November 29, 2000

Asian Banks
Thailand

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THAILAND

BANGKOK BANK HITS THE ROCKS:

SHOULD INVESTORS ABANDON SHIP?

Ticker: (Foreign)	BBL/F.BK
Rating:	**4-Market Underperform**
Price:	Bt39.25
52-Week Range:	Bt28.00-112.00
Ticker: (Local)	BBL.BK
Rating:	**3-Market Perform**
Price:	Bt27.00
52-Week Range:	Bt21.50-67.50

Source: Lehman Brothers.

- **Beware False Profits:** Bangkok Bank (BBL) has heralded its return to reported earnings in the second and third quarters after eight straight quarters of losses – but these earnings are not real. Underprovisioning and securities gains have permitted the bank to record bottom line profits, but on an operating basis the bank remains unprofitable. BBL will not be able to restore its capital base or make appropriate provisions through earnings in the foreseeable future.

- **It's Still About the Bad Assets:** For all the attempts to sell the results, restructure loans at off-market rates, and present an improving picture, BBL remains at 28% net NPLs/Loans, more than three years into the crisis. Staggering provisions of Bt178 billion made during this period are almost completely gone, with current reserves totalling less than Bt18 billion.

- **Reserves are Grossly Inadequate:** By our model, BBL requires additional loan loss provisions of Bt170 billion – equivalent to all the bank's remaining capital 6.4x over. Current reserves cover only 9% of our required amount.

- **BBL is Relying on 85% Recovery:** For the bank to be solvent at its disclosed level of NPLs (which we consider to be low), it will need to achieve 85% recovery on all NPLs – an unprecedented level. Our model estimates a 22% NPV recovery, while the recent Thai Danu sale of an NPL portfolio at 27% of face value would seem to confirm that real recoveries will be much lower than the level required to preserve capital at BBL. *(see figure 6 on page 9)*

- **Remain Underweight Thai Banks:** The best buy in the sector continues to be **SCB**, with the preferred shares still offering some downside protection. BBL is still overvalued given its degree of insolvency, and investors should particularly avoid the foreign shares, as the high premium is unsustainable.

Bangkok Bank Hits The Rocks:
Should Investors Abandon Ship?

November 29, 2000 Paul Sheehan

Figure 1: Bangkok Bank Hits The Rocks
Thai Bank Coverage and Ratings

Bank	Tickers (Local/Foreign)	Price (L)	Price (F)	Ratings
Bangkok Bank	BBL.BK / BBL/F.BK	27.00	39.25	3/4
Bank of Ayudhya	BAY.BK / BAY/F.BK	5.40	5.40	4/4
IFCT	IFCT.BK / IFCT/F.BK	5.80	5.80	NR/3
Krung Thai Bank	KTB.BK / KTB/F.BK	11.50	11.50	NR/4
National Finance PCL	NFS.BK / NFS/F.BK	5.70	6.10	3/3
Siam Commercial Bank	SCB.BK / SCB/F.BK	20.25	20.25	NR/3
Preferred	SCB/P.BK / SCB/Q.BK	20.50	20.25	3/3
Thai Farmers Bank	TFB.BK / TFB/F.BK	20.25	22.75	3/3
Thai Military Bank	TMB.BK / TMB/F.BK	5.80	5.80	NR/4

Source: Lehman Brothers.

"Trust not to appearances."

—Jacob Cats, Moral Emblems, 1632.

INVESTMENT SUMMARY

Bangkok Bank Offers Risk Without Reward

We continue to be bearish on BBL, with the most recent quarter's financial statements confirming that the bank's massive insolvency remains, due to underfunding of the loan loss reserve. Based on the bank's own reporting of its NPLs, we calculate the deficiency at Bt170 billion, or 6.4x the bank's entire remaining capital.

Even without considering the loss allowance, BBL has an insufficient level of capital to operate in a prudent manner, with equity to assets of only 2.2% – the lowest of any Thai bank. We see no way for the bank to raise further equity funds from international investors at this time. While we do consider BBL a good candidate to raise upper Tier 2 capital[1], this expensive form of debt will not help the bank's anemic margins, and can not be raised in quantities sufficient to cover the bank's capital shortfall. Whatever happens, we see existing equity investors' stakes being diluted away.

BBL has trumpeted its return to reported earnings in the second and third quarters after eight straight quarters of losses – but these earnings are not real. Underprovisioning and securities gains have permitted the bank to record bottom line profits, but on an operating basis the bank remains unprofitable. BBL will not be able to restore its capital base or make appropriate provisions through earnings in the foreseeable future.

For the bank to be solvent at its disclosed level of NPLs (which we consider to be low), it will need to achieve 85% recovery on all NPLs – an unprecedented level. Our model estimates a 22% NPV recovery, while the recent Thai Danu sale of an NPL portfolio at 27% of face value would seem to confirm that real recoveries will be much lower than the level required to preserve capital at BBL. *(see figure 6 on page 9)*

Foreign Competition is an Imminent Threat to the Bank's Position

Given the arrival of foreign banks on the scene (UOB/Radanasin, DBS/Thai Danu, ABN AMRO/Bank of Asia, HSBC/Bangkok Metropolitan), BBL has a limited window of opportunity in which to make a radical turnaround, lest it be left behind and marginalized by deep-pocketed global players. Low loan demand will make this an uphill battle.

A Political Solution is Necessary (But Perhaps Not Sufficient)

We continue to believe that the Thai banks require immediate and meaningful government intervention, as the public sector appears to be the only entity capable of injecting the necessary capital into the banks, particularly those with weak franchises. If BBL gets a Krung Thai-like solution, it may yet preserve its market position. However, while we believe that the government will save the bank, it's a stretch to assume that it will bail out existing investors as well.

Maintain Negative Outlook

We maintain our **4-Market Underperform** rating on the foreign shares and **3-Market Perform** rating on the local shares.

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[1] For full details please refer to our report: *Thai Bank Upper Tier 2: Can the Banks Afford the Capital they Need?*, dated September 27, 2000.

ASSET QUALITY

Poor Asset Quality Remains BBL's Major Problem

BBL's asset quality is, of course, poor – as with every other domestic commercial bank in the Thai sector. In fact, BBL's non-performing assets, or NPAs, (non-performing loans plus foreclosed property, or ORE) are actually slightly below those of its large bank peers on a reported basis, at 31.5% of total loans. However, the institution's loan portfolio contains a higher percentage of more-severely classified credits, as evidenced by a weighted classification ratio which is higher than that of any other bank save TFB. Particularly worrisome is the distribution of nonperforming assets among the classification categories. Fully 76% of all impaired assets are in the "Loss" category, which implies that there will be virtually no return from these loans. When combined with the "Doubtful" category, the most seriously categorized loans account for over 84% of all nonperforming assets.

Figure 2: Bangkok Bank Hits The Rocks
Thai Bank Comparative Asset Quality

	BBL	TFB	SCB	KTB	TMB	BAY
Total Assets	1,216.4	763.1	703.2	993.3	337.1	435.0
Total Loans	746.4	510.9	485.7	432.8	267.1	328.9
Total Equity	26.5	25.4	54.3	66.3	13.6	14.6
Equity / Assets	2.2%	3.3%	7.7%	6.7%	4.0%	3.4%
NPLs / Loans	31.5%	38.0%	35.4%	33.8%	42.0%	31.0%
Weighted NPLs	24.4%	30.1%	22.0%	23.2%	25.4%	21.7%
Reserve Coverage	7.5%	27.8%	14.5%	35.4%	10.4%	8.7%

Source: Company reports and Lehman Brothers Asia estimates.

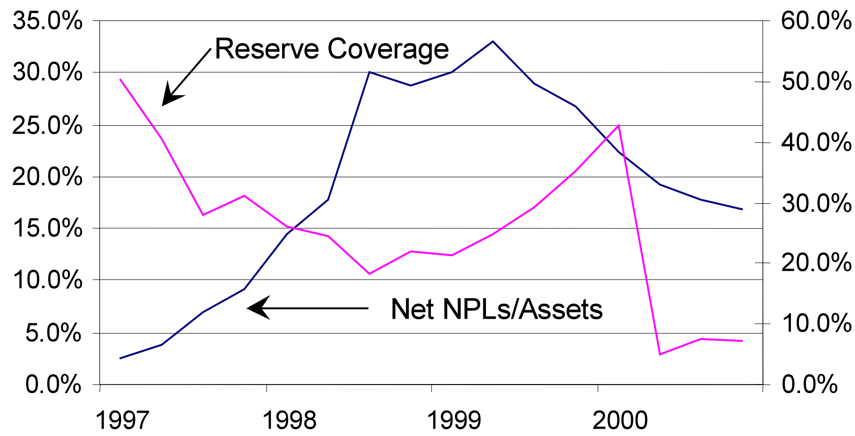
NPL Trends Show Some Progress – and Some Backsliding

NPAs peaked at 58.0% of total loans in 2Q99, and have declined steadily since that time due mainly to write-offs. In addition, the bank has restructured over Bt109 billion in loans, excluding asset settlements and in-substance foreclosure. However, post the last big write-off in 2Q00, NPLs have been more stubborn, perhaps because management has less ability to agree to restructurings which might require write-downs given the sharp fall in gross reserves – from Bt194 billion at 1Q00 to only Bt18 billion currently. Headline information from the October release indicates that NPAs at the bank have actually begun to rise again, a disturbing signal.

Reserve Coverage is Extremely Minimal

Where the bank really falls short vis-a-vis its peers is in its reserve coverage of these NPAs. BBL's reserve coverage of NPLs is only 7.5% – the lowest in the sector. Competitors SCB and TFB have reserve coverage of 1.9x and 3.7x BBL's, respectively, which makes their portfolios much less risky and mitigates their insolvency.

Figure 3: Bangkok Bank Hits The Rocks
Net NPLs / Assets (LHS) and Reserve Coverage (RHS)



Source: Company reports and Lehman Brothers Asia estimates.

Reserve Adequacy

We believe that Bangkok Bank is dangerously under-reserved, with actual reserves totalling only 9% of our theoretical required amount, which is based on international standards. The shortfall of Bt170 billion is equivalent to 6.4x BBL's entire remaining book capital, leaving the bank massively insolvent if proper reserves are made. It is evident that BBL will not be able to take appropriate steps to clear this shortfall without a significant capital infusion.

We have assessed BBL’s loan loss reserve adequacy using our standard methodology, which incorporates reserves both for identified problem assets and for future unidentified risks residing within the portfolio of Pass, or current, loans.

Figure 4: Bangkok Bank Hits The Rocks
Loan Loss Reserve Adequacy

At 9/30/00	Gross Amount	Reserve Percentage	Required Reserve
Loan Portfolio			
Pass	529,158.4	1%	5,291.6
Special Mention	24,244.2	5%	1,212.2
Substandard	10,797.4	20%	2,159.5
Doubtful	17,565.2	50%	8,782.6
Loss	167,101.3	100%	167,101.3
ORE (Foreclosed Property)	15,242.3	20%	3,048.5
Excess Accrued Interest Receivable	-	20%	-
Total	764,108.8		187,595.6
Actual Reserves			
Loan Loss Reserves			16,867.4
ORE Reserves			865.2
Total			17,732.7
Reserve Shortfall			169,863.0
Actual Reserves / Required			9.0%
Shortfall / Book Equity			640.2%

Source: Company reports and Lehman Brothers Asia estimates.

Calculation Methodology

We divided BBL's loan portfolio into the international standard categories of Pass (performing), Special Mention, Substandard, Doubtful, and Loss, with Loss comprising both the Bank of Thailand's (BOT) Doubtful of Loss classification and loans classified as Uncollectable. Note that this analysis accepts the bank's internal classification of its own loans, which we believe to be more lenient than the standards applied outside of Thailand.

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 Doubtful; 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.

Collateral is the Key Issue

The difference between our calculation of reserves and that of the BOT basically comes down to the issue of collateral. In mid-1999, the BOT reversed a portion of its stance on loan loss provisioning requirements for NPLs, loosening provisioning requirements for performing and special mention loans. Previously, these better quality loans required provisions of 1% and 5%, respectively, on a whole loan basis. While the percentage still holds, the provision is now on a "net of collateral basis" – similar to that of loans classified substandard, doubtful and loss. This methodology is not in general use by other bank regulators. The reasons are obvious: even the presence of theoretical collateral on most loans in Thailand has not prevented massive defaults, nor has it significantly reduced losses. For this reason, we classify all loans on a gross-of-collateral basis, as do most regulatory agencies worldwide.

In addition, we see issues with respect to the subjective valuation of unmarketable, unattachable, or illiquid collateral. The Thai system virtually invites banks to overvalue collateral in order to lower their capital requirements (a necessity for survival), which perversely provides incentives not to foreclose, and not to sell seized collateral as this would result in a realized loss. Overall, provisioning standards illustrate the inability of the sector to meet the most minimal capital standards.

Collateral values are basically meaningless if banks have neither the intention nor the ability to foreclose on their problem assets. However, since the BOT requires provisions on a net-of-collateral basis and not based on a borrower's willingness and ability to repay, we are forced to investigate collateral values. Despite the brouhaha surrounding the passage of improved bankruptcy laws in Thailand, Thai foreclosure laws have been left largely intact. Although this has meant that bankers are unable to foreclose on much of the collateral securing their NPLs, it has in some ways been a perverse blessing, as the lack of ability to seize and sell impaired collateral has kept the market from clearing at what we suspect would be a level significantly below that now assumed by banks for purposes of reserve adequacy calculations.

LIQUIDITY REMAINS STRONG

Systemic Guarantees Prevent Failure

NPLs and negative capital are not the proximate causes of bank failure, although they are usually at the root of the problem. The real culprit is liquidity, and on this score the BOT has been able to maintain public confidence in the banking system. Despite the persistent level of technical insolvency in the banking sector, the resultant high level of liquidity is preventing a string of bank failures, including that of BBL. The BOT is well aware of this phenomenon and has not moved to close many of its large banks, a forbearance which we do not expect to change.

For these reasons, we believe that there is essentially no chance that BBL will experience a damaging liquidity event which would threaten its operating survival, nor do we believe that the bank will cease performance on any of its fixed income obligations.

CAPITAL

Bangkok Bank is Beyond Insolvency

BBL has the lowest book capital base of any Thai bank, with equity to assets now at 2.2%. This is below the margin of safety even for a clean bank which is well run, and in the case of Bangkok Bank it amounts to no cushion at all. Even worse, 40% of book equity is in the form of property revaluation, which we normally discount as a form of capital (see *Valuation* section, on page 13).

If we assume that BBL must meet its reserve requirements and provide an adequate capital base for further operations, this means that the bank will need Bt180–200 billion in additional equity – equivalent to approximately 50% of all Tier 1 equity raised for private Thai banks since the onset of the crisis (see figure 5).

ALL PLAUSIBLE SCENARIOS LEAD TO BANKRUPTCY

What if We're Wrong About Recoveries?

As you can see from figure 6, our estimate of recoveries (~22%) as implicit in our reserve calculations, is fairly close to the 27% realized by Thai Danu in the most recent NPL sale. However, feel free to choose your own scenarios using the attached table.

Note that even if you accept BBL's estimate of NPLs as accurate, the bank would have to realize an 85% recovery rate on all impaired assets in order to retain any book capital whatsoever.

Figure 5: Bangkok Bank Hits The Rocks
Bank and Finance Company Capital Raisings 1998–2000

	1998			1999			1H2000			Total
Institution:	Tier 1	Tier 2	Total	Tier 1	Tier 2	Total	Tier 1	Tier 2	Total	1/98-6/00
Private banks:										
Bangkok Bank	43,245	-	43,245	34,500	1,384	35,884	-	-	-	79,129
Thai Farmers Bank	33,088	-	33,088	43,530	20,000	63,530	-	-	-	96,618
Bank of Ayudhya	5,000	8,000	13,000	30,000	6,500	36,500	-	-	-	49,500
Siam Commercial Bank	2,652	6,000	8,652	65,000	5,787	70,787	-	667	667	80,106
Thai Military Bank	5,016	6,000	11,016	9,960	742	10,702	29,880	-	29,880	51,598
DBS Thai Danu Bank	6,000	-	6,000	12,000	206	12,206	13,500	1,077	14,577	32,783
Standard Chartered Nakornthon	672	-	672	7,001	-	7,001	-	-	-	7,673
Bank of Asia	7,500	-	7,500	13,043	2,000	15,043	-	-	-	22,543
UOB Radanasin	19,793	-	19,793	-	-	-	-	-	-	19,793
Total	122,966	20,000	142,966	215,034	36,619	251,653	43,380	1,744	45,124	439,743
State-owned banks:										
Krung Thai Bank	97,000	-	97,000	108,000	-	108,000	-	-	-	205,000
Siam City Bank	51,400	-	51,400	-	-	-	-	-	-	51,400
Bangkok Metropolitan Bank	64,190	-	64,190	-	-	-	-	-	-	64,190
Bank Thai	41,414	-	41,414	45,568	-	45,568	-	-	-	86,982
Fisrt Bangkok City Bank	32,000	-	32,000	-	-	-	-	-	-	32,000
Bangkok Bank of Commerce	10,000	-	10,000	-	-	-	-	-	-	10,000
Total	296,004	-	296,004	153,568	-	153,568	-	-	-	449,572
Total Bank Capital Raised	**418,970**	**20,000**	**438,970**	**368,602**	**36,619**	**405,221**	**43,380**	**1,744**	**45,124**	**889,315**
Finance Company Capital Raised	**21,841**	**-**	**21,841**	**27,743**	**1,989**	**29,732**	**5,031**	**241**	**5,272**	**56,845**
Total Bank and FinCo Capital Raised	**440,812**	**20,000**	**460,812**	**396,345**	**38,608**	**434,953**	**48,411**	**1,985**	**50,396**	**946,161**

Source: Bank of Thailand.

Figure 6: Bangkok Bank Hits The Rocks

BBL Expected Loan Portfolio Losses: Scenario Grid

Expected Percentage Recovery

Non-Performing Assets		22%	27%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%
176,213	75% of Reported	137,446	128,635	123,349	114,538	105,728	96,917	88,106	79,296	70,485	61,674	52,864	44,053	35,243	26,432	17,621
187,960	80% of Reported	146,609	137,211	131,572	122,174	112,776	103,378	93,980	84,582	75,184	65,786	56,388	46,990	37,592	28,194	18,796
199,708	85% of Reported	155,772	145,787	139,796	129,810	119,825	109,839	99,854	89,869	79,883	69,898	59,912	49,927	39,942	29,956	19,971
211,455	90% of Reported	164,935	154,362	148,019	137,446	126,873	116,300	105,728	95,155	84,582	74,009	63,437	52,864	42,291	31,718	21,146
223,203	95% of Reported	174,098	162,938	156,242	145,082	133,922	122,762	111,601	100,441	89,281	78,121	66,961	55,801	44,641	33,480	22,320
234,950	**Actual Reported: 3Q00**	183,261	171,514	164,465	152,718	140,970	129,223	117,475	105,728	93,980	82,233	70,485	58,738	46,990	35,243	23,495
246,698	105% of Report[illegible]	192,424	180[illegible]	[illegible]2,689	160,354	148,019	135,684	123,349	111,014	98,679	86,344	74,009	61,674	49,340	37,005	24,670
258,445	110% of Rep[illegible]	201,587	188,66[illegible]	[illegible]912	167,990	155,067	142,145	129,223	116,300	103,378	90,456	77,534	64,611	51,689	38,767	25,845
270,193	115% of [illegible]d	210,751	197,241	[illegible]	175,625	162,116	148,606	135,096	121,587	108,077	94,568	81,058	67,548	54,039	[illegible]	27,019
281,941	120[illegible]orted	219,914	205,817	19[illegible]	[illegible]83,261	169,164	155,067	140,970	126,873	112,776	98,679	84,582	70,485	56,3[illegible]	[illegible]2,291	28,194
293,688	[illegible] Reported	229,077	214,392	205,582	190,897	176,213	161,528	146,844	132,160	117,475	102,791	88,106	73,422	[illegible]	44,053	29,369

Loss Based on Lehman Methodology **Loss Based on Thai Danu NPL Sale** **Shaded Area = Solvency on Reported Capital**

Source: Company reports and Lehman Brothers Asia estimates.

CAPITAL-RAISING

Prospects for Dilution are High

BBL has been able to maintain its regulatory capital due to an issuance during FY1999 of Bt46 billion of capital in the form of Capital Augmented Preferred Securities (CAPS). However, this form of capital is too expensive to rely on for the large amounts now in question, and it is a measure of the bank's desperation that it was used at all. We expect that BBL could raise some capital funds by issuing upper Tier 2 securities[2], but it is clear that the bank badly needs additional Tier 1 equity.

This presents two major issues: First, we do not believe that BBL could access the public markets for the amount of equity that it needs, nor do we believe that investors should subscribe to a rights offering or other issuance of new equity. Second, the probable effects of a new equity offering (on what would almost certainly be draconian terms) would be strongly negative for existing shareholders.

For these reasons, **we see no upside case for BBL equity**, as the downside is bankruptcy (or similar government receivership) while the upside is a marginal improvement sufficient to allow the bank to execute its oft-postponed equity offering and dilute existing shareholders away.

LOAN GROWTH

Loan Growth Continues Negative; No Strong Upturn Seen Through 2002

Loan growth over the past two years has been negative, even attempting to exclude the effects of write-offs. While we continue to forecast 2% growth through YE2000 and an average 4% and 5.5% growth rate for FY2001 and 2002 respectively, at the moment this estimate appears to be at least an optimistic scenario. This is a bitter pill for the bank, as any growth would help dilute NPLs and boost margins.

EARNINGS

We Estimate Continued Losses Through FY2002

BBL has begun to report profits, posting book gains in 2Q00 and 3Q00 after a string of losses trailing back to 1Q98. While the results have exceeded our bottom line projections, which called for losses, we contend that earnings have been created by securities gains and underprovisioning, and that the earnings capacity of BBL is parlous.

These overstated profits show that management remains under pressure to "window-dress" its accounts prior to its inevitable and imminent attempt at an equity offering.

BBL does retain a higher asset yield than its major peers, but the bank's ability to aggregate low-cost funding, as shown in figure 7, lags behind and contributes to its relatively lower ROE. While direct comparisons are not always valid, due to differences in the business mix of competing banks, this should be a source of concern for BBL investors and managers, particularly in the light of 3Q00's 33 basis point decline in net interest margin.

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[2] For full details please refer to our report: *Thai Bank Upper Tier 2: Can the Banks Afford the Capital they Need?*, dated September 27, 2000.

Figure 7: Bangkok Bank Hits The Rocks
Thai Bank Earnings Ratios

		BBL		TFB	SCB	KTB	TMB	BAY
	1Q00	2Q00	3Q00	3Q00	3Q00	3Q00	3Q00	3Q00
Yield on Earning Assets	6.13%	6.16%	5.84%	5.80%	5.62%	4.39%	4.81%	5.36%
Cost of Funds	4.09%	3.85%	3.87%	3.62%	3.39%	3.22%	4.02%	4.03%
Net Interest Margin	2.02%	2.30%	1.97%	2.17%	2.35%	1.34%	0.82%	1.27%
Core ROAA	-7.65%	0.05%	-0.46%	-0.51%	0.41%	-7.79%	-0.27%	0.30%
Core ROAE	-376.82%	4.26%	-35.97%	-19.39%	5.70%	-417.95%	-6.81%	10.03%
Overhead Ratio	1.96%	1.82%	2.13%	2.97%	2.48%	2.10%	1.81%	2.07%
Cost/Income Ratio	62.10%	53.60%	51.31%	87.53%	62.25%	134.85%	153.97%	129.02%

Source: Company reports and Lehman Brothers Asia estimates.

Net Interest Income still comes mainly from loans, although the effective yield on BBL's loan portfolio has dropped to only 6.0%, well below the Minimum Lending Rate (MLR) of 7.75%. We believe that this is due not only to the NPL portfolio, but to the effect of loans restructured at preferential rates. In order to quantify this foregone interest income, we made the following assumptions:

Figure 8: Bangkok Bank Hits The Rocks
Interest Income Components

3Q00, THB MMs	Interest Income:
On Loans	11,146.4
On Interbank and Money Market Items	2,644.4
On Govt Securities	2,353.6
On Other Securities	514.1
Total Interest Income	16,658.6

Source: Company reports and Lehman Brothers Asia estimates.

- **Performing Loans:** We assume that BBL's portfolio has an average yield of MLR + 1.5%.

- **Restructured Loans:** Based on the bank's financial statements, we believe that the net yield on restructured loans was Bt656 million, or a 2.4% yield.

- **NPLs:** Although termed non-performing, NPLs do have some partial yield, which we assume to be 1.5%.

On this basis, we estimate foregone interest income at Bt4.9 billion for the quarter, or 29% of realized interest income, based on normalization of restructured loans and NPLs to MLR. Had BBL actually earned this income, the bank would have recorded a net interest margin of 3.71%, with net income of Bt6.7 billion.

Figure 9: Bangkok Bank Hits The Rocks
Loan Portfolio Interest Breakdown

3Q00, THB MMs	Gross Amount	Rate	Income
Loans:			
Non-Performing	219,708.1	1.5%	823.9
Restructured	109,573.2	2.4%	656.2
Performing	417,113.9	9.3%	9,666.3
Total Loans	746,395.2	6.0%	11,146.4
Interbank and Money Market Items	145,041.9	7.3%	2,644.4
Securities	254,900.8	4.5%	2,867.7

Source: Company reports and Lehman Brothers Asia estimates.

VALUATION

Book Value and Adjusted Book Value

In order to compare Bangkok Bank and other Thai banks with the rest of our universe of Asian institutions, we have made 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 "cherry-pick" appreciated properties from a portfolio 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

Secondly, we have deducted loan loss reserve underfunding from adjusted book value to arrive at fully adjusted book value, which is negative for all of our covered Thai banks. This allows us to compare institutions within the market and across markets based on their underlying economics, and not on the timing of provisions or loss recognition, which is highly variable at management's discretion. As fully adjusted book is negative and thus a price-to-fully adjusted book measure not meaningful, we have presented only price-to-book and price-to-adjusted book throughout this report.

Valuation on Deposit Premium Basis

With our normal value touchstones in distressed markets – price-to-book and price-to-adjusted book – rendered less-than-accurate by the dominating effect of reserve underfunding, we have begun to compare 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 22.1% (although down from 31.8% at 1Q00) still standing out as rich compared with less-distressed markets. This despite an average price decline of 60% in Thai bank share prices year-to-date.

Note that even under this methodology BBL looks expensive compared with SCB, which we consider the strongest Thai bank.

Figure 10: Bangkok Bank Hits The Rocks
Adjusted Book Value Calculations

	9/30/00		12/31/01	
	Actual	Per Share	Estimated	Per Share
Stated Book Value	26,534.6	18.09	9,245.7	6.30
Less:				
Real Estate Revaluation	(10,524.3)	(7.18)	(10,341.4)	(7.05)
Reserve Underfunding	(169,863.0)	(115.83)	(131,083.5)	(89.39)
Excess Accrued Interest Receivable	-	-	-	-
Adjusted Book Value	(153,852.7)	(104.91)	(132,179.2)	(90.13)

Source: Company reports and Lehman Brothers Asia estimates.

Figure 11: Bangkok Bank Hits The Rocks
Thai Bank Price-to-Book Valuations

	BBL	TFB	SCB	KTB	TMB	BAY	Average
Quoted Price (For.)	39.25	22.75	20.25	11.50	5.80	5.40	
Book Value Per Share	18.09	8.77	17.35	3.02	3.41	7.88	
Adj. BVPS (excluding LLR Shortfall)	10.92	6.47	16.25	2.83	3.16	7.21	
Fully Adj. BVPS	(104.91)	(29.13)	(11.01)	0.48	(11.28)	(27.86)	
P/BV	2.17x	2.59x	1.17x	3.81x	1.70x	0.69x	2.02x
P/ABV	3.60x	3.51x	1.25x	4.06x	1.84x	0.75x	2.50x
P/FABV	NM	NM	NM	23.99x	NM	NM	NM

Source: Company reports and Lehman Brothers Asia estimates.

Figure 12: Bangkok Bank Hits The Rocks
Thai Bank Deposit Premium Valuations

	BBL	TFB	SCB	KTB	TMB	BAY	Average
Market Capitalization	57,560	65,973	63,392	252,828	23,217	9,992	
Less: Fully Adjusted Equity	(153,853)	(84,468)	(34,473)	10,540	(45,144)	(51,543)	
Total Firm Premium	211,413	150,441	97,865	242,287	68,362	61,535	
Total Deposits	1,007,385	637,909	585,163	845,923	265,060	362,449	
Deposit Premium	20.99%	23.58%	16.72%	28.64%	25.79%	16.98%	22.12%

Source: Company reports and Lehman Brothers Asia estimates.

Figure 13: Bangkok Bank Hits The Rocks
Earnings Model Summary: 1997–2002

	1997 Year Actual	1998 Year Actual	1999 Year Actual	2000 Year Estimated	2001 Year Estimated	2002 Year Estimated
INCOME STATEMENT						
Interest Income		112,951.4	65,621.2	68,115.5	73,272.4	79,347.8
Yield on Earning Assets		8.8%	6.0%	5.9%	6.2%	6.4%
Interest Expense		104,104.2	57,771.7	44,707.0	48,244.9	51,294.7
Cost of Interest-Bearing Liabilities		9.2%	5.2%	3.8%	4.0%	4.0%
Net Interest Income	45,424.3	8,847.2	7,849.4	23,408.6	25,027.5	28,053.0
Net Interest Margin	**3.95%**	**0.71%**	**0.66%**	**2.09%**	**2.14%**	**2.30%**
Non-Interest Income:	16,263.1	20,126.9	23,117.6	15,062.5	10,386.4	11,222.6
Fee Income	10,215.9	8,507.3	8,543.5	9,285.6	9,597.8	10,086.8
Dealing Profits	10,426.4	10,544.3	2,596.2	1,810.9	(205.8)	90.8
Securities Gains	(5,325.9)	782.6	11,252.58	3,163.3	-	-
Other Income	946.7	292.8	725.2	802.7	994.4	1,045.1
% of Average Earning Assets	1.4%	1.6%	2.0%	1.3%	0.9%	0.9%
% of Gross Earnings	26.4%	69.5%	74.7%	39.2%	29.3%	28.6%
Non-Interest Expense:	24,835.6	30,471.8	22,585.1	21,613.1	23,248.8	24,108.9
Salaries and Benefits	10,553.1	9,342.6	7,352.2	6,926.9	6,996.1	7,066.1
Premises and Equipment	3,206.2	3,450.4	3,586.9	3,577.9	3,662.3	3,811.0
Taxes and Duties	5,036.0	3,745.5	6,348.2	6,098.8	6,360.1	6,684.1
Other Expenses	6,040.3	13,933.4	5,297.8	5,009.5	6,230.3	6,547.7
Efficiency Ratio	40.3%	105.2%	72.9%	56.2%	65.6%	61.4%
Overhead Ratio	2.2%	2.4%	1.9%	1.9%	2.0%	2.0%
Net Income Before Taxes & Provisions	36,851.8	(1,497.7)	8,381.9	16,858.0	12,165.1	15,166.7
Loan Loss Provision	28,368.1	47,991.7	68,210.1	38,497.6	28,000.0	20,000.0
Net Income Before Taxes	8,483.7	(49,489.4)	(59,828.2)	(21,639.6)	(15,834.9)	(4,833.3)
Taxes	4,450.0	-	-	-	-	-
Tax Rate	52%	0%	0%	0%	0%	0%
Income Before Extraordinary Items	4,033.7	(49,489.4)	(59,828.2)	(21,639.6)	(15,834.9)	(4,833.3)
CORE EARNINGS	6,565.9	(50,272.0)	(71,081.7)	(25,093.8)	(15,834.9)	(4,833.3)
NET INCOME	**4,033.7**	**(49,489.4)**	**(59,829.1)**	**(21,785.3)**	**(15,834.9)**	**(4,833.3)**
Dividends Paid	5,008.1	-	-	-	-	-
Dividend Yield (For. Shares)	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Effective Payout	124%	0%	0%	0%	0%	0%
Return on Assets (ROA)	0.31%	-3.70%	-4.89%	-1.80%	-1.25%	-0.37%
Core ROA	0.51%	-3.76%	-5.81%	-2.08%	-1.25%	-0.37%
Return on Equity (ROE)	4.23%	-53.64%	-95.02%	-88.50%	-234.63%	140.49%
Core ROE	6.89%	-54.49%	-112.89%	-101.95%	-234.63%	140.49%
SHARE INFORMATION:						
Net Income Per Share (EPS)	**4.03**	**(37.64)**	**(40.80)**	**(14.86)**	**(10.80)**	**(3.30)**
EPS Before Extraordinary Items	4.03	(37.64)	(40.80)	(14.76)	(10.80)	(3.30)
Core Earnings Per Share	6.55	(38.24)	(48.47)	(17.11)	(10.80)	(3.30)
Dividends Per Share	5.00	-	-	-	-	-
Book Value Per Share	103.08	76.95	30.87	17.10	6.30	3.01
Adjusted Book Value (ABV) Per Share	93.03	69.43	23.62	9.95	(0.75)	(3.94)
BALANCE SHEET INFORMATION:						
Total Assets	1,408,618.8	1,266,949.1	1,181,685.4	1,235,425.1	1,300,864.1	1,327,077.1
Earning Assets	1,223,848.8	1,277,819.0	1,089,579.3	1,146,314.3	1,188,433.9	1,248,979.1
Total Deposits	946,547.8	969,779.8	961,458.9	1,017,459.3	1,058,772.2	1,101,762.6
Loan-to-Deposit Ratio	114%	98%	96%	74%	74%	75%
Period-End Equity	103,294.2	101,167.7	45,273.0	25,080.6	9,245.7	4,412.5
Property Revaluation	10,069.0	9,876.2	10,636.3	10,487.5	10,341.4	10,197.4
Adjusted Equity	93,225.2	91,291.5	34,636.7	14,593.2	(1,095.7)	(5,784.9)
Avg. Equity to Total Assets	7.3%	8.0%	3.8%	2.0%	0.7%	0.3%
ASSET QUALITY INFORMATION:						
Total Loans	1,074,396.1	952,545.8	926,489.5	750,127.2	780,583.0	824,408.7
Accrued Interest Receivables	10,210.3	6,948.0	1,888.1	1,500.3	1,561.2	1,648.8
% of Total Loans	0.95%	0.73%	0.20%	0.20%	0.20%	0.20%
Nonperforming Loans (NPLs)	180,572.0	460,000.0	475,872.6	207,731.0	170,771.7	144,278.1
Foreclosed Real Estate (ORE)	5,599.8	6,702.5	10,220.2	15,547.2	16,828.8	18,216.0
Nonperforming Assets (NPAs)	186,171.8	466,702.5	486,092.7	223,278.1	187,600.4	162,494.1
% of Total Loans	17.3%	49.0%	52.5%	29.8%	24.0%	19.7%
Total Loan Loss Reserves	57,925.4	102,077.4	170,417.2	15,878.9	25,399.2	32,152.4
% of Total Loans	5.39%	10.72%	18.39%	2.12%	3.25%	3.90%

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