## Raising The Thai-Tanic

10,000 Feet And Rising-But Still Under Water

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The safest road to hell is the gradual one-the gentle slope, soft underfoot, without sudden turnings, without milestones, without signposts.
-C. S. Lewis

If we keep on doin' what we always done, we'll keep on gettin' what we always got.
-Barbara Lyons

## Remain Underweight Thailand

We continue to be UNDERWEIGHT the Thai banking sector, with no exposure recommended for our clients who have broad global or regional mandates. Although fundamentals for the sector are undeniably improving, the underlying asset quality problems and reserve underfunding are persistent issues which make the equity of these banks highly speculative and very expensive relative to the franchise value of the institutions.

Our favorite of the large banks is still SCB, although the company has stumbled in recent quarters and no longer holds as large a lead over its compatriots as it once did.

- It's The Asset Quality, Stupid: The sector still has $31.4 \%$ non-performing/loans, more than three years in. Worse, after three years of increasingly serious restructuring, Thai banks have worked through most of the easy cases-what is left are hard-core NPLs which will probably cause higher rates of loss. The once-vaunted TAMC will only address $5-10 \%$ of the NPL issue at the listed banks; welcome to be sure, but hardly sufficient.

■ Required Reserves Are 2.5x Capital: Remaining required reserves under our methodology are still $2.5 \times$ book equity of the banks, and without raising equity it will take 24-48 months for banks to top off the allowance such that additional profits may accrue to shareholders. All banks are insolvent save for Krung Thai.

- Thailand Is Overbanked: Thailand still has a surfeit of commercial banks, including several propped up by the government which are hopelessly insolvent and serve only to ruin the margin environment for the other potentially salvageable banks. We must see consolidation and capacity reduction in order to cut costs and lift profits.
- Negative Loan Growth Persists: All banks would like to grow their way out of trouble, but the market is not cooperating. Loan growth was $-5.2 \%$ in the first half, and total bank loans have declined by $24 \%$ since 1997. A recession forecast beginning in 4Q01 casts ample doubt on the prospects for reversal of this trend.
- Beware Equity Offerings: With all banks undercapitalized, managements will likely seize any opportunity to come to market for straight equity. Current investors should beware potential dilution from coercive rights offerings, new convertible structures, and the like.
- Valuations Still Not Attractive: Even after steep declines in Thai bank share prices over the past two years, valuations remain high compared to the potential returns-even assuming a return to normalized asset quality. Remember that the high reserve shorifalls at these banks act like debt when evaluating franchise value, so that even a large cut in market cap has a minimal effect on EV.


## Consolidation and Market Share

## M\&A Is Necessary-As Are Bank Closures

Thailand continues to have too many banks for its shrinking pool of profitable lending; desperate for business they are competing away margins on many products, and possibly lowering credit standards again as well-we won't know for several years yet.

In order to clear their bad debt provisioning shortfalls, banks must return to high levels of profitability, and the best way to accomplish this would be to merge relatively healthy banks, closing branches and cutting employees in order to reduce the industry's cost base. In a static growth environment, these cost improvements would drop directly to the bottom line, and could be used to support a higher level of provisioning, as well as a permanently higher return on capital which might attract badly-needed new equity into the sector.

The less-healthy government banks should likewise be either closed or merged into one, perhaps using the now-stable Krung Thai as a base.

Figure 1: Thai Bank Rankings by Assets, Deposits, Loans, and Branches

| 2Q01, THB Bil | Abbreviation | Assets | Deposits | Loans | Branches |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Bangkok Bank | BBL | 1,260 | 1,066 | 703 | 562 |
| Krung Thai Bank | KTB | 982 | 840 | 371 | 618 |
| Thai Farmers Bank | TFB | 788 | 661 | 426 | 530 |
| Siam Commercial Bank | SCB | 730 | 606 | 450 | 476 |
| Bank of Ayudhya | BAY | 437 | 363 | 326 | 403 |
| Thai Military Bank | TMB | 359 | 296 | 261 | 365 |
| Siam City Bank | SCIB | 312 | 247 | 71 | 210 |
| Bankthai | BT | 293 | 176 | 212 | 78 |
| Bangkok Metropolitan Bank | BMB | 212 | 164 | 73 | 177 |
| Bank of Asia | BOA | 155 | 138 | 108 | 118 |
| DBS Thai Danu Bank | DTDB | 94 | 76 | 67 | 62 |
| Standard Chartered Nakornthon Bank | SCNB | 71 | 60 | 56 | 44 |
| UOB Radanasin Bank* | UOBR | 65 | 48 | 18 | 50 |

* as of August 30, 2001.

Source: Company reports; Bank of Thailand; Lehman Brothers estimates.

## Market Share Trends

The Thai banking market is not as widely scattered as some (Taiwan, for example), with the top five banks accounting for some $71 \%$ of deposits. However, Thailand still has more significant commercial banks than Singapore, and a comparable number to Korea.

Since the advent of the crisis, large banks including the big three and KTB have increased their share of deposits, but are losing ground on the lending front to the smaller institutions. In part, this is a reflection of a shift from large corporate syndications to more SME and personal lending. Note that foreign banks have actually reduced their presence significantly as measured by market share, although four now own domestic banks: ABN AMRO (BOA); Standard Chartered (SCNB); DBS (DTDB); and UOB (UOBR).

Figure 2: Market Share of Thai Banks

| 2Q01 | Market Share |  |  |
| :---: | :---: | :---: | :---: |
|  | Assets | Deposits | Loans |
| BBL | 19.16\% | 21.41\% | 19.45\% |
| KTB | 14.93\% | 16.86\% | 10.27\% |
| TFB | 11.97\% | 13.27\% | 11.77\% |
| SCB | 11.09\% | 12.17\% | 12.46\% |
| BAY | 6.64\% | 7.28\% | 9.02\% |
| Subtotal: Top 5 | 63.80\% | 70.98\% | 62.98\% |
| TMB | 5.46\% | 5.93\% | 7.23\% |
| SCIB | 4.74\% | 4.95\% | 1.96\% |
| BT | 4.45\% | 3.53\% | 5.87\% |
| BMB | 3.23\% | 3.29\% | 2.02\% |
| BOA | 2.36\% | 2.77\% | 2.99\% |
| DTDB | 1.42\% | 1.53\% | 1.87\% |
| SCNB | 1.08\% | 1.21\% | 1.54\% |
| UOBR | 0.98\% | 0.96\% | 0.51\% |
| Subtotal: Other Thai | 23.73\% | 24.18\% | 23.99\% |
| All Foreign Banks | 12.85\% | 5.18\% | 13.32\% |

Source: Company reports; Bank of Thailand; Lehman Brothers estimates.

Figure 3: Change in Market Share: 12/97-6/01
Change in Share

|  | Change in Share |  |
| :--- | ---: | ---: |
| 12/97-6/01 | Deposits | Loans |
| BBL | $+1.76 \%$ | $-2.32 \%$ |
| KTB | $+3.31 \%$ | $-3.72 \%$ |
| TFB | $+1.08 \%$ | $-0.71 \%$ |
| SCB | $+2.87 \%$ | $+0.68 \%$ |
| BAY | $-0.64 \%$ | $+0.55 \%$ |
| TMB | $-0.07 \%$ | $+0.92 \%$ |
|  |  |  |
| Other Thai | $-7.58 \%$ | $+14.94 \%$ |
| Foreign | $-0.37 \%$ | $-10.06 \%$ |

Source: Company reports; Bank of Thailand; Lehman Brothers estimates.

## Capital Raising Still An Issue

All of the Thai banks are undercapitalized relative to their risk books, and most are currently insolvent when marked to market. The sector will continue to require large amounts of additional equity capital over the next two years in order to cover past losses and move forward, even if consolidation and cutbacks are able to mitigate this to an extent.

Thai banks and finance companies have issued an aggregate of almost THB 1 trillion in Tier 1 and Tier 2 equity since yearend 1997, without managing to redeem their disastrous balance sheets. Although the situation has stabilized somewhat, the sector remains in a distressed state.

## Equity Window Is Shut

Both Bangkok Bank and Bank of Ayudhya have attempted share offerings during the past 12 months, only to be met with indifference from investors. Most of their competitors also require additional capital, and would react to any successful offering by scheduling their own. Given the current attitude of investors, its is difficult to assume that even with a market upturn all banks would be able to access the required funding, and so we foresee several failures among the next round of attempted capital-raisings.

Bear in mind that some or all of the banks may take issuance in the form of coercive rights offerings priced well below the underlying equity, or of potentially-dilutive preferred classes of stock. This argues for caution in purchasing and holding any Thai bank shares.

## Equity/M\&A Combo Deals May Be Attractive

Although we generally feel that current equity prices exceed the franchise value of Thai banks, there is a growing possibility of comprehensive transactions which will altempt to solve several problems at once; these could be attractive to investors.

Combo deals will generally contain the following components:

- M\&A or other consolidating activity. A merger between two distressed banks can help create a healthy one if it enables them to combine networks, cut branches and staff, and improve profitability. With overhead ratios averaging $1.9 \%(2.2 \%$ without IFCT), Thailand has substantial room to cut costs: we believe that the Thai banks should be able to approach the Singaporean overhead average level of 1.2\%.
- Resolution of all distressed assets. Investors are rightly wary of buying into partial recap situations-see Figure 4 for capital raisings between 1997-200 to remember why. Any equity story must contain a comprehensive cleansing of the balance sheet, including real estate and "phantom equity."
- Recapitalization. Most of the Thai banks would like to jump directly to this phase of activity, but investors should stand firm in demanding contemporaneous action on the first two fronts before providing additional funds.

Figure 4: Thai Bank Capital Raisings: 1998-2001

| THB, MM | FY1998 |  |  | FY1999 |  |  | FY2000 |  |  | 1H2001 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Private Banks: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BBL | 43,245 | - | 43,245 | 34,500 | 1,384 | 35,884 | - | - | - | - | - | - | 79,129 |
| TFB | 33,088 | - | 33,088 | 43,530 | 20,000 | 63,530 | - | - | - | - | - | - | 96,618 |
| BAY | 5,000 | 8,000 | 13,000 | 30,000 | 6,500 | 36,500 | - | - | - | - | - | - | 49,500 |
| SCB | 2,652 | 6,000 | 8,652 | 65,000 | 5,787 | 70,787 | - | 2,851 | 2,851 | - | - | - | 82,290 |
| TMB | 5,016 | 6,000 | 11,016 | 9,960 | 742 | 10,702 | 29,880 | 545 | 30,425 | - | - | - | 52,143 |
| DTDB | 6,000 | - | 6,000 | 12,000 | 206 | 12,206 | 13,500 | 1,337 | 14,837 | - | - | - | 33,043 |
| SCNB | 672 | - | 672 | 7,001 | - | 7,001 | - | - | - | - | - | - | 7,673 |
| BOA | 7,500 | - | 7,500 | 13,043 | 2,000 | 15,043 | 4,690 | - | 4,690 | - | - | - | 27,233 |
| UOBR | 19,793 | - | 19,793 | - | - | - | - | - | - | - | - | - | 19,793 |
| Sub-total | 122,966 | 20,000 | 142,966 | 215,034 | 36,619 | 251,653 | 48,070 | 4,733 | 52,803 | - | - | - | 447,422 |
| State Banks: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| KTB | 97,000 | - | 97,000 | 108,000 | - | 108,000 | - | - | - | - | - | - | 205,000 |
| SCIB | 51,400 | - | 51,400 | - | - | - | - | - | - | - | - | - | 51,400 |
| BMB | 64,190 | - | 64,190 | - | - | - | - | - | - | - | - | - | 64,190 |
| BT | 41,414 | - | 41,414 | 45,568 | - | 45,568 | - | - | - | 36 | - | 36 | 87,018 |
| First Bangkok City Bank | 32,000 | - | 32,000 | - | - | - | - | - | - | - | - | - | 32,000 |
| Bangkok Bank of Commerce | 10,000 | - | 10,000 | - | - | - | - | - | - | - | - | - | 10,000 |
| Sub-total | 296,004 | - | 296,004 | 153,568 | - | 153,568 | - | - | - | 36 | - | 36 | 449,608 |
| Total | 418,970 | 20,000 | 438,970 | 368,602 | 36,619 | 405,221 | 48,070 | 4,733 | 52,803 | 36 | - | 36 | 897,031 |

Source: Bank of Thailand.

## Rates and Margins

Margins have come up reasonably well over the last six quarters, adding an average of 19bp at the three major banks on a 20bp increase in spread. Asset yields continue to fall, giving up 73 bp over the same period and now standing at $5.17 \%$, while cost of funds declined 94 bp as banks cut deposit rates sharply.

Margins do continue to be stratified by institution, with the top three banks showing respectable spreads, KTB coming on strong post its recapitalization, and BAY, TMB, and IFCT remaining deeply troubled.

Figure 5: Net Interest Margins: FY1999-2Q01

|  | 2Q01 | 1Q01 | FY2001E | FY2000 | FY1999 |
| :--- | :---: | ---: | ---: | ---: | ---: |
| BBL | $2.13 \%$ | $2.09 \%$ | $2.14 \%$ | $2.08 \%$ | $0.66 \%$ |
| TFB | $2.44 \%$ | $2.37 \%$ | $2.42 \%$ | $2.22 \%$ | $1.36 \%$ |
| SCB | $2.42 \%$ | $2.46 \%$ | $2.44 \%$ | $2.37 \%$ | $1.52 \%$ |
| KTB | $2.09 \%$ | $1.94 \%$ | $2.16 \%$ | $1.47 \%$ | $0.68 \%$ |
| BAY | $1.25 \%$ | $1.38 \%$ | $1.37 \%$ | $1.50 \%$ | $0.73 \%$ |
| TMB | $1.49 \%$ | $1.00 \%$ | $1.46 \%$ | $0.62 \%$ | $0.57 \%$ |
| IFCT | $-0.20 \%$ | $-0.25 \%$ | $-0.23 \%$ | $-1.17 \%$ | $-1.24 \%$ |
|  |  |  |  |  |  |
| Average | $1.66 \%$ | $1.57 \%$ | $1.68 \%$ | $1.30 \%$ | $0.61 \%$ |

Source: Company reports; Lehman Brothers estimates.

The fall in asset yield is surprising-despite a prevailing fall in benchmark rates-as by our calculations foregone interest income on NPLs should have fallen considerably to offset this. Assuming that moving loans from NPL categories back into performing assets (or writing them off and replacing with same) should yield incremental spread of $3-5.5 \%$ as per the following table, we find that although foregone interest income has fallen materially lby an average of 60bp), it has not offset other factors-either that or loans are being restructured to yield substantially less than performing loans.

We suspect the latter, meaning that banks have taken long-term impairment to their net interest income to lower NPL figures.

Figure 6: NPL Yield Losses (L); Foregone Interest Income Margin Impact (R)

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | S/M |  | , 0 \% |  |  |
|  |  | S/S |  | 50\% |  |  |
|  |  | D |  | .00\% |  |  |
|  |  | L |  | 50\% |  |  |
|  |  | ORE |  | .00\% |  |  |
|  | 1 Q00 | 2 Q00 | 3Q00 | 4Q00 | 1 Q01 | 2 Q01 |
| $\overline{\text { BBL }}$ | -2.17\% | -1.09\% | -1.04\% | -0.98\% | -1.04\% | -0.96\% |
| TFB | -1.61\% | -1.47\% | -1.40\% | -1.32\% | -1.25\% | -1.12\% |
| SCB | -1.19\% | -1.28\% | -1.24\% | -1.04\% | -1.08\% | -1.10\% |
| AVG | -1.66\% | -1.28\% | -1.23\% | -1.11\% | -1.12\% | -1.06\% |

Source: Company reports; Lehman Brothers estimates.

Because the effect of falling foregone interest will be limited in the future, and because we see less room to cut deposit rates going forward, we conclude that NIM improvements will become ever scarcer at the top banks. Second/third tier institutions will probably continue to make progress on this front through 1 HO 2 , but will still have margins below those of the big three.

Figure 7: Net Interest Margin Components

|  | 2Q01 |  |  |  | FY2000 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cost of Funds | Asset Yield | Spread | NIM | Cost of Funds | Asset Yield | Spread | NIM |
| $\overline{\mathrm{BBL}}$ | 5.24\% | 3.09\% | 2.16\% | 2.13\% | 5.81\% | 3.73\% | 2.08\% | 2.08\% |
| TFB | 5.33\% | 2.91\% | 2.42\% | 2.44\% | 5.75\% | 3.55\% | 2.19\% | 2.22\% |
| SCB | 4.95\% | 2.62\% | 2.32\% | 2.42\% | 5.58\% | 3.35\% | 2.23\% | 2.37\% |
| KTB | 4.28\% | 2.25\% | 2.03\% | 2.09\% | 4.51\% | 3.26\% | 1.25\% | 1.47\% |
| BAY | 4.74\% | 3.40\% | 1.34\% | 1.25\% | 5.65\% | 4.05\% | 1.60\% | 1.50\% |
| TMB | 4.95\% | 3.49\% | 1.45\% | 1.49\% | 4.74\% | 4.22\% | 0.52\% | 0.62\% |
| IFCT | 4.66\% | 4.81\% | -0.15\% | -0.20\% | 5.23\% | 6.29\% | -1.06\% | -1.17\% |
| Average | 4.88\% | 3.22\% | 1.65\% | 1.66\% | 5.32\% | 4.06\% | 1.26\% | 1.30\% |

Source: Company reports; Lehman Brothers estimates.
Note that weak loan growth will also tend to arrest any tendency towards higher rates, as banks desperate for yield on performing assets are culting lending rates.

Fierce competition for high-margin business is also coming from the non-viable state banks like BMB and SCIB, which have cut MLR by an average of 100bp so far this year, as opposed to 50 bp at the large private banks. These "zombie banks" have almost no options other than to try to grow out of their problems, and with sectoral growth flat to negative this can only be accomplished by taking share from healthier institutions via pricing, looser credit standards, or both.

For this reason alone, it is imperative that the Thai government act to shutter these banks and take capacity out of the system-Thailand can't afford a rate war now.

Figure 8: Thai Bank Deposit and Lending Rates


Thai Bank Rates: 10/12/01
Thai Bank Rates: 01/01/00
Change: 01/01/00-10/12/01
Source: Company reports; Bank of Thailand; Lehman Brothers estimates.

Figure 9: Historical Net Interest Margin Components: 1Q00-4Q01

|  |  | 1 Q00 | 2Q00 | 3Q00 | 4Q00 | 1 Q01 | 2Q01 | 3Q01 | 4Q01 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BBL | Asset Yield | 6.13\% | 6.16\% | 5.84\% | 5.70\% | 5.52\% | 5.24\% | 5.22\% | 5.15\% |
|  | COF | 4.09\% | 3.85\% | 3.87\% | 3.59\% | 3.40\% | 3.09\% | 3.01\% | 2.94\% |
|  | Spread | 2.04\% | 2.31\% | 1.97\% | 2.11\% | 2.13\% | 2.16\% | 2.21\% | 2.21\% |
|  | NIM | 2.02\% | 2.30\% | 1.97\% | 2.06\% | 2.09\% | 2.13\% | 2.18\% | 2.19\% |
| TFB | Asset Yield | 5.92\% | 5.70\% | 5.80\% | 5.84\% | 5.52\% | 5.33\% | 5.27\% | 5.15\% |
|  | COF | 3.81\% | 3.69\% | 3.62\% | 3.35\% | 3.16\% | 2.91\% | 2.83\% | 2.76\% |
|  | Spread | 2.11\% | 2.02\% | 2.18\% | 2.49\% | 2.36\% | 2.42\% | 2.44\% | 2.40\% |
|  | NIM | 2.16\% | 2.00\% | 2.17\% | 2.47\% | 2.37\% | 2.44\% | 2.46\% | 2.41\% |
| SCB | Asset Yield | 5.66\% | 5.97\% | 5.62\% | 5.59\% | 5.20\% | 4.95\% | 4.86\% | 4.76\% |
|  | COF | 3.52\% | 3.59\% | 3.39\% | 3.21\% | 2.90\% | 2.62\% | 2.55\% | 2.47\% |
|  | Spread | 2.14\% | 2.38\% | 2.23\% | 2.38\% | 2.30\% | 2.32\% | 2.31\% | 2.29\% |
|  | NIM | 2.22\% | 2.47\% | 2.35\% | 2.49\% | 2.46\% | 2.42\% | 2.43\% | 2.41\% |
| AVG | Asset Yield | 5.90\% | 5.94\% | 5.75\% | 5.71\% | 5.42\% | 5.17\% | 5.12\% | 5.02\% |
|  | COF | 3.81\% | 3.71\% | 3.63\% | 3.38\% | 3.15\% | 2.87\% | 2.80\% | 2.72\% |
|  | Spread | 2.10\% | 2.24\% | 2.13\% | 2.33\% | 2.26\% | 2.30\% | 2.32\% | 2.30\% |
|  | NIM | 2.13\% | 2.25\% | 2.16\% | 2.34\% | 2.30\% | 2.33\% | 2.36\% | 2.33\% |

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## Asset Quality

Stated NPLs are well off their late 1998 highs, the result of countless restructurings, extraordinary provisions and in some cases government assistance. Real progress has been made, albeit at a high price-most of the billions of dollars in new equity raised by these banks in 1998 and 1999 went right out the door again to cover the asset quality nut.

Although we are somewhat tired of hearing about the problem, and so possibly inclined to take improvement as solution, we must keep on singing that old dirge: the Thai banks remain very seriously troubled by bad debts.

Figure 10: Gross NPAs

|  |  | Gross Non-Performing Assets (NPAs) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | THB, Bil | 1998A | 1999A | 2000A | 2Q01A | 2001E | 2002E | 2003E |
| BBL | 467 | 486 | 229 | 238 | 220 | 189 | 158 |  |
| TFB | 350 | 227 | 185 | 165 | 151 | 126 | 104 |  |
| SCB | 184 | 185 | 150 | 166 | 154 | 133 | 113 |  |
| KTB | 480 | 428 | 110 | 118 | 109 | 94 | 80 |  |
| BAY | 139 | 125 | 98 | 99 | 92 | 79 | 66 |  |
| TMB | 119 | 142 | 112 | 101 | 96 | 88 | 80 |  |
| IFCT | 47 | 49 | 36 | 38 | 34 | 28 | 23 |  |

Source: Company reports; Lehman Brothers estimates.

Figure 11: NPAs as a Percentage of Total Loans

|  | NPAs (\% of Loan Book) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1998A | 1999A | 2000A | 2Q01A | 2001E | 2002E | 2003E |
| BBL | $49.0 \%$ | $52.5 \%$ | $28.8 \%$ | $30.5 \%$ | $28.5 \%$ | $25.0 \%$ | $21.0 \%$ |
| TFB | $57.5 \%$ | $42.8 \%$ | $35.7 \%$ | $33.8 \%$ | $31.2 \%$ | $26.5 \%$ | $21.9 \%$ |
| SCB | $33.8 \%$ | $37.5 \%$ | $30.4 \%$ | $34.7 \%$ | $32.6 \%$ | $28.4 \%$ | $23.7 \%$ |
| KTB | $50.2 \%$ | $45.7 \%$ | $28.3 \%$ | $29.5 \%$ | $27.9 \%$ | $25.0 \%$ | $21.6 \%$ |
| BAY | $37.9 \%$ | $34.7 \%$ | $29.7 \%$ | $29.6 \%$ | $27.6 \%$ | $23.9 \%$ | $19.9 \%$ |
| TMB | $41.0 \%$ | $50.3 \%$ | $42.6 \%$ | $37.4 \%$ | $35.8 \%$ | $33.3 \%$ | $30.2 \%$ |
| IFCT | $35.5 \%$ | $36.1 \%$ | $23.0 \%$ | $24.1 \%$ | $21.7 \%$ | $17.9 \%$ | $14.4 \%$ |
|  |  |  |  |  |  |  |  |
| Average | $43.6 \%$ | $42.8 \%$ | $31.2 \%$ | $31.4 \%$ | $29.3 \%$ | $25.7 \%$ | $21.8 \%$ |

Source: Company reports; Lehman Brothers estimates.

Non-performing assets (NPLs plus foreclosed property, or ORE) still account for $31.4 \%$ of total loans at our covered universe, and have actually increased since year-end as hastily-restructured loans come home to roost. Yet hope springs eternal. We project that bad loans will continue to come down-but any slide into deep recession for Thailand could scotch this progress.

Figure 12: Classified Assets Breakdown

| 2Q01 | BBL | TFB | SCB | KTB | BAY | TMB | IFCT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total Impaired Assets (\%): |  |  |  |  |  |  |  |
| $\quad$ Special Mention | $9.6 \%$ | $6.7 \%$ | $15.1 \%$ | $18.2 \%$ | $9.1 \%$ | $14.5 \%$ | $10.4 \%$ |
| Substandard | $17.0 \%$ | $10.2 \%$ | $19.4 \%$ | $17.1 \%$ | $15.2 \%$ | $16.2 \%$ | $2.6 \%$ |
| Doubtful | $10.6 \%$ | $7.6 \%$ | $12.8 \%$ | $7.1 \%$ | $5.0 \%$ | $10.3 \%$ | $6.2 \%$ |
| Loss | $53.9 \%$ | $67.3 \%$ | $46.5 \%$ | $45.2 \%$ | $56.5 \%$ | $49.7 \%$ | $64.0 \%$ |
| ORE | $9.0 \%$ | $8.3 \%$ | $6.2 \%$ | $12.4 \%$ | $13.7 \%$ | $7.7 \%$ | $7.7 \%$ |
| Excess Accrued Interest | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.5 \%$ | $1.6 \%$ | $9.1 \%$ |
|  |  |  |  |  |  |  |  |
| Weighted Classification Ratio | $19.23 \%$ | $24.79 \%$ | $19.97 \%$ | $15.64 \%$ | $18.59 \%$ | $22.35 \%$ | $18.05 \%$ |

[^1]The low-hanging fruit for loan restructurings has already been picked.

## Restructurings Are Getting Harder

In an effort to return loans to performing status, banks have restructured hundreds of billions of baht worth of loans over the past three years. In some cases, this restructuring amounts to nothing more than capitalizing unpaid interest, setting a new payment schedule, and perhaps lowering the interest rate a point or two. For some, it has involved haircutting the amount owed, swapping debt for equity stakes, dropping interest rates to as low as $0.1 \%$ per year, and even court proceedings.

While some of these efforts have been reasonably successful given the economic backdrop (witness TFB's assertion that its yield on restructured loans is now 5-5.5\%), we believe, and banks concur, that the easy restructurings have already taken place. With an average of $55 \%$ of all impaired assets in the loss category-denoting for the most part loans which have not paid interest for three years or more-what remains to be dealt with are more hard-core defauls or borrowers without readily accessible assets.

## Collateral Is A False Salvation

While banks do point to collateral held against many of these loans, our methodology does not take it into account when looking at reserve adequacy (although we do think it a proper consideration for classification), as the valuation is subject to management's discretion, many of the properties are single-purpose or unfinished sites with no value, and banks' ability to actually seize collateral has been limited. Even under new, expedited procedures, bankers report that an average foreclosure will still take them three to five years to accomplish.

## Beware Phantom Assets

With a change in reporting over the past two quarters, banks have started to disclose the equity stakes they have booked from restructuring transactions, with somewhat disturbing results. Aside from marketable stakes, which are allegedly marked-to-market, banks have 15-60\% of their capital tied up in non-marketable equity securities-which we consider a euphemistic term for securities of questionable value.

Figure 13: Top Three Bank Equity Holdings: 2Q01

| THB, MM | BBL | TFB | SCB |
| :--- | ---: | ---: | ---: |
| Marked to Market | 6,867 | 3,229 | 3,593 |
| Held to Maturity | 13,661 | 3,252 | 5,547 |
| Total | 20,528 | 6,481 | 9,139 |
|  |  |  |  |
| \% of Equity | $59.7 \%$ | $25.7 \%$ | $\mathbf{1 4 . 6 \%}$ |

Source: Company reports; Lehman Brothers estimates.
BBL is the worst offender here, no surprise given its large corporate NPL porffolio and slim equity balance. Our position: these are not bankable assets, and should be written down to zero.

## National AMC

After having been discussed for some time, Thailand's National AMC ("TAMC") is now a reality, and is ready to begin accepting loans as early as this week. However, the early promise of the TAMC as an entity which would solve the asset quality problem by assuming all bad loans a la IBRA has faded away, and the government company is now seen mainly as a solution for the state banks and AMCs like BMB, SCIB, and Sukumvit AMC—all institutions for which the government was already fully responsible.

Most of our covered institutions will shed $5-11 \%$ of their NPLs on a gross basis-certainly welcome, but hardly a panacea for bad debt woes. Remember as well that $20 \%$ of net value will eventually be charged back to the banks as the TAMC incurs losses, a bill which may be paid by issuing equity to the government if capital is insufficient.

Figure 14: TAMC Effect on NPLs

| THB, Bil | BBL | TFB | SCB | KTB | BAY | TMB | IFCT* |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Gross NPAs Before TAMC | 237.5 | 164.8 | 165.7 | 117.5 | 99.3 | 101.0 | 38.0 |
| Estimated Net Transfers | 27.0 | 8.5 | 7.6 | 3.2 | 8.0 | 8.9 | 10.0 |
| Gross NPAs After TAMC | 210.5 | 156.3 | 158.1 | 114.3 | 91.3 | 92.1 | 28.0 |
|  |  |  |  |  |  |  |  |
| Transfers as \% of NPLs | $11 \%$ | $5 \%$ | $5 \%$ | $3 \%$ | $8 \%$ | $9 \%$ | $26 \%$ |

Source: Company reports; Lehman Brothers estimates.

Figure 15: Potential TAMC Loss Sharing

| THB, Bil | BBL | TFB | SCB | KTB | BAY | TMB | IFCT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| TAMC Transers | 27.0 | 8.5 | 7.6 | 3.2 | 8.0 | 8.9 | 10.0 |
| Potential Loss Sharing | 5.4 | 1.7 | 1.5 | 0.6 | 1.6 | 1.8 | 2.0 |

Source: Company reports; Lehman Brothers estimates.

Although IFCT appears to be the greatest beneficiary of the TAMC, the company will require special approval in order to participate; hence the figure given above is a company estimate of its total TAMC-qualifying loans. (See IFCT section for full details).

## Reserve Adequacy

Thai banks are better reserved than they have been for some time, but the sector as a whole is only at $32 \%$ of our calculated required reserve, with no individual bank even reaching the $50 \%$ mark. Perhaps more importantly, banks' ability to make additional required provisions is low: the sector underfunding averages $249 \%$ of remaining capital, and no bank save for the postrecap Krung Thai is solvent by our methodology.

Figure 16: Actual Reserves to Required Reserves

|  | 4Q99 | 1Q00 | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| BBL | $40 \%$ | $48 \%$ | $6 \%$ | $9 \%$ | $35 \%$ | $40 \%$ | $47 \%$ |
| TFB | $32 \%$ | $27 \%$ | $33 \%$ | $34 \%$ | $44 \%$ | $47 \%$ | $49 \%$ |
| SCB | $18 \%$ | $23 \%$ | $21 \%$ | $23 \%$ | $28 \%$ | $28 \%$ | $26 \%$ |
| KTB | $57 \%$ | $38 \%$ | $4 \%$ | $50 \%$ | $20 \%$ | $23 \%$ | $41 \%$ |
| BAY | NA | $30 \%$ | $11 \%$ | $12 \%$ | $12 \%$ | $12 \%$ | $13 \%$ |
| TMB | $22 \%$ | $24 \%$ | $16 \%$ | $17 \%$ | $16 \%$ | $13 \%$ | $14 \%$ |
| IFCT | $26 \%$ | $30 \%$ | $35 \%$ | $35 \%$ | $38 \%$ | $33 \%$ | $31 \%$ |
|  |  |  |  |  |  |  |  |
| AVG | $32 \%$ | $31 \%$ | $18 \%$ | $26 \%$ | $28 \%$ | $28 \%$ | $32 \%$ |

Source: Company reports; Lehman Brothers estimates.

Figure 17: Reserve Shorffalls to Equity: 2Q01

|  | 4Q00 | 2Q01 |
| :--- | ---: | ---: |
| BBL | $334 \%$ | $244 \%$ |
| TFB | $318 \%$ | $255 \%$ |
| SCB | $108 \%$ | $118 \%$ |
| KTB | $86 \%$ | $68 \%$ |
| BAY | $402 \%$ | $343 \%$ |
| TMB | $434 \%$ | $460 \%$ |
| IFCT | $187 \%$ | $257 \%$ |
|  |  |  |
| AVG | $267 \%$ | $249 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Calculation Methodology

We calculate required reserves and shorffall as follows:

We divide the Thai Banks' loan porffolios into the international standard categories of Pass (performing), Special Mention, Substandard, Doubfful, and Loss, with Loss comprising both the BOT's Doubfful of Loss classification and loans classified as Uncollectable. Note that this analysis accepts each bank's internal classification of their own loans, which we believe to be more lenient than the standards applied outside of Thailand. Also note that unmarketable equity is not included in these classification figures.

We apply reserve weightings as follows to determine the appropriate minimum level of required reserves: 1\% on Pass; 5\% on Special Mention; 20\% on Substandard; 50\% on Doubfful; and $100 \%$ on Loss loans. In addition, where not included in banks' internal classifications, we classify all excess (above 1.25\%) accrued interest receivables and Other Real Estate (ORE, or foreclosed property) as Substandard. All assets are classified on a gross of collateral basis.

This is quite a bit more stringent than the BOT methodology, which is one of the most lenient in the world, but directly in line with the standards applied by the BIS and major regulators in the U.S. and the UK.

## Loan Growth

Loan growth continues to be strongly and worrisomely negative, a key problem not only for the banks, but for the country. We do know that stimulating loan growth is one of the Thai Rak Thai administration's top priorities; however, we have some issues about the way in which it has heretofore been addressed.

Total loans at commercial banks have shrunk by a total of $24 \%$ since the end of 1997, even after the transformation of the assets of Krungthai Thanakit Finance and 12 other finance companies into Bank Thai in 1999. Loan growth continues to be weak in $1 \mathrm{HO1}$, with total loans falling 5.2\% YoY despite strenuous efforts on the part of state banks to lead the recovery.

Figure 18: Loan Growth (YoY): 1995-2001


Source: Bank of Thailand.

Figure 19: Loan Growth by Sector (YoY): 1997-2001

| THB, MM | 1997 | 1998 | 1999 | 2000 | 1H01 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Agriculture | $-1.4 \%$ | $-9.3 \%$ | $-7.9 \%$ | $-10.6 \%$ | $-13.2 \%$ |
| Mining | $47.1 \%$ | $-10.4 \%$ | $-8.9 \%$ | $-25.3 \%$ | $-26.9 \%$ |
| Manufacturing | $42.5 \%$ | $-14.2 \%$ | $-3.9 \%$ | $-14.4 \%$ | $-14.8 \%$ |
| Construction | $15.5 \%$ | $-9.6 \%$ | $-9.6 \%$ | $-26.9 \%$ | $-22.8 \%$ |
| Trade | $18.0 \%$ | $-13.8 \%$ | $-7.7 \%$ | $-18.7 \%$ | $-21.0 \%$ |
| Finance | $41.2 \%$ | $-46.0 \%$ | $48.9 \%$ | $70.3 \%$ | $146.3 \%$ |
| Real estate business | $15.1 \%$ | $3.2 \%$ | $1.6 \%$ | $-34.0 \%$ | $-35.0 \%$ |
| Public utilities | $38.1 \%$ | $-3.8 \%$ | $7.8 \%$ | $8.1 \%$ | $5.5 \%$ |
| Services | $21.2 \%$ | $-8.6 \%$ | $-8.0 \%$ | $-18.7 \%$ | $-20.5 \%$ |
| Consumer Lending | $6.5 \%$ | $-8.8 \%$ | $-4.7 \%$ | $-9.8 \%$ | $-11.7 \%$ |
| $\quad$ Mortgages | $5.2 \%$ | $-8.2 \%$ | $-7.6 \%$ | $-6.4 \%$ | $-5.9 \%$ |
| Other Consumer | $9.7 \%$ | $-10.2 \%$ | $2.3 \%$ | $-17.0 \%$ | $-24.3 \%$ |
|  |  |  |  |  |  |
| Total | $24.8 \%$ | $-13.6 \%$ | $-2.0 \%$ | $-10.3 \%$ | $-5.2 \%$ |

Source: Bank of Thailand.
Note that financial institution lending has grown dramatically, and now accounts for some $20.2 \%$ of total commercial bank loans; this is generally shortterm, low-margin business which is not as desirable as other types of lending.

Figure 20: Loan Growth and Performing Loan Growth by Bank: 1999-2Q01

| Loan Growth |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| \%, YoY | FY1999 | FY2000 | 1Q01 | 2Q01 |
| BBL | $-2.7 \%$ | $-14.3 \%$ | $-15.1 \%$ | $3.8 \%$ |
| TFB | $-12.8 \%$ | $-2.3 \%$ | $-1.9 \%$ | $-5.5 \%$ |
| SCB | $-9.2 \%$ | $-0.6 \%$ | $-0.1 \%$ | $-0.7 \%$ |
| KTB | $-2.3 \%$ | $-58.4 \%$ | $-56.1 \%$ | $-56.7 \%$ |
| BAY | $-1.3 \%$ | $-8.9 \%$ | $-7.8 \%$ | $1.4 \%$ |
| TMB | $-2.7 \%$ | $-6.5 \%$ | $-8.6 \%$ | $3.5 \%$ |
| IFCT | $3.2 \%$ | $13.8 \%$ | $12.4 \%$ | $10.8 \%$ |
|  |  |  |  |  |
| Average | $-4.0 \%$ | $-11.0 \%$ | $-11.0 \%$ | $-6.2 \%$ |


| Performing Loan Growth |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| \%, YoY | FY1999 | FY2000 | 1Q01 | 2Q01 |
| BBL | $-8.5 \%$ | $29.0 \%$ | $14.4 \%$ | $7.8 \%$ |
| TFB | $19.4 \%$ | $11.9 \%$ | $11.2 \%$ | $3.1 \%$ |
| SCB | $2.9 \%$ | $10.5 \%$ | $0.3 \%$ | $1.8 \%$ |
| KTB | $-19.0 \%$ | $-43.0 \%$ | $13.7 \%$ | $-3.7 \%$ |
| BAY | $6.7 \%$ | $-0.4 \%$ | $3.8 \%$ | $4.6 \%$ |
| TMB | $-19.6 \%$ | $8.0 \%$ | $13.1 \%$ | $16.5 \%$ |
| IFCT | $4.4 \%$ | $36.6 \%$ | $17.5 \%$ | $17.6 \%$ |
|  |  |  |  |  |
| Average | $-2.0 \%$ | $7.5 \%$ | $10.6 \%$ | $6.8 \%$ |

Source: Company reports; Lehman Brothers estimates.

Our covered universe of banks has declined basically in-line with the industry as a whole—unsurprising as they constitute over $70 \%$ of loan market share. However, note that performing loans-a more useful statistic as they represent interest-earning assets—have begun increasing. Yet, this mainly represents the restructuring of old NPLs into new performing loans (frequently at concessionary rates), and not new originations.

For the Thai banks to truly come back, organic loan originations and porifolio growth will have to come hand in hand. With our economic forecast calling for negative GDP growth by 4 QO 1 , this seems unlikely.

The government's proposal to force bank lending to targeted sectors frankly concern us, although we can fully understand and share the motivation behind it. With a history of poor credit decisions still looming large in the rear view mirror, policy lending is a very long-shot solution.

Figure 21: Thai Commercial Bank Loan Composition by Sector

| THB, MM | $\mathbf{1 2 / 3 1 / 9 7}$ | $\%$ | $\mathbf{6 / 3 0 / 0 1}$ | $\%$ |
| :--- | ---: | ---: | ---: | ---: |
| Agriculture | 161,695 | $2.7 \%$ | 109,615 | $2.4 \%$ |
| Mining | 36,000 | $0.6 \%$ | 17,793 | $0.4 \%$ |
| Manufacturing | $1,872,325$ | $30.9 \%$ | $1,245,247$ | $27.2 \%$ |
| Construction | 273,064 | $4.5 \%$ | 156,739 | $3.4 \%$ |
| Trade | $1,431,155$ | $23.6 \%$ | 843,915 | $18.4 \%$ |
| Finance | 487,514 | $8.0 \%$ | 924,632 | $20.2 \%$ |
| Real estate business | 490,521 | $8.1 \%$ | 304,419 | $6.6 \%$ |
| Public utilities | 197,128 | $3.3 \%$ | 208,006 | $4.5 \%$ |
| Services | 458,037 | $7.6 \%$ | 290,970 | $6.3 \%$ |
| Consumer Lending | 652,516 | $10.8 \%$ | 481,864 | $10.5 \%$ |
| $\quad$ Mortgages | 455,409 | $7.5 \%$ | 352,722 | $7.7 \%$ |
| $\quad$ Other Consumer | 197,107 | $3.3 \%$ | 129,141 | $2.8 \%$ |
| Total | $6,059,956$ | $100.0 \%$ | $4,583,199$ | $100.0 \%$ |

Source: Bank of Thailand.

## Lower, But Not Low Enough

Thai bank valuations have come off quite significantly since the January rally, but are still expensive for the franchises on offer. We use two primary methods to value the banks: Price-to-book vs. ROE and deposit premium valuation.

## Book Value and Adjusted Book Value

In order to compare Thai banks with each other and with the rest of our universe of Asian institutions, we make a number of standard adjustments to the reported financial statements for valuation purposes.

## Property Revaluation

First, we have deducted real estate revaluations from book value to arrive at adjusted book value. This account is not properly included in our calculation of adjusted book value for a number of reasons.

- Inferior Protection Against Losses. In the case of revaluation increment on bank property, such as branches and offices, actually used within the business, as opposed to that held for investment, the gain can not be realized without selling the property. However, this action is inconsistent with the valuation of the entity as an ongoing business, as the property is necessary to the conduct of business. Therefore, this capital is available only under a liquidation scenario. We bear in mind that scenarios under which banks are required to liquidate assets and capital in order to pay out liabilities are closely correlated with scenarios under which the value and ready liquidity of real estate can be expected to fall, due to general economic depression, panic selling, and unavailability of credit to finance the purchase of property. Therefore, real estate revaluation is available to serve as capital only so long as it is not needed, and so is less valuable than other forms of capital.
- Subjective Timing. Real estate is generally written-up at a time (and using a method) of management's choosing, and is rarely, if ever, written down. In addition, management frequently has wide discretion to select appraisers, and can "cherrypick" appreciated properties from a porffolio that may have an aggregate loss.
- Included in Enterprise Value. The value contributed to the bank by its property is already subsumed within our estimate of the value of the bank's branch network, customer relationships and deposit franchise. This estimate of continuing enterprise value is the key factor that typically produces a "multiple effect" on bank valuations, causing them to trade at above book value. In this case, it would be double-counting that value to include property revaluation in our overall assessment of value.
- Cross-Market Comparisons. Many jurisdictions, including the U.S. and Singapore, do not permit the use of property revaluation on the balance sheet, while others including Hong Kong, Indonesia and the Philippines do. Therefore, for purposes of
comparability, we always include revaluation in our estimates and calculations of book value, grossing up reported book with revaluation if not reported as such within a particular jurisdiction, and we always subtract revaluation from our calculation of adjusted book value.


## Loan Loss Reserves

We generally deduct loan loss reserve underfunding from adjusted book value to arrive at fully adjusted book value (FABV), a more consistent measure of value as it is not affected by management's allocation of scarce capital between the reserve account and the equity account. However, FABV is negative for all of our covered Thai banks except for Krung Thai. As fully adjusted book is negative and thus a price-to-fully adjusted book measure is not meaningful, we have presented only price-to-book and price-to-adjusted book here.

Figure 22: Price to Book and ROE

|  | Price | Book | Adj. Book |  | ROE |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| THB | 10/12/01 | Value | Value | P/BV | P/ABV | 2000A | 2001E |
| BBL | 45.00 | 23.43 | 11.92 | $1.92 x$ | $3.78 x$ | $-73.10 \%$ | $29.81 \%$ |
| TFB | 17.25 | 10.71 | 7.92 | $1.61 x$ | $2.18 x$ | $6.70 \%$ | $4.65 \%$ |
| SCB | 15.25 | 20.00 | 17.22 | $0.76 x$ | $0.89 x$ | $6.95 \%$ | $4.02 \%$ |
| KTB | 9.00 | 2.70 | 2.52 | $3.33 x$ | $3.57 x$ | $95.59 \%$ | $-10.09 \%$ |
| BAY | 4.60 | 9.21 | 7.15 | $0.50 x$ | $0.64 x$ | $-47.90 \%$ | $-11.42 \%$ |
| TMB | 5.00 | 2.98 | 2.73 | $1.68 x$ | $1.83 x$ | $-252.02 \%$ | $-1.93 \%$ |
| IFCT | 5.20 | 7.06 | 6.48 | $0.74 x$ | $0.80 x$ | $-16.55 \%$ | $-2.32 \%$ |
|  |  |  |  |  |  |  |  |
| Average |  |  |  | $1.51 x$ | $1.95 x$ | $-40.05 \%$ | $1.82 \%$ |

Source: Company reports; Lehman Brothers estimates

Thai banks currently trade at an average of $1.51 \times$ book value and $1.95 \times$ adjusted book value, quite high compared with their trailing and forward average ROEs of $-40.1 \%$ and $1.8 \%$ respectively.

## Valuation on Premium Basis

With our normal value touchstones in distressed markets-price-to-book and price-toadjusted book-rendered less-than-accurate by the dominating effect of reserve underfunding, we have been comparing the banks from a deposit premium standpoint.

Under this methodology, we subtract fully adjusted book value from market capitalization to determine the value in excess of net assets that the market is placing on the bank's franchise. When expressed as a percentage of total deposits, this valuation methodology confirms our view that the Thai market should still be avoided on valuation terms, with an average deposit premium of $15.1 \%$ down by $50 \%$ from June 2000 but still rich compared with less-distressed markets.

Figure 23: Deposit Franchise Premium Valuation

| THB, MM | Market <br> Cap | Adjusted <br> Book | Reserve <br> Underfunding | Franchise <br> Premium | Total <br> Deposits | Deposit <br> Premium |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| BBL | 65,992 | 17,478 | $(83,967)$ | 132,482 | $1,066,148$ | $12.4 \%$ |
| TFB | 40,676 | 18,685 | $(64,373)$ | 86,364 | 660,701 | $13.1 \%$ |
| SCB | 47,750 | 53,918 | $(73,953)$ | 67,785 | 606,259 | $11.2 \%$ |
| KTB | 197,865 | 55,417 | $(40,616)$ | 183,063 | 839,612 | $21.8 \%$ |
| BAY | 8,511 | 13,230 | $(58,522)$ | 53,803 | 362,632 | $14.8 \%$ |
| TMB | 20,015 | 10,944 | $(54,796)$ | 63,867 | 295,552 | $21.6 \%$ |
| IFCT | 6,040 | 7,530 | $(21,061)$ | 19,571 | 179,921 | $10.9 \%$ |
|  |  |  |  |  |  | $15.1 \%$ |
| Average |  |  |  |  |  | 1 |

Source: Company reports; Lehman Brothers estimates.
Even SCB, cheapest of the three large banks, is not cheap compared with some of our regional comps-unless of course you believe it comparable in quality to Hang Seng, which trades at a $30.1 \%$ premium. Banks in other distressed markets (Korea, Indonesia) with much better asset quality are available at $0-3 \%$ premium, with even DBS showing up at the high end of that scale.

Figure 24: Deposit Franchise Premium Valuation: Regional Comps

| Bank | Country | Market <br> Cap | Adjusted <br> Book | Reserve <br> Underfunding | Franchise <br> Premium | Total <br> Deposits | Deposit <br> Premium |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| DBS | Singapore | $13,615,403$ | $10,935,627$ | $(126,678)$ | $2,806,454$ | $94,810,775$ | $3.0 \%$ |
| H\&CB | Korea | $3,395,117$ | $2,638,007$ | 528,025 | 229,085 | $50,058,564$ | $0.5 \%$ |
| BCA | Indonesia | 6,916 | 5,511 | $(513)$ | 1,918 | 92,493 | $2.1 \%$ |
| Hang Seng | Hong Kong | 157,727 | 31,270 | 1,226 | 125,231 | 415,484 | $30.1 \%$ |
| Regional Comps Average |  |  |  |  |  |  | $8.9 \%$ |

[^2]
## Bangkok Bank

Prestige at a Premium


## Investment Conclusion:

- BBL remains in dire straits, but fundamentals have improved somewhat. Maintain 4Market Underperform rating on foreign and 3-Market Perform rating on local shares.
- BBL 2Q01 earnings show a bottom line profit of THB 1.6 billion, down from 1Q01. Although margins improved, pre-provision earnings have been steadily declining.
- We have continuing concerns about BBL's insufficient reserve and its holdings of unmarketable equity securities.

We have taken another look at Bangkok Bank post 2Q01 results, with moderately positive results compared with our consistently bearish previous view. However, we remain negative on both BBL shares vis-à-vis those of competitors and on the Thai banking sector as a whole, due to continued bad debt overhang and a parlous macroeconomic environment.

## Return Analysis:

BBL reported a 2Q01 net profit of THB 1.56 billion, or THB 1.06 per share, a seven-fold increase over the comparable period of FY2000 but a $15 \%$ fall from 1 QO . While net income appears to have settled at a sustainable maintenance level, we note that preprovision profit has consistently fallen in past quarters, and remains well below last year's level, with the difference due largely to lower provisions which are imprudently small.

Although return on equity appears quite good at an annualized $42 \%$ in the quarter, mediocre ROA of $0.64 \%$ shows that the bank's slim equity cushion $(2.7 \%$ of assets on a stated basis) is responsible for the high ROE. Remember as well that property revaluation
accounts for some $49 \%$ of book equity, so that on an adjusted basis equity-to-assets totals only $1.4 \%$-a completely unwise level of gearing by our standards.

Because of this, we expect that any opening of a market window for Thai Bank equity issuance will lead to a prompt rights issuance or other offering from BBL, which is likely to be dilutive for existing shareholders, giving us an additional reason to avoid the stock.

| Figure 25: BBL-Key Earnings | Components |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: |
| THB, MM | $\mathbf{2 Q 0 0}$ | $\mathbf{3 Q 0 0}$ | $\mathbf{4 Q 0 0}$ | $\mathbf{1 Q 0 1}$ | $\mathbf{2 Q 0 1}$ |
| Net Interest Income | 6,358 | 5,557 | 5,917 | 6,042 | 6,227 |
| Pre-Provision Profit | 4,355 | 5,691 | 3,083 | 3,596 | 2,707 |
| Provisions | 4,028 | 3,924 | 1,584 | 1,764 | 1,152 |
| Net Income | 182 | 1,767 | 1,499 | 1,831 | 1,555 |
| EPS (Bt) | 0.12 | 1.20 | 1.02 | 1.25 | 1.06 |

Source: Company reports; Lehman Brothers estimates.

Figure 26: BBL—Key Earnings Ratios

|  | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NIM | 2.30\% | 1.97\% | 2.06\% | 2.09\% | 2.13\% |
| Asset Yield | 6.16\% | 5.84\% | 5.70\% | 5.52\% | 5.24\% |
| Cost of Funds | 3.85\% | 3.87\% | 3.59\% | 3.40\% | 3.09\% |
| Core ROAA | 0.05\% | -0.46\% | -0.18\% | 0.47\% | 0.64\% |
| Core ROAE | 4.26\% | -35.97\% | -13.09\% | 31.72\% | 42.15\% |
| Overhead | 1.82\% | 2.13\% | 3.05\% | 2.07\% | 2.04\% |
| Efficiency | 53.60\% | 51.31\% | 73.96\% | 62.48\% | 68.76\% |

Source: Company reports; Lehman Brothers estimates.

## Rates and Margins:

BBL continues to improve its net interest margin gradually, but the operating environment is making gains harder and harder to achieve. NIM increased by 4 bp in the quarter to $2.13 \%$, as a lowered cost of funds once again outpaced the declining yield on assets. Note that falling deposit pricing is not leading to an oufflow of deposits, which continue to outpace loan growth. However, it will be fairly difficult to restore margins further without a return to performing asset growth and commensurate higher asset yields.

Figure 27: BBL—Net Interest Margin Components

|  | 4Q00 | 1Q01 | 2Q01 |
| :---: | :---: | :---: | :---: |
| Change in Asset Yield | -0.15\% | -0.17\% | -0.28\% |
| Change in Cost of Funds | -0.28\% | -0.19\% | -0.31\% |
| Change in NIM | 0.09\% | 0.02\% | 0.04\% |
| Loan Growth (QoQ) | 6.3\% | -1.3\% | -0.5\% |
| Deposit Growth (QoQ) | 3.2\% | 0.7\% | 1.9\% |

Source: Company reports; Lehman Brothers estimates.

## Asset Quality:

Asset quality continues to be poor, with NPLs comprising some $31 \%$ of total loans, almost unchanged from a year ago. On a weighted classification basis, NPLs declined from $20.91 \%$ at YE2000 to $19.23 \%$ in 2 Q, but this measure ignores a marked increase in foreclosed property, which now accounts for almost $10 \%$ of non-performing assets.

We currently forecast that NPAs will decline to $25.0 \%$ of loans at YE2002, $21 \%$ at YE2003, and $17.5 \%$ at YE2004, but this estimate assumes that Thailand does not experience another wave of new loan defaults by no means a safe assumption given the declining economy and over-levered borrowers. In fact, we have already seen an increase in the number of previously-restructured loans falling back into non-performing status, a phenomenon that we first predicted as far back as 1999.

A further complicating factor is that by banks' own admission we have reached the point where most of the easily-restructured loans have already been worked-out, with the remaining NPLs considered "hard-core" bad assets.

## TAMC:

BBL will be the largest non-state bank beneficiary of the TAMC, due to the requirement that transferred loans be of large size and be shared by at least two bank creditors in order to qualify. BBL has publicly estimated that it will be able to transfer a net THB27 billion in problem loans with face value of THB60 billion, comprising debts owed by some 1,100 borrowers. This effect is not yet included in our projections, as the classification of loans to be transferred is not yet clear.

## Reserve Adequacy:

Reserves for loan losses continue to be inadequate by our calculation methodology, with current reserves amounting to only $47 \%$ of our required amount, leaving a shortfall of THB84 billion, or $2.4 x$ book equity. Although we project NPLs will decline, our forecast for year end shows little improvement.

Figure 28: BBL—Reserve Adequacy Calculation: 2Q01

| THB, MM | Gross <br> Amount | Reserve <br> Percentage | Required <br> Reserve |
| :--- | ---: | ---: | ---: |
| Pass | 564,530 | $1 \%$ | 5,645 |
| Special Mention | 22,691 | $5 \%$ | 1,135 |
| Substandard | 40,363 | $20 \%$ | 8,073 |
| Doubtful | 25,228 | $50 \%$ | 12,614 |
| Loss | 127,954 | $100 \%$ | 127,954 |
| ORE | 21,300 | $20 \%$ | 4,260 |
| Excess AIR | - | $20 \%$ | - |
|  |  |  |  |
| Total | 802,066 |  | 159,681 |
|  |  |  |  |
| Actual Reserves |  |  | 75,714 |
| Shortfall |  |  | 83,967 |
| Actual/Required |  |  | $47 \%$ |
| Shortfall/Capital |  |  | $244 \%$ |

Source: Company reports; Lehman Brothers estimates.
Note that this calculation does not explicitly include higher reserves for restructured loans which are considered to be performing, nor is it applied against equity stakes taken in
debt-for-equity swaps. At 2 Q01, BBL reported that it holds over THB 10 billion in nonmarketable equity-much of which we suspect is worthless.

Figure 29: BBL—Non-marketable Equity Holdings
THB, MM

|  | THB, MM |
| :--- | ---: |
| Regular equity securities | 6,302 |
| $\quad$ Non-marketable equity securities - domestic | 5,730 |
| Non-marketable equity securities - overseas | 573 |
| Equity securities received through debt restructuring | 4,076 |
| $\quad$ Non-marketable equity securities - domestic | 4,076 |
| Total | 10,379 |

Source: Company reports; Lehman Brothers estimates.

## Loan Growth:

Overall loan growth continues to be slack, with even performing loans down from YE2000. We forecast continued hard going for originations, with overall loan growth estimates at $-2 \%$ for FY 2002 , flat for FY 2003 , and at $+2 \%$ for FY 2004 .

Figure 30: BBL—_Loan Growth and Performing Loan Growth

|  | 1Q00 | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Loan Growth (QoQ) | $-0.4 \%$ | $-18.7 \%$ | $-0.5 \%$ | $6.3 \%$ | $-1.3 \%$ | $-0.5 \%$ |
| Performing Loan Growth (QoQ) | $6.6 \%$ | $8.6 \%$ | $1.0 \%$ | $10.3 \%$ | $-5.4 \%$ | $2.3 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Valuation:

$\mathrm{BBL} / \mathrm{F}$ shares are trading at 1.8 x book and 3.3 x adjusted book, still a high valuation given the poor economic outlook and potential for downward revision in book value as losses are recognized. On an earnings basis, BBL shares trade at $11.9 \times 2001$ and $9.3 \times 2002$ EEPS on a core basis, not lofty but warranted by the risk weighing mainly on the downside. We note that quality Indonesian banks like BCA sell at less than half of BBL's valuation, despite clean asset books.

Figure 31: BBL Summary Sheet

| Share Price: <br> 52 Week Price Range: | $45.00$ |  | Index: <br> Current Yield: |  | $\begin{array}{r} 284.97 \\ 0.0 \% \end{array}$ | Reuters Code: Bloomberg Code: | BBL.BK |  | Shares Outstanding (B): |  | 1,466.50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INCOME STATEMENT | 1999A | 2000A | 2001E | 2002E | $\underline{2003 E}$ | BALANCE SHEET | 1999A | 2000A | 2001E | 2002E | $\underline{2003 E}$ |
| (THB mil) year ending Dec |  |  |  |  |  | (THB mil) year ending Dec |  |  |  |  |  |
| Interest income | 65,621 | 67,114 | 62,697 | 64,351 | 68,100 | Gross loans | 926,490 | 793,690 | 771,047 | 755,741 | 753,837 |
| Interest expense | 57,772 | 43,765 | 37,370 | 36,747 | 41,139 | Loan loss reserves | 170,417 | 61,537 | 77,781 | 79,974 | 80,214 |
| Net interest income | 7,849 | 23,349 | 25,327 | 27,604 | 26,961 |  |  |  |  |  |  |
|  |  |  |  |  |  | Net loans | 756,072 | 732,153 | 693,265 | 675,767 | 673,623 |
| Ave. int. earnings assets | 1,183,699 | 1,122,014 | 1,183,871 | 1,250,139 | 1,331,070 | Total earning assets | 1,089,579 | 1,154,448 | 1,213,293 | 1,286,984 | 1,375,157 |
| NIM (\%) | 0.66\% | 2.08\% | 2.14\% | 2.21\% | 2.03\% | Other assets | 92,106 | 85,952 | 84,782 | 89,931 | 96,092 |
|  |  |  |  |  |  | Total Assets | 1,181,685 | 1,240,400 | 1,298,075 | 1,376,915 | 1,471,249 |
| Non-interest income | 23,118 | 18,176 | 11,980 | 12,605 | 13,380 |  |  |  |  |  |  |
| Total operating income | 30,967 | 41,526 | 37,307 | 40,209 | 40,341 | Deposits | 961,459 | 1,039,321 | 1,098,372 | 1,165,772 | 1,246,468 |
|  |  |  |  |  |  | Customer deposits | NA | NA | NA | NA | NA |
| Non-interest expense | 22,585 | 25,131 | 23,878 | 23,913 | 24,207 | Other deposits | NA | NA | NA | NA | NA |
| Pre provision profit | 8,382 | 16,395 | 13,430 | 16,296 | 16,134 | Other paying liabilities | 150,063 | 133,555 | 131,298 | 139,355 | 149,001 |
|  |  |  |  |  |  | Interest-bearing Liabilities | 1,136,412 | 1,206,444 | 1,261,551 | 1,333,287 | 1,419,248 |
| Loan loss provisions | 68,210 | 35,082 | 6,917 | 6,000 | 4,000 |  |  |  |  |  |  |
| Non-operating income | 1 | 146 | 0 | 0 | 0 | Gross Equity | 45,273 | 33,957 | 36,524 | 43,628 | 52,001 |
| Pre tax profit | -59,827 | -18,541 | 6,513 | 10,295 | 12,134 | Adjusted equity | 34,637 | 16,889 | 20,304 | 28,668 | 38,202 |
| Tax | 0 | 0 | 970 | 3,192 | 3,762 | baLANCE SHEET RATIOS | 1999A | 2000A | 2001E | 2002E | $\underline{2003 E}$ |
| Net profit | -59,829 | -18,833 | 5,544 | 7,104 | 8,373 | (\%) |  |  |  |  |  |
|  |  |  |  |  |  | Loan-to-deposit | 96.4\% | 76.4\% | 70.2\% | 64.8\% | 60.5\% |
| Core earnings | -71,082 | -24,178 | 5,618 | 7,104 | 8,373 | Equity to assets | 3.8\% | 2.7\% | 2.8\% | 3.2\% | 3.5\% |
|  |  |  |  |  |  | Total loan loss provisions | 14.42\% | 4.96\% | 5.99\% | 5.81\% | 5.45\% |
| PER SHARE DATA (THB) | 1999A | 2000A | $\underline{2001 E}$ | $\underline{2002 E}$ | $\underline{2003 E}$ |  |  |  |  |  |  |
| EPS | (40.80) | (12.84) | 3.78 | 4.84 | 5.71 | ASSET QUALITY | 1999A | 2000A | 2001E | $\underline{2002 E}$ | 2003E |
| DPS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Nonperforming assets | 486,093 | 228,977 | 219,878 | 188,593 | 158,469 |
| Effective payout ratio (\%) | 0\% | 0\% | 0\% | 0\% | 0\% | Special mention | 26,316 | 24,261 | 20,912 | 17,762 | 15,086 |
| BVPS | 30.87 | 23.15 | 24.91 | 29.75 | 35.46 | Substandard | 16,171 | 19,719 | 41,994 | 43,690 | 40,299 |
| ABVPS | 23.62 | 11.52 | 13.85 | 19.55 | 26.05 | Doubtful | 27,121 | 15,125 | 22,768 | 18,545 | 15,105 |
|  |  |  |  |  |  | Loss | 406,264 | 153,215 | 114,266 | 91,127 | 72,673 |
| VALUATION | 1999A | 2000A | 2001 E | $\underline{2002 E}$ | $\underline{2003 E}$ | ORE | 10,220 | 16,657 | 19,938 | 17,470 | 15,307 |
| Price to book value (x) | 3.08 | 1.49 | 1.81 | 1.51 | 1.27 |  |  |  |  |  |  |
| Price to adjusted book value ( x ) | 4.02 | 3.00 | 3.25 | 2.30 | 1.73 | NPAs/total loans | 52.5\% | 28.8\% | 28.5\% | 25.0\% | 21.0\% |
| Price to earnings ( x ) | (2.33) | (2.69) | 11.90 | 9.29 | 7.88 | Reserve coverage of NPAs | 35.1\% | 26.9\% | 35.4\% | 42.4\% | 50.6\% |
| PROFITABILITY RATIOS | 1999A | 2000A | $\underline{2001 E}$ | $\underline{2002 E}$ | $\underline{2003 E}$ | Required reserves | 428,900 | 171,769 | 144,794 | 119,365 | 98,208 |
| (\%) |  |  |  |  |  | Actual reserves | 170,417 | 61,537 | 77,781 | 79,974 | 80,214 |
| Net interest margin | 0.66\% | 2.08\% | 2.14\% | 2.21\% | 2.03\% | Shortfall (surplus) | 258,483 | 110,232 | 67,012 | 39,392 | 17,993 |
| Yield on interest earning assets | 6.02\% | 5.81\% | 5.17\% | 5.00\% | 4.95\% | Actual to required reserves | 40\% | 36\% | 54\% | 67\% | 82\% |
| Cost on interest bearing liabilities | 5.20\% | 3.73\% | 3.04\% | 2.82\% | 2.95\% | Shortfall to capital | 571\% | $325 \%$ | 183\% | 90\% | 35\% |
| Net interest spread | 0.83\% | 2.08\% | 2.13\% | 2.18\% | 2.00\% |  |  |  |  |  |  |
| Non-int. income (\% Op income) | 74.7\% | 43.8\% | 32.1\% | 31.3\% | 33.2\% |  |  |  |  |  |  |
| Cost to income | 72.9\% | 60.5\% | 64.0\% | 59.5\% | 60.0\% | GROWTH RATES | 1999A | 2000A | $\underline{2001 E}$ | $\underline{2002 E}$ | $\underline{2003 E}$ |
| Overhead ratio | 1.91\% | 2.24\% | 2.02\% | 1.91\% | 1.82\% | (\%) |  |  |  |  |  |
| Cost coverage | 137.1\% | 165.2\% | 156.2\% | 168.1\% | 166.7\% | Income statement |  |  |  |  |  |
| ROA | -4.89\% | -1.56\% | 0.44\% | 0.53\% | 0.59\% | Net interest income | -11.3\% | 197.5\% | 8.5\% | 9.0\% | -2.3\% |
| ROE | -95.0\% | -73.1\% | 29.8\% | 29.0\% | 25.0\% | Non-interest income | 14.9\% | -21.4\% | -34.1\% | 5.2\% | 6.1\% |
|  |  |  |  |  |  | Total operating income | 6.9\% | 34.1\% | -10.2\% | 7.8\% | 0.3\% |
| OROA ANALYSIS | 1999A | 2000A | 2001E | $\underline{2002 E}$ | $\underline{2003 E}$ | Non-interest expenses | -25.9\% | 11.3\% | -5.0\% | 0.2\% | 1.2\% |
|  |  |  |  |  |  | Pre-provision earnings | -659.6\% | 95.6\% | -18.1\% | 21.3\% | -1.0\% |
| Net interest margin | 0.66\% | 2.08\% | 2.14\% | 2.21\% | 2.03\% | Loan loss provisions | 42.1\% | -48.6\% | -80.3\% | -13.3\% | -33.3\% |
| Non-interest inc./gross inc. | 74.65\% | 43.77\% | 32.11\% | 31.35\% | 33.17\% | Core earnings | 41.4\% | -66.0\% | -123.2\% | 26.5\% | 17.9\% |
| Efficiency ratio | 72.93\% | 60.52\% | 64.00\% | 59.47\% | 60.01\% | Net profit | 20.9\% | -68.5\% | -129.4\% | 28.2\% | 17.9\% |
| Provision/assets | 5.77\% | 2.83\% | 0.53\% | 0.44\% | 0.27\% |  |  |  |  |  |  |
|  |  |  |  |  |  | Balance sheet |  |  |  |  |  |
| Operating return on assets | -5.06\% | -1.37\% | 0.60\% | 0.87\% | 0.94\% | Loan growth | -2.7\% | -14.3\% | -2.9\% | -2.0\% | -0.3\% |
|  |  |  |  |  |  | Interest earning assets | -14.7\% | 6.0\% | 5.1\% | 6.1\% | 6.9\% |
| Equity/assets | 3.83\% | 2.74\% | 2.81\% | 3.17\% | 3.53\% | Asset growth | -6.7\% | 5.0\% | 4.6\% | 6.1\% | 6.9\% |
|  |  |  |  |  |  | Deposit growth | -0.9\% | 8.1\% | 5.7\% | 6.1\% | 6.9\% |
| Operating return on equity | -132.2\% | -49.9\% | 21.4\% | 27.4\% | 26.6\% | Shareholders funds | -55.2\% | -25.0\% | 7.6\% | 19.5\% | 19.2\% |
| Source: Company reports; Lehman Brothers estimates. |  |  |  |  |  |  |  |  |  |  |  |

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## Siam Commercial Bank

Racing For Solvency


## Investment Conclusion:

- SCB remains profitable, but its financial lead over competitors is slipping. Maintain 3-Market Perform.
- Non-performing assets at SCB continue to rise—bucking a downward trend set by competitors.
- Although SCB remains in control of a stronger balance sheet than its peers, this advantage is slipping away as an already-underfunded reserve need grows.
- SCB's valuation is considerably lower than those of the other banks in the sector, but still does not offer compelling value for investors.

Siam Commercial Bank posted a net profit of THB545.6 million in the second quarter of 2001, down slightly from the previous quarter and 24\% below the year-earlier figure. Although the bank is reporting profits, NPLs continue to rise - a dramatically unfavorable signal for future earnings. Despite these problems, we continue to favor SCB as the most financially strong Thai bank, which also has the lowest valuation; however, as the bank remains in poor condition our rating likewise remains at 3-Market Perform.

We met with the company last month; the following incorporates management's insights from our discussion as well. Key points from our analysis:

## Returns:

SCB continues to be the only major Thai bank to consistently post positive core earnings by our methodology, despite some deterioration in the period, showing a core ROAA of $0.38 \%$ on an annualized basis. Provisions have also remained fairly high (THB 1.7
billion in the quarter), indicating what we view as management's salutary decision to put the NPL crisis behind them as soon as possible.

SCB has considerably more book equity than most of its competitors $18.6 \%$ of assets versus $3.2 \%$ for TFB and only $2.7 \%$ for BBL), which depresses ROE: the bank showed an annualized return of only $4.05 \%$ in 2Q01. However, given that financial strength and stability are dominating traits in the current environment, we believe that SCB offers a more appropriate trade-off between risk and return.

We continue to see SCB as a candidate for future capital-raising when market conditions permit, but the bank is not in as urgent a need as are BBL and TFB.

Figure 32: SCB—Key Earnings Components

| THB, MM | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Net Interest Income | 3,913 | 3,757 | 4,050 | 4,111 | 4,089 |
| Pre-Provision Profit | 3,258 | 2,401 | 2,577 | 2,438 | 2,300 |
| Provisions | 2,490 | 1,606 | 469 | 1,814 | 1,703 |
| Net Income | 714 | 754 | 773 | 559 | 546 |
| EPS (Bt) | 0.23 | 0.24 | 0.25 | 0.18 | 0.17 |

Source: Company reports; Lehman Brothers estimates.

Figure 33: SCB—Key Earnings Ratios

|  | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | :---: |
| NIM | $2.47 \%$ | $2.35 \%$ | $2.49 \%$ | $2.46 \%$ | $2.42 \%$ |
| $\quad$ Asset Yield | $5.97 \%$ | $5.62 \%$ | $5.59 \%$ | $5.20 \%$ | $4.95 \%$ |
| $\quad$ Cost of Funds | $3.59 \%$ | $3.39 \%$ | $3.21 \%$ | $2.90 \%$ | $2.62 \%$ |
| Core ROAA | $0.06 \%$ | $0.41 \%$ | $1.25 \%$ | $0.32 \%$ | $0.38 \%$ |
| Core ROAE | $0.84 \%$ | $5.70 \%$ | $17.27 \%$ | $4.38 \%$ | $5.15 \%$ |
| Overhead | $2.96 \%$ | $2.48 \%$ | $2.27 \%$ | $2.11 \%$ | $2.17 \%$ |
| Efficiency | $58.96 \%$ | $62.25 \%$ | $58.88 \%$ | $59.13 \%$ | $61.50 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Rates and Margins:

SCB's net interest margin slipped in the quarter, the only one of the big three Thai banks to report such a shrinkage. NIM declined by 4bp on top of a 3bp fall in 1Q01, ending the quarter at $2.42 \%$. While this is still comparatively high for the sector, declining NIM may be a harbinger of future problems in the bank's asset book.

In fact, our analysis attributes the decline to a rise in the amount of criticized assets at SCB; NPLs actually rose in the quarter (see "Asset Quality," below). Like all of the Thai banks, asset quality, slack loan demand, and falling interest rates meant a falling asset yield for SCB in the quarter-returns here came off by 25bp following on a 38bp 1 Q0 1 performance. Cost of funds is also coming down, and outpaced the decline in asset yield with a 27 bp fall in the quarter, meaning that interest spread (asset yield less cost of funds) actually increased in the period after a fall in 1Q01, but adverse volume trends are constraining NIM.

Figure 34: SCB—Net Interest Margin Components

|  | 4Q00 |  | $\mathbf{1 Q 0 1}$ |
| :--- | :--- | :--- | :--- |
| Change in Asset Yield | $-0.03 \%$ | $-0.38 \%$ | $-0.25 \%$ |
| Change in Cost of Funds | $-0.18 \%$ | $-0.31 \%$ | $-0.27 \%$ |
| Change in NIM | $0.14 \%$ | $-0.03 \%$ | $-0.04 \%$ |
|  |  |  |  |
|  | $1.1 \%$ | $-0.9 \%$ | $-2.0 \%$ |
| Loan Growth (QoQ) | $2.2 \%$ | $2.0 \%$ | $-0.6 \%$ |
| Deposit Growth (QoQ) |  |  |  |

Source: Company reports; Lehman Brothers estimates.

## Asset Quality:

SCB is showing signs of trouble here. Long derided by competitors for alleged lax provisioning policies and loose collateral appraisals (note that our methodology does not take collateral into account, and so is not subject to skew from this factor), SCB's NPLs have begun to rise again, increasing in both 1Q01 and 2Q01, by a total of $11 \%$ from YE2000. This is not the result of a reduction in more-seriously distressed loans coupled with a rise in Special Mention of Substandard credits; weighted classified assets have also increased in each of the past two periods.

Management has attributed this backsliding to a combination of several factors: 1) a slowdown in restructurings since 4Q00, in part because borrowers are waiting for the outcome of TAMC legislation; 2) a higher relapse rate in previously restructured NPLs; and 3) a poor economic environment which has caused difficulties at a small number of major accounts. While we agree that these factors are all legitimate, it is hard to see why they are affecting SCB disproportionately.

Figure 35: SCB—Asset Quality Summary

| THB, MM | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Gross NPLs | 175,350 | 172,106 | 149,553 | 163,048 | 165,678 |
| NPLs/Loans | $36.5 \%$ | $35.4 \%$ | $30.4 \%$ | $33.5 \%$ | $34.7 \%$ |
| NPL Coverage | $13.3 \%$ | $14.5 \%$ | $17.1 \%$ | $16.4 \%$ | $16.1 \%$ |
| Weighted Classification Ratio | $22.5 \%$ | $21.6 \%$ | $17.5 \%$ | $18.5 \%$ | $20.0 \%$ |

Source: Company reports; Lehman Brothers estimates.

In a meeting with management last month, SCB disclosed that total loan restructurings since the crisis have totaled THB238 billion, with THB16.1 billion of that taking place in 1 HO 1 . Although management reports only a $5.7 \%$ average loss rate in these NPLs (not calculated on an NPV basis), the average yield on restructured loans has fallen to $3.3 \%$, well below the 5-5.5\% yield reported to us by TFB over the same period. Although there is not enough evidence to say that these figures are directly comparable, SCB's poor margin experience would seem to corroborate the theory that the bank is getting lower returns from its NPLs and restructured loans than is its competition.

## Reserve Adequacy:

SCB turns in one of the worst performances on our measure of actual reserves to required, having set aside only $26 \%$ of our theoretical figure; however, the bank turns in the best performance of any major Thai bank on our solvency measure, which measures
the total reserve shorifall against total remaining equity. On this measure, SCB is close to solvency-as close to a victory in the sector as can be expected.

Note that this measure does seem to bear out speculation that SCB's assessment of its collateral against lending is aggressive-more reason to disregard official reserve methodology and use a collateral-neutral measure such as the one detailed below.

Figure 36: SCB—Reserve Adequacy Calculation: 2Q01

|  | Gross <br> Amount | Reserve <br> Percentage | Required <br> Reserve |
| :--- | ---: | ---: | :---: |
| Pass | 324,137 | $1 \%$ | 3,241 |
| Special Mention | 25,095 | $5 \%$ | 1,255 |
| Substandard | 32,148 | $20 \%$ | 6,430 |
| Doubtful | 21,167 | $50 \%$ | 10,584 |
| Loss | 77,006 | $100 \%$ | 77,006 |
| ORE | 10,262 | $20 \%$ | 2,052 |
| Excess AIR | - | $20 \%$ | - |
|  |  |  |  |
| Total | 489,815 |  | 100,567 |
|  |  |  |  |
| Actual Reserves |  |  | 26,615 |
| Shortfall |  |  | 73,953 |
| Actual/Required |  |  | $26 \%$ |
| Shortfall/Capital |  |  | $118 \%$ |
| Sill |  |  |  |

Source: Company reports; Lehman Brothers estimates.

## National AMC:

Management currently plans to transfer a net THB7.6 billion in loans to the TAMC in two tranches; this figure is more likely to decline than to increase. SCB is not counting on any additional government initiatives to remove NPLs or bolster bank capital in the near future, given the substantial amount of public funds already deployed.

The transfer will not materially change SCB's asset quality position; we anticipate based on current estimates, that actual reserves would rise from $26 \%$ of required prior to the TAMC to $29 \%$ after.

## Loan Growth:

Growth in performing loans has come to a halt over the past two quarters. Management is currently projecting a flat 2 HO 1 performance, excluding the impact of loans transferred to TAMC.

Figure 37: SCB-Loan Growth and Performing Loan Growth

|  | 1Q00 | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loan Growth (QoQ) | $-1.4 \%$ | $-1.4 \%$ | $1.1 \%$ | $1.1 \%$ | $-0.9 \%$ | $-2.0 \%$ |
| Performing Loan Growth (QoQ) | $4.4 \%$ | $-5.1 \%$ | $2.4 \%$ | $8.5 \%$ | $-5.1 \%$ | $-3.7 \%$ |

[^3]
## Valuation:

SCB currently trades at $0.76 \times$ book and $0.89 x$ adjusted book, on a trailing core ROE of $6.61 \%$. On an earnings basis, SCB should show cautious improvement over the next three years, although provisions will remain very high. SCB shares trade at $13.4 \times$ trailing and $22.1 \times 2001 \mathrm{E}$ EPS, falling to $13.1 \times$ in FY2002. There is downside risk to these estimates, however, if criticized assets continue to rise as they have in 1 HO . However, SCB is cheaper than its large Thai bank brethren.

Figure 38: SCB Summary Sheet


## Thai Farmers Bank

What Price Quality?

|  |  |  |  | Rating: <br> Ticker: <br> Share Price: | $3-N$ | arket | B.BK <br> 17.25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Market Cap: |  | THB40. | billion |
|  | Net Profit (THB M) | $\begin{aligned} & \text { EPS } \\ & \text { (THB) } \end{aligned}$ | Change <br> (\%) | $\mathrm{P} / \mathrm{E}$ (x) | $\begin{gathered} \text { P/BV } \\ (\mathrm{x}) \end{gathered}$ | $\begin{aligned} & \text { DPS } \\ & \text { (THB) } \end{aligned}$ | Yield <br> (\%) |
| 1999A | -56,420 | -23.93 | -30\% | \% -2.6 | 7.0 | 0.00 | 0.0\% |
| 2000A | 1,265 | 0.54 | -102\% | \% 40.1 | 2.0 | 0.00 | 0.0\% |
| 2001E | 903 | 0.38 | -29\% | \% 45.0 | 1.6 | 0.00 | 0.0\% |
| 2002E | 2,463 | 1.04 | 173\% | \% 16.5 | 1.4 | 0.00 | 0.0\% |
| 2003E | 2,837 | 1.20 | 15\% | - 14.3 | 1.3 | 0.00 | 0.0\% |
| Shares Outstanding: 2,358 billion |  |  | Fiscal Year End: Dec |  |  |  |  |

## Investment conclusion

- TFB's underlying business is improving, but high expenses and the weight of NPLs argue against any near-term profit breakout.
- TFB posted improved operating performance in 2 Q01; however, poor asset quality remains the salient characteristic of this (and other Thai) banks, and a poor economic environment may lead to further deterioration.
- TFB has taken some difficult but necessary steps to cut costs, and its AMC experience is a model for other banks.
- Maintaining 3-Market Perform rating.

Thai Farmers Bank reported 2Q net income of THB 111 billion, down 95\% from a year ago, but the bank's best performance so far this year. While we note welcome trends in interest income, asset quality remains the driving factor for TFB as it does for all the Thai banks. As the macroeconomic environment deteriorates, we continue to see better value in banks in other Asian markets. Hence, we are maintaining our 3-Market Perform rating on TFB, which remains in our opinion among the strongest of the Thai banks, but which is not notably attractive from a return standpoint.

We met with the company last month; the following incorporates management's insights from our discussion as well. Key points from our analysis:

## Returns:

TFB came close to positive core income for the first time since 2 QOO in the most recent period, posting a core ROAA of $-0.01 \%$ on an annualized basis. Although this shows
signs of improvement, earnings increased mainly due to a fall-off in provisions; as we consider TFB still substantially under-reserved this appears unwarranted on an economic basis. The large difference between pre-provision profit and net income is primarily due to write-downs on foreclosed property (which we treat as provisions), rather than to additions to the general reserve against loans still on the books.

Note that as with other Thai banks, TFB's low equity base $13.2 \%$ of assets, $2.4 \%$ on a tangible basis) makes ROE on a net basis appear better than it should be. We see TFB as a prime candidate for capital-raising should market access return.

Figure 39: TFB—Key Earnings Components

| THB, MM | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Net Interest Income | 3,483 | 3,800 | 4,373 | 4,265 | 4,450 |
| Pre-Provision Profit | 1,751 | 742 | 30 | 2,423 | 1,559 |
| Provisions | $(595)$ | 1,137 | 478 | 2,295 | 1,354 |
| Net Income | 2,203 | $(1,268)$ | 24 | 59 | 111 |
| EPS (Bt) | 0.93 | $(0.54)$ | 0.01 | 0.02 | 0.05 |

Source: Company reports; Lehman Brothers estimates.

Figure 40: TFB—Key Earnings Ratios

|  | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| NIM | $2.00 \%$ | $2.17 \%$ | $2.47 \%$ | $2.37 \%$ | $2.44 \%$ |
| $\quad$ Asset Yield | $5.70 \%$ | $5.80 \%$ | $5.84 \%$ | $5.52 \%$ | $5.33 \%$ |
| $\quad$ Cost of Funds | $3.69 \%$ | $3.62 \%$ | $3.35 \%$ | $3.16 \%$ | $2.91 \%$ |
| Core ROAA | $0.80 \%$ | $-0.51 \%$ | $-0.15 \%$ | $-0.12 \%$ | $-0.01 \%$ |
| Core ROAE | $24.57 \%$ | $-19.39 \%$ | $-6.21 \%$ | $-4.67 \%$ | $-0.61 \%$ |
| Overhead | $2.54 \%$ | $2.97 \%$ | $3.23 \%$ | $2.93 \%$ | $2.80 \%$ |
| Efficiency | $71.73 \%$ | $87.53 \%$ | $99.47 \%$ | $68.48 \%$ | $76.61 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Rates \& Margins:

As with the other major Thai banks, TFB has been able to claw back some margin improvement by progressively reducing its deposit rates. Even though the yield on earning assets has fallen as well, the bank was thus able to increase both interest spread and NIM in 2Q01. Due to government pressure, we do not see much additional margin for spread expansion on the deposit side, although excess liquidity would seem to invite such

TFB has been able to outperform by virtue of its aggressive restructuring of loans through its two AMCs (see below); management reports that the average yield on restructured loans is now $5-5.5 \%$, as much as 200bp higher than the figures reported to us by other banks. Does this mean that TFB's eventual loan losses will be lower than those at other banks? So far we have no hard data on this, but it is a clear possibility we will be exploring in the months ahead.

Figure 41: TFB—Net Interest Margin Components

|  | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: |
| Change in Asset Yield | $0.05 \%$ | $-0.32 \%$ | $-0.19 \%$ |
| Change in Cost of Funds | $-0.27 \%$ | $-0.20 \%$ | $-0.25 \%$ |
| Change in NIM | $0.30 \%$ | $-0.10 \%$ | $0.07 \%$ |
|  |  |  |  |
| Loan Growth (QoQ) | $1.5 \%$ | $-1.4 \%$ | $-4.5 \%$ |
| Deposit Growth (QoQ) | $1.4 \%$ | $1.1 \%$ | $1.0 \%$ |

Source: Company reports; Lehman Brothers estimates.
Deposit and lending rates at TFB remain in line with large bank peers, and only slightly below those of the state banks -which offer significantly less convenience and safety. Foreign-owned commercial banks offer rates as much at 100bp below those of TFB \& Co., a material differential given their low levels.

This stance is probably politically wise in the near term, as the government is reported to be unhappy even with current interest rates and spreads on the grounds that deposit rates are too low and lending rates too high. Proposals to address these issues have extended even to the insertion of a clause in the draft version of the new Financial Institutions Act (at article 37) which would limit lending rates to 300bp over fixed deposit rates-in theory cutting 75 bp from TFB's spread at the margin.

## Loan Growth:

Loan growth continues to be poor on both a gross and net performing loan basis. Management altributes this to the poor economic environment and lack of credit-worthy borrowers, and is mainly targeting loan sectors based on fee income growth potential rather than balance increases.

Figure 42: TFB-Loan Growth and Performing Loan Growth

|  | 1Q00 | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loan Growth (QoQ) | $-1.8 \%$ | $-0.9 \%$ | $-1.1 \%$ | $1.5 \%$ | $-1.4 \%$ | $-4.5 \%$ |
| Performing Loan Growth (QoQ) | $-0.3 \%$ | $5.0 \%$ | $1.2 \%$ | $5.1 \%$ | $-0.9 \%$ | $-2.4 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Asset Quality:

NPLs are continuing to move down, with gross criticized assets declining by $20 \%$ from a year ago and weighted classified assets at $24.8 \%$ of loans, down from $27.3 \%$ at YE2000. However, NPLs of THB 165 billion are still $33.8 \%$ of total loans-a thoroughly unacceptable level for a bank with TFB's level of capital and reserves.

TFB has restructured THB220 billion in loans (45\% of current total loans) since the onset of the crisis, and expects to keep restructuring $\sim$ THB5 billion per month out through FY2002. Relapses into NPL have been higher than originally expected, however, which is attributed in part to the onset of the National AMC.

## AMCs:

TFB formed two AMCs in early 2000, Thonburi and Chantaburi, which took on approximately $39 \%$ of the bank's NPLs, disproportionately concentrated in the doubfful and loss categories. Both AMCs are fully-owned by the bank, and so consolidated on its books, but TFB has outsourced the management of the majority of the AMC assets to Goldman Sachs and GE Capital.

Management disclosed to us recently that Thonburi has resolved $27 \%$ of its transferred assets (with original face value of THB64 billion, transferred at a $47 \%$ discount) at an average of $73 \%$ of the transfer value, and expect a $50-60 \%$ total recovery on all assets. This implies a return on gross NPLs of $26.5-31.8 \%$, which is not far off our estimate for the entire bank of $22.8 \%$.

Chantaburi has resolved $53 \%$ of its transferred assets (with original face of THB44 billion transferred at a $42.5 \%$ discount) at an average recovery rate of $88 \%$, but management expects this to fall as remaining NPLs are described as quite "sticky."
(Please see our report: ABCs of AMCs, dated March 7, 2000, for additional information on TFB and other Thai bank AMCs.)

## Thai AMC:

TFB expects to transfer THB8-9 billion in book value of loans to the TAMC, out of a list of eligible loans aggregating THB15 billion. None of these loans will come from TFB's own AMCs (although the TAMC would accept them), as bank management feels that it is better placed to extract value than the government.

## Reserve Adequacy:

TFB's reserve is inadequate by our methodology, and required provisions would make the bank insolvent. Current ALLL is only $49 \%$ of our required metric, which leaves a shoriffll of THB64.4 billion, or $2.6 x$ equity. Although this is not unusual in Thailand, it is a serious impediment to investors or acquisitors, and we believe that TFB will have to undergo another round of recapitalization in the future.

Figure 43: TFB—Reserve Adequacy Calculation: 2Q01

|  | Gross <br> Amount | Reserve <br> Percentage | Required <br> Reserve |
| :--- | ---: | ---: | ---: |
| Pass | 341,264 | $1 \%$ | 3,413 |
| Special Mention | 11,005 | $5 \%$ | 550 |
| Substandard | 16,804 | $20 \%$ | 3,361 |
| Doubtful | 12,488 | $50 \%$ | 6,244 |
| Loss | 110,929 | $100 \%$ | 110,929 |
| ORE | 13,618 | $20 \%$ | 2,724 |
| Excess AIR | - | $20 \%$ | - |

Total $\quad 506,109 \quad 127,220$

| Actual Reserves | 62,847 |
| :--- | ---: |
| Shortfall | 64,373 |
| Actual/Required | $49 \%$ |
| Shortfall/Capital | $255 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Expenses

Expenses remain very high as illustrated by an overhead ratio of $2.8 \%$ in the quarter. Management has taken prompt and aggressive steps to address this problem, shedding 2,000 staff (on an original base of 11,500 ) via early retirement and targeting a staff base of 8,000 by the end of 2003. At the same time, merit pay and bonuses are being significantly upgraded to retain the best workers and motivate staff to increase production and efficiency.

In addition to pure staff cuts, TFB is taking steps to re-engineer its back-office operations, and projects that total savings will be $60 \%$ of present back-office costs at completion of its program, which will be rolled out beginning in mid 2002.

Finally, TFB is paring back its unprofitable rural office network, announcing that it will close 25 branches of its current 530. These branches will be replaced by 15-18 supermarket and department store branches which are significantly cheaper to operate. (for our thoughts on supermarket banking, see our First Call Note: DBS: In The Market For Branches, Keeping POSB Name, dated April 26, 2001 .)

## Valuation:

TFB currently trades at $1.56 x$ book and $2.08 x$ adjusted book, on a trailing core ROE of $4.6 \%$. On an earnings basis, we expect most of TFB's income to go to provisions over the next three years; consequently the bank trades at $40.09 x$ trailing ( $54.6 x$ core) and $45.0 \times 2001 \mathrm{E}$ EPS, falling to $16.5 \times$ in FY2002. There is material downside risk to these estimates, however, should the economic downturn hurt spreads or cause a wave of new defaults.

Figure 44: TFB Summary Sheet


## Krung Thai Bank

## Balance Sheet Distress Clearing



## Investment conclusion

- Krung Thai has uncertain prospects despite a bail-out, and trades at a high premium due to its low float. Maintain 4-Market Underperform.
- KTB's balance sheet has been strengthened by the government, and Krung Thai remains the only solvent bank in Thailand.
- However, much of the bank's balance sheet is taken up by low-yielding assets, and organic loan growth in the market is lacking.
- We are also concerned about the potential for aggressive policy lending by KTB which results in a new cycle of NPLs.

Krung Thai is taking steps to move into the modern era, but is still hampered by its state banking legacy. Although the government has recapitalized KTB to the point where it is now the only solvent Thai commercial bank by our methodology, KTB continues to have weak earnings, high NPLs, and low efficiency.

Although we do not see any risk at this point that KTB will be forced to discontinue its operations, we are worried about the bank's apparent desire to make political hay through accelerated policy lending. Finally, the state-owned nature of the bank makes it a potential candidate to rescue other state institutions which are not solvent, a potential which holds obvious risks for investors in KTB. We are maintaining our 4-Market Underperform investment rating on the shares of Krung Thai.

## 2 Q01 Earnings Highlights:

Krung Thai swung back into the red in 2Q01, affer posting only one quarter of profit since 1Q98, as provisions once again rose to crisis levels. However, all news is not bad, as we find that asset quality improved slightly despite the high bad debt charge even net of write-offs. KTB continues to present horrific numbers on all generally-accepted return benchmarks: ROE of $-60 \%, \mathrm{ROA}$ of $-3.6 \%$, and an operating ROE of $-9.04 \%$; however, from a financial standpoint at least KTB is taking steps to secure its survival.

Figure 45: KTB-Key Earnings Components

| THB, MM | $\mathbf{2 Q 0 0}$ | $\mathbf{3 Q 0 0}$ | $\mathbf{4 Q 0 0}$ | $\mathbf{1 Q 0 1}$ | $\mathbf{2 Q 0 1}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Net Interest Income | 2,772 | 3,077 | 4,943 | 4,656 | 4,997 |
| Pre-Provision Profit | $(126)$ | $(1,242)$ | $(620)$ | 2,228 | 1,246 |
| Provisions | 739 | 15,048 | 2,003 | 0 | 10,490 |
| Net Income | $(864)$ | 88,866 | $(2,630)$ | 2,203 | $(9,250)$ |
| EPS (Bt) | $(0.04)$ | 4.04 | $(0.12)$ | 0.10 | $(0.42)$ |

Source: Company reports; Lehman Brothers estimates.

Figure 46: KTB-Key Earnings Ratios

|  | $\mathbf{2 Q 0 0}$ | $\mathbf{3 Q 0 0}$ | $\mathbf{4 Q 0 0}$ | $\mathbf{1 Q 0 1}$ | $\mathbf{2 Q 0 1}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| NIM | $1.21 \%$ | $1.34 \%$ | $2.11 \%$ | $1.94 \%$ | $2.09 \%$ |
| $\quad$ Asset Yield | $4.39 \%$ | $4.39 \%$ | $5.00 \%$ | $4.29 \%$ | $4.28 \%$ |
| $\quad$ Cost of Funds | $3.18 \%$ | $3.22 \%$ | $3.09 \%$ | $2.58 \%$ | $2.25 \%$ |
| Core ROAA | $-0.35 \%$ | $-7.79 \%$ | $-0.22 \%$ | $0.87 \%$ | $-3.56 \%$ |
| Core ROAE | $-12.02 \%$ | $-417.95 \%$ | $-3.46 \%$ | $13.97 \%$ | $-59.93 \%$ |
| Overhead | $1.87 \%$ | $2.10 \%$ | $2.63 \%$ | $1.83 \%$ | $2.08 \%$ |
| Efficiency | $103.02 \%$ | $134.85 \%$ | $111.21 \%$ | $66.27 \%$ | $79.97 \%$ |

Source: Company reports; Lehman Brothers estimates

## Rates \& Margins:

Net interest margin improved by 15 bp in the quarter to $2.09 \%$, almost erasing the loss of spread in 1Q01. Asset yields have stabilized, remaining relatively flat from 2Q002Q01. Note that asset yields remain well below those of the major banks, despite a MLR which is identical to that of BBL and TFB (and only 25bp below that of SCB). We attribute this in large part to the approximately THB321 billion in special government notes given to KTB as part of the transfer of the bank's bad debts into SAM Isee our note of November 20, 2000, entitled: Krung Thai Bank: Government Picks Up The TabUpgrading to 4-Market Underperform for full details; these notes pay only KTB's average savings rate ( $2.00 \%$ ) plus the special business tax and so lower overall asset yield.

The bank continues to benefit from special government and SOE deposits on its liability side ( $\sim 40 \%$ of total deposits), contributing to a cost of funds which is likewise the lowest of any of the Thai banks. However, KTB is exposed-by virtue of its government shareholder-to the current political desire to increase deposit rates paid to consumers while lowering lending rates to spur growth.

Figure 47: KTB—Net Interest Margin Components

|  | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | :---: | :---: |
| Change in Asset Yield | $0.61 \%$ | $-0.71 \%$ | $-0.01 \%$ |
| Change in Cost of Funds | $-0.13 \%$ | $-0.51 \%$ | $-0.33 \%$ |
| Change in NIM | $0.77 \%$ | $-0.17 \%$ | $0.15 \%$ |
|  |  |  |  |
| Loan Growth (QoQ) | $-10.1 \%$ | $4.4 \%$ | $-1.8 \%$ |
| Deposit Growth (QoQ) | $-3.2 \%$ | $6.0 \%$ | $-3.2 \%$ |

Source: Company reports; Lehman Brothers estimates.

Figure 48: KTB-Industry Spread Comparison: 2Q01

| 2Q01A | SCB | BBL | TFB | KTB |
| :--- | :---: | :---: | :---: | :---: |
| Asset Yield | $4.95 \%$ | $5.24 \%$ | $5.33 \%$ | $4.28 \%$ |
| Cost of Funds | $2.62 \%$ | $3.09 \%$ | $2.91 \%$ | $2.25 \%$ |
| Spread | $2.32 \%$ | $2.16 \%$ | $2.42 \%$ | $2.03 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Asset Quality:

Asset quality is poor, but has dramatically improved since the government bailout in 3Q00. NPLs/Loans have fallen below $30 \%$-still an unacceptable level but in line with the industry-and weighted classifications stand at $15.6 \%$, indicating that a substantial portion of KTB's remaining NPLs are housed in the less-severe Special Mention and Substandard categories.

Figure 49: KTB—Asset Quality Summary

| THB, MM | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Gross NPLs | 621,760 | 146,085 | 110,050 | 118,546 | 117,528 |
| NPLs/Loans | $67.5 \%$ | $33.8 \%$ | $28.3 \%$ | $29.2 \%$ | $29.5 \%$ |
| NPL Coverage | $4.1 \%$ | $35.4 \%$ | $12.6 \%$ | $13.3 \%$ | $23.6 \%$ |
|  |  |  |  |  |  |
| Weighted Classification Ratio | $61.4 \%$ | $22.5 \%$ | $16.6 \%$ | $15.7 \%$ | $15.6 \%$ |

Source: Company reports; Lehman Brothers estimates.
The danger for KTB now is that these non-Loss NPLs continue to worsen in quality with the faltering economy, and wind up migrating into more-severe categories with correspondingly higher reserve requirements and loss expectations. While our methodology is designed to mirror the loss incurred on a normal migration cycle Isome loans are upgraded, some downgraded, and some written-off), should Thailand experience another round of widespread corporate defaults losses will exceed our predicted values.

An additional area of caution stems from KTB's close relationship with the government, and with the administration's wholly salutary focus on stimulating the economy. Conversations with members of the government have revealed that the general attitude towards KTB's rate of lending so far in 2001 has been negative, and given that the state has spent a substantial amount of money making the bank solvent once again, there exists an attitude that the bank should be more active in its reciprocation.

## Loan Growth:

Figure 50: KTB-Loan Growth and Performing Loan Growth

|  | $\mathbf{1 Q 0 0}$ | $\mathbf{2 Q 0 0}$ | $\mathbf{3 Q 0 0}$ | 4Q00 | 1Q01 | 2Q01 |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: |
| Loan Growth (QoQ) | $-1.1 \%$ | $-0.4 \%$ | $-53.0 \%$ | $-10.1 \%$ | $4.4 \%$ | $-1.8 \%$ |
| Performing Loan Growth (QoQ) | $-44.9 \%$ | $4.0 \%$ | $-3.0 \%$ | $-3.8 \%$ | $3.3 \%$ | $-2.2 \%$ |

Source: Company reports; Lehman Brothers estimates.

Krung Thai has kicked lending into gear on the commitment and origination end, but this is not yet translating into sustained balance growth, particularly in terms of performing loans. So far this year, KTB has made large commitments to fund such political darlings as airport and commuter rail service projects in Bangkok, but it is not clear whether these funds have yet been disbursed.

## Reserve Adequacy:

KTB's reserve is inadequate along with those of all of its peers, but there is a substantial and positive distinction. By our calculations, KTB is the only Thai bank whose reserve underfunding is less than its equity-meaning that Krung Thai remains the only solvent commercial bank in Thailand.

Currently, we estimate that KTB will eventually have to make additional provisions of THB41 billion, or $68 \%$ of remaining equity. Because of this, we don't envision KTB requiring additional capital any time in the near future barring an acquisition of one of its troubled state bank brethren.

Figure 51: KTB—Reserve Adequacy Calculation: 2Q01

|  | Gross <br> Amount | Reserve <br> Percentage | Required <br> Reserve |
| :--- | :---: | ---: | :---: |
| Pass | 300,520 | $1 \%$ | 3,005 |
| Special Mention | 21,397 | $5 \%$ | 1,070 |
| Substandard | 20,075 | $20 \%$ | 4,015 |
| Doubtful | 8,308 | $50 \%$ | 4,154 |
| Loss | 53,144 | $100 \%$ | 53,144 |
| ORE | 14,604 | $20 \%$ | 2,921 |
| Excess AIR | - | $20 \%$ | - |
|  |  |  |  |
| Total | 418,047 |  | 68,309 |
|  |  |  | 27,693 |
| Actual Reserves |  |  | 40,616 |
| Shortfall |  |  | $41 \%$ |
| Actual/Required |  |  | $68 \%$ |
| Shortfall/Capital |  |  |  |

Source: Company reports; Lehman Brothers estimates.

## Efficiency:

KTB is overstaffed and overbranched, and needs to cut back to a more sustainable level in order to get overhead costs down. This is one of the only avenues open to management to increase the bank's strength given that KTB can not affect the overall loan growth environment, and that margins on a large portion of its assets are already locked in.

## Valuation:

Even at its sharply reduced trading price, KTB shares are still valued at $3.2 \times$ book and $3.4 \times$ adjusted book. Although the bank does deserve a premium to the rest of the sector given its solvency (transfers of equity to reserves have lowered BVPS and thus raised the book multiple even though the economic value of the bank has not changed), this is still high by regional standards, especially as we project single-digit forward ROEs.

Looking at a measure which adjusts for both equity and reserves, we use our deposit franchise calculation to show the premium a theoretical acquisitor of KTB would pay for its prime asset-its deposit and customer base. Keep in mind that KTB's deposit franchise is more valuable than many others in Thailand as it includes such a large percentage of low-cost government funds (as long as the bank remains state-controlled); however, Krung Thai is still expensive at a $21.8 \%$ premium on deposits-well above the Thai average and that of other regional markets.

Figure 52: KTB——Deposit Premium Valuation Detail

| THB, MM | 2Q01A |
| :--- | :---: |
| Market Capitalization | 197,865 |
| Less: Adjusted Book Value | $(55,417)$ |
| Plus: Reserve Underfunding | 40,616 |
| Implied Franchise Value | 183,063 |
| Total Deposits/Debentures | 839,612 |
| Deposit Premium | $21.8 \%$ |

[^4]Figure 53: KTB Summary Sheet


## Bank of Ayudhya

Proud Franchise, Hard Times

|  |  |  |  | Rating: <br> Ticker: <br> Share Price: | Market | nderpe | form <br> Y.BK <br> 34.60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Market Cap: |  | THB8. | billion |
|  | Net Profit (THB M) | $\begin{aligned} & \text { EPS } \\ & \text { (THB) } \end{aligned}$ | Change <br> (\%) | $\begin{aligned} & \text { P/E } \\ & (\mathrm{x}) \end{aligned}$ | $\begin{gathered} \text { P/BV } \\ (\mathbf{x}) \end{gathered}$ | $\begin{aligned} & \text { DPS } \\ & \text { (THB) } \end{aligned}$ | Yield <br> (\%) |
| 1999A | -21,973 | -11.88 | -36\% | \% -1.3 | 1.3 | 0.00 | 0.0\% |
| 2000A | -8,530 | -4.61 | -61\% | \% -1.1 | 0.6 | 0.00 | 0.0\% |
| 2001E | -1,464 | -0.79 | -83\% | \% -5.8 | 0.6 | 0.00 | 0.0\% |
| 2002E | -3,051 | -1.65 | 108\% | \% -2.8 | 0.7 | 0.00 | 0.0\% |
| 2003E | -3,102 | -1.68 | 2\% | \% -2.7 | 0.9 | 0.00 | 0.0\% |
| Shares Outstanding: 1,850 billion |  |  | Fiscal Year End: Dec |  |  |  |  |

## Investment conclusion

- BAY continues to be dogged by reserve underfunding; Maintain 4-Market Underperform.
- BAY's asset quality is not much worse than that of other Thai banks, but its reserves lag far behind.
- Nevertheless, the bank has been taking negative provisions for the last four quarters, overstating income.
- Interest spreads are weak, due to both the asset and liability sides of the balance sheet.

Bank of Ayudhya is doing well in certain aspects of its operating performance; however, reserve underfunding continues to be a dominating factor for the bank, even after transfers to the TAMC. The bank's franchise does have value, but unlocking any of this will likely have to wait until a resolution of the bank's loan porffolio-which will take years at the current speed of progress. On the positive side, BAY does have good partnerships and the steady support of the controlling Ratanarat family.

We maintain our 4-Market Underperform rating pending concrete action on the loan quality front.

## Returns:

BAY reported a net profit of THB99.4 million in 2Q01 (THB 0.05 per share), down $7 \%$ on a consecutive quarter basis but well above last year's $2 Q$ loss of THB6. 8 billion. While some operating trends improved, BAY continued to take money out of its loan loss
reserve via negative provisioning (THB 703 million in 2Q) for the fourth consecutive quarter. This action is in our opinion unequivocally unwarranted as BAY's reserve remains direly underfunded by our standards.

That said, although on a net income basis BAY appears to show respectable ROA and ROE, we de-weight these numbers due to the negative provision issue. However, the bank has made good progress on lowering its expense base as promised, and overhead costs are falling. Specifically, management has implemented a plan to reduce staff by 10\% from the April level of 9,731 using early retirement incentives-note that April's level was already down by 19\% from the 1999 level.

Figure 54: BAY—Key Earnings Components

| THB, MM | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Net Interest Income | 1,586 | 1,276 | 1,358 | 1,396 | 1,267 |
| Pre-Provision Profit | $(584)$ | $(469)$ | $(854)$ | $(320)$ | $(365)$ |
| Provisions | 6,173 | $(845)$ | $(1,481)$ | $(437)$ | $(703)$ |
| Net Income | $(6,817)$ | 369 | 628 | 107 | 99 |
| EPS (Bt) | $(3.68)$ | 0.20 | 0.34 | 0.06 | 0.05 |

Source: Company reports; Lehman Brothers estimates.

Figure 55: BAY-Key Earnings Ratios

|  | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| NIM | $1.57 \%$ | $1.27 \%$ | $1.35 \%$ | $1.38 \%$ | $1.25 \%$ |
| $\quad$ Asset Yield | $5.73 \%$ | $5.36 \%$ | $5.22 \%$ | $5.01 \%$ | $4.74 \%$ |
| $\quad$ Cost of Funds | $4.07 \%$ | $4.03 \%$ | $3.78 \%$ | $3.58 \%$ | $3.40 \%$ |
| Core ROAA | $-6.21 \%$ | $0.30 \%$ | $0.57 \%$ | $0.25 \%$ | $0.28 \%$ |
| Core ROAE | $-168.54 \%$ | $10.03 \%$ | $18.03 \%$ | $7.84 \%$ | $9.12 \%$ |
| Overhead | $2.45 \%$ | $2.07 \%$ | $2.62 \%$ | $2.14 \%$ | $2.07 \%$ |
| Efficiency | $130.78 \%$ | $129.02 \%$ | $147.84 \%$ | $117.32 \%$ | $121.09 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Rates and Margins:

Net interest margin declined by 13bp in 2Q01, from an already anemic $1.38 \%$ to $1.25 \%$. BAY's problem is not so much its asset yield-which is declining, but at a rate comparable to that of its major competitors—but its cost of funds, which remains quite elevated. This is due to a high level of non-deposit funding, including long-term borrowings and a 1999 issue of SLIPs (Stapled Limited Interest Preferred Shares) which pay a minimum rate of $11 \%$.

Unfortunately, it will be difficult for the bank to eliminate this disadvantage without growing the balance sheet to dilute existing high-yield liabilities-and this course presents its own almost insurmountable difficulties given the paucity of loan growth.

Figure 56: BAY—Net Interest Margin Components

|  | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | :---: | ---: |
| Change in Asset Yield | $-0.14 \%$ | $-0.21 \%$ | $-0.27 \%$ |
| Change in Cost of Funds | $-0.24 \%$ | $-0.20 \%$ | $-0.18 \%$ |
| Change in NIM | $0.08 \%$ | $0.03 \%$ | $-0.13 \%$ |
|  |  |  |  |
| Loan Growth (QoQ) | $0.1 \%$ | $1.5 \%$ | $0.4 \%$ |
| Deposit Growth (QoQ) | $-0.2 \%$ | $1.0 \%$ | $-0.7 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Asset Quality:

Asset quality at BAY is not notably worse than the three major Thai banks, but basically in line with the industry. The bank does lag, however, in provisions, which are markedly insufficient. NPLs have resumed their downward trend after a worrisome upward blip in 1Q01 (atributed to TAMC positioning), declining by $6 \%$ in the quarter. More importantly, the severity of the NPL mix is also declining, with weighted classifications dropping from $20.0 \%$ at YE2000 to $18.6 \%$ currently.

Figure 57: BAY—Asset Quality Summary

| THB, MM | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Gross NPLs | 102,385 | 102,104 | 97,705 | 103,226 | 99,264 |
| NPLs/Loans | $31.0 \%$ | $31.0 \%$ | $29.7 \%$ | $30.9 \%$ | $29.6 \%$ |
| NPL Coverage | $7.8 \%$ | $8.7 \%$ | $8.8 \%$ | $8.3 \%$ | $9.2 \%$ |
|  |  |  |  |  |  |
| Weighted Classification Ratio | $20.5 \%$ | $21.0 \%$ | $20.0 \%$ | $19.9 \%$ | $18.6 \%$ |

Source: Company reports; Lehman Brothers estimates.

Management disclosed to us recently that the bank is making good strides in selling ORE as well, offloading THB2 billion in foreclosed property since the close of 2 Q $1 \sim 14.6 \%$ of net ORE at that time) for a profit of THB2OO million over written-down book value.

## AMCs:

BAY plans to transfer all acceptable loans to the TAMC, currently estimated at a face value of THB 12 billion and net book value of THB8 billion. This is approximately $10 \%$ of NPLs-a good start, but by no means a panacea. Management would certainly be amenable to further transfers of NPLs to the TAMC, and believes that there will be another tranche of government purchases within 12-18 months.

Once the TAMC transfer is completed, BAY plans to transfer an additional THB8 billion in NPLs to its own AMC, primarily for the benefits of the longer holding period on real estate afforded such entities.

## Reserve Adequacy:

BAY's reserves against known bad loans are insufficient, with the bank's actual provisions accounting for only $13 \%$ of our required reserve amount and the difference amounting to some $3.4 x$ equity. Taking out estimated TAMC transfers is helpful, but does not alter the essential picture: BAY still needs $3 x$ its capital in additional provisions.

Figure 58: BAY—Reserve Adequacy Calculations

|  | 2Q01 Actual |  |  |
| :--- | ---: | ---: | ---: |
|  | Gross <br> Amount | Reserve <br> Percentage | Required <br> Reserve |
| Pass | 254,369 | $1 \%$ | 2,544 |
| Special Mention | 9,059 | $5 \%$ | 453 |
| Substandard | 15,192 | $20 \%$ | 3,038 |
| Doubtful | 4,974 | $50 \%$ | 2,487 |
| Loss | 56,349 | $100 \%$ | 56,349 |
| ORE | 13,690 | $20 \%$ | 2,738 |
| Excess AIR | 454 | $20 \%$ | 91 |
|  |  |  |  |
| Total | 354,087 |  | 67,700 |
|  |  |  |  |
| Actual Reserves |  |  | 9,087 |
| Shortfall |  |  | 58,613 |
| Actual/Required |  |  | $13 \%$ |
| Shortfall/Capital |  |  | $344 \%$ |


|  | 2Q01 Pro-forma after TAMC |  |  |
| :--- | ---: | ---: | ---: |
|  | Gross <br> Amount | Reserve <br> Percentage | Required <br> Reserve |
| Pass | 254,369 | $1 \%$ | 2,544 |
| Special Mention | 9,059 | $5 \%$ | 453 |
| Substandard | 15,192 | $20 \%$ | 3,038 |
| Doubtful | 4,974 | $50 \%$ | 2,487 |
| Loss | 44,349 | $100 \%$ | 44,349 |
| ORE | 13,690 | $20 \%$ | 2,738 |
| Excess AIR | 454 | $20 \%$ | 91 |
|  |  |  |  |
| Total | 342,087 |  | 55,700 |
|  |  |  |  |
| Actual Reserves |  |  | 5,087 |
| Shortfall |  |  | 50,613 |
| Actual/Required |  |  | $9 \%$ |
| Shortfall/Capital |  |  | $297 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Loan Growth:

The bank has been doing relatively well on the loan growth front, although figures remain close to zero. BAY's renewed focus on housing loans and credit cards (via a joint venture with GE Capital, which has doubled BAY's previous card base since its inception in March 2001) has paid some dividends.

We don't expect industry loan growth to pick up materially from current levels, which will make it hard for BAY to exploit this strength.

Figure 59: BAY-Loan Growth and Performing Loan Growth

|  | 1Q00 | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Loan Growth (QoQ) | $0.2 \%$ | $-8.7 \%$ | $-0.6 \%$ | $0.1 \%$ | $1.5 \%$ | $0.4 \%$ |
| Performing Loan Growth (QoQ) NM |  | $4.1 \%$ | $-0.6 \%$ | $2.1 \%$ | $0.1 \%$ | $2.5 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Valuation:

BAY shares are now trading at $0.50 \times$ book value and at $0.73 x$ adjusted book value - what appears to be deep value territory. However, book value is significantly negative affer subtracting reserve underfunding, making this measure a bad touchstone for industry comparison. As we expect losses through FY2004 lassuming provisioning sufficient to reach 50\% of YE2004 reserve adequacy by our methodology), BAY can not be measured on earnings either.

Figure 60: BAY——Deposit Premium Valuation Detail

| THB, MM | 2Q01A |
| :--- | ---: |
| Market Capitalization | 8,511 |
| $\quad$ Less: Adjusted Book Value | $(13,230)$ |
| $\quad$ Plus: Reserve Underfunding | 58,522 |
| Implied Franchise Value | 53,803 |
| Total Deposits | 362,632 |
| Deposit Premium | $14.8 \%$ |

Source: Company reports; Lehman Brothers estimates

Our deposit franchise calculation is valid, however, and shows that BAY continues to be expensive when valued against its deposit franchise, with a theoretical acquisitor paying a $14.8 \%$ premium on deposits-well above the average for other Asian markets.

Figure 61: BAY Summary Sheet

| BAY |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Share Price: | 4.60 |  | Index: |  | $\begin{array}{r} 284.97 \\ 0.0 \% \end{array}$ | Reuters Code: <br> Bloomberg Code: | BAY.BK |  |  |  |  |
| 52 Week Price Range: | 4.20 | 0.00 |  | ent Yield: |  |  | BAY/F TB |  | Shares Ou | nding (B): | 1,850.33 |
| INCOME STATEMENT | 1999A | 2000A | 2001E | 2002E | $\underline{2003 E}$ | BALANCE SHEET | 1999A | 2000A | 2001E | 2002E | $\underline{2003 E}$ |
| (THB mil) year ending Dec |  |  |  |  |  | (THB mil) year ending Dec |  |  |  |  |  |
| Interest income | 26,934 | 22,688 | 19,546 | 19,456 | 20,250 | Gross loans | 361,340 | 329,094 | 331,953 | 328,645 | 331,944 |
| Interest expense | 23,747 | 16,638 | 14,015 | 13,420 | 14,395 | Loan loss reserves | 30,078 | 8,584 | 10,255 | 12,605 | 14,952 |
| Net interest income | 3,187 | 6,050 | 5,531 | 6,036 | 5,854 |  |  |  |  |  |  |
|  |  |  |  |  |  | Net loans | 331,262 | 320,510 | 321,698 | 316,040 | 316,993 |
| Ave. int. earnings assets | 435,518 | 404,528 | 403,547 | 409,761 | 419,487 | Total earning assets | 407,172 | 401,885 | 405,210 | 414,312 | 424,662 |
| NIM (\%) | 0.73\% | 1.50\% | 1.37\% | 1.47\% | 1.40\% | Other assets | 39,360 | 33,228 | 36,155 | 36,967 | 37,891 |
|  |  |  |  |  |  | Total Assets | 446,532 | 435,112 | 441,366 | 451,279 | 462,552 |
| Non-interest income | 2,676 | 1,540 | 1,836 | 1,977 | 2,186 |  |  |  |  |  |  |
| Total operating income | 5,863 | 7,590 | 7,367 | 8,014 | 8,041 | Deposits | 361,178 | 361,631 | 366,268 | 374,578 | 384,031 |
|  |  |  |  |  |  | Customer deposits | NA | NA | NA | NA | NA |
| Non-interest expense | 10,616 | 9,900 | 8,458 | 8,402 | 8,503 | Other deposits | NA | NA | NA | NA | NA |
| Pre provision profit | -4,753 | -2,310 | -1,091 | -388 | -463 | Other paying liabilities | 55,056 | 49,230 | $(366,268)$ | $(374,578)$ | $(384,031)$ |
|  |  |  |  |  |  | Interest-bearing Liabilities | 423,603 | 419,640 | 425,989 | 438,953 | 453,328 |
| Loan loss provisions | 17,713 | 6,788 | 860 | 4,000 | 4,000 |  |  |  |  |  |  |
| Non-operating income | -520 | -579 | -207 | 23 | 23 | Gross Equity | 22,929 | 15,472 | 15,377 | 12,326 | 9,225 |
| Pre tax profit | -22,986 | -9,678 | -2,159 | -4,365 | -4,440 | Adjusted equity | 21,682 | 13,934 | 11,711 | 8,945 | 6,106 |
| Tax | 27 | 10 | -744 | -1,360 | -1,383 | BALANCE SHEET RATIOS | 1999A | 2000A | 2001E | 2002E | $\underline{2003 E}$ |
| Net profit | -21,973 | -8,530 | -1,464 | -3,051 | -3,102 | (\%) |  |  |  |  |  |
|  |  |  |  |  |  | Loan-to-deposit | 100.0\% | 91.0\% | 90.6\% | 87.7\% | 86.4\% |
| Core earnings | -22,384 | -8,561 | -1,143 | -3,051 | -3,102 | Equity to assets | 5.1\% | 3.6\% | 3.5\% | 2.7\% | 2.0\% |
|  |  |  |  |  |  | Total loan loss provisions | 6.74\% | 1.97\% | 2.32\% | 2.79\% | 3.23\% |
| PER SHARE DATA (THB) | 1999A | 2000A | $\underline{2001 E}$ | $\underline{2002 E}$ | $\underline{2003 E}$ |  |  |  |  |  |  |
| EPS | (11.88) | (4.61) | (0.79) | (1.65) | (1.68) | ASSET QUALITY | 1999A | 2000A | $\underline{2001 E}$ | 2002E | $\underline{2003 E}$ |
| DPS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Nonperforming assets | 125,218 | 97,705 | 91,779 | 78,550 | 66,011 |
| Effective payout ratio (\%) | 0\% | 0\% | 0\% | 0\% | 0\% | Special mention | 8,136 | 9,565 | 8,349 | 7,091 | 6,023 |
| BVPS | 12.39 | 8.36 | 8.31 | 6.66 | 4.99 | Substandard | 14,776 | 11,346 | 15,806 | 16,444 | 15,168 |
| ABVPS | 11.72 | 7.53 | 6.33 | 4.83 | 3.30 | Doubtful | 8,153 | 4,305 | 4,489 | 3,656 | 2,978 |
|  |  |  |  |  |  | Loss | 96,460 | 61,047 | 50,321 | 40,131 | 32,004 |
| VALUATION | 1999A | 2000A | $\underline{2001 E}$ | $\underline{2002 E}$ | $\underline{2003 E}$ | ORE | 7,750 | 11,442 | 12,815 | 11,229 | 9,838 |
| Price to book value (x) | 1.29 | 0.62 | 0.55 | 0.69 | 0.92 |  |  |  |  |  |  |
| Price to adjusted book value ( x ) | 1.37 | 0.69 | 0.73 | 0.95 | 1.39 | NPAs/total loans | 34.7\% | 29.7\% | 27.6\% | 23.9\% | 19.9\% |
| Price to earnings ( x ) | (1.35) | (1.13) | -5.81 | -2.79 | -2.74 | Reserve coverage of NPAs | 24.0\% | 8.8\% | 11.2\% | 16.0\% | 22.7\% |
| PROFITABILITY RATIOS | 1999A | 2000A | $\underline{2001 E}$ | 2002E | $\underline{2003 E}$ | Required reserves | 106,237 | 68,375 | 61,237 | 50,461 | 41,553 |
| (\%) |  |  |  |  |  | Actual reserves | 30,078 | 8,584 | 10,255 | 12,605 | 14,952 |
| Net interest margin | 0.73\% | 1.50\% | 1.37\% | 1.47\% | 1.40\% | Shortfall (surplus) | 76,158 | 59,791 | 50,982 | 37,856 | 26,601 |
| Yield on interest earning assets | 6.61\% | 5.65\% | 4.82\% | 4.70\% | 4.77\% | Actual to required reserves | 28\% | 13\% | 17\% | 25\% | 36\% |
| Cost on interest bearing liabilities | 5.71\% | 4.05\% | 3.38\% | 3.17\% | 3.31\% | Shortfall to capital | 332\% | 386\% | 332\% | 307\% | 288\% |
| Net interest spread | 0.91\% | 1.60\% | 1.44\% | 1.53\% | 1.46\% |  |  |  |  |  |  |
| Non-int. income (\% Op income) | 45.6\% | 20.3\% | 24.9\% | 24.7\% | 27.2\% |  |  |  |  |  |  |
| Cost to income | 181.1\% | 130.4\% | 114.8\% | 104.8\% | 105.8\% | GROWTH RATES | 1999A | 2000A | 2001E | 2002E | $\underline{2003 E}$ |
| Overhead ratio | 2.44\% | 2.45\% | 2.10\% | 2.05\% | 2.03\% | (\%) |  |  |  |  |  |
| Cost coverage | 55.2\% | 76.7\% | 87.1\% | 95.4\% | 94.6\% | Income statement |  |  |  |  |  |
| ROA | -4.72\% | -1.93\% | -0.33\% | -0.68\% | -0.68\% | Net interest income | -30.9\% | 89.8\% | -8.6\% | 9.1\% | -3.0\% |
| ROE | -93.0\% | -47.9\% | -11.4\% | -29.5\% | -41.2\% | Non-interest income | 219.9\% | -42.5\% | 19.2\% | 7.7\% | 10.6\% |
|  |  |  |  |  |  | Total operating income | 7.5\% | 29.4\% | -2.9\% | 8.8\% | 0.3\% |
| OROA ANALYSIS | 1999A | 2000A | $\underline{2001 E}$ | 2002E | $\underline{2003 E}$ | Non-interest expenses | 4.6\% | -6.7\% | -14.6\% | -0.7\% | 1.2\% |
|  |  |  |  |  |  | Pre-provision earnings | 1.2\% | -51.4\% | -52.8\% | -64.4\% | 19.2\% |
| Net interest margin | 0.73\% | 1.50\% | 1.37\% | 1.47\% | 1.40\% | Loan loss provisions | 284.6\% | -61.7\% | -87.3\% | 365.2\% | 0.0\% |
| Non-interest inc./gross inc. | 45.65\% | 20.29\% | 24.92\% | 24.67\% | 27.19\% | Core earnings | 267.8\% | -61.8\% | -86.7\% | 166.9\% | 1.7\% |
| Efficiency ratio | 181.06\% | 130.44\% | 114.82\% | 104.84\% | 105.75\% | Net profit | 129.5\% | -61.2\% | -82.8\% | 108.4\% | 1.7\% |
| Provision/assets | 3.97\% | 1.56\% | 0.19\% | 0.89\% | 0.86\% |  |  |  |  |  |  |
|  |  |  |  |  |  | Balance sheet |  |  |  |  |  |
| Operating return on assets | -5.06\% | -2.13\% | -0.47\% | -0.98\% | -0.98\% | Loan growth | -1.3\% | -8.9\% | 0.9\% | -1.0\% | 1.0\% |
|  |  |  |  |  |  | Interest earning assets | -12.2\% | -1.3\% | 0.8\% | 2.2\% | 2.5\% |
| Equity/assets | 5.13\% | 3.56\% | 3.48\% | 2.73\% | 1.99\% | Asset growth | -7.7\% | -2.6\% | 1.4\% | 2.2\% | 2.5\% |
|  |  |  |  |  |  | Deposit growth | -10.6\% | 0.1\% | 1.3\% | 2.3\% | 2.5\% |
| Operating return on equity | -98.5\% | -59.9\% | -13.4\% | -35.9\% | -48.9\% | Shareholders funds | -14.7\% | -32.5\% | -0.6\% | -19.8\% | -25.2\% |
| Source: Company reports; Lehman Brothers estimates |  |  |  |  |  |  |  |  |  |  |  |

## Thai Military Bank

Trench Warfare


## Investment Conclusion:

- Thai Military has posted better operating results, but remains materially insolvent. Maintain 4-Market Underperform rating.
- TMB has improved its operating performance since we last visited the bank, with margins up and rising and credible loan growth.
- However, the bad debt burden is still a dominant factor, with reserve shorffall at $4.6 x$ equity.
- The TAMC will not remove the majority of TMB's loans, as was once thought.

It has been some time since we looked in on Thai Military Bank, and many aspects of the institution's position have changed. The bank returned to positive net income in 1Q01 for the first time since 3Q97, following 13 consecutive quarters of losses, and increased this profit in 2Q01. Pre-provision earnings have also been positive for two quarters, and core income (excluding extraordinaries and tax-adjusted securities gains) turned positive in 2Q01, also for the first time in 13 periods.

But while the operating measures are improving somewhat-albeit off a very low base-structural insolvency due to bad debts is the dominating factor in any analysis of TMB, and the reason we maintain our 4-Market Underperform rating. It will be difficult if not impossible for operating income to pull the bank out of its deep financial hole in any reasonable amount of time.

Figure 62: TMB—Key Earnings Components

| THB, MM | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | :---: | :---: | :---: | ---: | ---: |
| Net Interest Income | 478 | 638 | 527 | 806 | 1,232 |
| Pre-Provision Profit | $(716)$ | $(496)$ | $(276)$ | 542 | 485 |
| Provisions | 20,720 | 48 | 152 | 477 | 332 |
| Net Income | $(21,444)$ | $(549)$ | $(439)$ | 45 | 153 |
| EPS (Bt) | $(5.36)$ | $(0.14)$ | $(0.11)$ | 0.01 | 0.04 |

Source: Company reports; Lehman Brothers estimates.

Figure 63: TMB-Key Earnings Ratios

|  | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| NIM | $0.62 \%$ | $0.82 \%$ | $0.67 \%$ | $1.00 \%$ | $1.49 \%$ |
| $\quad$ Asset Yield | $4.63 \%$ | $4.81 \%$ | $4.69 \%$ | $4.73 \%$ | $4.95 \%$ |
| $\quad$ Cost of Funds | $3.99 \%$ | $4.02 \%$ | $4.12 \%$ | $3.83 \%$ | $3.49 \%$ |
| Core ROAA | $-26.44 \%$ | $-0.27 \%$ | $-0.89 \%$ | $-0.44 \%$ | $0.21 \%$ |
| Core ROAE | $-945.55 \%$ | $-6.81 \%$ | $-24.21 \%$ | $-12.79 \%$ | $6.67 \%$ |
| Overhead | $2.40 \%$ | $1.81 \%$ | $1.72 \%$ | $1.86 \%$ | $1.85 \%$ |
| Efficiency | $163.51 \%$ | $153.97 \%$ | $125.47 \%$ | $73.37 \%$ | $75.95 \%$ |

Source: Company reports; Lehman Brothers estimates.

The main problem is that TMB's net asset quality position has not improved in the past year-even though gross NPLs are down by $11 \%$ year on year and weighted classifications have fallen from $9.89 \%$ to $8.91 \%$ over the same period, indicating that the average severity of NPLs has declined.

## Rates \& Margins:

TMB's net interest margin remains low at $1.49 \%$, but has come up sharply since the beginning of the year. In part this is due to a rise in asset yield—an anomaly among the Thai banks in our universe. As foregone interest from classified loans has not changed materially, we believe that the increase has come primarily from growth in performing loans-another mark of distinction in Thailand. Assuming that performing loans have an average incremental net yield of 400bp over securities and interbank, incremental loan growth in 1 HO 1 alone should be responsible for a 24 bp increase in asset yield, versus the 25 bp actually experienced. Note that asset yield remains lower than that of two of the three major banks, however.

On the liability side, TMB has been reducing its cost of funds; we believe that the bank will continue to have an elevated COF due to high-cost debt instruments on the balance sheet, but the reduction has contributed to increased spread. Spread improvements are outpacing margin gains as deposits expand quickly: we are curious as to whether this indicates liquidity issues or is just an opportunity for better balance sheet management.

Figure 64: TMB—Net Interest Margin Components

|  | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: |
| Change in Asset Yield | $-0.11 \%$ | $0.04 \%$ | $0.21 \%$ |
| Change in Cost of Funds | $0.09 \%$ | $-0.29 \%$ | $-0.33 \%$ |
| Change in NIM | $-0.15 \%$ | $0.33 \%$ | $0.49 \%$ |
|  |  |  |  |
| Loan Growth (QoQ) | $-1.2 \%$ | $0.7 \%$ | $1.6 \%$ |
| Deposit Growth (QoQ) | $1.3 \%$ | $3.8 \%$ | $6.1 \%$ |
| Soure Comper |  |  |  |

Source: Company reports; Lehman Brothers estimates.

## Loan Growth:

TMB has posted QoQ growth in performing loans during five of the past six quarters, indicating that the bank is taking market share. We have seen numerous initiatives from TMB over this period, including micro-lending programs aimed at financing small shopowners, the introduction of a new "Top Brass" premium credit card available only to current and retired senior military officers, and a reduction in turnaround time for documentation on export loans which has increased usage of credit lines. Management comments that they aim "to ensure that our biggest clients would be provided with the necessary documentation within four hours, smaller customers in about six to eight hours."

In 1HO1, management reports that total originations were approximately THB12 billion, which resulted in balance increases of THB6 billion. The bank is targeting total originations of THB3O billion for the full year, implying $8.2 \%$ growth in performing loans in 2 HOl . If achieved (without, of course, compromising credit quality) this will be an excellent achievement given the poor economic conditions and slack overall loan growth prevailing in Thailand.

Figure 65: TMB-Loan Growth and Performing Loan Growth

|  | 1Q00 | 2Q00 | 3Q00 |  | 4Q00 | 1Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2Q01 |  |  |  |  |  |  |
| Loan Growth (QoQ) | $3.1 \%$ | $-10.3 \%$ | $2.3 \%$ | $-1.2 \%$ | $0.7 \%$ | $1.6 \%$ |
| Performing Loan Growth (QoQ) | $1.2 \%$ | $1.2 \%$ | $4.4 \%$ | $-1.9 \%$ | $5.3 \%$ | $6.8 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Asset Quality and Reserve Adequacy:

As stated above, gross NPLs at TMB have been both coming down and becoming less severely classified. However, reserves have also been declining despite continued provisioning, indicating that much of the net change is due to write-offs rather than to any improvement in underlying asset quality.

Figure 66: TMB—Asset Quality Summary

| THB, MM | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Gross NPLs | 113,528 | 112,129 | 112,423 | 106,321 | 101,043 |
| NPLs/Loans | $43.5 \%$ | $42.0 \%$ | $42.6 \%$ | $40.0 \%$ | $37.4 \%$ |
| NPL Coverage | $9.9 \%$ | $10.4 \%$ | $9.7 \%$ | $8.8 \%$ | $8.9 \%$ |
|  |  |  |  |  |  |
| Weighted Classification Ratio | $25.4 \%$ | $25.1 \%$ | $24.6 \%$ | $25.2 \%$ | $22.3 \%$ |

Source: Company reports; Lehman Brothers estimates.

Figure 67: TMB-Write-offs and Implied Loss Ratio

| THB, MM | TMB |
| :--- | :---: |
| Starting Reserve: 2Q00 | 11,230 |
| Provisions: 3Q00-2Q01 | 1,009 |
| Ending Reserve: 2Q01 | 9,002 |
|  |  |
| Implied Net Write-offs | 3,237 |
| Change in Gross NPLs | $(12,486)$ |
| Implied Loss Ratio | $25.9 \%$ |

Source: Company reports; Lehman Brothers estimates.

Note that the implied loss ratio assumes that no loans were upgraded to performing status during this period (i.e., there were zero restructurings), and that no recoveries on past write-downs were taken. Even under these heroic assumptions the actual loss sustained was $25.9 \%$, or almost $3 \times$ TMB's reserve coverage of remaining NPLs. Furthermore, we believe based on consistent reports from other bankers that the "easy" NPLs have already been restructured, and that what remains will be considerably more difficult to cure.

Our standard model for predicting future losses and reserve adequacy shows a required allowance of THB64 billion for TMB, against which the bank holds just THB9 billion in actual reserves, or $14 \%$ of required. The shorffall of THB55 billion is $4.6 \times$ book equity. This ratio has been rising for some time.

While the TAMC was once expected to remove the bulk of TMB's NPLs, the bank now expects to transfer at most THB8.9 billion in bad loans to the government corporation.

Figure 68: TMB—Reserve Adequacy Calculation: 2Q01

|  | Gross <br> Amount | Reserve <br> Percentage | Required <br> Reserve |
| :--- | ---: | ---: | ---: |
| Pass | 182,094 | $1 \%$ | 1,821 |
| Special Mention | 14,937 | $5 \%$ | 747 |
| Substandard | 16,624 | $20 \%$ | 3,325 |
| Doubtful | 10,566 | $50 \%$ | 5,283 |
| Loss | 51,049 | $100 \%$ | 51,049 |
| ORE | 7,867 | $20 \%$ | 1,573 |
| Excess AIR | 1,623 | $20 \%$ | 325 |
|  |  |  |  |
| Total | 284,760 |  | 64,122 |
|  |  |  |  |
| Actual Reserves |  |  | 9,002 |
| Shortfall |  |  | 55,120 |
| Actual/Required |  |  | $14 \%$ |
| Shortfall/Capital |  |  | $462 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Valuation:

TMB trades at $1.7 x$ stated book and $1.8 x$ adjusted book, but reserve underfunding makes this measure moot. On a deposit franchise basis, the bank trades at a $21.7 \%$ premium on its deposit base-far too high.

Figure 69: TMB—Deposit Premium Valuation Detail

| THB, MM | 2Q01A |
| :--- | ---: |
| Market Capitalization | 20,015 |
| Less: Adjusted Book Value | $(10,944)$ |
| Plus: Reserve Underfunding | 55,120 |
| Implied Franchise Value | 64,191 |
| Total Deposits | 295,552 |
| Deposit Premium | $21.7 \%$ |

[^5]Figure 70: TMB Summary Sheet


## Industrial Finance Corp. of Thailand

Closer To Banks, But Still Distinct


## Investment conclusion

- IFCT has revamped its strategy to be more like its commercial bank rivals, but still has poor operating performance. Maintain 3-Market Perform.
- IFCT has applied for additional powers, including the ability to take deposits from its upper-tier SME customers.
- The bank is doing this in an attempt to lower its cost of funds, and thus reverse its negative net interest margin.
- IFCT would benefit from the TAMC, but is not eligible under the current enabling legislation, and will probably have to petition the MOF for inclusion.


## Bank Charter and Change of Strategy:

Contrary to some published reports, IFCT does not wish to become a commercial bank and is not seeking the issuance of a new charter. However, management has petitioned the Ministry of Finance for permission to offer additional products: deposit accounts and foreign exchange facilities. IFCT as presently constituted does not take deposits but issues debentures and other fixed income securities in order to fund itself. Although the MOF has approved these changes (which will be expressed as changes to the IFCT Act rather than via a new charter), they must now be approved by the Cabinet.

New deposit products will be offered through all of IFCT's 35 branches, and management plans to use its deposit license to attract additional funding rather than to replace existing debenture sales. The main rationale is to lower IFCT's cost of funds, a perennial problem.

Additionally, these new products are intended to help IFCT hang on to its "upper-end SME" clientele now that commercial banks are hungry enough for loan growth to begin encroaching on the bank's historic turf. Management remains adamant that they do not want IFCT to become a bank which services all SMEs a role that the institution was offered by the Thaksin administration but which it managed to resign in favor of SIFCT.

## TAMC Participation Not Assured:

Due to its special status, IFCT is not covered under the existing bill establishing the Thai National Asset Management Corporation (TAMC) either as a state bank or a private institution. Management states that they will have to request approval to participate from the MOF in order to sell loans to the TAMC. The bank is currently studying whether to do so, but management described their initial conclusions as favorable towards TAMC participation.

Based on the current criteria, IFCT would have approximately THB1O billion in gross eligible assets, or $29 \%$ of total criticized assets; the net figure is not known but is estimated at THB6 billion.

## 2Q01 Earnings Analysis

IFCT reported net income of THB25.3 million (THBO.02 per share) in 2Q01, only the bank's second profit since 4Q98. It will come as no surprise that this profit came on nominal provisions and adjustments for minority interest, as pre-provision income continued to be negative. IFCT continues to be relatively parsimonious on the expense front, with overhead running at only $0.35 \%$ of assets, but this can not offset weak top line margins.

| Figure 71: IFCT—Key Earnings Components |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| THB, MM | $\mathbf{2 Q 0 0}$ | $\mathbf{3 Q 0 0}$ | $\mathbf{4 Q 0 0}$ | $\mathbf{1 Q 0 1}$ | $\mathbf{2 Q 0 1}$ |
| Net Interest Income | $(492)$ | $(510)$ | $(509)$ | $(107)$ | $(89)$ |
| Pre-Provision Profit | 23 | $(476)$ | $(728)$ | $(2)$ | $(24)$ |
| Provisions | 182 | 1 | 98 | 3 | 3 |
| Net Income | $(159)$ | $(499)$ | $(797)$ | 22 | 25 |
| EPS (Bt) | $(0.14)$ | $(0.43)$ | $(0.69)$ | 0.02 | 0.02 |

Source: Company reports; Lehman Brothers estimates.

Figure 72: IFCT—Key Earnings Ratios

|  | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| NIM | $-1.20 \%$ | $-1.26 \%$ | $-1.25 \%$ | $-0.25 \%$ | $-0.20 \%$ |
| $\quad$ Asset Yield | $5.34 \%$ | $5.26 \%$ | $4.89 \%$ | $5.35 \%$ | $4.66 \%$ |
| $\quad$ Cost of Funds | $6.56 \%$ | $6.35 \%$ | $6.03 \%$ | $5.55 \%$ | $4.81 \%$ |
| Core ROAA | $-0.32 \%$ | $-0.96 \%$ | $-2.16 \%$ | $-0.31 \%$ | $-0.09 \%$ |
| Core ROAE | $-5.13 \%$ | $-17.27 \%$ | $-44.58 \%$ | $-6.91 \%$ | $-2.27 \%$ |
| Overhead | $0.35 \%$ | $0.42 \%$ | $0.68 \%$ | $0.41 \%$ | $0.37 \%$ |
| Efficiency | $86.44 \%$ | $-56.13 \%$ | $-61.04 \%$ | $101.31 \%$ | $117.12 \%$ |

[^6]
## Rates \& Margins:

IFCT's net interest margin and spreads remain negative, with NIM improving by 5bp to $-0.20 \%$ in the quarter. Asset yields have seen a precipitous fall in recent quarters, declining by almost 70bp in 2Q01 alone. Although funding costs are more than keeping pace, IFCT continues to pay considerably more for its funding than do other major commercial banks, despite the bank's development role and access to concessional funds.

During 1 Q01, the corporation took advantage of low interest rates to refinance $\mathrm{B}+11$ billion of debentures with a coupon rate of $9 \%$ or higher, issuing new $4 \%$ one-year and $5 \%$ three-year notes, which should help continue to reduce funding costs going forward, but improvements elsewhere will be slow.

Figure 73: IFCT—Net Interest Margin Components

|  | 4Q00 |  | 1Q01 |
| :--- | ---: | ---: | ---: | 2Q01 |  | $-0.37 \%$ | $0.46 \%$ | $-0.69 \%$ |
| :--- | :--- | ---: | :--- |
| Change in Asset Yield | $-0.32 \%$ | $-0.48 \%$ | $-0.74 \%$ |
| Change in Cost of Funds | $0.01 \%$ | $1.00 \%$ | $0.05 \%$ |
| Change in NIM |  |  |  |
|  | $6.2 \%$ | $0.7 \%$ | $1.3 \%$ |
| Loan Growth (QoQ) | $3.4 \%$ | $3.2 \%$ | $4.8 \%$ |
| Deposit Growth (QoQ) |  |  |  |

Source: Company reports; Lehman Brothers estimates.

## Asset Quality:

Asset quality remains worse than at year-end, but shows some signs of improvement from 1Q01. Management reports that restructured NPL relapses are now at around the $10 \%$ level, up from 5-6\% in FY2000, which may lead to bad assets re-entering the bank's books at a faster rate than they can be restructured in the future.

Note also that even though gross NPLs are declining, their relative severity as measured by the weighted classification ratio is increasing-yet reserve coverage is remaining the same.

Figure 74: IFCT—Asset Quality Summary

| THB, MM | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Gross NPLs | 40,199 | 38,378 | 35,638 | 39,485 | 38,012 |
| NPLs/Loans | $28.2 \%$ | $26.3 \%$ | $23.0 \%$ | $25.3 \%$ | $24.1 \%$ |
| NPL Coverage | $26.4 \%$ | $27.3 \%$ | $28.2 \%$ | $24.6 \%$ | $24.6 \%$ |
|  |  |  |  |  |  |
| Weighted Classification Ratio | $20.4 \%$ | $19.6 \%$ | $16.1 \%$ | $18.0 \%$ | $18.1 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Reserve Coverage:

IFC's reserve coverage remains low; by our model of required reserves the bank has provisioned only $30 \%$ of its required level, with the remaining shoriffall equal to over $2.6 x$ equity. Management highlighted to us that the bank has received approval from the MOF to study raising capital via an equity offering or Tier 2 issue, but we suspect that
neither one is practicable-straight equity because the markets would not be receptive and Tier 2 debt because it is too expensive.

Figure 75: IFCT—Reserve Adequacy Calculation: 2Q01

|  | Gross <br> Amount | Reserve <br> Percentage | Required <br> Reserve |
| :--- | ---: | ---: | ---: |
| Pass | 128,866 | $1 \%$ | 1,289 |
| Special Mention | 4,366 | $5 \%$ | 218 |
| Substandard | 1,079 | $20 \%$ | 216 |
| Doubtful | 2,588 | $50 \%$ | 1,294 |
| Loss | 26,769 | $100 \%$ | 26,769 |
| ORE | 3,210 | $20 \%$ | 642 |
| Excess AIR | 3,819 | $20 \%$ | 764 |
|  |  |  |  |
| Total | 170,697 |  | 31,192 |
|  |  |  |  |
| Actual Reserves |  |  | 9,367 |
| Shortfall |  |  | 21,824 |
| Actual/Required |  |  | $30 \%$ |
| Shortfall/Capital |  |  | $266 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Loan Growth:

IFCT has bucked the tide on loan growth, managing to show increases in both total loans and performing loans on a fairly consistent basis-making it somewhat odd that asset yields have come off so sharply. We do note that the IFCT has largely continued in its development role, providing loans to projects at concessionary interest rates. High profile loans this year include a B+454 million loan at $3.25 \%$ interest for construction of a rice-husk burning power plant and $\mathrm{B}+240$ million for the development of two projects in the already crowded hotel sector.

We believe that IFCT, like other governmentrun banks, has experienced pressure to take part in the government's directed lending initiatives aimed at spurring on the economy—a tricky business in the best of times.

Figure 76: IFCT—Loan Growth and Performing Loan Growth

|  | 1Q00 | 2Q00 | 3Q00 | 4Q00 | 1Q01 | 2Q01 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Loan Growth (QoQ) | $2.0 \%$ | $2.8 \%$ | $2.2 \%$ | $6.2 \%$ | $0.7 \%$ | $1.3 \%$ |
| Performing Loan Growth (QoQ) | $12.8 \%$ | $2.7 \%$ | $4.3 \%$ | $10.4 \%$ | $-2.0 \%$ | $3.0 \%$ |

Source: Company reports; Lehman Brothers estimates.

## Valuation:

IFCT shares currently trade at 0.74 x book and 0.80 x adjusted book value. Book value is negative after subbracting reserve underfunding, making this measure an ambiguous one at best. With losses expected into next year, IFCT is also relatively unsusceptible to earnings valuation measures as well.

Figure 77: IFCT——Deposit Premium Valuation Detail

| THB, MM | 2Q01A |
| :--- | :---: |
| Market Capitalization | 6,040 |
| Less: Adjusted Book Value | $(7,530)$ |
| Plus: Reserve Underfunding | 21,061 |
| Implied Franchise Value | 19,571 |
|  |  |
| Total Deposits/Debentures | 179,921 |
|  |  |
| Deposit Premium | $10.9 \%$ |

Source: Company reports; Lehman Brothers estimates.

Using our deposit franchise calculation, we find that a theoretical acquisitor of IFCT would pay a $10.9 \%$ premium on IFCT's debenture funding base, which we consider somewhat equivalent to deposits for purposes of assessing franchise value.

Figure 78: IFCT Summary Sheet


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Key to Investment Ronkings: This is a guide to expected total return (price performance plus dividend) relative to the total return of the stock's local market over the next 12 months. $1=$ Strong Buy (expected to outperform the market by 15 or more percentage points); $2=$ Buy (expected to outperform the market by $5-15$ percentage points); $3=$ Market Perform (expected to perform in line with the market); $4=$ Market Underperform (expected to underperform the market by 5-15 percentage points); $5=$ Sell (expected to underperform the market by 15 or more percentage points); $\mathbf{V}=$ Venture (return over multiyear time frame consistent with venture capital; should only be held in a well-diversified porffolio).

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[^0]:    Source: Company reports; Lehman Brothers estimates

[^1]:    Source: Company reports; Lehman Brothers estimates

[^2]:    Source: Company reports; Lehman Brothers estimates

[^3]:    Source: Company reports; Lehman Brothers estimates

[^4]:    Source: Company reports; Lehman Brothers estimates.

[^5]:    Source: Company reports; Lehman Brothers estimates

[^6]:    Source: Company reports; Lehman Brothers estimates

