
Special Report

Turkish Bank Capital Adequacy - Too Little, Too Late

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■ Summary

- Although most privately owned Turkish banks meet minimum regulatory capital guidelines, we feel many of them are undercapitalised by international standards. This is principally due to one or more of the following characteristics: a) a relatively high level of unreserved problem loans; b) excessive loans to related parties; c) higher systemic risk in the banking system; and d) weak free capital due to significant investment in bank premises and other permanent assets. This results in an elevated level of Tier II capital within the capital structure. Due to these factors, Fitch believes that Turkish banks need capital ratios meaningfully above the minimum standard.
- Some risk weighting should be assigned to bills and bonds issued by the Turkish Treasury (currently weighted at zero). This overstates the capital of banks with a high proportion of these instruments in their balance sheet.
- In order to effect a recapitalisation of the banking system as dictated by the recent agreement with the International Monetary Fund, the Banking Regulatory and Supervisory Authority (BRSA) has adopted methods of augmenting the capital structure of undercapitalised banks.
- Banks that have an 8% risk-weighted capital ratio after three audits of end-2001 financial information and a review of loan quality will be deemed (by the BRSA) to have adequate capital. However, in Fitch's opinion this level of capital is inadequate in a volatile and higher risk operating environment.
- The BRSA has relaxed the regulatory definition of the capital base by eliminating the deduction of loans to stockholders holding 10% or more of the bank's shares. While this helps banks to achieve the regulatory minimum ratio, it is a concern that the BRSA is weakening the calculation. In our analysis of capital and asset quality, we consider the risk in these loans, judge whether or not there should be additional credit loss reserves, and reflect the result as a diminution of equity in calculating capital adequacy.
- The three-stage audit process has not been completed. Fitch will review how prudent the process is during meetings with management.
- Due to their ability to manage balance sheet size and the inclusion of Tier II capital, most banks will meet the required minimum ratio without accessing additional capital from the government. However, meeting the ratio will restrict their ability to grow and expand their lending by taking on higher risk-weighted assets. It will also leave a question mark over the ability of many banks to build sustainable franchises.
- This process is not enough in itself to strengthen the capital structure of many of the Turkish banks unless they comply with the spirit of the law.

■ Turkish Bank Capital Adequacy

Fitch believes that adequate capital must be viewed within the context of the balance sheet and off-balance sheet structure, asset quality, earnings power, and systemic environment. Thus, a bank with greater profitability and better loan quality can conceivably operate with lower capital ratios. On the other hand, an institution whose systemic risk is greater and credit portfolio weaker should logically have more capital. However, the reality is the reverse. The better banks are continuing to build capital through retained earnings and have better access to the markets, whereas the weaker banks are suffering from continued capital erosion. Any analysis of leverage should also take into account management's penchant for maintaining above-average risk characteristics.

Regulators worldwide have adopted the Basle risk-based capital minimum of 8% as a threshold by which banks should operate, unfortunately ignoring, in many cases, the risk differences of certain asset classes within their own countries. Bank regulators have also traditionally chosen to assign similar risk weightings to a loan to a 'AAA' company and a loan to a riskier middle market borrower. Compliance with a certain ratio assumes that that indicator is adequate when it can be just the opposite. There are numerous cases in Turkey where banks reported regulatory capital ratios in excess of the required minimum only to fail or be taken over shortly thereafter. This typically occurred due to financial problems (i.e., poor loan quality or high off-balance sheet risk) that eroded equity after they were properly identified. Fitch believes that the quality of capital, reserve adequacy, and profits are more important determinants of a properly leveraged balance sheet.

As a group, privately owned Turkish banks are undercapitalised and have a high level of Tier II capital due to revaluation reserves associated with investments in permanent assets. This weakens free capital and hurts the banks' ability to grow core businesses. There are a number of ways to improve the system's equity structure. The quickest and most desirable one would be a **cash** infusion by shareholders. However, in the current uncertain environment there is a noticeable reluctance by many owners to inject substantial fresh cash. Enhanced profitability should build capital, barring a significant dividend payout or excessive growth. However, profitability ratios have generally been lower than inflation which means that banks have found it difficult to stand still, let alone grow in a high-inflation environment without continued capital injections. Fitch Ratings believes that certain banks will also review the possibility of an outright merger

with another local bank and/or a joint venture with an outside party. This could put them into a position of being among the longer-term players in the industry.

■ New Capital Regulations

On 31 January 2002, the BRSA issued a regulation on the measurement and assessment of the capital adequacy of banks. This regulation established the methodology for the calculation of capital adequacy ratios of banks on both a consolidated and unconsolidated basis to ensure that they maintain an adequate amount of capital against existing and potential losses. The ratio of own funds to risk-weighted assets, non-cash loans and obligations will be a minimum 8%. Similarly to generally accepted EU principles, the category of own funds consists of two elements: core capital and supplementary capital.

Core capital (Tier I) consists of paid-up capital, legal reserves, optional reserves, reserves against probable losses, net profit for the period and previous years' profit. Any losses for those periods are deducted from the capital base.

Supplementary capital (Tier II) consists of general provisions for loans, the bank's fixed asset revaluation fund, provisions for the revaluation of fixed assets of investments in subsidiaries, affiliates, and other participations, subordinated debt, and provisions held for probable losses and securities value increase (revaluation fund). That portion of general reserves held for probable risks exceeding 25% of core capital is excluded in the calculation of supplementary capital. Banks may revalue their fixed assets based on 10 percentage points less than the proportional changes in the wholesale price index and may include the revaluation in their supplementary capital, which is limited to the amount of core capital.

Any portion of supplementary capital exceeding 100% of core capital is not taken into account in the calculation of capital. Subordinated debt with a maturity equal to or longer than five years is considered to be supplementary capital, provided that BRSA approval is obtained. If the total of subordinated loans is higher than 50% of core capital, the portion exceeding the ratio is excluded. When the maturity of a subordinated loan declines to less than five years, the amount considered as supplementary capital is reduced by 20% per year. Thus, at a four-year maturity, only 80% of the subordinated loan is considered capital, at three years only 60% and so on.

Tier 3 capital is any subordinated debt that is unsecured and fully paid-up, with an original

maturity of at least two years, not repayable before the maturity date with BRSA approval, and subject to a clause that neither interest nor principal can be paid at maturity if it will result in the bank falling below the minimum capital ratio. Tier 3 capital is limited to 250% of the core capital required to support market risk. It is added to own funds only to meet needs for market risk, along with that portion of supplementary capital that exceeds core capital.

Assets deducted from total capital consist of financial subsidiaries, affiliates and other participations (capital participations in banks, insurance and reinsurance companies, special finance houses, financial leasing companies, financing companies, factoring companies and capital market intermediaries, among others). Also deducted are: special expense values, preliminary expenses, prepaid expenses, the difference between the fair value and book value of unconsolidated financial subsidiaries, affiliates, other participations and fixed assets, subordinated loans extended to other banks operating in Turkey, and goodwill and capitalised costs.

Prior to the recent adoption of the new regulation, loans extended to shareholders holding 10% or more of the capital and to entities with connected relationships with those shareholders were deducted from the capital base in determining capital adequacy. It was possible to circumvent this regulation by separating ownership by an industrial group into individual companies, each with less than the 10% ownership ceiling. Thus, loans to these entities did not have to be deducted from capital. Credits made to operating companies of shareholders did not have to be deducted either. Nonetheless, this section of the law was conservative relative to other emerging markets.

Unfortunately, eliminating this rule gives banks with a high level of related-party lending some manoeuvring room in complying with the 8% minimum capital requirement and artificially inflating their capital ratios relative to previous years. Unless the BRSA is very strict in its reserve requirements for loans to marginal related-party companies, there will be no appropriate financial penalty.

■ Weighting of Assets and Other Obligations

Like other banking systems, the Turkish authorities have adopted the asset risk weightings outlined in the Basle accord, as well as other commitments and off-balance sheet items. However, because of the risks in emerging markets such as Turkey, the weightings of certain assets are often incongruous

with those in industrialised markets. For instance, a Turkish bank's portfolio of government bonds and bills (including repo transactions) is assigned a risk weighting of zero. Fitch Ratings has often noted in previous reports that because of the risk of operating in Turkey and the weak rating of the sovereign (currently rated 'B'), these securities should be assigned a higher risk weighting. This would obviously diminish the regulatory capital ratio of an institution with a high percentage of government securities, which would require additional equity to support this balance sheet structure.

In contrast, placements and securities issued or guaranteed by banks in OECD countries are risk-weighted at 20% in Turkey. From a capital perspective, this encourages local banks to bolster liquidity and capital through investment in Turkish assets.

■ Introduction of Market Risk

From 1 January, 2002, Turkish banks have been calculating market risk (relating to foreign exchange, interest rates, equity, derivatives, among others) to determine a capital charge associated with non-credit exposure. This will be required on July 1, 2002 on a consolidated basis. The calculation of market risk requires the use of a risk management model or the development of an approved internal model with appropriate management controls and stress-testing capability. In addition to extensive qualitative standards, the model must be able to calculate "Value at Risk" (VaR) on a daily basis under various scenarios. The capital charge is based on a formula using VaR. The BRSA has the following specific requirements: 1) 99% confidence level; 2) minimum holding period of 10 trading days; 3) historical observation period of not less than one year; 4) daily updates of VaR or as frequently as possible if that is unavailable. Also, the capital charge increases by a certain plus factor if there are more than four exceptions to these rules. backtesting.

A bank not using a risk management model for assessing market risk, or whose model does not meet the required standards, must use a "Standardised Market Risk Measurement Method". Under this methodology, there are predetermined capital charges based on certain criteria. In summary, the charge for interest rate risk is based on the maturity of the obligation, the type of obligation (identical instruments can be netted) and the amount of the exposure. The capital penalty for obligations maturing under one year (the substantial majority in Turkey) is less than 1% of the exposure and there is no capital penalty if interest rate risk is taken with exactly offsetting (matching maturity, currency, coupon, etc.) Turkish government securities. If a

bank adopts any material interest rate risk, it would probably be in this balance sheet category, as loans and deposits are generally short-term.

The capital charge for equity positions and derivatives is relatively straightforward and is 4% of the net exposure (of individual issuers) of short and long equity positions, if the issues are liquid and well-diversified. The charge is 8% of the sum for illiquid issues.

The capital charge for foreign exchange risk is calculated using the net position of foreign currency assets and liabilities and net forwards. However, a bank may be exempted from any charge, provided that the greater of the sum of its gross long positions and the sum of its gross short positions in each currency, does not exceed 100% of capital and its overall net position does not exceed 2% of its capital. Given the way these contracts unfolded in the last crisis this may not be a prudent approach. The BRSA appears to be replicating rules used in developed markets without realising that they may be inappropriate for a volatile emerging market.

After calculating these three risks under the Standardised Method, the sum is multiplied by a certain factor to arrive at the overall penalty. One of the critical characteristics of the inclusion of market risk in determining regulatory capital adequacy is the ability of management and the regulators to understand the concepts and thus mitigate the potential risks that the bank is taking over time.

■ Free Capital

Since many Turkish banks have significant investments in permanent assets and/or a high level of revaluation reserves in the capital structure, Fitch believes that free capital is one of the most important analytical tools in determining capital adequacy. Free capital is defined as shareholders' equity less investment in fixed assets, equity participations, affiliates, and associated companies. The remaining equity represents the capital available to leverage a bank's ordinary banking business. Under a more conservative calculation, the unreserved amount of non-performing loans and/or accrued interest on loans should also be deducted. While this is a stringent calculation of capital strength, it eliminates revaluation reserves on permanent assets (a non-cash equity component) from capital accounts. Refer to the Capital Structure table on page 6 for free capital ratios of the private commercial banks in Turkey and the top five institutions at end-September 2001. As seen in the chart, while equity as a percentage of assets appears adequate (albeit eroding during last year), the sector's free capital ratios are substantially lower and reflect the low level of financial flexibility

in the system. The equity of the private commercial banks approximated 53% of the entire system's capital and represented a good proxy for its capital. The top five banks by assets (Akbank, Garanti Bank, Isbank, Pamukbank, and Yapi Kredi) accounted for 77% of private commercial bank equity.

Similarly, the top five banks accounted for 63% of all private banks' adjusted free capital. This is wholly attributable to Akbank, whose adjusted free capital of USD754m is 82% of the USD916m of total free capital of all private banks. Garanti and Isbank both had negative positions, while YKB's was modestly positive. Garanti was impacted on a bank only basis by its investment in Osmanli Bankasi, while Isbank and YKB hold relatively high levels of permanent assets. This inflates reported equity through revaluation reserves which are included as a Tier II component of regulatory capital. Inclusion of these revaluation reserves in attaining the minimum capital ratio of 8% is misleading and contrary to the spirit of true capital adequacy.

Because of certain transactions during 4Q01, the capital ratios of some banks will reflect some change when end-2001 financial statements are released. For example, among the larger banks, Garanti Bank merged with Osmanli Bank in December, eliminating its financial investment and improving regulatory and free capital. However, there was no significant new cash. Among the medium-sized banks, Alternatifbank received a cash injection in September 2001, so that its period-end equity was improved. Denizbank received new capital in 4Q01, which improved its equity and reduced the percentage of revaluation reserves in total capital.

■ Banking Sector Recapitalisation

As part of the recapitalisation of the banking sector, laws were recently passed outlining how the BRSA will determine a bank's capital position and methods that can be used to improve it. All banks will undergo an independent audit of their end-2001 financial statements to determine if they meet the minimum standard capital ratio of 8% and if they qualify for participation in the programme. Subsequently, the report will be reviewed by a second audit firm and finally by the BRSA. If the ratio is found to be lower than 8%, steps will be taken to assure compliance as outlined below.

First, the bank's board of directors must ensure that paid-up capital is reduced by any losses not covered by reserves and must hold an extraordinary shareholders' meeting to make sure that capital is replenished to the minimum 8%. If the appropriate increase is not forthcoming, the BRSA's programme

outlines several methods to achieve proper capitalisation.

If a bank chooses to participate in the programme, it has several options. Banks with risk-adjusted capital ratios of less than 5% but greater than zero whose market share in the banking system as of September 30, 2001 is at least one percent, will receive a cash capital infusion from the Savings Deposit Insurance Fund (SDIF). The cash injection will bring the ratio to 5%, provided that the injection does not exceed the amount paid up by shareholders (including that paid in cash in 2001). A bank whose capital ratio is between 0% and 4% that does not receive any capital injection from its parent will be transferred to the SDIF. Banks with risk-adjusted capital ratios of more than 5% but less than 8% will receive loans from the SDIF with seven-year maturities (convertible into shares) to bring the capital ratio to 9%. Thus, banks will be able to receive both cash (if they meet the market share criteria) and loans from the government. It is important to note that these loans will be Tier II capital instruments and will be offset by government securities. No new cash will be injected under this method by the SDIF, there is no limit on asset size nor is there a requirement that owners inject capital. In order to provide collateral for the Fund's capital contribution, the ownership of existing shareholders is pledged to the SDIF (a huge disincentive for shareholders to contribute as well or to seek assistance). Thus, if it ultimately becomes necessary to close or take the bank over because of illiquidity or other difficulties, ownership will be transferred to the regulators. Any bank receiving an additional capital contribution from the SDIF must lend a minimum 60% of that amount to the corporate sector by June 30, 2003.

In the past, Fitch has seen a number of audit reports that were qualified because the management excluded potentially problematic loans as non-performing and did not establish reserves as it was legally required to do. Thus, earnings and reserves were overstated. In order to avoid this and obtain an unqualified opinion, it is incumbent on banks to conservatively classify loan portfolios and realistically address delinquent credits. Auditors would then be less subject to potential criticism by other firms. Because profitability in 2001 is likely to be weak (the majority of banks are likely to report losses on an inflation-adjusted basis), it would be the perfect opportunity to raise reserve coverage and enter 2002 with a more solid balance sheet.

■ Impact On The System

Fitch views the new law as positive in that it puts steps in place to recapitalise weak banks and owners have been instructed to participate in raising capital.

However, the regulation does not address some of the critical issues faced by Turkish banks. It makes a broad assumption that an 8% capital ratio is adequate for all banks and does not take into account the differences in loan portfolio risk, which additional capital should address. Additionally, the logic of requiring lower capitalised institutions that need new equity to lend 60% of the funds to a weak corporate sector does not seem compelling, as it could aggravate existing problems.

The regulation is silent as to the timing of the inclusion of market risk. The timing of the aforementioned audits is end-2001 and the addition of market risk could mean the difference between below 8% and above 8%. Will market risk be included for the purposes of the regulation and, if so, when? From a credit perspective, there is no mention of Tier I and Tier II capital; thus, 50% of regulatory capital can still be comprised of revaluation reserves and other Tier II components, something Fitch would view negatively.

Banks that participate in the recapitalisation programme will be listed in the public Official Gazette, thus tarnishing their reputation to some degree and showing outside investors the regulators' perception of the institutions. Because many banks have the flexibility to reduce the balance sheet as well as include Tier II capital to meet the 8% minimum, Fitch believes that there will not be a material number of banks participating in the exercise. Some have publicly stated that they will not be applying for capital aid. Thus, the entire concept of recapitalising the private banking system will have gone for naught unless the BRSA forces institutions to establish substantial credit loss reserves for weak portfolios.

It was encouraging to see HSBC expand its presence in Turkey through the 4Q01 purchase of a substantial portion of the failed Demirbank. The recent agreement in principle between Koc Financial Services and Unicredito to fortify Koc's balance sheet is another sound development. Alternatifbank's recent announcement of a potential transaction with Credit Agricole has also been positive. However, the failure of Garanti Bank and Finansbank to reach agreements with Intesa and BNP-Paribas, respectively, was disappointing. It remains to be seen whether there are other potential near-term market entrants or whether a wait-and-see attitude will be more prevalent. In addition to having better economic potential, a well-capitalised bank would appear to be a better acquisition candidate than one with marginal equity.

CAPITAL STRUCTURE
PRIVATE COMMERCIAL BANKS
(USD mln)

Total Private Banks	Sep-01	Jun-01	Mar-01	Dec-00
Shareholders' Equity	5,507	6,121	7,365	10,289
Less:				
Equity Participations	821	937	1,311	2,352
Affiliates	1,691	1,892	1,923	2,708
Premises and Equipment	1,560	1,779	1,817	2,600
Free Capital	1,435	1,513	2,314	2,629
Less:				
Additional Reserves to Reach 100% Coverage of NPL	519	526	400	427
Adjusted Free Capital	916	987	1,914	2,202
Total Assets	56,394	59,359	60,804	73,588
Equity/Assets (%)	9.77	10.31	12.11	13.98
Free Capital/Assets (%)	2.54	2.55	3.81	3.57
Adjusted Free Capital/Assets (%)	1.62	1.66	3.15	2.99
Revaluation Reserves/Equity (%)	22	29	27	35
Akbank	Sep-01	Jun-01	Mar-01	Dec-00
Shareholders' Equity	951	1,021	1,133	1,610
Less:				
Equity Participations	37	38	39	44
Affiliates	13	12	13	17
Premises and Equipment	147	160	150	205
Free Capital	754	811	931	1,344
Less:				
Additional Reserves to Reach 100% Coverage of NPL	0	0	6	9
Adjusted Free Capital	754	811	925	1,335
Total Assets	9,540	9,580	9,357	10,953
Equity/Assets (%)	9.97	10.66	12.11	14.70
Free Capital/Assets (%)	7.90	8.47	9.95	12.27
Adjusted Free Capital/Assets (%)	7.90	8.47	9.89	12.19
Revaluation Reserves/Equity (%)	6	1	5	5
Garanti Bank	Sep-01	Jun-01	Mar-01	Dec-00
Shareholders' Equity	645	745	828	1,218
Less:				
Equity Participations	40	54	62	121
Affiliates	462	463	442	490
Premises and Equipment	287	317	331	467
Free Capital	(144)	(89)	(7)	140
Less:				
Additional Reserves to Reach 100% Coverage of NPL	86	71	18	8
Adjusted Free Capital	(230)	(160)	(25)	132
Total Assets	6,844	7,086	7,479	9,839
Equity/Assets (%)	9.42	10.51	11.07	12.38
Free Capital/Assets (%)	(2.10)	(1.26)	(0.09)	1.42
Adjusted Free Capital/Assets (%)	(3.36)	(2.26)	(0.33)	1.34
Revaluation Reserves/Equity (%)	11	21	17	18

Isbank	Sep-01	Jun-01	Mar-01	Dec-00
Shareholders' Equity	1,011	1,233	1,497	2,440
Less:				
Equity Participations	107	132	148	232
Affiliates	634	795	880	1,505
Premises and Equipment	328	359	425	598
Free Capital	(58)	(53)	44	105
Less:				
Additional Reserves to Reach 100% Coverage of NPL	165	106	88	30
Adjusted Free Capital	(223)	(159)	(44)	75
Total Assets	9,581	9,937	8,868	11,604
Equity/Assets (%)	10.55	12.41	16.88	21.03
Free Capital/Assets (%)	(0.61)	(0.53)	0.50	0.90
Adjusted Free Capital/Assets (%)	(2.33)	(1.60)	(0.50)	0.65
Revaluation Reserves/Equity (%)	26	42	35	41
Pamukbank	Sep-01	Jun-01	Mar-01	Dec-00
Shareholders' Equity	603	744	885	1,353
Less:				
Equity Participations	228	277	400	607
Affiliates	39	47	40	105
Premises and Equipment	97	105	104	148
Free Capital	239	315	341	493
Less:				
Additional Reserves to Reach 100% Coverage of NPL	14	11	10	14
Adjusted Free Capital	225	304	331	479
Total Assets	5,697	5,302	5,554	6,956
Equity/Assets (%)	10.58	14.03	15.93	19.45
Free Capital/Assets (%)	4.20	5.94	6.14	7.09
Adjusted Free Capital/Assets (%)	3.95	5.73	5.96	6.89
Revaluation Reserves/Equity (%)	49	55	53	54
Yapi ve Kredi Bankasi	Sep-01	Jun-01	Mar-01	Dec-00
Shareholders' Equity	1,007	1,172	1,425	2,476
Less:				
Equity Participations	344	348	550	1,137
Affiliates	145	172	127	727
Premises and Equipment	355	380	371	529
Free Capital	163	272	377	83
Less:				
Additional Reserves to Reach 100% Coverage of NPL	111	125	114	101
Adjusted Free Capital	52	147	263	(18)
Total Assets	8,719	8,314	9,019	11,178
Equity/Assets (%)	11.55	14.10	15.80	22.15
Free Capital/Assets (%)	1.87	3.27	4.18	0.74
Adjusted Free Capital/Assets (%)	0.60	1.77	2.92	(0.16)
Revaluation Reserves/Equity (%)	37	36	43	52

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