.33	43.13

In addition to investment & trust companies, another type of financial institutions in a more serious trouble is the local financial institutions (mainly credit unions, saving & loan associations, and agricultural cooperatives) in Taiwan. Figure 3 depicts the trend of their NPL ratio over the period of 1996 to 2004. The NPL ratio of local financial institutions increased all the way from 1996 to August 2001, and only began to fall

steadily since June 2002. Even now the NPL ratio of local financial institutions still stands over 10%.

**Figure 3 1996~2004.5 NPL Ratio of Local Financial Institution in Taiwan**

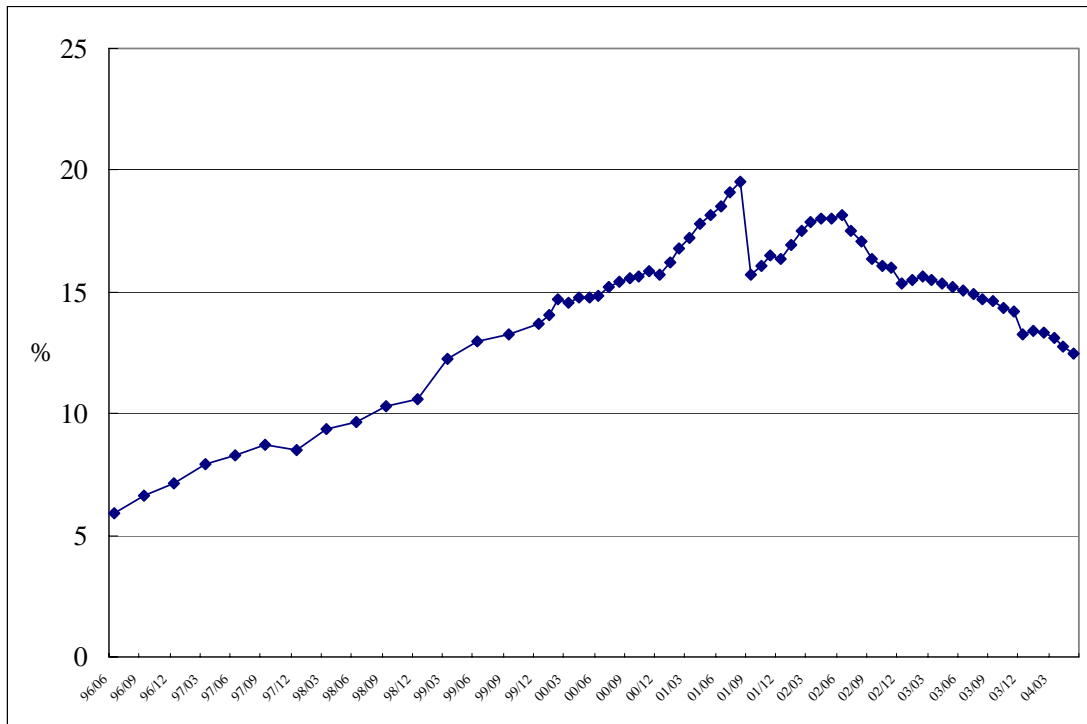


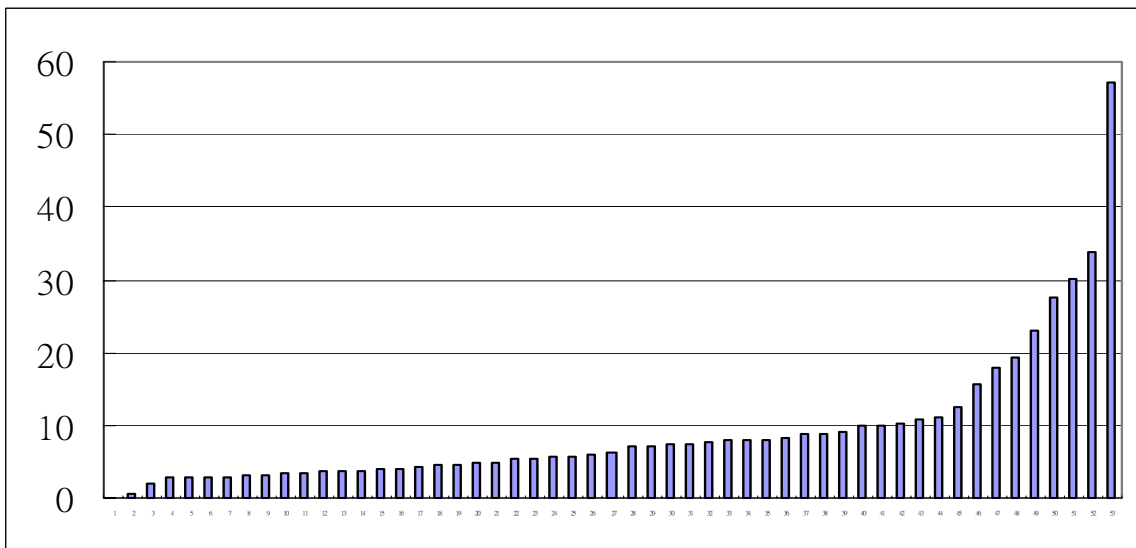
Table 2 shows the distribution of NPL ratios in Taiwan from December 2001 to August 2003. The changing distribution of banks with different range of NPL ratios suggests that improvements have been made in dealing with the non-performing loan problems. In December 2001 there were twenty banks whose NPL ratio was between 5% and 10% and eight banks whose ratio was over 15%. By August 2003, there were thirty-two banks virtually trouble free (with NPL ratio between 0% and 5%) and only five banks over 15%.

**Table 2 the Distribution of NPL Ratio**

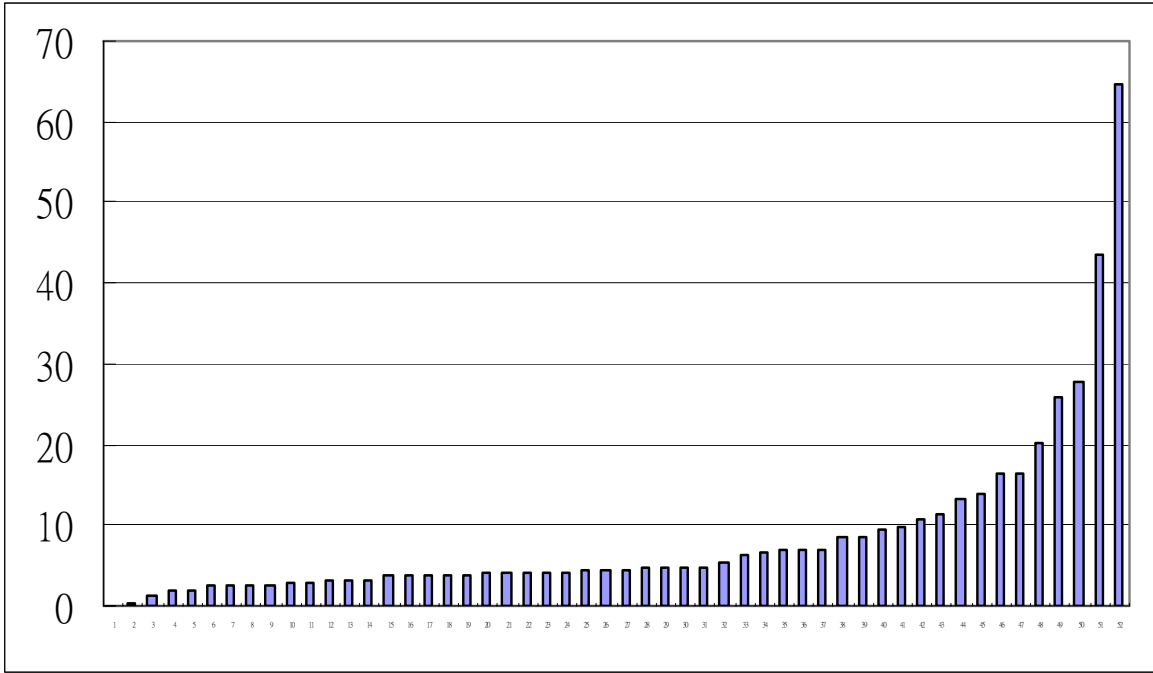
NPL Ratio Date(# of banks)	0%~5%	5%~10%	10%~15%	> 15%
Dec. 2001	21	20	4	8
Dec. 2002	31	11	4	7
Aug. 2003	32	11	4	5

A more detailed profile of the non-performing loan problems facing each bank in Taiwan in recent years is given consecutively in Figures 4, 5 and 6 below. Figure 4 shows that in 2001 there were 12 banks with NPL ratio over 10%, and the majority of banks had NPL ratio between 5% and 15%. Whereas in 2003, as shown by Figure 6, only 9 banks still had NPL ratio over 10%, and the majority of banks had NPL ratio between 0% and 5%. Thus, it is clear that many banks have essentially solved the non-performing loan problem by now.

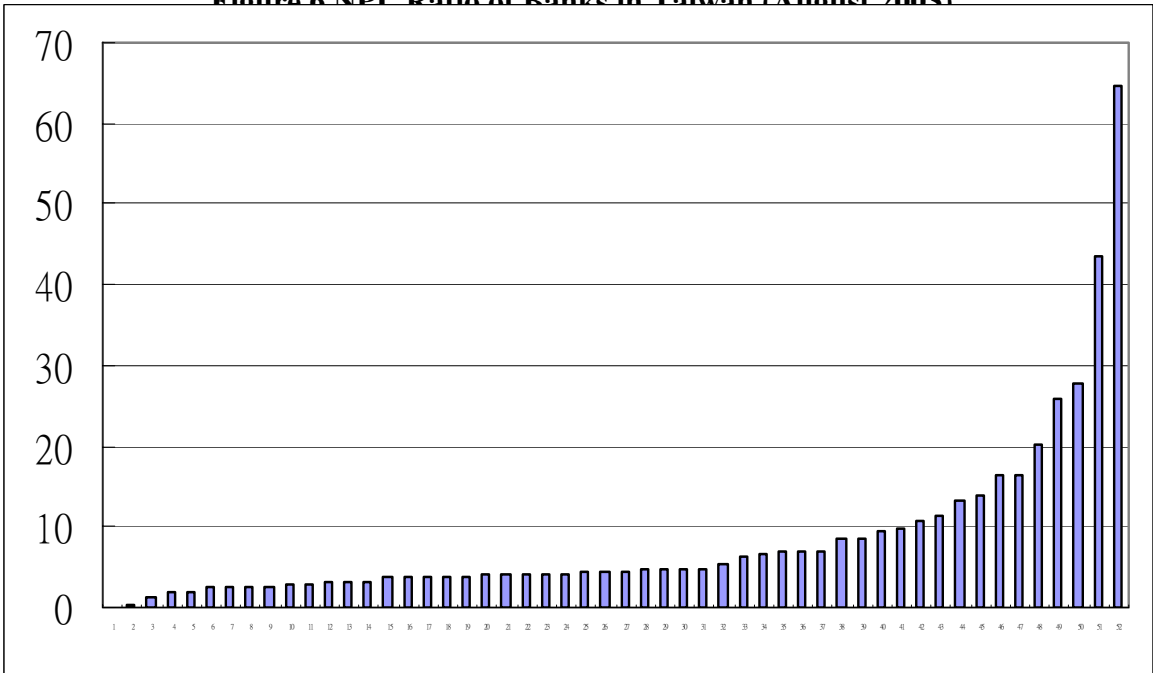
**Figure 4 NPL Ratio of Banks in Taiwan (December 2001)**



**Figure 5 NPL Ratio of Banks in Taiwan (December 2002)**



**Figure 6 NPL Ratio of Banks in Taiwan (August 2003)**



In sum, we can conclude unequivocally from the above factual analysis that significant progress has been made in solving banking problems in Taiwan, a commendable achievement to be credited to the joint effort of the Government and private financial institutions. Despite the overall success of financial reform in this regard, there are still a few financial institutions that are on the verge of insolvency and desperately need urgent assistance. Figures 4, 5 and 6 indicate that there are four banks with an extremely high NPL ratio, which is over 20%, or even over 50% for a bank at the far right of the bar chart. The pressing task facing policy makers now is to deal with these most troublesome banks and financial institutions to prevent them from further harming the public.

#### **IV. How Taiwan did it--The roles of FRF (RTC), AMC, and banks**

Financial institutions play a vital role in the process of money supply, payment system and financial intermediation. However, given the close linkage and transmission speed of modern financial networks, the risk of financial crisis is also greater than before. The chain reaction caused by a bank run can impose unbearable cost to the society, because the contagion of devastation can quickly go from one troubled domestic bank to the whole banking industry, culminating a financial meltdown in no time. Thus no regime can afford a collapse of its financial institutions and will try to avoid that with all means. In Taiwan's case, its banking sector had been increasingly weakened by mounting bad debts and NPL ratio since surviving the 1997 Asia financial crisis. The public were gradually losing confidence in banking services, making the bad situation even worse. As reported earlier, the banking system's NPL ratio climbed to a record-high of 8.28% in



April, 2002, triggering a series of gloom and doom predictions of an incoming banking crisis.

To prevent the crisis from happening and to give the banks some relief, the government of Taiwan moved quickly to cut sales tax by 3 percent, which was expected to boost banks' revenue by thirty-three billion NT Dollars more. The administration also announced its resolution to push a controversial "258" policy, that is, in 2 years to bring NPL ratio down to 5%, and bring bank' capital reserve adequacy ratio up to 8%. While the measures and policies proposed by the government to meet this timetable received many strong criticisms and questions on the feasibility and effectiveness of these measures, the government and banking sector fumbled through to lower the NPL ratios with some degree of success. As shown in the preceding section, Taiwan's NPL ratio in May 2004 reached 4.32%, even less than the policy target of 5%. How did this improvement come into being? This section aims to address this question by examining the workings of RTC, AMC and the troubled banks' own debt-absorption efforts.

## **RTC**

Taiwan's RTC fund, formally called Financial Resolution Fund (FRF), was set up by the government in July 2001 and afforded with one-time budget of one hundred and forty billion NT dollars. This RTC fund was established mainly for the purpose of facilitating the solving of non-performing loan problems facing troubled financial institutions, especially those grass-root credit unions and savings & loan associations. After two years of operation, it had used up ninety billion to help 40 some troubled institutions dissolving their non-performing debts. After deducting relevant interest expenses there won't be much left in this special fund to meet the need of other troubled

institutions. One estimate puts six hundred billion dollars as needed to “cure” the NPL disease once and for all. Although injection of RTC fund of such an astronomical size is unlikely in the foreseeable future, the original amount dispensed did play its role in bringing down the NPL ratios.

There are several ways that RTC fund can be legally used. The guideline stipulated by the government allows RTC fund to be used first to help those financial institutions that are determined to be either having no ability to pay back their liability or their net value is already negative. Once approved, the RTC fund is then used to buy back their asset and take over their liability. The following tabulation details the institutions being handled and the involved amount of RTC fund by years:

Table 3 Chronology of RTC Usage

<b>Year</b>	<b>Disposed Institution</b>	<b>Amount</b>
2001	36 basic financial institutions	77 billion and 200 million dollars
2002	7 Farm Credit Cooperative 、 The fifth Credit Cooperative of Tainan	12 billion and 500 million dollars
2003~2004.7	Chung Shing Bank 、 Kaohsiung Business Bank 、 Fengshan Credit Cooperative	In Process

While so far the RTC fund seems to have done its job in bringing down the NPL ratio in Taiwan, it is debatable whether the fund has been used most efficiently (concerns over the hasty and questionable usage of the fund will be raised later in Section 5). When it comes to how to use the RTC fund efficiently, we believe there should be a comprehensive system specifying detailed and systematic steps on how to solve the problems, along the line suggested in Lin et al. (2003). It has always been difficult to

assess the market value of the NPL, for there are no set standards and reliable principles upon which to calculate the true market value. So, a well designed accounting system to ascertain the true market value of a debt package, and a transparent procedure to allocate the fund fairly, play the most important part in the efficient usage of the RTC fund. Some suggestions in this regard are offered in Liu (2002b).

In addition, Taiwan government's basic stance towards the troubled banks has been, instead of letting them go bankrupt, directing them to merge with other good banks. This creates incentives for the troubled banks to usurp bank assets and dump the losses to the sucker-government. Since government will take whatever needed to go through this difficult bank-merging process, there may well be a waste in the RTC funding process and even some money going into personal account instead. Thus, in making RTC fund decisions, it is imperative to take precautionary measures to guard against the potential "moral hazard" problem.

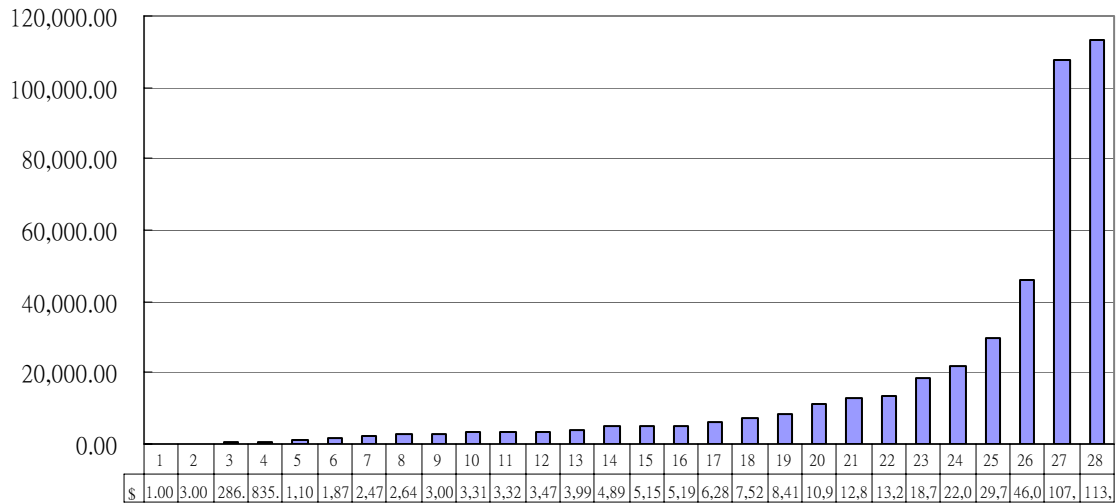
## **AMC**

Besides having banks absorbing the loss by themselves, another option of non-performing loan management is to sell bad debts to asset management corporations (AMC). An AMC is a company specialized in purchasing and resolving bad debts and in the process making profits through maximizing recovery rates of bad debts. To aid a troubled bank's lowering of NPL ratio using this avenue, the government promulgated Article 15 of the Financial Institution Merger Act in December 2000 that enabled the setting up of AMC for the purpose of purchasing bad debts from financial institutions. Since then many AMCs have been set up under the auspice and encouragement of the government. Except the government-controlled TAMCO, these AMCs are private entities

registered as regular corporations over which the Ministry of Economic Affairs (instead of the Ministry of Finance) is the governing agency. They are either foreign AMCs coming to Taiwan, or joint ventures between domestic and foreign financial institutions, or domestically owned AMCs most of which are funded by domestic financial institutions. To induce active NPL reduction endeavor, they were granted tax cut on the interest income generated in their operations. Another special inducement is that those financial institutions that sold their bad assets to AMC are allowed to amortize the loss incurred from the transactions over a five-year period.

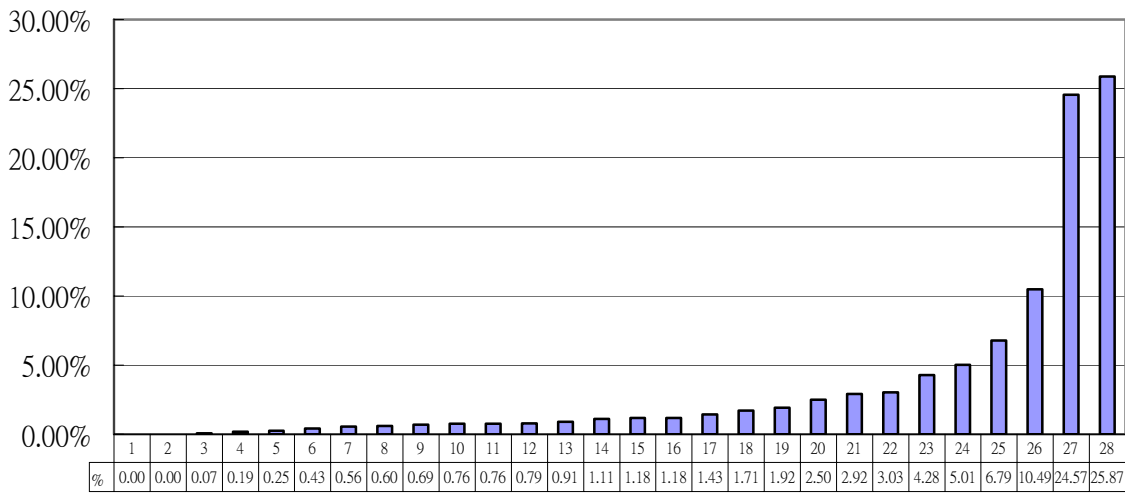
Following the proclamation of the “258” policy, banks were pressured to take immediate actions in order to meet the government-mandated 5% NPL ratio in two years. So banks rushed to sell out heaps of NPL on hand to AMCs, which bid and took in all these “bargain” package deals from loan market auctions in a short time. As a result, AMCs together have bought more than four hundred and thirty billion NT dollar values of bad debts, amounting to a little over forty percent of the total bad assets disposed of so far. We can get a general idea of these purchases by looking at the following 3 graphs taken from Liu (2003), which describe the purchase of non-performing assets by 28 AMCs in 2001-2003, in terms of the absolute amounts involved as well as the relative rankings of the shares of purchases.

The purchase of non-performing assets by AMC's in 2001-2003  
(unit:million NT.\$)

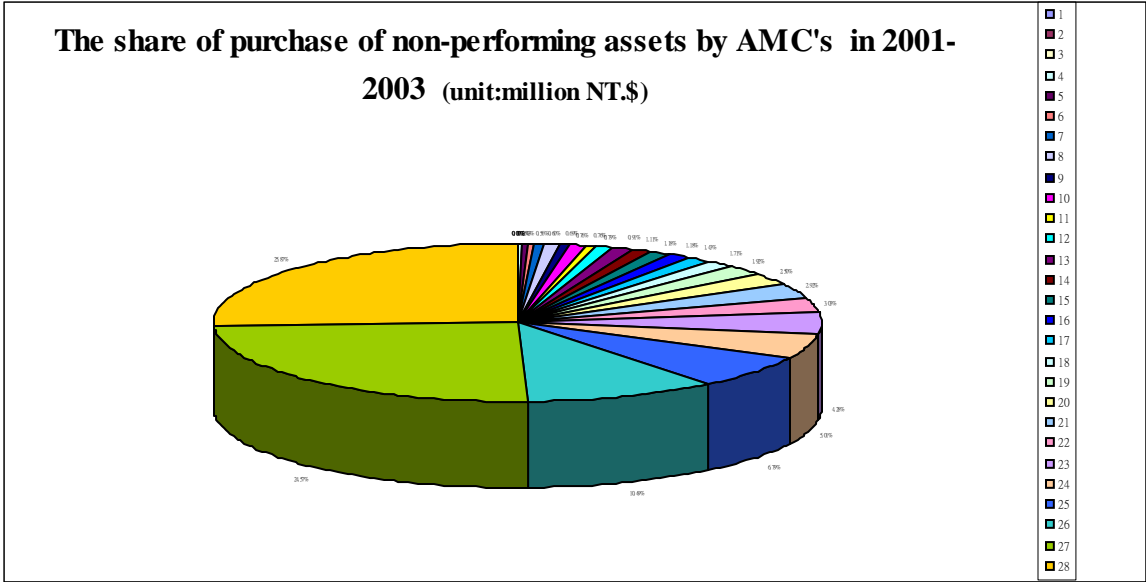


Source: Liu (2003)

The ratio of purchase of non-performing assets by AMC's  
in 2001-2003 (unit: %)



Source: Liu (2003)



Source: Liu (2003)

Although as being observed from above that AMC's have played an important role in effectively bringing down Taiwan's NPL ratio, there are concerns over the operation and capital source of AMC's that cast doubt on whether their achievements are genuine or simply accounting illusion and doubt on the long-term viability of their extremely high leverage buyout practices. These concerns will be elaborated in the next section.

**Banks Acknowledging and Absorbing Losses**

Finally, although the RTC fund and AMC can be useful instruments or avenues to help bring down the NPL ratio in an economy's financial sector, the most direct and effective approach is for the troubled financial institutions to take initiative dealing with the non-performing loan problem by themselves. That is, the troubled financial institutions need to acknowledge the unrecoverable portion of their loan portfolios and write them off as loss explicitly in their book of accounts. Granted that taking this step is rather painful because it will result in exposing the NPL loss and presenting an embarrassingly poorly performed balance sheet to the public in that year, it is the

fundamental and indispensable way to solve the non-performing loan problem. And only by releasing the correct information about the financial condition of the bank can it regain the public's confidence. Of course, exposing and absorbing the losses and regaining public confidence still do not guarantee that the banks will be set on a profit-making course right away. However, only after shedding those bad loans can the banks hope for a clean start with a healthy portfolio, and if they learn the lesson afterwards to act more cautiously in assessing risks and making loans, then they can achieve a complete cure of the "disease" and make a profitable comeback in the future.

In most cases, this absorption of the non-performing loan loss was accomplished by the troubled banks tapping into a collective pool of reserve fund accumulated through many years of surplus gained by the banks.

## **Summary**

How did Taiwan do it bringing down the NPL ratio in half (from 8% to 4%) in less than 3 years? The general answer is that it is because of Taiwan government's timely intervention along with private sector's cooperative efforts. But more specifically, as being described above, Taiwan did it through a three-pronged approach, namely, timely infusion and rescue of RTC fund into the most troubled institutions, active and aggressive participation of AMC in bad loan auctions, and the bold apportionment of large non-performing loan losses taken by troubled financial institutions. Altogether, they are the main reasons behind this remarkable accomplishment: more than 1 trillion and two hundred eighty billion NT dollars of non-performing debts have been successfully disposed of.

However, this does not mean that Taiwan is completely home free from the threat of a potential financial crisis. As noted in the preceding section, even though the average NPL ratio has dropped to a safe level, the variance of NPL ratio is still high, which implies that good banks do become better but bad banks are still in deep water. These banks, while very few, have the most serious and sticky non-performing loan problems, which, if left alone, are likely to become much worse to adversely impact the economy tremendously. Hence this is no time for Taiwan to be complacent about the current accomplishment and should take quick and decisive steps to deal with them. Furthermore, there are actually hidden problems associated with the three approaches credited for this accomplishment, and if not addressed they will hinder the ultimate solution to the NPL problem, to which we now turn.

## **V. Critical Assessment and Conclusions--Problems, concerns, and challenges ahead**

As briefly noted in passing from the preceding sections, while Taiwan managed to escape from financial meltdown despite foreign observers' dire predictions of the incoming banking crisis, some of the measures used to tame the NPL beast are of the quick-fix or makeshift patching nature that posed potential problems and raise latent apprehension on the health and long-term sustainability of Taiwan's financial system. This section pinpoints and elaborates some of these problems that we think should be brought to the attention of policy makers facing future challenges of chartering a sound course of financial system for Taiwan and other countries as well.

First, regarding the usage of public fund to help lowering the NPL ratio, the most contentious issue in Taiwan's political arena has been on the extension and expansion of



FRF (RTC) budget appropriations. As mentioned earlier, since its inception in July 2001, FRF committee has dispensed close to 100 billion(NT\$) to salvage mostly the disastrous non-performing debts made by local credit union cooperatives, with the remaining 40 billion deemed insufficient to cover the holes left by the two worst performed banks that are on the brink of bankruptcy, let alone meeting the pressing need of other banks also in trouble. In the past year and half the Finance Ministry's request for substantially raising the amount of FRF and expanding the scope of its usage has been stalled at the legislative process. Although the Ministry of Finance has since then substantially curtailed funding request (originally asking 1 trillion and 50 billion) and made several concessions on the proposed use of the fund, still no passage of the law is in sight. While the administration (Executive Yuan) blames this slow progress on lack of cooperation from legislators, there are indeed strong reasons and legitimate reservations voiced by the public concerning FRF expansion (some of them to be mentioned shortly herein) that justify legislators to serve as a conscientious watchdog of taxpayers' money and not allowing its hasty (and may turn out to be reckless) passage. Judging from the many still unanswered questions and doubts about the proposed FRF expansion, coupled with the current political climate, we can not be optimistic about the prospect of significant injection into FRF (RTC) to allow it to play a greater and more active role in the future dealing of NPL problems in Taiwan.

While it would be ideal to have an expedient policymaking to deal with problems in an economy, it is nonetheless a normal phenomenon in reality to have a long drawn-out process before a correct policy is agreed and carried out in democratic societies. (Japan's RTC legislation and implementation also went through a glacial pace.) Actually,

for funding request of this size oftentimes it is necessary to go through a long prudent process to allow for extensive discussions and deliberations so as to prevent or correct possible policy errors that could prove to be even more costly (as well put by the saying “a wrong policy could be more terrible than corruption”.) The FRF funding issue in Taiwan is precisely a case in point, as there are serious questions that could be raised about the efficiency, adequacy and fairness issues stemming from past operation of FRF. For instance, the bulk of FRF approval and dispensing decisions were made in less than 2 months as part of the political mandate to salvage some 40 failing local credit unions. Haste makes waste, and this daring emergency rescue attempt is no exception. In a short 2 month period and without a well designed operating mechanism and procedure in place, it is virtually impossible to conduct a comprehensive evaluation of the assets and collaterals associated with non-performing debts in question, rendering the pricing of the packaged debts (and dispensing of FRF) to be grossly inaccurate and at best questionable. Furthermore, the decision makers (the appointed FRF supervisory committee members) are part-timers and it is unreasonable to expect them to devote full attention to the information and appraisals given to them to ensure the most efficient and fair outcome of their decisions. As a result, controversies, suspicions and disputes were bound to arise (and indeed surfaced) from their decisions. [For a more complete and comprehensive treatment on the RTC issues, please see Liu (2002c) and Lin et al. (2003).]

Thus, the challenge facing a revamped FRF in Taiwan (or RTC in any country) is to inject fund to lower the NPL ratio at the same time maintaining efficiency and fairness of fund allocation. Attaining this goal will require establishing a transparent supervising mechanism, essential to which is setting up a standard operating procedure to secure

credible and accurate pricing of the non-performing debts. Achieving this goal may also require appointment of a few full-time professionals into the review and decision-making panel.

Second, in addition to having banks sell bad loans themselves Taiwan's Finance Ministry also adopted the market-oriented approach of public auctioning of loan packages and inducing AMC's to bid and purchase them. In theory, this approach is heralded as the ideal private sector solution to a country's high NPL problem since it conforms to the fundamental principle of setting up markets and letting market mechanism do its work; after all, the AMC's, especially the well-established competitive foreign AMC's, are specialized in this type of business, and have expertise and experience to maximize recovery rate of bad loans. In practice, this approach has met with fair amount of success in Taiwan: as shown in the previous section, 400 billion, amounting to 40% of the one trillion bad assets being disposed of up to now, are resolved through this channel.

However, as with the implementation of any well-intended policy in the complicated real world, this approach is not free from problems and potential distortions. For one thing, to enable AMC to carry out smooth consolidation or merging of bad-loan ridden banks, the Ministry of Finance allowed financial institutions to take a five-year amortization over the loss incurred from selling their bad assets to AMC. As a result, the aforementioned 400 billion bad assets were disposed of by AMC paying for example, 160 billion to acquire those assets. Assuming the recovery rate to be 40% and the banks were able to digest the remaining 240 billion transaction loss by amortizing them over 5 years and showing them in the banks' balance sheets under the guise of 48 billion "deferred

assets” each year. This “clever” accounting maneuver, which was allowed perhaps with good intention to facilitate disposal of non-performing loans, distorts the reading of banks’ balance sheets and can conceivably lead to serious understatement (and hence misjudgment) of the extent of problem plaguing a troubled financial institution. Moreover, each financial institutions may take advantage of this accounting trick in varying degrees, (some uses up the entire annual allowed amount listing the loss as deferred assets but some uses the allowance partially), rendering comparisons of financial conditions across banks difficult and unreliable. The problems associated with this accounting trick, which is in violation of international accounting protocol, will linger around for more years to come even after the termination of this provision effective July 1 of 2005.

Another concern related to the AMC approach to NPL reduction is the high leverages implied in AMC’s purchase of bad assets. To be sure, leverage buyout is to be expected in this type of business and does not pose a concern by itself. The concern arises from the extremely high leverages in many AMC purchases (a casual perusal of a table ranking 28 AMCs by their market shares revealed some unbelievable leverage). Since an AMC’s operating success or failure hinges crucially on its ability to finance the purchase and protection of both party’s benefits also depends on adequate capital reserve of the AMC, abnormally high leverages pose danger of transactions unraveling. More seriously, except TAMCO and a few foreign AMCs, many of these AMCs are joint ventures between domestic financial institutions and foreign entities, even with some suspected to have been set up exclusively by a domestic institution (which itself also has NPL problem) and functioning virtually as its affiliate or subsidiary. While the latter case cannot be ascertained given that the current legal framework on AMC regulation does not provide

adequate disclosure of the funding source of an AMC, there is no telling if bad assets purchased by an AMC are truly disposed of or are simply shifted from one hand to another in the same sector. If the last scenario prevails, it would just make the numbers look good, creating illusionary improvement of the situation.

Thus, the challenge facing policymakers to maximize the functionality of AMC to lower NPL ratio is to “set up the market and make the market work”. In this regard, the Finance Ministry’s proposed termination of the 5-year loss amortization is a move in the right direction. More extensive AMC regulations (particularly on disclosure of capital source) are also called for to match and enable better functioning of market mechanism.

Third, we turn to consider the direct approach that banks take initiative writing off unrecoverable portion of bad debts themselves. This approach typically entails banks tapping into past surplus reserves to absorb the loss. While this action will severely erode a bank’s profit margin and may make its balance sheet look very bad for the years that it endures NPL write-off losses, many banks in Taiwan chose to “bite the bullet” partly because of being pressured by the government to do so and partly because they realized that at the end of the day “a short acute pain is better than long-term sufferings”. Only after shedding those bad loans can they hope for a clean start with a lean and mean portfolio and profitable future, much like a surgical removal of bad tissue to restore a healthier body. Indeed, many of these banks started to report profits recently after enduring NPL writ-off losses for a few years.

Again, despite the above appealing reasons for promoting this approach to taming high NPL ratios, it is not without limitations and reservations either. The first and foremost concern is about the depletion of surplus reserve and the long-term viability of

this approach. This approach has forced banks to draw from a pooled reserve built up over surplus accumulated through last 20 or 30 years, and now with the expensing of several billion and more to be expected the reserve stands to be exhausted in the not far future. This raises the inevitable question: what to do if similar explosions of bad debts recur? How can the banking system in Taiwan fight the unthinkable without any more self-owned ammunition?

Related to the surplus depletion concern and perhaps more importantly the questions should be, as raised in Lin et al. (2003): what was the fundamental cause of the past NPL problem? Was it caused by overly aggressive extending of loans? Or was it caused by lax scrutiny of credit applications? Or is this NPL a result of policy lending stemming from past unscrupulous political pressure? Only by identifying the origin of the problem and dealing with it directly will help the banks to preempt it from happening again (thereby making the worry of no surplus reserve to cover recurring NPL problem a non-issue). Thus, the challenge faced by policymakers in this regard is to address the fundamental quality issue of banking and particularly lending operations. Specifically, in the case of Taiwan, the newly created Financial Supervisory Commission (with the authority transferred from the Ministry of Finance) should not be just contented with progress made by banks in lowering NPL ratios using surplus reserves, instead should take proactive measure and step up overseeing efforts to make sure that banks do not repeat the same mistakes in their loaning practice, i.e. nabbing the NPL bud from its forming in the first place.

To conclude, even though Taiwan was able to avoid the banking crisis that normally would have occurred as predicted by outsiders, and seems to succeed in

lowering NPL ratios with a three-pronged approach of FRF infusion, AMC purchase and recovery, and banking system's self restructuring, it is not completely out of the woods yet. This last section of the paper enumerates several hidden problems and concerns that challenge policy makers to take heed and act on them to ensure a sustainable and healthier financial system in Taiwan.

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