

Recapitalization of Thailand's Banks After the 1997 Crisis: Interpretation and Critique from a Neo-institutional Perspective

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ABSTRACT The recapitalization of Thailand's banks following the 1997 crisis is interpreted and positively criticized from the perspective of neo-institutional theory. Although a recapitalization scheme was introduced as part of monetary policy in 1998, the statistics and critical reaction on the part of private interests suggest that public resources and administrative action would not suffice to fully and expeditiously fulfill this task. To increase the supply of private capital to the banking sector the authorities can most effectively adopt a neo-institutional philosophy, under which policy credibility in situations of financial distress is enhanced by the clarification of property rights and minimization of opportunities for special-interest action. Neo-institutional theory also suggests that it is possible to expedite overall monetary recovery if the government concentrates on its comparative advantage in supplying the public good of financial stability, and leave commercial banks free to realize private comparative advantage in areas such as restructuring, re-engineering, mergers and competition. To link public and private action in the areas noted above, initiatives can be introduced to cooperatively exploit relative efficiency in obtaining and using information to support decision-making.

KEY WORDS: Thailand, 1997 financial crisis, commercial banks, recapitalization, property rights, neo-institutional policies

Introduction

The 1997 financial crisis severely eroded the capital of Thailand's commercial banks. Statistics differ in methodology and magnitude, but not with regard to the severity of the problem. Standard and Poor (1998) reported that Bt900 billion of new capital would be required, a figure which was 2.37 times the capital calculated by the Stock Exchange of Thailand (1998) to be at the disposal of all 15 banks in September 1998. Another report placed recapitalization requirements at US\$39 billion, of which US\$7.9 billion or 20 per cent was available to the banks at the end of 1998 (Far Eastern Economic Review, 1998). It is generally recognized that recapitalization and the parallel provisioning for non-performing loans

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(NPLs) are necessary conditions for Thailand's economic recovery (Brimmer, 1998; Miller & Luangarum, 1998; Lauridsen, 1998; Philbeam, 2001).

As part of monetary policy to meet the crisis, the Thai government introduced a scheme to support recapitalization in August 1998. An initial fund of Bt300 billion, amounting to one third of the new capital estimated to be required, was offered to banks upon voluntary application (BD, 1998; Standard & Poor, 1998). Stringent conditions were imposed. In particular, institutions wishing to acquire tier-one capital faced balance sheet write-downs, immediate full provisioning for NPLs at expected year 2000 levels, and restructuring with possible removal of the incumbent administration. It was remarked that one large bank (Thai Military Bank) declined to participate at that time, whilst another large bank (Siam Commercial Bank) only applied for tier-two capital (Moody, 1998b, CI, 1998f, 1998), possibly because acquiescence to the scheme's conditions would dilute existing shareholder value and open the way for the transfer of corporate control to the government. Recent reviews suggest that since 1998, response from the banking sector and private interests have been generally critical (BP, 2003c; FT, 2004b).

Concerns that the August 1998 scheme's resources and modus operandi would not suffice to fully and expeditiously recapitalize Thailand's banks emerged immediately after it was introduced, together with the question of follow-up policies (BD, 1998). This issue has not diminished in importance after the passage of six years, for the Thai government is still grappling with the problems of 'strengthening, reforming and restructuring' the country's banking system and revising existing and enacting new legislation towards this end (e.g. the Commercial Banking Act, the Finance, Securities and Credit Foncier Act, and the Financial Institutions Business Act). (See BP, 2003a,b,c, 2004a; FT, 2004b). From as early as Adam Smith (1789 [1976] I: 344–345), it has been understood that financial stability is a public good. To ensure maximal consumption of any supply of this public good in a situation requiring recapitalization and banking recovery like that in Thailand after 1997, neo-institutional theory (Cheung, 1998, Werin, 2003) suggests that instead of directly interventionist action – e.g. greater public ownership or directives to change the market structure – the authorities can more effectively proceed in closer cooperation with the private sector.

Combining the facts and the theory, it is suggested that in the case of Thailand follow-up policies emerge for consideration in four directions:

- 1. Should public funding prove insufficient (quantitatively or incentive-wise under voluntary application) to recapitalize the banking system, the authorities can effectively induce an increase in the supply of private capital by adopting a philosophy which aims to enhance policy credibility in situations of financial distress by clarifying property rights and minimizing opportunities for special-interest action.
- 2. By more fully exploiting its resources- and knowledge-based comparative advantage in supplying the public good of financial stability (Smith, 1789 [1976] II: 208; Hayek, 1945 [1976]), the government can further support recapitalization by allowing banks to augment secondary capital without encroaching on private equity by borrowing long at optimally subsidized

- interest rates and by the ready provision and dissemination of information to enhance rationality in such decisions.
- Similar considerations of efficiency suggest that action directly and indirectly in aid of recapitalization (and overall recovery in money and banking) outside the ambit of public comparative advantage - e.g. new share issues to raise equity, profit reallocation towards NPL provisioning, restructuring, re-engineering, mergers and competition in individual banks and the banking sector – should be left to private initiatives.
- 4. Public and private action can be effectively linked if the authorities seek to transmit information that it can obtain and process more efficiently – e.g. on sector- and economy-wide feedback effects - to banks at low or zero cost for common use in decision-making with regard to activities under 2. and 3.

Post-Crisis Capital Positions

Table 1 displays the capital positions of Thailand's then existing banks in September 1998. It is seen that the capital possessed by all 15 institutions added up to Bt380 billion, a figure which amounted to less than half of the Bt900 billion

Table 1. Capital Positions in Thailand's Banking Sector, September 1998 (Unit: Million Bt)

	Capital Funds	Remarks
Large Banks		
Bangkok Bank	122,645.11	_
Krung Thai Bank	45,806.35	_
Thai Farmers Bank	68,036.89	_
Siam Commercial Bank	37,478.77	_
Bank of Ayudhya	28,023.52	_
Thai Military Bank	22,043.35	_
Medium Banks		
First Bangkok City Bank	7,026.04	To merge with Krung Thai Bank under the Aug. 1998 scheme
Siam City Bank	19,587.23	Due for private sale under the Aug. 1998 scheme
Bangkok Metropolitan Bank	4,743.15	Due for private sale under the Aug. 1998 scheme
Bangkok Bank of Commerce	-3,604.32	To be wound up under the Aug. 1998 scheme
Small Banks		
Bank of Asia	12,660.46	_
Thai Danu Bank	10,491.97	_
Union Bank of Bangkok	480.86	To merge with Krung Thai Bank under the Aug. 1998 scheme
Nakornthon Bank	1,507.34	_
Laem Thong Bank	3,488.39	To be taken over by Radanasin Bank under the Aug. 1998 scheme

Source: Stock Exchange of Thailand (1998), CI (1998a-1998n).

estimated to be required for recapitalization and just 30 per cent of the implied minimum total capital base of Bt1280 billion. On the individual level, although balance sheet data are lacking in detail, the fact that capital has been significantly reduced throughout the sector suggests that we can obtain a good idea of the severity of the recapitalization problem in each bank by considering its position relative to the group average in Table 1. Capital in four out of the six large banks was below the group average of Bt5,4006 million - in two cases (Bank of Ayudhya, Thai Military Bank) significantly so (less than 50 per cent). This indication of undercapitalization is supported by a report (Fitch IBCA 1998b) that three of the institutions in question (Siam Commercial Bank, Bank of Ayudhya, Thai Military Bank) would need to raise additional capital of Bt 55, 40 and 25 billion respectively - numbers which add up to more than one third of the resources allocated to the entire August 1998 scheme. In the medium group, only one bank out of three (Siam City Bank) possessed capital higher than the positive group average (not counting Bangkok Bank of Commerce) of Bt10,452 million. Among the small banks, three out of five institutions (Laem Thong Bank, Nakornthon Bank, Union Bank of Bangkok) can be seen to be under-capitalized in comparison with the group average (Bt5726 million), especially the third one.

In sum, the statistics suggest that ten out of fifteen of Thailand's banks faced significant capitalization problems at the time the August 1998 scheme was introduced. Two of these institutions – Siam City Bank and Bangkok Metropolitan Bank – were later put up for sale under the scheme. It was arranged for Bangkok City Bank, Union Bank of Bangkok and Laem Thong Bank

Table 2. Post-crisis loss absorption capacities of Thailand's banks (Unit: % Loans)

	Optimistic Scenario	Less Optimistic Scenario
Large Banks		
Bangkok Bank	11.5	4.5
Krung Thai Bank	6.6	-0.4
Thai Farmers Bank	11.4	4.4
Siam Commercial Bank	2.8	-4.2
Bank of Ayudhya	1.8	-5.2
Thai Military Bank	2.6	-4.4
Medium Banks		
First Bangkok City Bank	4.6	-4.4
Siam City Bank	1.5	-7.5
Bangkok Metropolitan Bank	5.1	-3.9
Bangkok Bank of Commerce	4.9	-4.1
Small Banks		
Bank of Asia	5.9	-1.2
Thai Danu Bank	7.8	0.8
Union Bank of Bangkok	6.8	-2.2
Nakornthon Bank	4.3	-2.7
Laem Thong Bank	4.5	- 2.5

Source: Fitch IBCA (1998a).

to be taken over by Krung Thai Bank (the first two) and a new Radanasin Bank, while Bangkok Bank of Commerce was closed down (BD, 1998). Although left alone at that time, Nakornthon Bank also stood in urgent need of assistance. It had capital of only Bt1,507 million, which was very low compared with the group average of Bt5,726 million. (A majority stake in this bank was subsequently sold to the UK's Standard Chartered Bank).

The capacity of each bank in Table 1 to absorb loan losses out of (primary and secondary) capital under two likely scenarios is calculated in Table 2, according to the formula loss absorption capacity = equity + reserves - problem loans (Fitch, IBCA, 1998a). In the optimistic scenario, it is assumed that banks must provide for 30 per cent of NPLs and that non-performance would affect 40 per cent of total loans. Under the less-optimistic scenario, provisioning is assumed to be required for 40 per cent of NPLs and non-performance to affect 50 per cent of total loans. Measured in such terms, Bangkok Bank, Thai Farmers Bank, Krung Thai Bank, Bank of Asia and Thai Danu Bank are seen to be in relatively strong positions. One reason may be that these institutions had earlier obtained capital injections from the international market (Moody, 1998a,b). Siam Commercial Bank, Bank of Ayudhya and Thai Military Bank stand out as being ill-equipped to absorb loan losses even if the optimistic scenario is assumed: Under less optimistic assumptions, all three institutions become clearly deficient in absorption capacity.

The Problem of NPLs

Although the problem of loan provisioning is parallel to that of recapitalization, it was not assigned commensurate priority under the August 1998 monetary policy (BD, 1998). In October 1998, NPLs carried by Thailand's banks were estimated to average Bt1.85 trillion or 40 per cent of total loans (Reuters, 1998d; TN, 1998a). Table 3 displays the NPL:loan ratios in Thailand's six large banks and the small banks not under full public control in September 1998. In five out of nine cases, the figures were higher than the sector average of 40 per cent noted above.

Table 3. NPL Ratios of Representative Thai Banks, 30 September 1998

Bank	NPL/Total Loans %
Bangkok Bank (large)	42.76
Krung Thai Bank (large)	54.53
Thai Farmers Bank (large)	38.09
Siam Commercial Bank (large)	39.63
Bank of Asia (small)	47.48
Thai Military Bank (large)	49.20
Thai Danu Bank (small)	47.18
Bank of Ayudhya (large)	34.77
Nakornthon Bank (small)	36.04

Source: Siam Commercial Bank (1998).

At the same time, it was reported that Thailand's banks were able to provide for 20 per cent of NPLs on average (BP, 1998c,e). In the case of the banks in Table 3, comparison of columns 2 and 3 of Table 4 indicates that apart from Thai Farmers Bank, their NPL provisions were already below estimated net minimum levels for that date. With more NPLs predicted to emerge (Fitch, IBCA 1998b), the problem would probably get worse over an appreciable length of time.

As can be seen in Table 5, missed interest receipts almost immediately began to damage profits and the ability of Thailand's banks to provide for NPLs through earnings retained and transferred to loan-loss reserves under secondary capital. In the longer run, poor profit performance would adversely affect the price of bank shares and credit ratings, thereby increasing the cost of raising primary and secondary capital through new issues and long borrowing. Against total profits of Bt31.8 billion in 1997, the banking sector registered losses amounting to Bt203 billion less than one year later: Every institution suffered, with Bangkok Metropolitan Bank posting the worst result (Stock Exchange of Thailand, 1998). Another reason for the fall in profits was an increase in contributions to the Financial Institutions Development Fund (FIDF), from 0.1 per cent of deposits in 1997 to 0.4 per cent in 1998 (Delhaise, 1998). The long drawn-out nature of the parallel problems of recapitalization and NPLs in an environment of falling profits is demonstrated by the case of Siam Commercial Bank. Though not significantly undercapitalized (70 per cent of the large group average per Table 1) and assisted by a minority public equity injection under the August 1998 scheme, it still took five years for this bank to reduce its NPL ratio from 39.6 per cent to 17 per cent and to return to profitability (Table 3, BP, 2004b).

As a result of NPLs many banks reduced lending, both to meet the minimum capital adequacy ratio (8.5 per cent over tiers one and two) and in expectation of further deterioration in loan quality. Since credit contraction leads to lower revenue, these banks attempted to compensate by maintaining large spreads between minimum lending rates (MLR) and deposit rates. This led to complaints from the public, who felt excluded from the benefits of a fall in money market

Table 4. NPL Provisions of Representative Thai Banks, 30 September 1998 (Million Bt)

Bank	(1)	(2)	(3)	(4)
Bangkok Bank	111,844.77	160,724.20	87,592.80	1,006,392.99
Krung Thai Bank	_	146,468.86	61,231.08	462,603.34
Siam Commercial Bank	88,498.10	50,445.60	28,478.90	557,415.37
Bank of Ayudhya	64,813.06	27,777.38	15,509.01	389,045.71
Thai Farmers Bank	179,208.10	49,779.20	58,882.18	635,536.84
Thai Military Bank	76,027.41	30,120.00	13,168.00	302,125.89
Bank of Asia	31,037.00	14,073.00	9,071.77	131,575.34
Nakornthon Bank	9,375.00	16,881.91	5,279.86	58,423.13
Thai Danu Bank	24,751.58	15,849.00	8,647.00	114,846.28

Notes: (1): Estimated minimum NPL provision (2): Net minimum NPL provision = Estimated minimum NPL provision – collateral value (3): NPL provisions set aside as of 30 Sept. 1998 (4): Outstanding loans. Source: BP (1998e).

Table 5. Accounting Profits in Thailand's Banking Sector, 1998 (Unit: Billion Bt)

Bank	1st quarter	2nd quarter	3rd quarter	TOTAL
Bangkok Bank	0.0742	-16.474	- 9.988	-26.388
Krung Thai Bank	0.000378	-12.900	-8.475	-21.375
Thai Farmers Bank	0.134	-4.034	-19.438	-23.338
Siam Commercial				
Bank	0.117	-8.417	-1.273	-9.573
Bank of Ayudhya	-0.529	-6.871	-0.699	-8.099
Thai Military Bank	-1.280	-3.420	-1.370	-6.070
First Bangkok City Bank	-6.540	3.140	-8.199	-11.599
Siam City Bank	-2.760	-7.140	-3.599	-13.499
Bangkok				
Metropolitan Bank	-4.040	-10.660	-36.614	-51.314
Bangkok Bank				
of Commerce	-1.440	-6.260	-2.960	-10.660
Bank of Asia	-3.370	-2.030	-0.840	-6.240
Thai Danu Bank	0.00526	-5.005	-0.491	-5.491
Union Bank of				
Bangkok	-0.542	-1.758	-0.846	-3.146
Nakornthon Bank	-0.513	-2.587	-0.373	-3.473
Laem Thong Bank	-0.665	-0.935	-1.177	-2.777
			Grand Total	-203.042

Source: Stock Exchange of Thailand (1998).

rates since the end of 1997 (Reuters, 1998e). The criticism was also voiced that such practices penalized good quality borrowers, as interest payments from individuals or firms honouring obligations were used to maintain defaulters (BP, 1998f). MLRs were generally reduced in 1998, partly because of improving conditions in the money market and partly in response to pressure from government and public (Reuters, 1998e). Since narrowing spreads led to lower revenue and further declines in profitability, banks began to place greater emphasis on non-interest income. For example, where previously no charges were imposed for the first four ATM transactions per month, the average fee was raised to Bt3 per transaction, while some banks increased charges for utility bill settlements by as much as from 70 per cent (TNS, 1998). However, since noninterest receipts only accounted for 4-5 per cent of the typical bank's total revenue, such attempts did little to raise profits (TN, 1998b). To achieve this end on a significant and sustained basis Thailand's banks must resume normal lending, and this would only happen if the problem of NPLs is addressed in step with that of recapitalization.

Recapitalization, NPLs and Neo-Institutional Measures

If we interpret the statistics presented here in conjunction with the facts that, participation in the August 1998 scheme was voluntary but the response of private interests had been critical from the outset, the suggestion follows that full and

expeditious recapitalization of Thailand's banks would require more than public funding and administrative action. Even if it is assumed (for lack of information) that all of the scheme's (initial) allocation of Bt300 billion was taken up, this would amount to just 33 per cent of recapitalization cost in terms of domestic currency: If the US dollar value of the latter is used, the proportion would fall to 26 per cent even on an optimistic conversion factor of Bt30:US\$1. (The latter number, computed for the sake of reference, follows from averaging the average 1991–96 exchange rate (Bt25.4:US\$1) and that in early September 2004 (Bt40:US\$1). Since the lion's share of new capital would have to be sought from other — mainly private internal and external — sources, the question of supplementary policies would immediately emerge: In particular, (other things being equal) how can the authorities best increase the supply of private capital to Thailand's banks over any given time horizon?

The Thai government recognized early on that the country's banks – whether wholly or partly publicly- or privately- owned - would have to tap the international capital market. Under the August 1998 scheme, it was planned to sell Siam City Bank and Bangkok Metropolitan Bank (belonging to the medium group in Table 1) to external private interests (FT, 2000). As noted above, Bangkok Bank and Thai Farmers Bank (belonging to the large group in Table 1) obtained minority capital injections from the international market to supplement the public resources allocated from the August 1998 scheme. After discovering that it was unable to cover the balance sheet and NPL write-offs of Laem Thong Bank, the (then) new Radanasin Bank also decided to seek outside participation (see above, BP, 1998d). The most significant outcomes of foreign investment during 1997–99 were the acquisition of majority stakes in Radanasin Bank itself, Bank of Asia, Thai Danu Bank, and Nakornthon Bank (the last three belong to the small group in Table 1) by Singapore's United Overseas Bank, The Netherlands' ABN AMRO, Development Bank of Singapore and UK's Standard Chartered Bank (Reuters, 1998c; BP, 2003a; FT, 2004c,g).

Following these events, international interest in Thailand's banks cooled (FT, 2000f). The depreciated Baht notwithstanding, from early 2000 external investors became more reluctant to commit money to institutions carrying unclear balance sheets and problematic loan portfolios. Two cases of note were the failure of efforts on the part of the authorities to sell Bangkok Metropolitan Bank and Siam City Bank to the UK Hong Kong and Shanghai Banking Corporation and the US Newbridge Capital, respectively (FT, 2000). Thai Military Bank (which as noted above chose to opt out of the August 1998 scheme at the time it was introduced) was also unsuccessful in negotiations to raise capital by selling a minority stake to the Australia & New Zealand Banking Group, primarily because of disagreements over 'acceptable asset risk' (FT, 2003).

To support more effective competition for international capital, the Thai government broached a number of schemes aimed at boosting market sentiment. In August 1998, the Bank of Thailand raised the idea of buying back shares at the original price during the first five years of foreign involvement in any bank (Reuters, 1998b). It then announced a plan to guarantee NPLs for a period of up to seven years should external investors acquire controlling stakes in selected banks (Reuters, 1998d). However, few developments of substance followed until 2004,

when a Financial Institutions Business Act was likely to be passed to allow foreign ownership in domestic financial institutions to increase from 25 per cent to 50 per cent under normal circumstances (BP, 2004a). Since expectations are rational, it is essential that proposals to increase international investment in Thailand's banks should be economically viable. In particular, the policies would gain in credence if they can be shown to follow from neo-institutional reasoning as defined above. A case in point: although little transpired from the idea of shares repurchase, at the time it would have been possible for the government to promote the scheme among international investors as a variation on share-cropping (Cheung, 1969), with banks playing the part of farms with five-year leases and fully refundable initial contract-substantiation deposits.

The above observation generalizes to suggest that the authorities can effectively increase the supply of private (internal and external) capital to Thailand's banks by adopting a philosophy grounded on the neo-institutional idea that clarification of property rights and minimization of opportunities for special-interest action can significantly enhance policy credibility in situations of financial distress. Consider how such an approach can be usefully applied to the problem of NPLs, which though parallel to that of recapitalization was not addressed with commensurate priority in the August 1998 monetary policy, but which is likely to be the first item on the agenda of potential investors in any bank seeking capital in the aftermath of financial turmoil. According to Reuters (1998d) and TN (1998a), only Bt11.78 billion or less than 1 per cent of Thailand's NPLs was restructured from July 1997 to August 1998. In support of such endeavours, an institutional framework for loan restructuring was agreed between Bank of Thailand, International Monetary Fund, Thai Bankers Association, Foreign Banks Association and Association of Finance Companies, together with a waiver of tax liability on assets transferred during the process (BP 1998b,3b). Since restructuring follows if it is incentive compatible for banks and clients to avoid outright default of NPLs, neo-institutional theory suggests that further policies in this direction can usefully seek to clarify property rights and re-contracting opportunities whenever discussions commence between lenders and borrowers over the rescheduling of interest and principal payments.

When calculating loan provisions, the general practice is to deduct the value of collateral assets from the principal. In the case of Thailand, where real estate represented the main security for loans throughout the 1990s, it would be difficult to assign rational values to collateral assets when the number of transactions in the property market was reduced to almost zero after July 1997 (Delhaise, 1998; Reuters, 1998a; Kritayanavaj, 2002). If valuation is introduced ad hoc, banks would have to contend with the risk of provisioning for and restructuring NPLs without sufficient economically meaningful information. This problem can be alleviated if property rights are clarified and opportunities for special-interest action minimized. Measures would be required in the first place to promote greater transparency of information in money and banking. A step in this direction is a requirement by the Bank of Thailand that NPLs be fully disclosed in accounting statements (BP, 1998a). Once sufficient information transparency is ensured, it would be possible for the public sponsorship of NPL restructuring (as noted above) to be extended to allow borrowers and lenders to re-contract to wait until more information regarding the fair value of collateral assets becomes

available. In parallel, restructuring can be negotiated under a scheme in which the rights to real estate and other items securing the loans would be assigned in trust to the authorities and the income held in trustee accounts, with the value of pledged assets being entered into bank and client balance sheets according to a price adjustment schedule agreed to between all parties after arbitration (if necessary) by a public panel of experts established for the purpose.

Amendments to Thailand's Commercial Banking Act and Finance, Securities and Credit Foncier Act (see above) provide further scope to apply neo-institutional thinking to the problem of NPLs. Lengthy court proceedings create opportunities for debtors to relocate or dispose of assets before judgment, thereby increasing the cost of legal action on the part of creditors. Resolution of what Thailand's Prime Minister has described as 'the problem of strategic default of non-performing loans' (BP, 2003a) calls for initiatives to revise commercial law and rationalize and expedite foreclosure and bankruptcy procedures by clearly defining and protecting property rights under financial distress. For example, measures to hold collateral assets in publicly monitored escrow accounts pending the determination of residual values and the assignment of ownership claims to them would increase and stabilize the expected value of contract recovery, thereby increasing incentives on the part of banks to carry the risk of NPL restructuring.

Recent developments in Thailand bear out the idea that if credibility is enhanced in the manner suggested by neo-institutional theory, this would significantly increase the positive impact any given policy is able to exert on private support for recapitalization and other initiatives directed towards monetary recovery. Particularly noteworthy is the case of Siam City Bank: This bank was re-privatized in 2003 through a successful share flotation which reflected investor approval of its re-engineering and business re-invention, notwithstanding slow monetary recovery (FT, 2004b), continuing controversy over public involvement in the financial markets (BP, 2003c) and the failure of its sale to Newbridge Capital three years earlier over balance sheet valuation problems (see above).

Discussion

Neo-institutional ideas are not only useful when applied to recapitalization and NPL provisioning. Consider the wider policy problem of recovery in money and banking. According to the IMF, each 1 per cent reduction in average MLR would reduce Thailand's NPLs by 2.3 per cent under normal supply conditions in the money market (Reuters, 1998e). However, despite falling MLRs and short term interest rates and rising deposits, the supply of loanable funds remained abnormally tight after 1998. Financially distressed banks effectively stopped making loans: Instead, new inflows were employed to raise the ratio of safe assets (e.g. government bonds) in the balance sheet (BP, 1998f). Banks still lending regularly were mainly enthusiastic towards 'safe' multinational companies (BT, 1998). Such action can be readily understood to be the result of bearishness in the face of capital inadequacy, high levels of NPLs, and anxiety that fresh loans are not likely to be fully repaid so that NPLs would further increase and aggravate financial distress.

Table 6. Thai monetary statistics (January-October 1998) (Unit: Billion US Dollars)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Monetary Base*	471.4	465.4	447.7	448.9	448.2	427.5	448.1	442.1	440.0	450.2
% Change Commercial Bank	4287.8	- 1.3% 4299.5	- 5.8% 4283.3	0.3% 4275.0	-0.2% 4310.3	-4.6% 4377.6	4.8% 4457.4	1.3% 4496.8	-0.5% 4580.3	2.3% 4588.3
Deposits % Change	I	0.3%	-0.4%	-0.2%	0.8%	1.6%	1.8%	0.9%	1.9%	0.2%
Commercial Bank Credit	6187.6	5794.0	9.6995	5654.2	5683.1	5723.1	5639.2	5642.5	5576.9	5461.9
% Change	I	-6.4%	-2.1%	-0.3%	0.5%	0.7%	-1.5%	0.06%	-1.2%	-2.1%
Note: **Monetary base = central bank deposits + currency in circulation $Source$: Bank of Thailand (1998).	ntral bank dep land (1998).	osits + curren	cy in circulatic	on.						

Reflecting this liquidity squeeze, official statistics show that though deposits expanded by 7 per cent over the first ten months of 1998, bank credit contracted by 11.7 per cent. In parallel, Thailand's money base fell by 4.5 per cent (Table 6). Indeed, despite an increased money base in September 1998, bank credit was down by 2.1 per cent from the previous month (BP, 1998c). Since loan rationing ran counter to the government's strategy of increasing credit to stimulate economic recovery (BT, 1998), the Bank of Thailand responded by requiring all commercial banks to sign an agreement allowing the authorities to monitor capital hoarding. If found to possess 'excess' loanable funds the institution in question must submit a plan to the central bank, detailing how the money is intended to be used in the immediate future (BP, 1998f). The authorities also proposed a 'credit programme' to encourage lending and borrowing and to produce favourable repercussions on expectations. Under its terms, the Bank of Thailand would offer up to 60 per cent of loans to qualified borrowers at 3 per cent interest. This sum would be combined with the remaining 40 per cent from the lending bank with the rate set at 2.75 percentage points below MLR (BP, 1998a).

The 'no-lending' strategy pursued by undercapitalized banks may tide them over in the short run, but it is likely to be self-defeating in the long run. These institutions risk losing market share while delaying financial recovery. Moreover, they would fail to profit from a rise in the demand for credit when the Thai economy improves and would be unable to support effectively the return to normal growth through financial intermediation. On the other hand, though state intervention in the money market in the manner described above can be justified in part or in whole by the public good argument, it must be remembered that while financial stability is a valuable public good at all times the impact in each of these instances is mainly confined to the short run. Though the demand for loanable funds may receive a temporary boost, recapitalization and its supply-side effects remain fundamental to the resumption of normal activity in the money market in the long run.

The above observations suggest that more forward-looking action exploiting the government's resources-based comparative advantage in supplying the public good of financial stability – for example, a scheme to augment secondary capital through long loans at optimally-subsidized interest rates - would more permanently increase the willingness of banks to lend. (It should be noted that shareholder equity would not be affected, and that smaller institutions with limited entrée into the international bond market would especially benefit.) Similarly, by exploiting the government's knowledge-based comparative advantage in supplying the public good of financial stability, a measure to enhance rationality in the supply of loans can be introduced through the ready provision of macro level outside information (in the sense of Hayek, 1945 [1976]) for common use in banks. Further thinking along neo-institutional lines leads to the generalization that the wider objective of monetary recovery can be effectively served by coordinated action on both the demand-side and supply-side in banking over different time frames, based in each instance on comparative advantage in supplying the public good of financial stability on the part of the authorities or private comparative advantage in ways and means to endogenously reduce the financial system's susceptibility to instability.

Implications

We will briefly take up the second issue above and ask whether implications regarding the role of private initiatives follow which would be of interest to strategists and managers in banking and practitioners in economics, business and administration. Historically, the Thai authorities have regulated competition in banking by limiting the number of branches outside institutions may operate. Crisis conditions in 1997 created opportunities for foreign expansion through the purchase of local banks. As noted above, majority stakes in Bank of Asia, Thai Danu Bank, Nakornthon Bank and Radanasin Bank were acquired by The Netherlands' ABN AMRO, Development Bank of Singapore, UK's Standard Chartered Bank and Singapore's United Overseas Bank in 1997–99. By mid-1998 assets of the 20 foreign institutions holding full commercial banking licenses in Thailand had increased by 18 per cent year-on-year to a total of Bt1.14 trillion, translating into a market share of 16 per cent (FWN, 1998). Since these banks were carrying significantly lower average NPLs – at 4 per cent of total loans as compared to 40 per cent for the typical local bank (FWN, 1998; Reuters 1998d) – the implication follows that over the time frame of adjustments following the crisis, (other things being equal) an increase in foreign presence would enhance risk and credit analysis and management and reduce the susceptibility of Thailand's financial system to instability.

The effect noted above is short run, with a magnitude which would tend to diminish in the long run as the Thai economy returns to normal growth and NPL ratios fall in domestic banks. On the other hand, the response of domestic banks to an increase in external competition would produce a permanent impact on the financial system's susceptibility to instability. According to Griffiths (1980) for the sake of efficiency entry is a problem banks should solve on their own, without relying on the authorities to erect barriers or provide subsidies. Among the strategies domestic banks can (incrementally) adopt to enhance competitiveness, business re-invention and re-engineering (Porter, 1998 [1985]) are likely to attract first importance. In this case, risk-credit analysis and management would be

Table 7. Average Operating Cost in Asia's Commercial Banks (Unit: % Total Assets)

	1990–94	1995–96
Philippines	4.0	3.5
Indonesia	2.3	2.8
India	2.3	2.5
Korea	1.9	2.1
Thailand	1.9	1.8
Malaysia	1.6	1.4
Taiwan	1.3	1.3
China	1.0	1.4
Singapore	0.8	0.7
Hong Kong	0.1	0.4

Source: Bank for International Settlements (1997).

required to be upgraded, the asset-liability-revenue-cost nexus rationalized, product and service innovation accelerated, high technology investment increased and new approaches in marketing adopted. If all of this comes to pass, (other things being equal) the susceptibility of Thailand's financial system to instability would fall: by increasing efficiency, diversification, flexibility and information and reducing operating cost, re-invention and re-engineering in domestic banks would reduce their vulnerability of the business cycle and dampen the associated (financial) multiplier effects.

As can be seen from Table 7, average cost in Thailand's banks was among the highest in Asia from 1990 to 1996. At the time the crisis broke, Thai Farmers Bank, Krung Thai Bank and Laem Thong Bank were beginning to re-engineer to increase productivity and reduce cost (Bank for International Settlements, 1997; CI, 1998f,h). With revenue set to decline after 1997, operational and organizational re-engineering – for example, to meet the IT demands of ebanking (Liao & Cheung, 2003) would become more and more crucial to the viability of Thailand's banks. However, a problem may arise from the fact that the necessary hard- and software are expensive with prices usually denominated in US dollars, while the investment budgets and foreign exchange holdings of Thailand's banks and the Baht have fallen sharply. Institutions planning to re-engineer, especially small ones, are therefore likely to face severe financial constraints. In such situations, neo-institutional theory suggests that merging to pool investment resources - and to spread time-asymmetry risks in systems implementation (Cheung & Liao, 2002) - would be a more efficient strategy to capture the productivity effects of IT than appeals for government subsidization. It is noteworthy that a recent merger of two small privately owned banks - ABN AMRO Bank of Asia and UOB Radanasin Bank (3 per cent and 1 per cent market share, respectively) - has been reported to be due to reasons of 'operational support' as well as to the usual synergy considerations (FT, 2004e).

Especially in the larger Thai banks, staff establishments have remained static over the period of time in question, without significant increases in productivity (ABJ, 1998). Efficiency requires firms to be left free to exploit internal information regarding changes in human resources (Hayek, 1945 [1976]). On the other hand, since trade unions tend to resist efforts to re-engineer by streamlining the workforce and/or by reducing wages, transaction (negotiation) costs can become very high in such situations (BP, 2002). An opportunity then arises for cooperation between public and private action, under which the authorities can effectively support manpower re-engineering by supplying free information for common use to reduce decision costs in banks and unions and by initiating measures to encourage cooperative solutions – for example, subsidized retraining to reduce the cost of reallocating labour within and outside of the financial system.

It is well known that efficiency gains follow from mergers under certain conditions (Panzar, 1990; Jacquemin & Slade, 1990). In the case of Thailand's banks, we can point to an opportunity to realize the benefits from cooperative exploitation of public and private comparative advantage in obtaining and using information. According to Hayek (1945 [1976]), the individual bank can more efficiently utilize on-the-spot information regarding its market, operations and prospects – in particular the internal marginal costs and

benefits associated with merging. The authorities, on the other hand, tend to be more efficient in gathering, processing and transmitting for common use knowledge relating to the economy as a whole – in particular information which would assist individual banks in assessing the short and long run macroeffects and viability of any projected merger and its external marginal costs and benefits. It follows that in situations such as Thailand where banks and financial institutions are encouraged to 'consolidate' (BP, 2003a,b,c, 2004a; FT, 2004a,b), the greatest efficiency gains in obtaining and using information can be realized when publicly-owned institutions merge with privately-owned ones. It is noteworthy that the most significant merger to date (it produced the country's fifth largest bank in terms of assets) involved the state-owned International Finance Corporation of Thailand, the partly state-owned Thai Military Bank and the privately-owned DBS Thai Danu Bank (BP, 2003c; FT, 2004 h).

Conclusions

Recapitalization and the parallel provisioning for NPLs in the banking sector feature prominently among the conditions necessary for Thailand's recovery from the 1997 financial crisis. Though measures directed towards these objectives were introduced in 1998, the statistics and critical reaction on the part of private interests suggest that public resources and administrative action would not suffice to fully and expeditiously recapitalize the banking sector. From the viewpoint of neo-institutional theory, this task would be more effectively served if recognizing the public good nature of financial stability, the necessity to ensure maximal consumption of any given supply of this public good and the efficiency implications of comparative advantage, the authorities proceed in closer cooperation with the private sector.

To increase the supply of private capital to Thailand's banks, primary importance would devolve on policies grounded on the neo-institutional idea that credibility under financial distress can be significantly enhanced by clarifying property rights and minimizing opportunities for special-interest action. Exploiting its resources- and knowledge-based comparative advantage in supplying the public good of financial stability, the government can also support recapitalization through optimally subsidized long lending to banks to augment secondary capital and the ready provision of information for common use in financial decision making. Activities directly or indirectly in aid of recapitalization outside the ambit of public comparative advantage - for example, restructuring, re-engineering, mergers and competition – should be left to private decisions. Initiatives to link public and private action through cooperative exploitation of efficiency in obtaining and using information in the above areas – especially in the case of mergers between state- and privately-owned banks would also be fruitful.

We end by drawing attention to a point which may be of analytical importance for future research. According to the Coase Theorem, delineation of property rights is a necessary condition for market exchange. The arguments advanced in this paper suggest that the clarification of property rights (and minimization of opportunities for special-interest action which erode or obfuscate property rights) is a necessary condition for the selling (announcement/promulgation/elucidation/advocation) and buying (market acceptance) of public policies between the authorities and the private sector in situations of financial distress. Whether this proposition generalizes to policy exchange under other conditions and environments is suggested to pose an interesting question for further investigation.

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