

Equities

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Bank sector outlook 2012

Spring comes when the snow melts

■ Industry Overview

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- **Snow to melt midyear** — We think the fundamentals of the bank sector are sound and that shares are undervalued but for the snow to melt—that is, for a real recovery in bank share prices, we think both a necessary condition—the stabilization of global financial markets—and a sufficient condition—a bright earnings outlook—need to be fulfilled. We think it will take a few months for the necessary condition to be fulfilled and see share prices staging a real recovery from midyear.
- **Market reassurance from capital increases** — As was the case last year, we expect the sovereign debt crisis in Europe to drag on and to weigh on financial stocks in Europe and the US. We think by midyear that major European banks will have come up with specific measures to boost capital, these moves will mark the bottom, and that overall financial markets are likely to pick up.
- **Outlook for the sufficient condition in 2012** — We foresee steady credit expenses and stable net business profit again in FY3/13 but we do not envisage conditions being ripe for a powerful increase in core earnings. However, earnings momentum is mounting, especially in overseas loans, so we see the prospects for the fulfillment of our sufficient condition as being in sight, too.
- **Liquidity to be the theme in 2012 and out** — Besides the European crisis, a big focus of market interest is on fund management conditions for banks and the market as a result of the introduction of liquidity regulations in Basel III. For Japanese banks, which have ample liquidity in the form of yen deposits, the lending out of this yen liquidity in foreign currency is the key to profitability. Recently central banks in Asia have been supporting liquidity supply and we are optimistic that loans to Asia will grow powerfully.
- **When will the shift up a gear come?** — The firm share price performance of the leading regional banks, which are highly defensive, stood out last year after the Greek crisis flared up again. We think this trend will continue until the situation in Europe settles back down. After that, however, we would recommend an investment strategy focused on the megabanks, because of the way the majors are pursuing earnings opportunities overseas.

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Chapter 1: 2012 outlook

1. Investment strategy

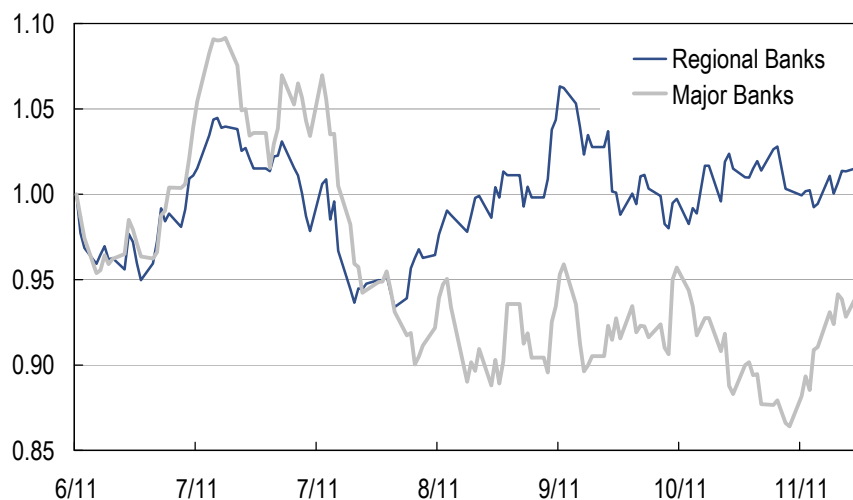
Uncertain environment and return to defensive names

Although bank earnings exhibited a steady recovery in 2011, it proved a difficult time for Japanese banks in terms of news flow. There was no lack of bad news for banks in Japan, with the March 11 disaster and associated problems at TEPCO as well as the Olympus scandal.

In addition, the sovereign and financial crisis deepened in Europe, and this weighed on the shares particularly of Japan's major banks, despite them having little direct exposure.

Under these circumstances, major bank stocks have done relatively poorly, particularly since July when the Greek crisis reignited. On the other hand, leading regional bank stock performance was firm. We think this is because the correlation between European/US financial stocks and Japanese bank stocks has been high, and it appears investors took refuge in regional bank stocks where said correlation is on the low side.

Figure 1. Market caps for major banks and the regional banks we cover (relative value setting June 1, 2011 at 1)



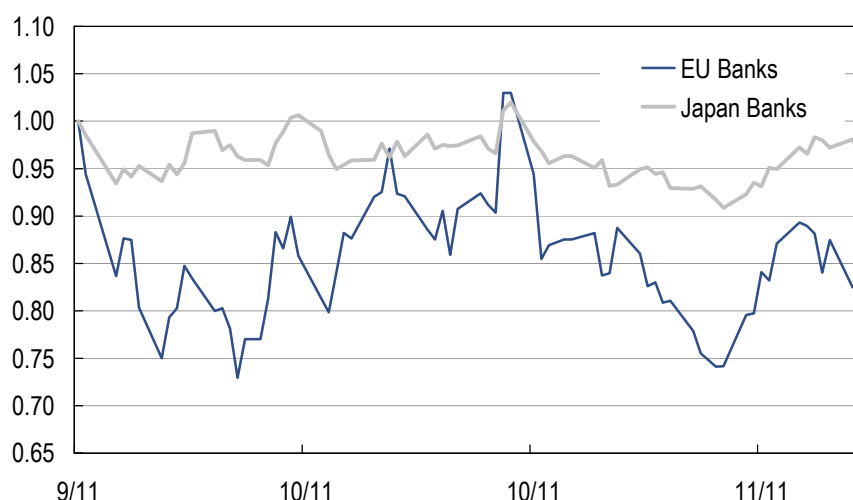
Source: Citi Investment Research and Analysis.

In our view, the basic question regarding 2012 is whether this trend will continue or whether there will be a performance reversal for regional and major bank stocks.

Conditions necessary for major bank stocks to recover

We think that this a recovery for major bank stocks will depend more on the European situation than on Japanese circumstances and fundamentals. In other words, even if Japanese bank earnings are firm, we are unlikely to see a real share price recovery unless the European situation settles down to some extent.

Figure 2. Market cap for major Japanese banks (yen base) and euro area banks (euro base)



Note: Relative figures setting September 1, 2011 at 1.
Source: Citi Investment Research and Analysis.

That is, global financial markets need to stabilize sufficiently for the snow to melt (the crisis to be eliminated) and spring (a real recovery in banking stocks) to come. For this to happen, we believe major European banks need to boost their capital to a level sufficient to absorb factors like sovereign risk. We also intend to keep an eye on the impact of stress tests in the US, which are likely to come at the start of the year.

If we assume that boosting capital at major European banks (which may include injection of public funds) is necessary for financial market stability, then it could take until mid-year for this to happen given the time needed to prepare national budgets and set up the necessary framework.

In addition, for a real recovery for bank shares (as opposed to a rebound after being oversold) to look more likely, we think that not only are the above factors necessary, but a bright earnings outlook is as well. We expect steady credit expenses

in FY12 as well as stability for net business profits, but a strong increase in core earnings looks unlikely. However, it appears that earnings momentum is improving, particularly from overseas lending, so a bright earnings outlook does look possible, in our view.

In addition to the European crisis, the introduction of liquidity regulations in Basel III has focused significant attention on the ability of banks and the market to raise capital. For Japanese banks, which have a lot of liquidity in the form of yen-based deposits, we believe profitability hinges on using yen liquidity to procure foreign currency.

After the Greek crisis reignited last year, share price performance by defensive leading regional banks was notably firm, and this could well continue until the situation calms in Europe. However, once things do calm down, we recommend an investment strategy focused on megabanks for 2012, as they are likely to pursue chances for profits abroad.

2. Crisis patterns and the European situation

Classifying government responses to financial crisis

Japan has suffered through a number of periods of financial uncertainty since the asset bubble burst, but we see the real crisis as the period spanning 1997-2003. The government took a number of measures to deal with this crisis, but in many cases it came in for severe criticism from the market and overseas authorities.

A look at Japanese history and the current problems in Europe suggests that when financial uncertainty emerges in some form, or it looks as if it could, the government often began by downplaying the problem, and then eventually arrives at a fundamental response after an unforgiving reaction by the market.

We have broken down the crisis response by governments into four phases.

Figure 3. Four phases of government crisis response and the example of Japan

	Phase	Market reaction	Events in Japan	Events in the EU
I	The surfacing of problems and the initial response to the symptoms	Near-term and modest rebound but shared perception of a "too late, too small" response by the authorities	1) Jusen clean-up and introduction of bank self-assessments (95-97) 2) Asset quality issues raised 3) Yamaichi Securities and Hokkaido Takushoku Bank fail (97/11) 4) First but limited public fund injection by Sazanami Committee (98/3)	1) Two rounds of stress tests 2) Greek debt crisis continues for two years 3) Reorganization of Dexia 4) Agreement on framework for capital injections
II	Response to the symptoms brought on by market urgings	Approval of the policy response, stage set for a real recovery	1) FSA scrutinizes bank assets (98/7) 2) Debt forgiveness and other voluntary reorganizations (98-99) 3) Stricter provisioning and write-down standards (99/1) 4) Sizable public fund injections by Yanagisawa Committee (99/3)	1) Third round of stress tests 2) Greek debt haircut for bondholders
III	Exposure of intrinsic and structural problems and resultant confusion	Recognition of the root problem, pressure for a substantive response	1) Repeated voluntary reorganizations of major problem borrowers (01) 2) Bankruptcy of rescued companies (01-02) 3) PM Koizumi commits to the solution of bank problems in meeting with President Bush (02/9) 4) The "Takenaka shock"	1) Ad hoc debt cuts 2) Deterioration in debtor countries' economies due to fiscal austerity
IV	Final elimination of the problem	Embrace of the authorities' drastic measures to deal with the issue, even though it brings pain	1) FSA-sponsored Financial Revitalization Program 2) Special FSA investigation into how to deal with troubled debtors 3) Strict assessment of assets, DTAs, and capital 4) Recapitalizations, bail-outs, and reorganizations of banks	?

Source: Citi Investment Research and Analysis.

Phase 1: Stopgap measures in the initial phases

Characteristics of phase 1

In the initial stage of a crisis, a full-scale response tends to be slow in coming due to political populism (e.g., political motives to limit the cost of measures taken, public criticism of bank bailouts, etc.). At the same time, the government tends to play down the crisis.

Meanwhile, we tend to see banks be overly optimistic about their financial health in 1) an attempt to head off reputational risk and 2) out of resistance to the idea of government intervention in management via injection of public funds. Therefore, rather than fundamental solutions to the problems, the first stage tends to bring an insufficient response.

The example of Japan

In our view, 1997-1998 corresponded to phase 1 in Japan. There was significant financial uncertainty in the second half of 1997, as Japan saw a spate of bankruptcy announcements (by Sanyo Securities, Yamaichi Securities, and Hokkaido Takushoku Bank) and it was difficult to procure capital into the New Year. Bank stocks fell sharply on market concern about insufficient capital.

In response to this the Japanese government passed the Financial Crisis Stabilization Law, which set up a vehicle for the injection of capital into banks. However, banks requested these injections without the government having taken a careful look at their capital, and there were concerns at banks that asking for significant capital could damage their reputations. As a result, capital injections into each major bank came to a uniform amount of just ¥100bn or so.

Therefore, although share prices rallied temporarily, the market did not have confidence that this was a formal capital injection of public funds, so the shares subsequently continued to fall.

Phase 2: Pressure from markets and more fundamental treatment of symptoms

Characteristics of phase 2

As countermeasures taken in phase 1 were insufficient, the market's lack of faith in government measures becomes clear in phase 2. Market prices tend as the market looks to force more drastic measures by the government. Under these circumstances, inter-bank lending tends to cease functioning, and banks tend to end up in a tight capital situation thanks to outflows from savings. Due to uncertainty about liquidity and concern about a decline in capital adequacy ratios, banks work to reduce capital, producing a credit crunch. This forces governments to take additional measures against the crisis.

To dispel market concern in this phase, the government urges strict capital assessments, raising reserves, and supplementing core capital (which may have become insufficient as a result of the first two factors). With this the government implements a more comprehensive set of measures against the risks that have emerged, which wins a certain level of praise from the market.

The example of Japan

There was a widespread view on the market that the ¥1.8trn injection of public funds in March 1998 was insufficient,

prompting concern about bank asset quality. As a result, the Financial Supervisory Agency (now the FSA) embarked on an audit of major banks from July, implementing thorough on-site checks of loans and other assets.

During this time, LTCB and the Nippon Credit Bank failed, prompting the Diet to enact the Financial Reconstruction Law in an effort to improve clarity around procedures for failed banks and the asset situation at banks overall. The Diet also enacted the Early Financial Strengthening Law to enable the injection of public funds into banks. These two laws put into place a framework for thorough NPL disposals and for banks to rebuild their capital bases. The reserve ratio for loans to borrowers in danger of bankruptcy was raised to 75%, and in March 1999 the government implemented a large-scale injection of public funds. This resulted in a certain level of praise from the market.

Phase 3: Structural problems emerge

Characteristics of phase 3

In phases 1 and 2, the government takes appropriate steps to deal with emerging problems via moves like strict asset audits, but this does not solve the structural issues that these problems produce. As a result, similar problems emerge and it is clear that the fundamental issues have not been solved.

Market prices decline as investors get even more uneasy due to the continuing spate of problems, resulting in sentiment that the government response was insufficient. In this stage, pressure ramps up, as not only the market but also other nations demand that the government makes efforts to solve the problems.

The example of Japan

Although it was thought that the bank problems had been solved in 1999 via the injection of public funds, only two years later Mycal failed, which was seen as evidence of cracks in the government's response to the banking problems. Thereafter, finances at a number of large companies deteriorated due to excessive facilities and/or excess debt.

Many of the companies that asked their banks for support were those that were in the process of rehabilitation due to voluntary measures like debt waivers in 1998-1999. As a result, they were deemed "zombie companies". The emergence of this micro-level problem exposed the insufficiency of structural

adjustments for Japan as a whole, so the market demanded more drastic solutions.

Phase 4: Decisive measures against structural problems

Characteristics of phase 3

The market and other nations think that the stopgap measures implemented through phase 2 mean the same problems could emerge again. The government understands this, and firms up its political resolve for structural reform while also preparing for short-term political costs and economic pain. At this point, the structural factors that were the root of the problems are eliminated, and market confidence recovers.

The example of Japan

In a meeting between then-president George Bush and then-PM Junichiro Koizumi in the US in September 2002, Japan promised to take drastic measures to solve the NPL problem. It ultimately implemented a financial rehabilitation program under Heizo Takenaka, who became Minister of State for Financial Services soon after Mr. Koizumi returned home from the US visit.

In 1998, the government required only strict audits for overall capital, but in special audits from 2002 the target was narrowed down to large borrowers, and the FSA investigation extended as far as possible measures banks would take (financial support, etc.). Thanks to these audits, the half-baked response by banks to NPLs was swept away and real disposal of NPLs from large borrowers accelerated.

At that time, many banks raised capital without relying on public funds, but the government injected a significant amount of public funds into Resona Bank (applying Chapter 102 of the Deposit Insurance Law). This confirmed dramatic structural reform (i.e., balance sheet adjustment) and the safety net to support it (the use of public funds), which helped regain market confidence.

Japan's example and the share price reaction

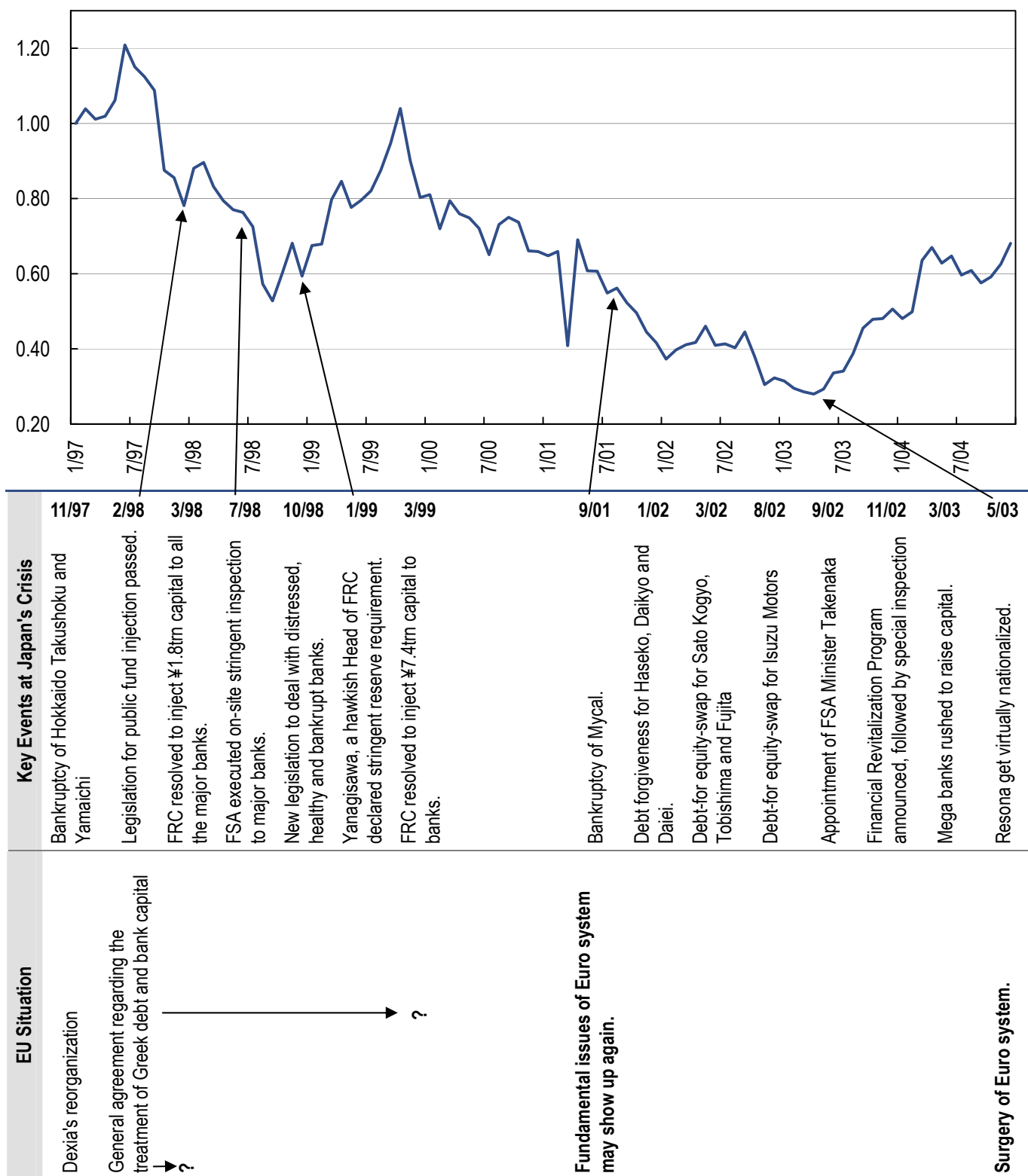
Small rebounds in phase 1

The event flows in each of these phases and the response of the market is easily understood when contrasted with the TSE Bank Index. Figure 4 contrasts movement in the TSE Bank Index from 1997 with the flow of the principal events.

The March 1998 injections of public funds prompted a recovery in bank share prices as investors found in them a certain measure of reassurance and expectations for the stabilization of financial markets, but this did not last very long. The market had deep-seated unease about the quality of bank assets, share prices fell remorselessly, and the government decided to embark on a toughening up of financial inspections. As a result, fears of ballooning bank losses spread and share prices kept sliding. The bankruptcy of the Long-term Credit Bank of Japan and other financial institutions marked the high tide of the financial crisis, and the government hurried to inject more public funds.

Hakuo Yanagisawa, then Minister of State for Financial Services and chair of the Financial Revitalization Committee, resolved to make banks' assets healthier and in concert with this, boost their capital with public funds so as to sweep away the mistrust of the markets, and he won their confidence. Specifically, he announced the government's stance on write-downs and provisioning when capital was boosted, on the assumption that asset inspections would be more rigorous, and attached the condition for public fund injections that reserve ratios for borrowers in danger of bankruptcy should be 75% or higher. Share prices hit bottom in February 1999, when the decision to inject public funds was made, and then embarked on a rising trajectory.

Figure 4. Event flow and share prices



Note: Share prices = TSE Bank Index, rebased to 1 at January 1, 1997.

Source: Citi Investment Research and Analysis.

Big turnaround for share prices in phase 2

Market mistrust welled up again, however, with the bankruptcy of Mycal in 2001 and the string of voluntary reorganizations of numerous major borrowers that followed. Share prices subsequently softened, with the market tacitly prodding the government to deal with the structural problems. The Koizumi administration assigned Heizo Takenaka the task of bringing structural reform to the financial sector, giving the market the impression that the government would take a hard line. The upshot was that concerns about bank nationalizations spread around the market and share prices uniformly fell. However, the message got through to the market via the rescue of Resona that structural problems were being resolved and that the government was clear that a safety net would then be put in place. Bank share prices began a rapid recovery.

Application to the situation in Europe

Target this year is to get to Phase 2

With the focus in the European crisis on the response of leading EU states such as Germany and France, yields on sovereign bonds remain in a completely unpredictable state. It is hard to tell how long this situation will continue but we would like to make some conjectures about the route to the end of the crisis by applying the typology of the four phases we have detailed above.

Dexia, which passed two rounds of stress tests that were implemented with the goal of restoring the trust of the market, has effectively been placed under public management. As market mistrust intensified, the European Banking Authority announced in October last year a comprehensive plan, calling on banks to raise their ratios of common equity and other capital to 9% by end-June 2012. The EBA calculates that European banks will need a capital boost of just over €100bn. These calculations are based on a 50% haircut for Greek sovereign debt holders. If circumstances unfold in line with the comprehensive plan, would we be in phase 1 or phase 2?

In terms of the amount of capital needed itself, the European figure is clearly higher than the ¥1.8trn mustered in Japan in phase 1, which attracted criticism as a half-hearted injection of public funds. However, if we work out the ratio of the amount needed to the total assets of the target banks, then perhaps coincidentally the European ratio comes to just over 0.2%, as in the case of Japan.

By way of contrast, our European bank team calculates that some €216bn will be needed (see the October 20 memo [European Banks & the Grand Solution - Eurogroup & G20 Meetings: Neither a Finale nor a Prelude*](#)). This is close to the result of the IMF calculations, which is virtually double the shortfall amount calculated by the EBA.

We conclude from this that Europe is more in phase 1 than it is in phase 2. One reason for this is that, as with the injections of public funds at the start of 1998 in Japan, bank assessments are only conscious of “actual losses” related to Greece. With the fiscal crisis spreading and the market hoping for a broader and more conservative response, we have to say that the response so far looks half-hearted.

So if the EU corrects its policy response and demands capital boosts, based on more rigorous asset assessments, of a scale that would bring greater reassurance, then the transition from phase 1 to phase 2 could happen by June. In this event, we would expect share prices to stage a swift recovery.

Phases 3 and 4 to come over the next 3-5 years

The haircut imposed on holders of Greek debt closely resembles the debt forgiveness of zombie companies in Japan. Debt forgiveness and other forms of financial support eased the fiscal conditions of the borrower over the short run but did not lead to remedies to the essential problems of their balance sheets or businesses, so as time passed, borrowers demanded additional financial support. Greece too will find it hard to get its economy back on the tracks amid fiscal austerity and it is not hard to imagine it beating the same path as one of Japan's zombie companies.

We feel that the impossibility of running economies with a single currency and a single monetary policy with differences in productivity, in culture and custom, and in inflation rates has been underscored as we observe the sovereign debt crises of Europe's peripheral countries unfold.

We believe that partial fiscal union through the issuance of joint Eurobonds and other steps would merely kick the can of structural problems down the road and that if the continued existence of the euro is to be guaranteed, there has to be a reasonable prospect of complete fiscal union, with countries ceding a key part of their national sovereignty.

Through phase 2, even if the authorities succeed in ameliorating the symptoms of the bank problem, we believe

the structural problems that the euro harbors will have to be confronted at some stage or other in the future.

These observations are first and foremost based on our experiences of Japan's "lost decade" and are drawn out from our typology of crisis response. We do not rule out the possibility of a resolution resulting from outstanding policy coordination by the EU. However, we feel that the complexity of the European situation, with a solution that must be found despite many countries in Europe having differing political, economic, and legal backgrounds, is such that it cannot be compared to the case of Japan.

Implications for bank shares

We think that the schedule for capital boosts to bank capital by the end of June this year that the EBA has announced will not change. Within this timeframe, we see the markets pushing for radical bank-bolstering measures. We thus think it may be possible to focus more intently on phase 2 in June.

We feel that as this market, in which investors press for action, unfolds, investors will need to think about the possibility of softness in European bank shares also having an impact on Japanese bank shares. We thus position the first half of this year as a key time for nailing the timing of a real uptrend for bank shares and deciding when to change up a gear.

That is to say, at some point in the course of the first half, we feel investors will need to lower their weightings of defensive regional bank shares and substantially raise their weightings of major bank shares, especially the megabanks. Investors face the need to determine the timing of this while keeping a watchful eye on the situation in Europe, and we think they may need to take action as soon as 2012 Q1.

3. In the spotlight in 2012

Event calendar

[Regulations, reorganization, sovereigns...](#)

We think that bank stocks this year are likely to be more impacted by event flow than they are by earnings trends. We need to add to our calendars the situation in Europe, which we have been discussing above. As far as individual banks are concerned, we see 2012 as being a year of action, including structural reorganization. Figure 5 summarizes the main event outlooks for both the sector and individual banks.

Sector

Bank sector-wide events we anticipate include those related to international regulations, those related to domestic regulations and laws, and those related to the situation in Europe, as well as several other specific events.

Events related to international regulations include the submission of bankruptcy treatment plans for global systemically important financial institutions (G-SIFIs) by the end of 2012, the establishment of country-level laws and systemic frameworks for Basel III, which will begin to be implemented in January 2013, and the transition to a central counterparty clearing institution for derivative trades.

Figure 5. 2012 event calendar (based on our research)

	Sector events	Corporate events
Jan	US bank stress test results due (Jan 9) FSA's proposal for regulations based on Basel III Q3 results announcements Submission of recapitalization plan by EU banks	Spotlight on personnel reshuffles at Mizuho as it aims to be a one-stop financial shop Banks to reflect the impact of tax rate changes in their Q3 earnings
Feb		
Mar	TEPCO's submission of a special integrated business plan SME Finance Facilitation Law expiry date to be extended a year EU leasers meet to discuss establishment of ESM	
Apr		Sumitomo Trust Bank, Chuo Mitsui Trust Bank and Chuo Mitsui Asset Trust Bank merge Mizuho's "one-stop bank" system kicks off MUFG announces new mid-term business plan SMFG makes Promise a wholly owned subsidiary
May	Full-year results announcements	
Jun	General shareholders' meetings Cut-off date for EU banks to raise capital in response to stress tests	Spotlight on Aozora moves on public funds
Jul	FSA personnel reshuffle Banks still in receipt of public funds to report on the execution of their revitalization plans Q1 results announcements ESM due to be established.	
Aug	Proposals for tax system revisions FSA supervisory guidelines	
Sep		Shinsei revisions to its revitalization plan
Oct		Mandatory conversion date for Aozora's No. 5 preferred shares
Nov	Q2 results announcements	
Dec	Cut-off date for countries to put in place systemic infrastructure ahead of Basel III G-SIFIs to submit resolution plans in the event of their bankruptcy Derivative transactions due to be concentrated at bourses and clearing houses	

Source: Citi Investment Research and Analysis.

In domestic systemic-related developments, the FSA will issue a Bank Law proposal based on Basel III in January, while in March the SME Finance Facilitation Law is due to expire; it will be clear before then whether or not it will be extended. We also forecast that in response to the impact of lower statutory effective tax rates resulting from tax system revisions, banks will take steps such as DTA drawdowns.

In Europe, a comprehensive plan for boosting bank capital is due to be implemented by end-June, while there will also be political developments such as the French presidential election and it is difficult as things stand to predict how the situation with the sovereign issues and other matters will evolve.

In other specific events, the spotlight is on the submission of a special integrated business plan by Tokyo Electric Power, which is slated for spring. The key point here is whether, in the approval process for the plan, partner banks are called on to bear some of the burden, such as through interest rate cuts.

Individual banks

Among several noteworthy bank-specific events, we think the most important will be the Mizuho Financial Group's business reorganization. We expect personnel appointments in line with the "just one bank" concept to be made early this year, while in April and out the question of whether the banks under the holding company umbrella can really improve efficiency and profitability will be put to the test.

We also expect Mitsubishi UFJ Financial Group to announce its medium-term management plan. Investors' focus will likely be on what kind of slant there will be in the allocation of management resources among the bank's various strategies—the overseas strategy, the securities and other group strategies, and the domestic corporate strategy.

The banks under the aegis of Sumitomo Mitsui Financial Group are due to merge. The market will be watching to see whether systems integration goes smoothly and whether SMFG makes steady progress with the realization of synergies.

We expect the mandatory conversion of the Aozora preferred shares that were created alongside the injections of public funds in October. Ahead of this, the focus will be on what options the bank considers, including the repayment via buybacks (at a premium) prior to the conversion.

Focal points at individual banks and the consensus and nonconsensus views

Mizuho Financial Group

The focal points at Mizuho are threefold: the realization of synergies accompanying the business reorganization, dividend policies, and capital policies. We get the impression that sadly the market may not be holding out great expectations for the business reorganization. Management has been making it clear that it wants to maintain the current DPS level but we do not think that market participants are united in expectation that the dividend will be maintained. Even though management has forcefully ruled out a capital increase, the market has not softened its skeptical stance. If we see positive developments on these three points, then it would be perfectly reasonable to expect the share price to recover. We think that at the least management will make progress on greater dividend and capital policy clarity.

Mitsubishi UFJ Financial Group

The focal points at MUFG are reorganization in Japan and overseas and the strategies on which emphasis is laid in the medium-term management plan. To judge from communications we have had with investors, we get the impression that they are generally of the view that MUFG could buy a regional bank in the US and that the possibilities of a hike in its stake in Morgan Stanley and the reorganization of domestic securities companies cannot be ruled out. However, many of these investors are of the view that, because of the risks, the realization of these various possibilities would not necessarily be positive for the shares. We are of a similar opinion given the current management environment and the bank's operational characteristics and strategic axis.

Sumitomo Mitsui Financial Group

The focal points at SMFG are developments with the group strategy as it relates to consumer finance and the expansionary strategy overseas. We expect it to take time for SMFG to acquire a financial holding company (FHC) license in the US and we see little likelihood of a major M&A deal emerging this year. However, we expect the bank to continue to aim to generate growth opportunities via the acquisitions of overseas assets. Moreover, the expansion of the gap between consolidated and parent earnings following the making of Promise a wholly owned subsidiary will likely be a theme. Undervaluation could become even clearer if a beefed up earnings platform made greater stability apparent.

Resona Holdings

The focal point at Resona is the repayment of public funds. Resona's implementation of operational reforms ahead of other banks and its highly distinctive strategy of focus on retail have been generating steady earnings with little volatility.

However, the public funds are a constant presence in one's mind when talking of the share price. The market's view is that the repayment of public funds will take several more years and that the bank will not take the route of repayment in installments and management has mentioned much the same. However, we think its stance could change as the outline of the domestic application of Basel III becomes clearer.

Sumitomo Mitsui Trust Holdings

The focal points at SMTH are merger effects for the banks under its auspices, recovery at the real estate business, and dividend policy. Operational mergers require a fair amount of "heavy lifting" and merger costs tend to emerge as a burden prior to the impact of cost cuts. As a result, we expect FY3/13, the first full fiscal year of the merger, to be a year of trials and tribulations. We thus think that while the FY3/12 dividend is likely to be lifted, there is a risk that the FY3/13 dividend will be cut. Nevertheless, the shares could enter a recovery trajectory if we see the swift realization of synergies and a rise in real estate business earnings on a recovery in real estate market conditions.

Shinsei Bank

The focal points at Shinsei will be whether it can surmount its asset quality issue and success in the consumer finance business. The bank is making steady progress with shrinking its noncore assets in areas such as European credit but the market continues to fret about noncore assets, real estate, and leveraged loans. If Shinsei can show in its earnings that it has overcome this asset quality problem and then if the consumer finance model that the bank has been developing and show starker results, we think the market's take on the bank would change markedly. In this regard, then, the spotlight will be on earnings trends in FY3/12 Q3 and Q4.

Aozora Bank

The focal points at Aozora are the possibility of repayment of public funds and its potential for acquisition by an overseas financial institution. We think that ahead of the mandatory conversion of the No. 5 preferred shares (¥155.3bn), due in October, Aozora will be looking at various options, including the buy back and retirement of the preferred at a premium and at dilution via the mandatory conversion. If it were to buyback and retire without a premium (this would require the agreement of the authorities and reports to the Diet and other bodies), this would be a greater positive than the market expects and such a buyback and retirement would raise the possibility of an acquisition from abroad. However, we do not take this kind of upbeat stance.

Seven Bank

The focal points at Seven Bank are a bottoming for usage rates by nonbank customers and the growth strategy in areas

such as overseas remittances. We are beginning to see signs of a recovery, since FY3/12 H1 results, in nonbank customer borrowing. If we see full-scale improvement here, it should lead to a halt in the decline for average usage fees and to a rise in operating revenue. Also, if international remittances, which have only just been introduced, take off, this would lead to Seven Bank creating a source of earnings other than ATM usage commissions. We think that neither focal point is attracting high expectations on the market and that if results are seen with them, it would be a tailwind for earnings and the share price.

Regional banks

We do not foresee much movement on the earnings front, so we expect investor interest to remain focused on share buybacks, dividend hikes, and other capital and dividend policies. Our focus is on Shizuoka Bank, where there are prospects of improved capital adequacy ratios as it is looking at introducing advanced internal credit rating method for measuring credit risk in terms of capital adequacy ratio calculations. We also have hopes for Bank of Yokohama, which started share buybacks last year, and for Joyo Bank and Chiba Bank, which have been buying back for some time.

Figure 6. Areas of market interest and our outlook (major banks)

	Market interest	CIRA view
Mizuho	Will it cut its FY3/13 dividend? Will it raise capital again? Will synergies be hard to come by?	No No We expect improvements in capital markets
MUFG	Will it merge with a domestic broker? Will it acquire overseas institutions?	Depends on conditions at the counterparty Not impossible
SMFG	Will nonbank earnings grow? Will it acquire overseas institutions?	May be possible in the near term Depends on US holding company approval
Resona	Could there be changes in capital policies? Will it pay back public funds in stages?	Will await clarification of domestic bank standards Not this year in all likelihood
SMTH	Will the early realization of synergies prove hard? Will it take time for the real estate market to recover?	Costs may come first We expect a gradual recovery
Shinsei	Will the disposal of noncore assets result in additional losses? Will consumer finance stagnate too?	We anticipate stabilized profitability We foresee growth at the bank parent
Aozora	Will it repay public funds by October? Will it be acquired by an overseas financial institution?	Probably little chance Depends on the above

Source: Citi Investment Research and Analysis.

10 potential events to ponder

In coming up with hypothetical scenarios for the sector in the past, our meditations have mainly focused on capital increases and reorganization. This year, too, we cannot get reorganization out of our heads. Figure 7 summarizes ten items that could be big news in 2012.

Of these, four involve industry reorganization: a possible merger of MUFG and Nomura Holdings, the acquisition of a US bank by MUFG, a reorganization of regional banks focused on Ashikaga Bank, and the acquisition of a Japanese bank by a foreign financial institution. Three are related to regulation: the definition of core Tier I standards in Japan, the first domestic issue of contingent capital, and the acquisition by SMFG of financial holding company status in the US. Two are related to public funds: Aozora Bank buying and retiring preferred shares created with public funds and Resona partially paying back public funds. One is related to other issues: expanded supply of funds by Asian central banks using JGBs as collateral.

Among these potential game-changers, we have discussed the possibility of a merger between MUFG and Nomura Holdings in our November 10 memo [Could Nomura and MUFG merge? - Unlikely for now but...](#) As we indicated in that memo, we think such a move is unlikely unless conditions come to the point that Nomura's existence would be threatened by sticking to its independent path.

The company-specific points above include a number of eventualities that we have already said we consider improbable; by raising these possibilities we do not mean to imply that they are likely to come to pass.

Figure 7. 10 potential events to ponder—in no particular order

10 brain-teasing potential surprises for 2012	
1	MUFG and Nomura merge
2	MUFG acquires a US regional bank
3	Ashikaga Bank proves key to regional bank consolidation
4	Overseas financial institutions acquire Japanese banks
5	Standards are set for domestic-only banks based on Basel III
6	The first domestic issuance of contingent capital occurs
7	SMFG obtains a financial holding corporation license in the US
8	Aozora buys back preferred shares created with the injection of public funds
9	Resona buys back some preferred shares created with the injection of public funds
10	Central banks in Asia expand the availability of funds with JGBs as collateral

Note: We do not necessarily think the events above are likely to transpire.
Source: Citi Investment Research and Analysis.

4. Expecting banks to reach earnings targets

Factors reducing visibility in FY3/12

Factors related to credit costs

Among the risk factors hanging over the current fiscal year and future ones, we see three that are tied to credit costs: TEPCO issues, Olympus issues, and the issues regarding the SME Finance Facilitation Law.

Last November, METI approved an emergency special business plan for TEPCO; the plan requires that financial institutions maintain loan balances, but does not demand other financial support. TEPCO will submit a special integrated business plan to the authorities this spring and see to win approval for it; in that process we see a non-negligible possibility of banks being called upon to bear some of the burden, in the shape of interest rate cuts, etc. We surmise, however, that the chances of this occurring are modest, as this kind of financial support would hamper the resumption of electric power bond issuance by other EPCOs. Nevertheless, the political risk is always present and given the history of past Chief Cabinet Secretary utterances, we feel that investors need to include within the range of their expectations the worst-case possibility of debt forgiveness for pre-quake liabilities. We think, however, that a more realistic way for the banks to bear the burden of losses would be to provision against TEPCO by classifying it as an “other watch-list borrower”.

We think that Olympus is unlikely to fall into a state of negative net worth from which it could not recover, given that, following the investigation into the company by the third-party committee and its report, Olympus has already filed its FY3/12 Q2 earnings report and its businesses themselves are doing just fine. Even if it were to be delisted, we do not think it would trigger a borrower downgrade for Olympus to special attention or in danger of bankruptcy status. We thus think it would be reasonable to expect, in terms of the maximum loss, the burden of reserves associated with “other watch-list borrower” status.

The SME Finance Facilitation Law, which is a temporary statute, expires in March this year; irrespective of whether it is extended or not, one of the concerns of the market is the deterioration in the quality of receivables extended to SMEs that have received support based on this law. Specifically, the

interest of the market is in whether firms that as a precondition of support, were required to submit or are expected to submit operational improvement plans (also known as radical operational rebuilding plans that are likely to be realized) are being adequately provisioned for, as they are being classified as “other watch-list borrowers” rather than “special attention borrowers”, even though their loan terms, such as moratoriums on the repayment of past principal, are being eased. In FY3/12 results briefing documents, SMFG has been disclosing material to help in the estimation of potential reserve shortfalls and it would be possible to conduct a stress test using these calculations. However, most banks do not disclose this kind of information, so we have decided to make hypothetical assumptions based on our impressions in the course of research and the example of SMFG.

Factors related to share prices

In past results, costs related to impairment write-downs on equities have had not inconsiderable impacts. Because banks do not disclose the acquisition cost of specific shareholdings, it is tough to estimate the amount of write-downs at a given share price level. We calculate them based on a linear approximation using impairment amounts at FY3/12 H1.

Factors related to accounting

The changes in tax rates will be reflected in Q3 earnings; this is no mere possibility but a certainty. The net impact of permanent tax cuts and the temporary 10% reconstruction tax will be to reduce the statutory tax rate by around 2.7%. This will have a negative impact on NP in FY3/12.

Analysis of leeway in reaching earnings targets

Positives that are not reflected in earnings outlooks

Current bank estimates for FY3/12 (including management targets) look very conservative overall when set up against earnings progress through H1. Bond trading, where banks enjoyed remarkable realized gains in H1, credit expenses, which are low, and reductions in effective tax rates associated with the drawdown of valuation reserves related to DTAs are all barely reflected in H2 estimates.

One specific factor that we forecast is likely to contribute to profit in H2 is gains on the collection of receivables that had already been written off related to Hayashibara, which has already submitted its turnaround plan proposal to the courts

and looks set to repay approximately ¥130bn of its ¥140bn in debt. Although the amount of profit booked will differ according to the timing of the repayments, we estimate that SMTH will book profits of ¥12bn-¥14bn overall (estimate based on the amount of loans Sumitomo Trust & Banking wrote off in FY3/11 Q4). We are also anticipating collection gains of around ¥2bn at Aozora (same estimate approach).

We think Shinsei could draw down reserves with the passage of the Jusen Resolution Law. We forecast reversal gains of the order of ¥15bn. While we anticipate similar reversal gains at Aozora (around ¥5bn), it has already reflected them in its earnings forecasts.

Some banks may also see the amount of DTAs they book rise on the elimination for taxation purposes of loss carryforwards, as MUFG did in FY3/11. Specifically, we expect valuation reserve drawdowns to push up NP on the shift from four categories (assets booked according to taxable income budgets over 1-5 years) to two categories (in which it is possible to book as assets deductible temporary differences without time constraints but by scheduling) in the categories in the Japan Institute of Chartered Professional Accountants' (JICPA) audit commission report No. 66, *Audit treatment of decisions on the possibility of recovering deferred tax assets*. However, this point will likely impact banks' results plans, so we disregard it in our calculations.

Analysis of leeway

We have analyzed the probability that banks will reach their FY3/12 earnings targets in light of the conditions detailed above and with added stresses. Our assumptions are as follows.

- 1) Banks maintain the level of net business profit they saw in H1, excluding factors that were clearly one-offs (i.e., the parent clean-up at Shinsei of loans that had already been dealt with on a consolidated basis). It would be unrealistic to assume bond trading gains of zero, so we assume the average for the past five years (from FY3/09, when the impact of securitized products resulting from the Lehman Brothers bankruptcy was reflected).
- 2) For credit expenses, we exclude the above positives and negatives and assume that the quarterly pace when there were no net reversals in H1 will recur in H2 with no reversals.

- 3) For equity gains/losses, we assume trading gains/losses in H1 and reflect impairments in a stress scenario.
- 4) For the effective tax rate, we reflect the negative impact of the decline in the statutory tax rate and determine the rate based on the trend in the effective tax rate in H1.
- 5) We assume that any negative contribution in H1 caused by subsidiaries and affiliates that appear on the consolidated books will not recur in H2.

First, Figures 8 and 9 show our calculations of the impact of the decline in the corporate tax rate. In making these calculations, we estimate the overall picture from bank parent aggregate data disclosed at the time of H1 results, as DTAs disclosed in quarterly reports have deducted from them those DTAs that relate to marketable securities revaluation differences, etc., and then calculate the reduction impact for gross DTAs.

Figure 8. Major banks: Estimates of FY3/12 accounting impact of the cut in the corporate tax rate (¥bn)

	Mizuho	MUFG	SMFG	Resona	SMTH	Shinsei	Aozora
DTAs (gross) est.	726.4	960.5	474.2	196.0	278.9	24.9	50.0
DTL (excluding revaluation, etc)	46.8	32.9	16.9	10.5	6.7	0.0	1.6
DTAs to be affected	679.6	927.6	457.3	185.5	272.2	24.9	48.4
Tax cut impact	45.1	61.5	30.3	12.3	18.1	1.7	3.2

Source: Citi Investment Research and Analysis.

Figure 9. Regional banks: Estimates of FY3/12 accounting impact of the cut in the corporate tax rate (¥bn)

	Chiba	Yokohama	Joyo	Fukuoka	Shizuoka	Shiga	Hiroshima
DTAs (gross) est.	37.9	53.9	46.6	107.9	56.8	24.9	41.7
DTL (excluding revaluation, etc)	0.9	0.0	14.4	12.3	7.5	0.2	4.8
DTAs to be affected	37.0	53.9	32.2	95.6	49.3	24.7	36.9
Tax cut impact	2.5	3.6	2.1	6.3	3.3	1.6	2.4

Source: Citi Investment Research and Analysis.

Figures 10 and 11 show our estimates of stress factors on earnings. For TEPCO receivables here we use numbers surmised from post-disaster media reports based operating reports for past fiscal years. For Olympus receivables, our numbers are based on data reported by the *Nikkei* at the time of the company's briefing for banks.

Figure 10. Major banks: Summary of stress factors on earnings (¥bn)

	Mizuho	MUFG	SMFG	Resona	SMTH	Shinsei	Aozora
Olympus receivables	85.9	142.8	227.5	0.0	14.1	0.0	0.0
Cost of downgrade to other watch-list borrower status	4.3	7.1	11.4	0.0	0.7	0.0	0.0
TEPCO receivables	781.0	697.2	890.9	0.0	350.0	0.0	0.0
(Of which outstanding before the quake)	231.0	247.2	290.9	0.0	100.0	0.0	0.0
Cost of downgrading to other watch-list borrower status	39.1	34.9	44.5	0.0	17.5	0.0	0.0
Cost of waiving old debts	313.5	314.7	380.9	0.0	137.5	0.3	0.0
TOPIX 700 additional impairment	34.8	60.5	12.4	1.0	5.8	2.9	0.1

Source: Nikkei, Citi Investment Research and Analysis.

Figure 11. Regional banks: Summary of stress factors on earnings (¥bn)

	Chiba	Yokohama	Joyo	Fukuoka	Shizuoka	Shiga	Hiroshima
Olympus receivables	0.0	0.0	15.0	0.0	0.0	0.0	0.0
Cost of downgrade to other watch-list borrower status	0.0	0.0	0.8	0.0	0.0	0.0	0.0
TEPCO receivables	10.0	0.0	0.0	0.0	0.0	0.0	0.0
(Of which outstanding before the quake)	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Cost of downgrading to other watch-list borrower status	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cost of waiving old debts	10.0	0.0	0.0	0.0	0.0	0.0	0.0
TOPIX 700 additional impairment	0.8	0.1	0.1	0.1	0.4	0.0	0.3

Note: Chiba Bank's TEPCO receivables are our estimates. We believe it has already downgraded TEPCO to other watch-list borrower status, however.

Source: Nikkei, Citi Investment Research and Analysis.

Figure 12. Major banks: Analysis of leeway in reaching FY3/12 targets (¥bn)

	Mizuho	MUFG	SMFG	Resona	SMTH	Shinsei	Aozora	Total
H1 results								
Net business profit	359.5	628.4	464.9	139.4	129.6	10.8	19.0	1,751.7
of which bond gains	81.8	214.7	124.4	15.4	50.7	-3.6	6.2	489.5
Credit cost	8.5	0.5	2.9	-0.4	0.8	2.8	-2.3	12.8
Equity gains/losses	-67.3	-113.3	-11.1	0.4	-23.3	1.8	0.3	-212.5
Pretax profits	189.3	479.0	398.1	142.7	79.9	6.9	20.2	1,316.0
Effective tax rate	19.4%	33.6%	27.0%	14.3%	27.8%	34.8%	-11.9%	26.4%
NP	152.5	317.9	290.6	122.2	57.7	4.5	22.6	968.0
Affiliated contribution	102.2	378.2	23.2	6.0	70.4	15.9	-0.1	595.8
Consolidated NP	254.7	696.1	313.8	128.2	128.1	20.4	22.6	1,563.8
of which one-off	77.4	290.6	21.0	11.5	62.7	4.0	0.0	467.2
of which affiliated negative contribution	-20.8	0.0	-46.0	0.0	0.0	0.0	0.0	-66.8
H2 assumptions								
Net business profit	327.4	506.8	402.3	137.1	104.2	19.2	20.0	1,517.0
Credit cost	50.2	27.6	68.6	16.6	12.0	6.4	0.0	181.4
Non-recurring cost	30.0	33.9	18.3	0.0	17.9	0.0	0.0	100.1
Other special items	0.0	0.0	0.0	0.0	13.0	15.0	2.0	
Pretax profits	247.2	445.2	315.4	120.5	87.3	27.8	22.0	1,265.5
Effective tax rate (before tax cut impact)	15.0%	35.0%	27.0%	35.0%	28.0%	35.0%	-20.0%	
NP	210.1	289.4	230.3	78.4	62.9	18.1	26.4	915.5
Affiliated contribution	45.6	87.6	48.2	6.0	16.4	1.9	-0.1	205.5
Tax cut impact	-45.1	-61.5	-30.3	-12.3	-18.1	-1.7	-3.2	-172.2
Consolidated NP	210.6	315.5	248.1	72.0	61.2	18.3	23.1	948.8
Full Year results based on assumptions above								
Net business profit	686.9	1,135.2	867.2	276.5	233.8	30.0	39.0	3,268.6
Credit cost	58.7	28.1	71.5	16.2	12.8	9.2	-2.3	194.1
Consolidated NP	465.3	1,011.5	561.8	200.3	189.3	38.6	45.7	2,512.6
Consolidated NP (CoE)	460.0	900.0	500.0	170.0	180.0	22.0	45.0	2,277.0
Buffer	5.3	111.5	61.8	30.3	9.3	16.6	0.7	235.6
Buffer (pretax basis)	6.2	171.6	84.7	46.6	12.9	25.6	0.6	348.2
Risk factors								
Olympus	4.3	7.1	11.4	0.0	0.7	0.0	0.0	23.5
TEPCO (pessimistic case)	39.1	34.9	44.5	0.0	17.5	0.0	0.0	136.0
TEPCO (worst case)	313.5	314.7	380.9	0.0	137.5	0.3	0.0	1,146.9
Additional equity write-down	34.8	60.5	12.4	1.0	5.8	2.9	0.1	117.6

Note: For Mizuho, we take into account the impact on extraordinary items of new subsidiaries in H1. SMFG's equity gains/losses exclude the estimated burden of write-downs on its own shares. For SMTH, we reflect the merger impact on net business profit in H2. For Shinsei, we put Aplus provisions for the repayment of overpaid interest at ¥10bn.

Source: Company data, Citi Investment Research and Analysis.

Figure 13. Regional banks: Analysis of leeway in reaching FY3/12 targets (¥bn)

	Chiba	Yokohama	Joyo	Fukuoka	Shizuoka	Shiga	Hiroshima	Total
H1 results								
Net business profit	38.2	52.4	22.3	44.8	35.6	10.5	21.0	224.7
of which bond gains	1.7	-3.1	2.8	7.5	5.7	1.6	3.0	19.1
Credit cost	-5.7	8.6	6.2	6.9	-7.3	3.1	4.2	16.0
Equity gains/losses	-9.5	-1.0	-1.2	-1.4	-5.2	-0.1	-3.6	-21.9
Pretax profits	35.5	41.1	12.8	30.8	37.4	7.3	11.9	176.7
Effective tax rate	35.2%	40.3%	32.9%	35.2%	42.4%	34.7%	37.0%	37.9%
NP	23.0	24.5	8.6	19.9	21.5	4.7	7.5	109.8
Affiliated contribution	0.5	1.4	0.6	-5.8	0.7	0.5	0.3	-1.9
Consolidated NP	23.5	25.9	9.2	14.1	22.3	5.3	7.7	107.9
of which one-off	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
of which affiliated negative contribution	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
H2 assumptions								
Net business profit	37.4	54.0	22.7	38.0	33.4	11.0	19.0	215.5
Credit cost	5.3	7.3	6.8	6.1	5.2	3.4	4.0	38.1
Non-recurring cost	0.0	2.9	1.3	-3.4	1.5	2.1	-0.2	4.2
Other special items	3.4	0.0	0.0	5.0	0.0	0.0	1.7	
Pretax profits	35.5	43.8	14.6	40.3	26.7	5.5	16.9	183.3
Effective tax rate (before tax cut impact)	38.0%	38.0%	37.0%	32.3%	38.0%	38.0%	38.0%	
NP	22.0	27.2	9.2	27.3	16.6	3.4	10.5	116.1
Affiliated contribution	1.1	1.4	0.6	-5.2	0.7	0.2	0.3	-1.0
Tax cut impact	-2.5	-3.6	-2.1	-6.3	-3.3	-1.6	-2.4	-21.9
Consolidated NP	20.7	24.9	7.7	15.7	14.0	1.9	8.3	93.2
Full Year results based on assumptions above								
Net business profit	75.6	106.4	45.0	82.8	69.0	21.4	40.0	440.2
Credit cost	-0.4	15.9	13.0	13.0	-2.1	6.5	8.2	54.1
Consolidated NP	44.1	50.8	16.9	29.8	36.3	7.2	16.0	201.2
Consolidated NP (CoE)	45.0	50.5	17.0	27.0	38.0	6.8	16.1	200.4
Buffer	-0.9	0.3	-0.1	2.8	-1.7	0.4	-0.1	0.8
Buffer (pretax basis)	-1.4	0.5	-0.2	4.2	-2.8	0.7	-0.2	0.8
Risk factors								
Olympus	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.8
TEPCO (pessimistic case)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TEPCO (worst case)	10.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Additional equity write-down	0.8	0.1	0.1	0.1	0.4	0.0	0.3	1.8

Source: Company data, Citi Investment Research and Analysis.

As a result of the analysis above, we conclude that in a situation in which banks are not under stress, many of them will be able to generate earnings ahead of their current estimates, even given the negative impact from the decline in the statutory effective tax rate.

Implications for FY3/13 earnings

Here we would like to analyze what kind of approach to take on FY3/13 earnings based on the outlook for where earnings in FY3/12 will end up in the various cases detailed above.

Essentially, what we do is to look at the kind of level the FY3/13 bank plan is likely to be at based on banks' tendencies when drawing up their initial earnings outlooks in a typical year. First, we think that while they will anticipate declines in bond gains versus FY3/12, they will reflect to a degree in their net business profit estimates efforts to increase loan balances and commission income. We think they will probably put their estimates of credit expenses at levels close to their initial FY3/12 outlooks. They generally put equity gains/losses at zero (Mizuho often anticipates gains from period-start but we assume here that it will go for zero this time). Finally, as regards the effective tax rate, we take note of the way that banks divided into ones that tend to anticipate scheduling for DTAs from period-start and those that strongly tend to draw up their earnings plans with the effective tax rate very close to the statutory effective tax rate.

Figures 14 and 15 show these expectations and compare them with FY3/12E earnings, the "launch-pad" for FY3/13, while also adding in a stress scenario.

Figure 14. Major banks: How FY3/13 earnings may shape up (¥bn)

	Mizuho	MUFG	SMFG	Resona	SMTH	Shinsei	Aozora	Total
FY3/12 estimates using above scenario								
Net business profit	686.9	1,135.2	867.2	276.5	233.8	30.0	39.0	3,268.6
Credit cost	58.7	28.1	71.5	16.2	12.8	9.2	-2.3	194.1
Consolidated NP (pre-stress)	465.3	1,011.5	561.8	200.3	189.3	38.6	45.7	2,512.6
Consolidated NP (post-realistic stress)	398.9	944.9	512.0	199.6	172.0	36.7	45.6	2,309.7
Consolidated NP (pre-stress, excl. good-will impact)	387.9	720.9	540.8	188.8	126.6	34.6	45.7	2,045.4
Consolidated NP (post-realistic stress, excl. goodwill impact)	321.5	654.3	491.0	188.2	109.3	32.7	45.6	1,842.5
FY3/13: Our forecast of bank estimates								
Net business profit	690.0	1,100.0	770.0	260.0	235.0	35.0	40.0	3,130.0
Credit cost	125.0	155.0	100.0	59.0	30.0	7.5	9.0	485.5
Consolidated NP	420.0	650.0	450.0	160.0	120.0	35.0	46.0	1,881.0
NP growth (pre-stress)	8.3%	-9.8%	-16.8%	-15.3%	-5.2%	1.1%	0.7%	-8.0%
NP growth (post-stress)	30.6%	-0.7%	-8.3%	-15.0%	9.8%	7.0%	0.8%	2.1%

Source: Citi Investment Research and Analysis.

Figure 15. Regional banks: How FY3/13 earnings may shape up (¥bn)

	Chiba	Yokohama	Joyo	Fukuoka	Shizuoka	Shiga	Hiroshima	Total
FY3/12 estimates using above scenario								
Net business profit	75.6	106.4	45.0	82.8	69.0	21.4	40.0	440.2
Credit cost	-0.4	15.9	13.0	13.0	-2.1	6.5	8.2	54.1
Consolidated NP (pre-stress)	44.1	50.8	16.9	29.8	36.3	7.2	16.0	201.2
Consolidated NP (post-realistic stress)	43.7	50.8	16.4	29.8	36.0	7.2	15.8	199.7
Consolidated NP (pre-stress, excl. good-will impact)	40.7	50.8	16.9	24.8	36.3	7.2	16.0	192.8
Consolidated NP (post-realistic stress, excl. goodwill impact)	40.3	50.8	16.4	24.8	36.0	7.2	15.8	191.3
FY3/13: Our forecast of bank estimates								
Net business profit	70.0	105.0	41.0	67.6	61.0	18.0	37.0	399.6
Credit cost	7.5	17.0	10.0	15.0	10.0	7.0	8.0	74.5
Consolidated NP	39.2	52.0	17.6	24.6	32.0	6.9	18.2	190.5
NP growth (pre-stress)	-3.8%	2.4%	4.0%	-0.9%	-11.8%	-4.5%	13.7%	13.7%
NP growth (post-stress)	-2.7%	2.5%	7.2%	-0.6%	-11.2%	-4.5%	14.9%	14.9%

Source: Citi Investment Research and Analysis.

Above we compare the earnings uptrend before and after deducting factors that are clearly one-offs in accounting terms, such as profits related to negative goodwill in FY3/12. Here, in our realistic stress scenario for FY3/12, we assume that receivables related to Olympus and TEPCO are downgraded to the other watch-list borrower category and that TOPIX falls to 700, giving rise to additional impairments.

As a result, we think that earnings levels that banks forecast for FY3/13 may be roughly the same level as profit in FY3/12 that is subject to certain amount of stress but that some banks will call for profit growth.

Accordingly, while some on the market are worried that banks will forecast YoY declines in earnings, we do not believe their estimates will stack up so badly as to warrant concern.

5. Relative valuations

Stable earnings

Stable earnings

We have been calculating fair value share price levels derived from stable earnings since 2010 (see our June 21, 2010 report [Banks sector outlook: Summer 2010 - Bruised but unbowed: 2010 stealth outperformance versus global peers to continue?](#)) We remap FY3/12 H1 results on an annual basis and update our assessment of stable earnings levels.

Figure 16. Major banks: Our estimate of stable earnings levels (¥bn)

	Mizuho	MUFG	SMFG	Resona	SMTH	Shinsei	Aozora	Total
Consolidated pre-tax profit								
FY2007	486.1	1,020.9	929.0	322.7	282.0	92.6	-12.8	3,120.4
FY2008	-405.9	115.1	29.5	234.2	-56.1	-119.0	-235.4	-437.6
FY2009	377.8	596.7	558.1	176.1	218.0	-123.0	7.5	1,811.1
FY2010	635.4	639.6	827.3	237.1	192.8	57.8	29.4	2,619.4
FY2011(1H)	343.6	963.1	545.4	155.1	194.4	25.7	20.5	2,247.8
One-off factors (taxable)								
FY2007	-224.7	-123.0	-68.6	-14.1	-70.2	36.9	-60.3	-524.0
FY2008	-595.2	-759.7	-192.5	62.2	-275.7	-60.3	-133.4	-1,954.6
FY2009	-114.9	-86.0	-37.1	-1.3	11.8	-2.0	0.0	-229.5
FY2010	-76.2	-131.4	-87.3	-1.7	-13.9	-17.6	0.0	-328.1
FY2011(1H)	-55.9	8.3	5.5	2.3	2.1	-8.4	-1.0	-47.1
One-off factors (non-taxable)								
FY2007	0.0	44.0	103.1	0.0	0.0	0.0	0.0	147.1
FY2008	0.0	0.0	0.0	0.0	0.0	-30.9	0.0	-30.9
FY2009	19.8	-67.4	-40.0	-7.4	-34.4	-95.1	0.0	-224.5
FY2010	-17.6	-211.0	-21.1	0.0	0.0	0.0	0.0	-249.7
FY2011(1H)	77.4	290.6	21.0	11.5	62.7	4.0	0.0	467.2
Credit cost								
FY2007	92.6	86.2	147.8	38.7	20.6	20.5	-7.4	398.9
FY2008	539.3	390.1	550.1	164.0	76.2	77.9	128.8	1,926.4
FY2009	157.1	404.4	254.7	82.1	-0.9	52.6	23.8	973.9
FY2010	-16.0	211.9	94.3	36.8	20.9	40.3	3.9	392.0
FY2011(1H)	8.5	0.5	2.9	-0.4	0.8	2.8	-2.3	12.8
Credit cost (0.3%)								
FY2007	196.8	265.6	186.4	78.2	55.8	16.9	12.9	812.5
FY2008	211.6	276.2	195.4	79.5	59.4	17.6	10.5	850.2
FY2009	186.5	254.6	188.1	78.8	61.9	15.5	9.2	794.6
FY2010	188.3	240.0	184.0	77.6	62.0	12.9	8.2	773.0
FY2011(1H)	87.4	112.4	85.6	38.7	31.3	6.1	4.1	365.5
Sustainable pre-tax profit								
FY2007	606.5	891.2	787.1	297.4	317.0	59.3	27.2	2,985.6
FY2008	517.1	988.7	576.6	256.4	236.4	53.1	16.3	2,644.7
FY2009	430.3	944.8	728.4	193.0	200.7	74.6	22.1	2,594.0
FY2010	536.6	1,094.6	860.0	198.1	165.6	54.0	25.1	2,934.0
FY2011E	486.5	1,104.5	872.4	204.6	198.3	53.6	30.1	2,950.1
Five year average	515.4	1,004.7	764.9	229.9	223.6	58.9	24.2	2,821.7
Estimate in 2010	522.6	979.8	738.0	236.2	229.9	60.2	22.7	2,789.6
Estimate in 2009	518.0	941.5	697.4	248.9	251.4	62.3	21.9	2,741.4

Source: Company data, Citi Investment Research and Analysis.

We have estimated stable earnings based on historical earnings excluding special factors. We separate special factors into two categories: 1) ones where the pretax impact has an equivalent post-tax impact (for instance, goodwill impairment is not subject to income deduction, so tax effects are not reflected) and 2) ones where the pretax impact filters through the effective tax rate and then impacts NP.

In the below calculation process, we discount the impact of special factors and estimate “stable consolidated pretax profit” that is not impacted by tax rates. We also adjust for a credit expenses level of 0.30% for each fiscal year.

Figure 17. Regional banks: Our estimates of stable earnings levels (¥bn)

	Chiba	Yokohama	Joyo	Fukuoka	Shizuoka	Shiga	Hiroshima	Total
Consolidated pre-tax profits								
FY2007	81.5	114.3	26.2	22.5	62.0	10.1	36.4	353.0
FY2008	14.7	9.6	2.9	-5.9	19.7	-17.5	13.2	36.8
FY2009	63.4	52.9	22.0	31.0	54.3	9.8	18.7	251.9
FY2010	70.2	83.8	21.8	51.7	63.5	11.8	24.5	327.2
FY2011(1H)	37.2	45.8	14.2	27.3	40.5	8.6	12.7	186.3
One-off factor (taxable)								
FY2007	-2.5	2.0	-8.7	-17.2	3.9	-0.2	4.0	-18.6
FY2008	-35.0	-43.2	-17.7	-13.3	-15.4	-12.6	-7.0	-144.1
FY2009	-4.6	-12.2	-6.1	-2.4	0.1	-0.7	-2.5	-28.4
FY2010	-0.4	-4.8	-5.7	3.8	0.3	0.0	-3.5	-10.3
FY2011(1H)	0.9	0.1	0.1	1.5	6.1	0.9	-0.3	9.3
One-off factor (non-taxable)								
FY2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FY2008	11.4	0.0	0.0	0.0	0.0	0.0	0.0	11.4
FY2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FY2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FY2011(1H)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Credit cost								
FY2007	8.7	18.0	13.6	29.2	7.5	15.9	21.3	114.3
FY2008	42.6	87.2	14.8	47.7	34.3	13.2	23.3	263.0
FY2009	26.4	55.9	19.5	26.3	23.3	14.0	14.6	180.0
FY2010	10.4	27.6	22.9	15.5	9.6	11.6	11.9	109.5
FY2011(1H)	-5.7	8.6	6.2	6.9	-7.3	3.1	4.2	16.0
Credit cost (0.3%)								
FY2007	19.9	25.6	13.9	23.9	17.8	7.7	13.0	121.7
FY2008	20.9	26.9	14.7	24.4	19.1	8.1	13.3	127.3
FY2009	21.4	25.5	14.4	24.4	18.9	8.1	13.1	125.7
FY2010	22.0	25.8	14.3	25.1	19.9	8.3	13.1	128.6
FY2011(1H)	11.2	13.1	7.2	12.9	9.9	4.1	6.6	65.0
Sustainable Pre-tax Profits								
FY2007	72.8	104.8	34.5	45.0	47.8	18.5	40.7	364.1
FY2008	60.1	113.1	20.6	30.7	50.3	0.2	30.2	305.1
FY2009	73.0	95.4	33.2	35.3	58.5	16.4	22.7	334.6
FY2010	58.9	90.4	36.1	38.3	52.8	15.1	26.8	318.4
FY2011E	38.7	82.3	26.4	39.6	34.4	13.5	21.0	256.0
Five Year Average	60.7	97.2	30.2	37.8	48.8	12.7	28.3	315.6
Estimate in 2010	66.2	100.9	31.1	37.3	52.4	12.5	30.1	330.6
Estimate in 2009	68.6	104.4	29.4	37.0	52.2	11.7	31.2	334.6

Source: Company data, Citi Investment Research and Analysis.

We define the “stable consolidated pretax profit” levels we obtain above as “sustainable pretax profit” and use it as the basis of our valuations below.

Sensitivity

We subject the “sustainable pretax profit” we obtain here to several sensitivity analyses: 10bpv credit expenses, 10bpv short-term interest rates, and 10bpv long-term interest rates. This estimates sensitivity to the three micro and macro factors of credit expenses, short-term interest rates, and long-term interest rates, expressed in 10bps values (10bpv).

Specifically, we show the impact on pretax profit of 0.10% upside and downside to our credit expense benchmark of 0.30%, we also show the earnings impact of a 0.10% movement in the unsecured overnight call rate, which is becoming the policy rate—this is the short-term interest rate impact—and of a 0.10% movement in the benchmark rate on a 10-year JGB as the long-term interest rate impact.

Setting PERs and tax rates

We use a PER level of 10x to draw out share price yardsticks—this is the average global valuation level over the long term.

We calculate the effective tax rate reflecting the lower corporate tax rate (net of tax increases) in the 2012 tax system revisions and lower only for drawdowns of valuation reserves related to future DTAs. Here we estimate room for future drawdowns of valuation reserves and use 10-year average tax rates. This is because, if the PER is 10x, then we assume that fair value equivalent to 10 years’ of earnings is priced into the shares.

Share price yardsticks

We believe Japanese banks have been oversold on factors such as political risk but think that near-term share price yardsticks should be determined by global bank valuations.

Figures 18 and 19 show our near-term share price yardsticks derived by applying a multiple of 10x to core EPS, in turn derived from stable earnings and the average effective tax rate. The undervaluation of the major banks stands out when valuing the banks on this PER level.

Figure 18. Valuations based on estimated stable earnings levels at major banks (¥bn, ¥)

	Mizuho	MUFG	SMFG	Resona	SMTH	Shinsei	Aozora
Sustainable pre-tax profit	515.4	1,004.7	764.9	229.9	223.6	58.9	24.2
Credit cost 10bpv	62.2	84.9	62.7	26.3	8.9	5.2	3.1
Short-term interest rate 10bpv	16.2	34.5	13.8	12.5	3.5	3.3	1.0
long-term interest rate 10bpv	16.2	22.3	14.6	6.7	2.1	0.3	0.0
DTA allowance to be written back	550.0	600.0	370.0	390.0	25.0	60.0	100.0
Effective tax rate (10 year)	29.1%	33.0%	34.0%	23.9%	37.1%	29.5%	3.6%
Basic EPS	14.5	47.6	361.6	48.4	33.9	15.6	11.9
PE 10x	145	476	3,616	484	339	156	119
Credit cost 10bpv EPS	1.7	4.0	29.6	5.5	1.4	1.4	1.5
PE 10x	17.4	40.2	296.4	55.3	13.6	13.7	15.1
Short-term rate 10bpv EPS	0.5	1.6	6.5	2.6	0.5	0.9	0.5
PE 10x	4.5	16.3	65.4	26.2	5.3	8.8	4.7
Long-term rate 10bpv EPS	0.5	1.1	6.9	1.4	0.3	0.1	0.0
PE 10x	4.5	10.6	69.2	14.0	3.1	0.8	0.1

Source: Citi Investment Research and Analysis.

Figure 19. Valuations based on estimated stable earnings levels at regional banks (¥bn, ¥)

	Chiba	Yokohama	Joyo	Fukuoka	Shizuoka	Shiga	Hiroshima
Sustainable pre-tax profit	60.7	97.2	30.2	37.8	48.8	12.7	28.3
Credit cost 10bpv	7.1	8.5	4.8	8.1	6.3	2.7	4.4
Short-term interest rate 10bpv	1.0	2.2	0.7	0.4	1.9	0.8	1.0
long-term interest rate 10bpv	0.8	0.9	0.8	1.1	0.6	0.4	0.5
DTA allowance to be written back	2.0	2.0	0.0	29.2	2.8	7.2	0.4
Effective tax rate (10 year)	37.7%	37.8%	38.0%	31.6%	37.5%	33.3%	37.9%
Basic EPS	43.4	44.9	24.4	30.1	46.5	32.2	28.4
PE 10x	434	449	244	301	465	322	284
Credit cost 10bpv EPS	5.1	3.9	3.9	6.5	6.0	6.8	4.4
PE 10x	50.9	39.2	38.9	64.8	60.0	68.2	43.8
Short-term rate 10bpv EPS	0.7	1.0	0.5	0.3	1.8	2.0	1.0
PE 10x	7.2	10.2	5.3	3.3	17.8	20.4	9.7
Long-term rate 10bpv EPS	0.5	0.4	0.6	0.8	0.5	0.9	0.5
PE 10x	5.4	4.0	6.3	8.5	5.5	8.9	4.6

Source: Citi Investment Research and Analysis.

Chapter 2: Liquidity and value

1. Changing environment

Europe-grown credit crunch

Warning from HSBC CEO

On November 8, the Financial Times reported excerpts from a speech made by HSBC CEO Stuart Gulliver on the same day in Hong Kong warning about potential liquidity problems in Asia.

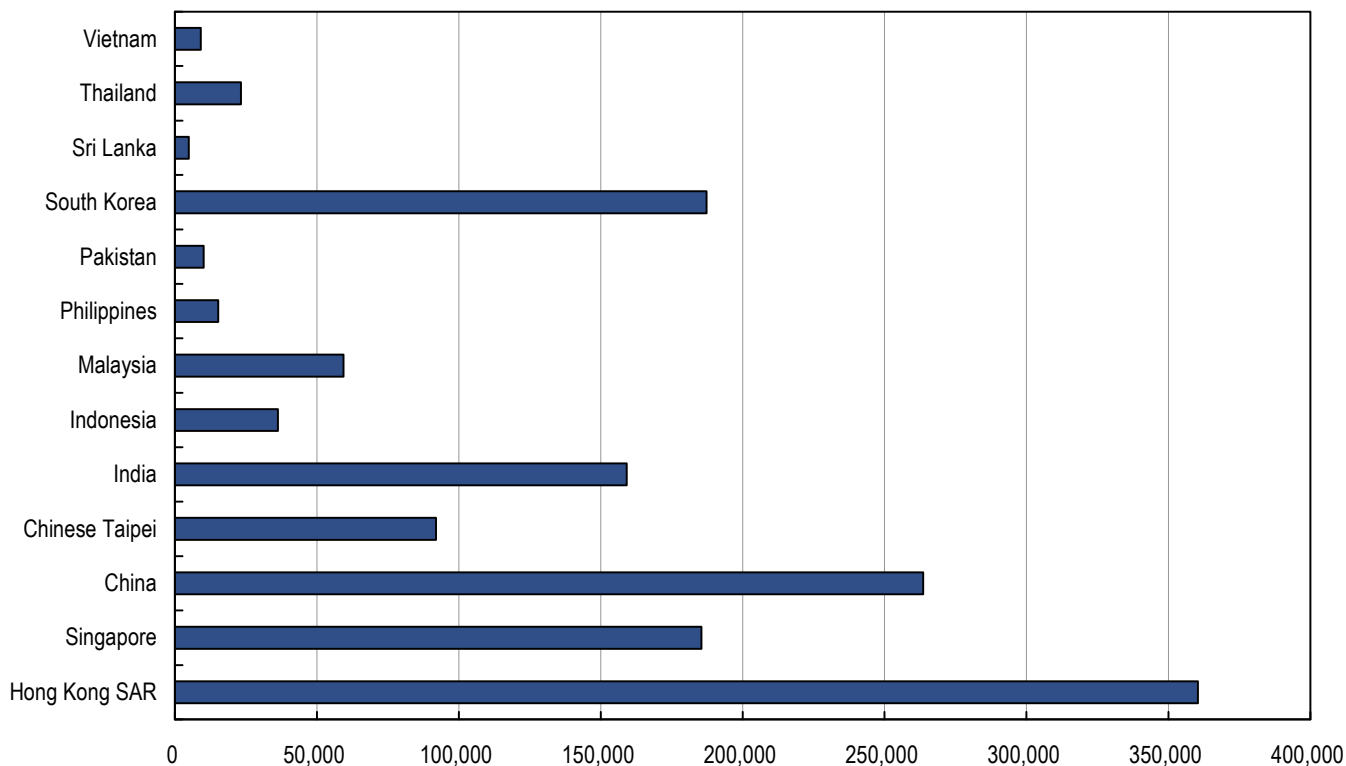
The funding pressures facing European banks, which play a crucial role in supplying credit to Asia, were clearly a concern to Mr. Gulliver and he warned that European banks could scale back loans made to the region.

European banks have ridden the wave of globalization in responding to robust demand for funds in Asia, the main locomotive of world economic growth. Even before Mr. Gulliver's warning, it did not take an expert to realize that deteriorating credit conditions for financial institutions in the eurozone could affect the supply of funds to Asia.

The presence of European banks in Asia

So is there a really a large risk of loan retrenchment by European banks leading to stagnation in economic growth in Asia? We do not think there is.

Figure 20. European bank exposure to Asia (end-June 2011; \$mn)



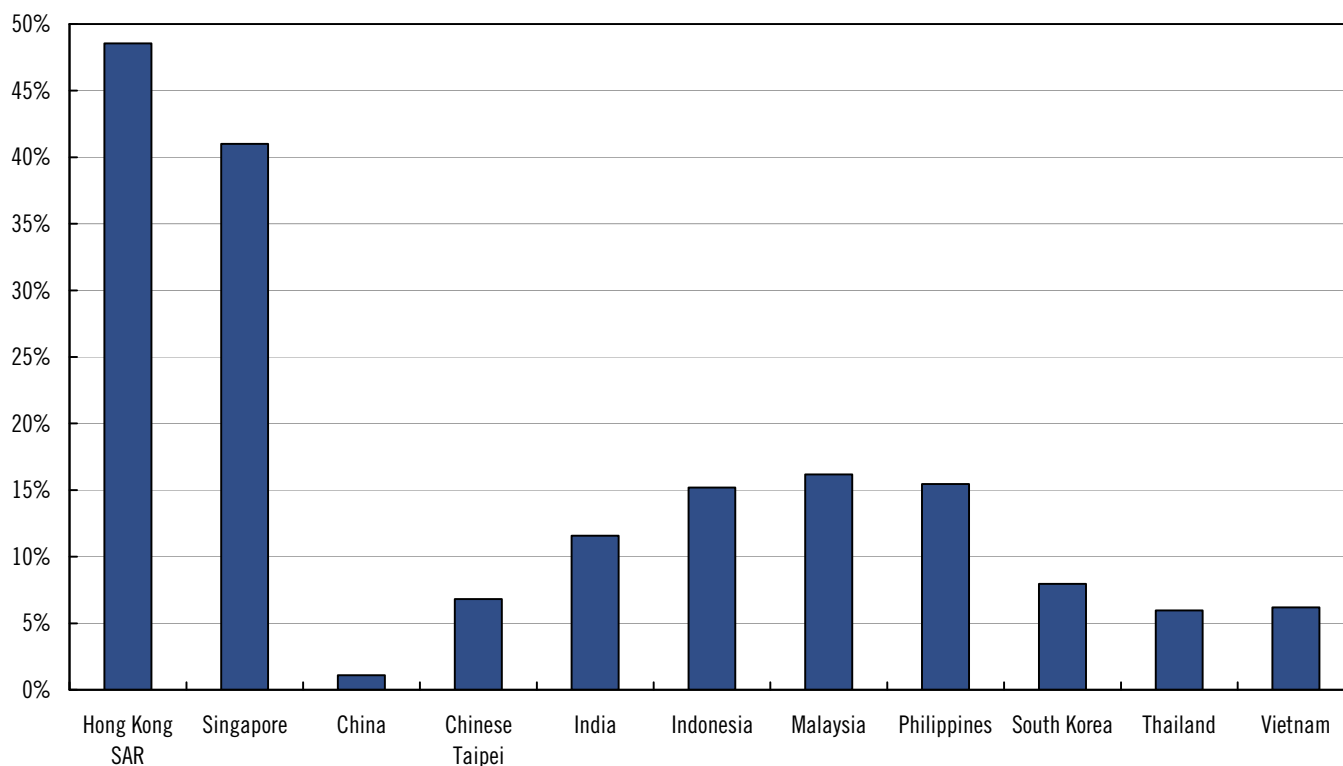
Source: BIS, Citi Investment Research and Analysis.

Figure 20 shows the exposure European banks have to Asian countries based on BIS data as of end-June 2010. The most eye-catching numbers are for Hong Kong, China, Singapore, and Korea. As a percentage of GDP, loans from European banks are particularly high for Hong Kong and Singapore, and considerably high for Malaysia and others.

Around 75% of loans to Hong Kong and 60% of loans to Singapore are from UK banks. Loans from continental European banks, which have been hit the hardest by European sovereign debt problems, are not especially large.

Should European banks, particularly continental banks, withdraw funds from Asia, we would not expect it to have an enormous impact on the economy. We think it is reasonable to conclude that more opportunities could arise for Japanese banks in Asia.

Figure 21. European bank exposure to Asia as a percentage of each nation's GDP (end-June 2011)



Source: BIS, Citi Investment Research and Analysis.

Regulation tightening

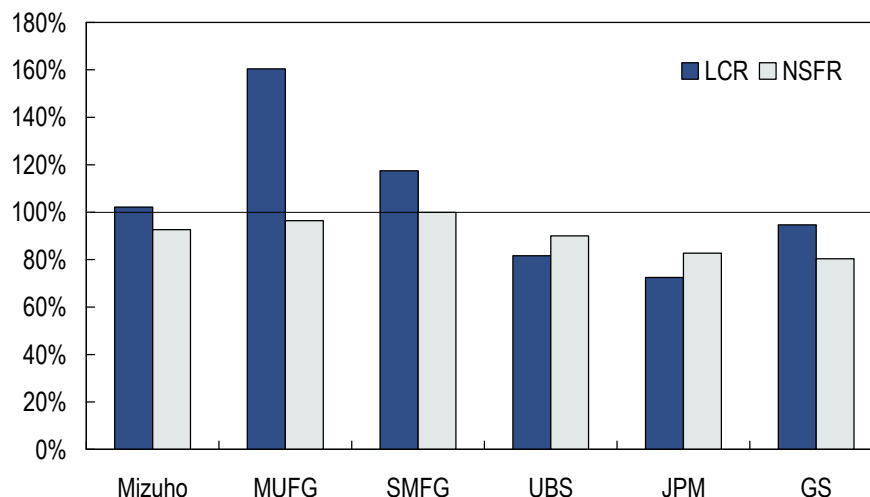
Basel III and liquidity

The Basel Committee has developed two liquidity ratios for use in the supervision of funding stability. The liquidity coverage ratio (LCR) is a measure of tolerance to short-term funding stress while the net stable funding ratio (NSFR) measures longer-term structural stability. A minimum of 100% has been set for both ratios. The LCR is to be introduced from 2015 and NSFR from 2018.

Figure 22 compares the liquidity ratios of Japanese banks and leading overseas banks. All Japanese currently clear the LCR requirement. All banks are struggling with the NSFR requirement, although overall Japanese banks are in better shape than overseas banks.

This suggests Japanese banks, with their strong deposit bases, are in a superior position to overseas banks in terms of funding.

Figure 22. Liquidity ratio estimates (FY2010)



Source: Citi Investment Research and Analysis.

The position of Japanese banks in a global context

Figure 23 compares bank loan-to-deposit ratios. Europe, mainly Northern Europe, is the region with the highest ratios, followed by emerging markets and Australia. Japanese banks are near the bottom of the ranking, with the three megabanks and Resona not even in the top 50. The stagnation of growth in loans, their main source of earnings, is not good but at least their financial positions look stable amid widening concern about liquidity regulation tightening and a global credit crunch.

Securing adequate liquidity is becoming a matter of survival for financial institutions as global macro visibility plummets. Financial institutions that have expanded asset bases to grow earnings without the backstop of deposits and other highly stable sources of funds are facing a crunch.

Credit market instability around the time of the Lehman failure raised the profile of liquidity ratios in the regulator environment. Even though the loan market is shrinking, we believe the chances of banks realizing the value of abundant liquidity have increased.

Figure 23. Global loan-to-deposit ranking (FY2010)

		Country	Loan deposit ratio
1	Svenska Handelsbanken	Scandinavia	268%
2	Swedbank	Scandinavia	222%
3	Danske Bank	Scandinavia	215%
4	DNB NOR ASA	Scandinavia	184%
5	Nordea	Scandinavia	177%
6	Itaú Unibanco	South America	165%
7	Lloyds Banking	UK	164%
8	Commonwealth Bank	AZ	159%
9	SEB	Scandinavia	151%
10	Westpac	AZ	143%
11	Bradesco	South America	142%
12	Bank VTB	Russia	138%
13	Commerzbank	Germany	137%
14	Santander Chile	South America	136%
15	Banco Santander	Spain	128%
16	Société Générale	France	126%
17	NAB	AZ	126%
18	BBVA	Spain	126%
19	Barclays	UK	124%
20	ANZ	AZ	119%
21	RBS	UK	117%
22	Shinhan Financial	Korea	116%
23	BNP Paribas	France	115%
24	US Bancorp	US	114%
25	Erste Bank	AZ	112%
59	Resona	Japan	77%
66	SMFG	Japan	73%
68	Mizuho	Japan	72%
69	MUFG	Japan	69%

Note: Ranking of 76 depository institutions covered by CIRA with market caps of at least \$10bn.

Source: Company data, Citi Investment Research and Analysis.

We believe any increased interest overseas financial institutions show in the Japanese market is likely related to access to liquidity. How can this dormant value be realized?

2. The value of liquidity

Expanding fundraising in Asia

Fundraising in local currency using Japanese government bonds as collateral

The Central Bank of Malaysia announced on November 18 that it would expand the list of eligible collateral that could be pledged to obtain ringgit liquidity to include securities issued by governments (including JGBs) and other central banks. On

November 25 the central banks of Japan and Thailand announced a collaborative arrangement for liquidity provision in baht using Japanese government securities as collateral.

These developments have put in place a smooth structure for Japanese banks to raise funds in ringgit and baht. It is difficult for Japanese banks to raise local-currency funds in countries where they do not have a retail presence. Previously, they relied on alliances with local banks to meet customers' needs. The only options available were inflexible, such as having a local bank provide a loan to a customer that the Japanese bank would then guarantee. This meant that they were not able to respond adequately to local-currency funding needs, and we believe this has resulted in missed loan opportunities.

Affinity with Japanese banks' strategy

These decisions make it considerably easier for Japanese banks, mainly the megabanks, with branches or banking licenses in these countries to grow loans to companies, etc, in Asia. Increasing business opportunities in Asia, an increasingly important region for Japanese companies, is at the core of Japanese banks' management strategies.

According to BIS data, at end-June 2011 Japanese banks had outstanding loans of \$11.9bn in Malaysia and \$35.5bn in Thailand. These amounts are not that large, and we believe one reason for this is the bottleneck of being unable to stably procure local-currency funds.

If central banks extend reciprocal arrangements to increase the flexibility of fund supply it would raise expectations of greater collaboration Asia wide, and this would probably be a strong tailwind for Japanese banks given their vast holdings of JGBs.

We believe the string of collaborative announcements could be related to asset contraction by European banks. If a credit crunch restricts the flow of funds from the eurozone to Asia, the impact on the Asian economy would be large. We think the enlargement of measures that address liquidity issues is a trend that has further to go.

Improving CCP functionality and expanding opportunities

Main obstacle to the use of surplus yen-deposits overseas

While abundant liquidity is one advantage Japanese banks have in global financial markets, their ability to procure foreign-currency funds is not that strong.

Yen funds are rarely converted into foreign-currency funds when financial markets are stable, but are often used as a last resort when Japanese banks find raising foreign-currency funds difficult. Converting yen funds into foreign-currency funds is thus an emergency measure, not undertaken under normal conditions.

The main reason Japanese banks find it difficult to develop business overseas using yen funds is because of currency risk hedging. Japanese banks typically do not take on currency risk when they lend overseas. But as banks intentionally take on currency risk as part of ALM and trading activities, we believe hedging the risk that naturally arises when pursuing credit risk overseas is the correct risk management approach.

Long-term forex contracts, currency swaps, and other instruments used to hedge currency risk require a counterparty. When a bank enters a hedge transaction with a counterparty, it does so within the framework of reciprocal credit lines. The size of the credit lines will differ substantially depending on whether the swap is of interest rates or the principal amount.

For example, an interest-rate swap on principal of ¥1trn can often involve a transfer of less than ¥10bn because difference between the rates that are swapped (variable rate and fixed rate) is at most only a few percentage points. A currency swap, however, requires transferring ¥1trn at maturity because it involves swapping the principal at a contracted date. Both parties' transaction windows thus narrow subsequently, even if they had credit lines to support the transaction.

Motivation for a central counter party (CCP)

Stabilizing financial markets is one of the aims of Basel III. The Basel Committee has accordingly put forward measures to stop contagion risk—the risk that the operational risk at a particular financial institution spreads to other institutions and creates a systemic risk.

One of its proposals is to reduce transactions that financial institutions negotiate among themselves. OTC derivatives

became a high-profile issue when Lehman Brothers collapsed. They involved banks that defaulted on derivatives contracts drawn up among financial institutions without the mediation of the market spreading their risk to other financial institutions. The problem of course included currency swaps.

Basel III thus imposes penalties based on both OTC derivatives trading volume and equity capital ratios. Movement in the value of derivatives trades when the market changes is not the only issue: the greater the value involved, the larger the loss can be when a bank defaults on a contract, although this will also depend on credit conditions at the counterparty. Increasing the capital required for these trades is a means of covering this risk. This is one factor behind the growth in risk assets at European and US banks.

Shifting OTC trades to a clearing institution, or central counterparty (CCP), allows banks to increase their equity capital ratios without needing to raise fresh capital.

Banks had shunned a unified format because tailored contracts among individual institutions allowed them freedom of action. However, Basel III has for the first time given them the common motivation to use a CCP system. In Japan, the Tokyo Stock Exchange started to function as a CCP for credit default swaps in July 2011.

If the CCP structure spreads to currency hedging, concerns about counterparty and credit risk would disappear and conditions would be in place to convert yen funds to foreign currency funds.

Hurdles to using a CCP

Deciding to use a CCP for currency swaps is not easy. Figure 24 and Figure 25 show some data related to the use of CCPs included in a Basel release last November

Figure 24 shows the current usage of clearing organizations for OTC derivatives. Many transactions are still conducted in a bilateral basis and the lack of information about currency trades shows how difficult it is in using a CCP.

Figure 24. Estimated trading at derivative clearing organizations (¥bn)

	Total notional outstanding	Notional outstanding on a CCP	Percentage of total on a CCP
Interest rate derivatives	395,304	134,113	34%
Interest rate swaps	214,472	104,913	49%
Basis swaps	19,286	2,405	13%
Overnight index swaps	50,244	26,796	53%
Other	111,302	NA	NA
Credit default swaps	27,046	3,107	11%
Multi name	12,185	1,994	16%
Single name	14,861	1,113	7%
Equity	5,635	NA	NA
Commodity	2,922	NA	NA
Foreign exchange	57,798	NA	NA

Note: As of July 1, 2011. Adjusted for double counting of trades between two parties.

Source: BIS, Citi Investment Research and Analysis.

Figure 25 shows the results of a survey conducted by the Basel Committee on Banking Supervision on progress made toward concentrating derivative transactions in clearing organizations and exchanges as of December 2011. This shows that progress varies by country.

Even in the US, where system design is most advanced, currency swaps are an exception to regulations requiring OTC derivative trades to be conducted through CCPs.

Certainly the hurdles to standardizing procedure, securing liquidity and other matters are high, but the imposition of penalties under regulations (increase in risk assets) and the early shift to CCPs for certain derivative products increase expectations of a wider range of derivatives being traded via CCPs and we thus expect this to be the most closely watched field of regulation moving forward.

Figure 25. Progress toward using CCPs based on a BCBS survey

	Law and/or regulation in force by end-2012 requiring all standardized OTC derivatives to be cleared through CCPs	Legislative and/or regulatory steps completed toward central clearing of standardized OTC derivatives	Additional legislative and/or regulatory steps needed for a central clearing requirement for standardized OTC derivatives to be effective
Argentina	No	NA	No
Australia	TBD	Legislation not yet proposed; Council of Financial Regulators (CFR) discussion paper published June 2011	Yes; CFR consultation period open until 5 August 2011, after which CFR to develop recommendation for Australian government consideration
China	Under consideration	Legislation not yet proposed; encouraging Shanghai Clearing House to establish detailed schemes for central clearing of OTC derivatives	Under review
European Union	Yes	Legislation not yet adopted; EMIR proposal made in September 2010	Yes; EMIR to be adopted by end-2011
Hong Kong SAR	Yes, but much also depends on the timing of global consensus on key issues and completing the legislative process in time	Legislation not yet proposed; regulators have commenced work on required amendments to legislation for regulatory regime for OTC derivatives	Yes; legislation must be adopted
Japan	Yes, but initially the requirements will apply only to Yen interest rate swaps and CDS (iTraxx Japan indices)	Financial Instruments and Exchange Act (FIEA) amended May 2010	Yes; Cabinet Ordinance to be amended to include requirement for CCP clearing of trades "that are significant in volume and would reduce settlement risks in the domestic market"
Singapore	Yes	Legislation not yet proposed	Yes; public consultation to be issued by end-2011; legislation to be introduced by end-2012
Switzerland	TBD	Legislation not yet proposed; under review to be concluded by end-2011	Yes
United States	Yes	Dodd-Frank Act adopted in July 2010	Yes; CFTC and SEC implementing regulations to be finalized

Source: BIS, Citi Investment Research and Analysis.

Overseas strategies using CCP and their implications

We can envisage a range of structural changes if Basel III promotes the use of CCPs and trading liquidity increases.

1) Increased added value for Japan's financial institutions

CCP-driven liquidity growth would increase the compatibility of yen funds' liquidity with foreign currencies. The strong capacity to absorb deposits in the nation's "closed economy" could thus become added value, in the form of increased liquidity, in the global "open economy".

2) Increased opportunities for pursuing credit risk overseas

We see possible opportunities for not only the megabanks but also a range of Japanese financial institutions to use that liquidity overseas. Although M&A involves little risk, we think the wider use of yen funds could create opportunities for business growth overseas without recourse to M&A. While we see the megabanks as the likely main beneficiaries due to their overseas credit assessment capabilities, we also think regional and other banks could leverage the support of corporate clients operating overseas to make wider use of their deposit-taking capabilities.

3) Easing of excessive competition in Japan

Using yen funds overseas is likely to ease deposit-backed competition among banks for shrinking lending opportunities in Japan. We could expect this to improve margins not only for overseas business but also for domestic business.

4) Increased long-term interest rates

Shifting yen funds from Japan overseas is likely to shrink liquidity for banks' JGB purchases. Although this raises no concerns of the supply/demand balance worsening sharply, we think it could steepen the yield curve in the long term.

5) Impact on foreign exchange rates

Because using yen funds overseas worsens Japan's capital balance, it could undermine the current account balance and weaken the yen. Rising long-term rates are troublesome for the government, but they may not be bad for the nation overall if we consider them together with Japanese companies' improved competitiveness and momentum for fiscal discipline resulting from higher JGB issuance costs.

3. Capital considerations

G-SIFIs

Designation of SIFIs

At the Cannes G20 meeting in November 2011, it was decided that special rules were required for global systemically important financial institutions (G-SIFIs). Specifically, the members decided to 1) draw up a provisional list of G-SIFIs; 2) draw up a framework for the supervision/regulation of SIFIs; 3)

strengthen the shadow banking system; 4) strengthen regulatory oversight for OTC derivatives.

The 29 banks provisionally designated at this meeting were asked to submit plans for how they could be broken up in a crisis by the end of 2012. However, the G-SIFIs that will be required to have a capital “surcharge” added to their Tier 1 ratios will be designated in November 2014 based on end-2013 data.

At this time, banks will be divided into five categories (with surcharges of 1%-3.5%) after which the additional capital adequacy necessary for each category will be announced. The new rules will be phased in in stages starting in January 2016. Banking authorities in each nation have discretion to implement the surcharges early should they want to.

Surcharges will be satisfied by Core Tier 1 capital only, and CoCos cannot be used. It is expected that insurance companies will be included in the candidates designated as G-SIFIs by 2013 after collaboration with accounting standards boards.

The relevant authorities will designate G-SIFIs via an indicator-based approach focused on four areas: cross-jurisdictional activity, size, substitutability, and complexity. The 29 institutions on the provisional list were selected in this manner from a survey of 73 financial institutions that account for 65% of global bank assets.

It is unclear right now whether Japanese banks will be targeted for a surcharge or how large this surcharge could be. We expect the surcharge on Japanese banks will be no more than 1%-1.5%. We anticipate all three megabanks in Japan having a core Tier 1 ratio of 8.5% by FY13, before the new requirements go into effect in 2016, and therefore we see little possibility of recapitalization.

Figure 26. Forecasts for core Tier 1 ratios based on Basel III

Bank	FY11E	FY12E	FY13E
Bank of America	5.9%	6.7%	7.8%
Goldman Sachs	7.9%	8.7%	9.5%
Morgan Stanley	7.1%	9.3%	9.3%
JP Morgan & Chase	8.0%	8.8%	9.5%
Wells Fargo	7.6%	8.6%	9.1%
HSBC	9.30%	10.00%	10.30%
Lloyds	7.80%	8.50%	9.80%
Santander	NA	9.02%	NA
Barclays	7.60%	8.20%	8.70%
RBS	6.90%	8.10%	9.20%
Commerzbank	5.80%	6.60%	7.60%
ING	NA	NA	NA
Deutsche	6.40%	7.20%	7.90%
BNP Paribas	7.60%	8.40%	9.50%
Credit Agricole	6.90%	7.50%	8.10%
UBS	10.30%	12.10%	13.30%
Société Générale	NA	9.12%	NA
Credit Suisse	NA	8.40%	NA
Nordea	NA	10.95%	NA
Uni Credit	NA	8.10%	NA
Mizuho	8.09%	8.52%	8.92%
MUFG	9.99%	10.36%	10.69%
SMFG	9.82%	10.37%	10.86%
BoC	9.85%	9.89%	10.07%

Source: Citi Investment Research and Analysis.

Estimating capital surcharges

It is extremely difficult to calculate systemic importance based on external data. We provide the following calculations based on a number of assumptions.

In making our assumptions, we base them on the indicator approach in *Global systemically important banks: assessment methodology and the additional loss absorbency requirement* (2011/11), as defined by the Basel Committee on Banking Supervision (BCBS).

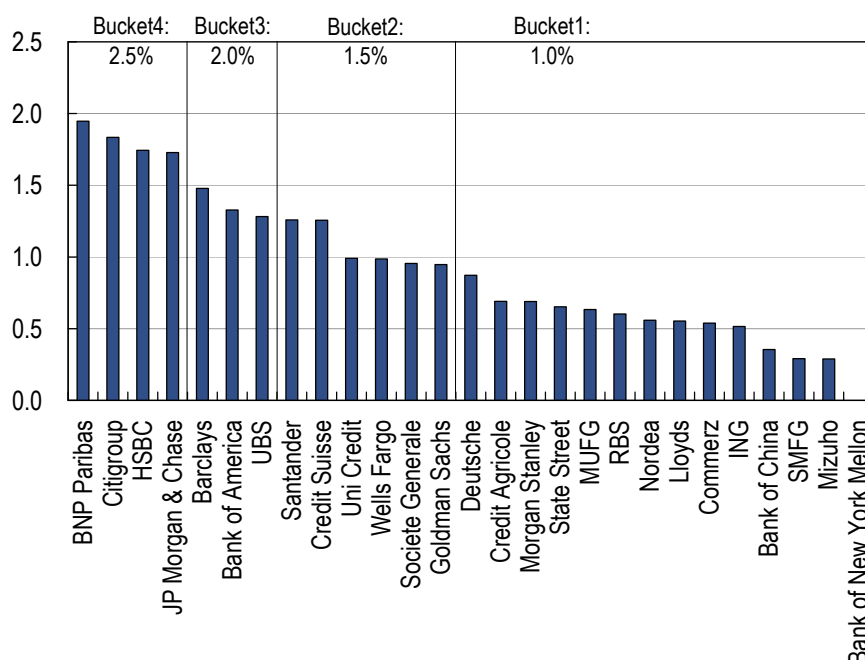
Specifically, we assign weights to standardized numbers for each metric in each field (Z scores in a standard normal distribution) so that each field is equalized and then turn them into metrics. We then reference the score distribution table for G-SIBs (global systemically important banks) and the allocation table for each bucket (category according to importance) in the same paper and distribute the banks into the various buckets.

Of the four fields designated by the BCBS, we exclude complexity, which is expressed typically by the number of regulatory authorities (jurisdictions), as we believe it exhibits a high degree of correlation with the metrics for the other three fields¹.

Reference: Estimation procedure

- 1) We convert the numbers and the six indicators in the footnote data (fiscal 2010, \$bn) into metrics (Z-numerical conversion)
- 2) We assign weights (33% each) to the three fields so they are equalized. In cases where the fields have an n-value, we divide the 33% assigned to each field by n
- 3) We add up the aggregates of the standardized numbers
- 4) We convert each bank's score to positive integers so that the lowest ranked score is zero
- 5) We allocate each bank to a bucket with reference to the BCBS paper

Figure 27. Estimated capital surcharge classifications (bar chart indicates systemic importance and not the level of surcharge)



Note: The BCBS used FY09 data in its calculations, but we use FY10 data in our estimates.
Source: BIS, Citi Investment Research and Analysis.

¹ The four main fields are as follows: 1) cross-jurisdictional activity: non-domestic revenue as a portion of total revenue, cross-jurisdictional claims and liabilities as a portion of total assets and liabilities, 2) size: gross or net revenue, equity market capitalization, 3) substitutability/financial institution infrastructure: gross mark-to-market value of repo, reverse repo, and securities lending transactions, gross mark-to-market OTC derivative transactions, and 4) complexity: number of jurisdictions.

Overseas strategies and capital costs

There is no doubt that Japanese banks, and particularly the three megabanks, have aggressive overseas strategies. As we said earlier, if a framework for procuring foreign currency is put in place, it could give a major boost to these strategies.

However, aggressive overseas expansion could potentially result in changes in systemic importance. We think banks need to consider capital adequacy requirements and associated increases in capital costs in planning overseas expansion.

These criteria do not rise in a linear fashion along with growth in overseas loans, making a simple discussion hard. However, we feel banks need to think more about regulatory costs associated with overseas expansion than they have in the past.

As a result, we have calculated the extent to which Japanese banks could increase their overseas lending before they would be subject to the next level of surcharge.

In making these calculations, we assume that the scores of other financial institutions do not change from fiscal 2010 and that averages and standard deviations are fixed.

Also, to see sensitivity to overseas exposure, which has limits, we disregard from consideration increases in derivative trading accompanying the expansion of overseas operations.

Figure 28 shows the results of our calculations. It is clear that unless Japanese banks' overseas operations increase quite considerably in size, they will not move into the next surcharge bucket. We therefore infer that Japanese banks probably need not fret excessively for now about their systemic importance scores when in pursuit of their overseas strategies.

Figure 28. Earnings and exposure necessary before next surcharge stage is reached

	Overseas earnings	Overseas exposure	Net business profit (¥bn)	Overseas exposure (¥bn)
Mizuho	27.2%	22.7%	283.9	21,912.1
MUFG	33.4%	26.9%	489.6	33,573.9
SMFG	31.0%	23.8%	271.0	18,946.6

Source: Citi Investment Research and Analysis.

Chapter 3. FAQs regarding 2012 outlook

Q1. Are Japanese bank stocks likely to lag global peers as they did after the Lehman collapse?

After Lehman Brothers went down, share price performance at Japanese banks was even worse than at European and US banks, despite the fact that their exposure to securitized products was not as great. Is the same thing likely to happen as a result of the crisis in Europe?

A1. There are clear differences from the time of the Lehman collapse in terms of risk (real estate-related, etc.)

Impairment of equities holdings

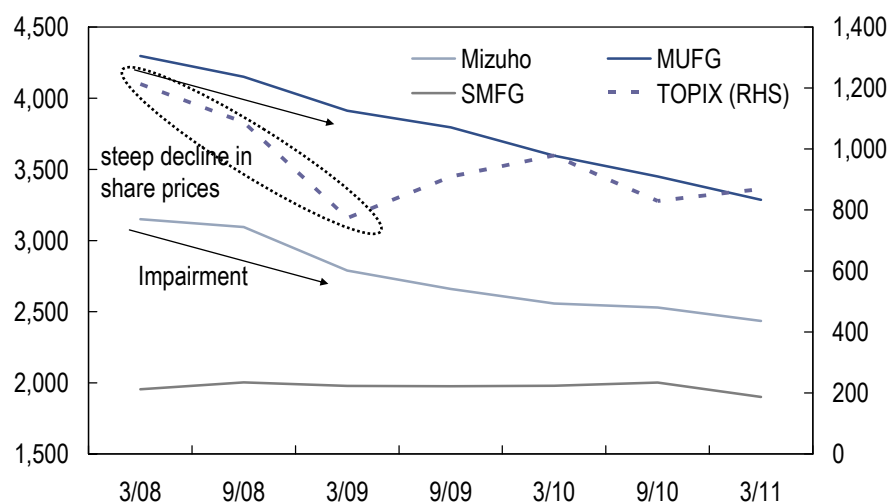
During the global financial crisis, Japanese banks wrote down trillions of yen in impairment losses resulting from the decline in Japanese stock prices, on top of losses on securitized products and other instruments. Furthermore, there was a rash of bankruptcies among start-up condo developers, while credit expenses at Japanese banks ballooned.

Figure 29 charts TOPIX against the value of megabank equities holdings. As the balance of shareholdings is shown at acquisition prices rather than market value, the value is diminished only by impairments or by sales.

While SMFG differs because acquisition values were written down when Wakashio Bank was absorbed, the chart shows how shareholdings at MUFG and Mizuho declined in tandem with falling share prices.

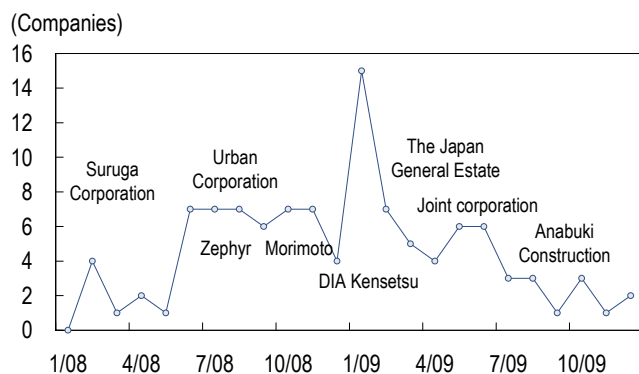
If share prices weaken further it could lead to further impairment losses, but compared to the situation after the Lehman Brothers collapse, it looks as though banks are more resistant to share price declines.

Figure 29. Share price declines and value of bank shareholdings (acquisition price basis; ¥bn)



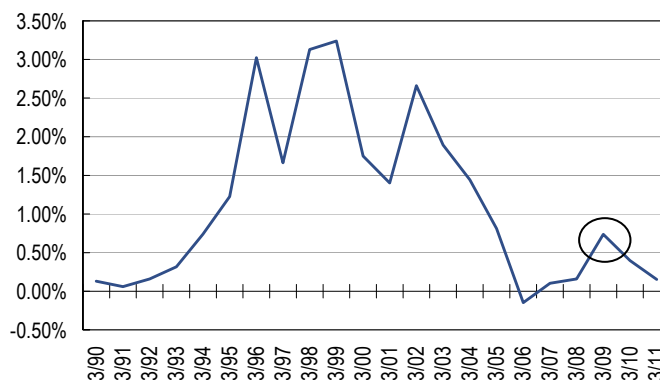
Source: Company data, Citi Investment Research and Analysis.

Figure 30. Condo developer bankruptcies



Source: Citi Investment Research and Analysis.

Figure 31. Credit expenses at major banks



Source: Citi Investment Research and Analysis.

Start-up real estate developers

Credit expenses increased markedly in the year Lehman went under. The principal driver was a spate of bankruptcies among start-up condo developers. Bankruptcies among such highly leveraged companies tend to lead to higher credit expenses. However, this negative is not a factor in the current environment, so we would not expect share price performance to follow the same pattern as that seen in the wake of the Lehman Brothers collapse.

Q2. Is deterioration in corporate earnings resulting from the crisis in Europe and yen strength likely to boost credit expenses?

There are concerns that the financial crisis in Europe will have an impact on the macro economy via avenues like a fall in exports from Japan. At the same time, the yen remains strong, with implications for bank borrowers that cannot be ignored either. Are credit expenses likely to increase?

A2. Corporate balance sheet improvements mean that past credit expense trends are no indicator of the future

Stronger balance sheets

Japanese companies have been strengthening their balance sheets over the past 20 years. As illustrated in Figure 32 below, overall financial leverage has declined and companies have made notable progress in bolstering their finances despite deteriorating operating conditions.

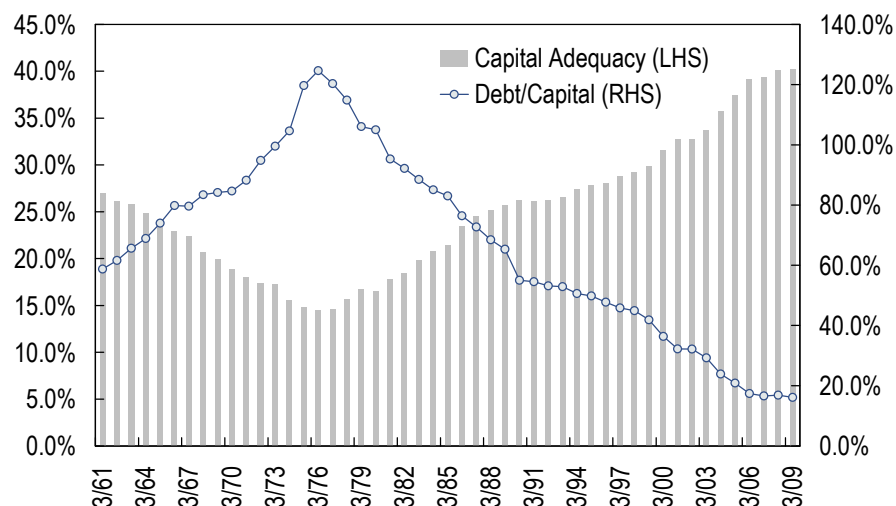
This process has resulted in fewer large corporations burdened by massive debts and fewer highly-leveraged borrowers (such as mid-tier real estate operators). As such, we see less reason to expect substantial increases in credit expenses.

SME risk

Furthermore, uncompetitive companies have been weeded out to some degree during past financial crises and periods of yen appreciation. A number of small companies have been sustained by political lifelines, including safety net guarantees and measures to ease financing. However, for the major banks at least it is hard to imagine developments in this segment that would threaten the very foundation of operations.

Due to the post-Lehman government response, classifications for debtors like SMEs were relaxed, and based on bank disclosure and our talks with bank management we think the shortfall at megabanks in terms of reserves to cover potential losses from this relaxed treatment is likely to be in the ¥20bn-¥40bn range.

Figure 32. Finances at Japanese companies (non-financials)



Source: MoF corporate statistics, Citi Investment Research and Analysis.

Q3. What are the implications of permanent tax cuts and temporary tax hikes to finance reconstruction?

While on one hand taxes are being reduced by revisions to the corporate tax structure and tax breaks to facilitate reconstruction, the government has also announced temporary tax hikes to finance reconstruction efforts. What are the implications for corporate accounts?

A3. Temporary negative impact in FY3/12, but positive implications for FY3/13 out

We expect the effects to manifest from Q3

Proposed revisions to the corporate tax structure were announced by the end of last year. As a result, in FY3/12 there will be impairment write-downs accompanying the decline in deferred tax assets. This will accordingly have a one-off negative impact on corporate NP.

However, from FY3/13, the net reduction in corporate taxes will be about 2.7%, and we should start to see some positive earnings impact.

Why will there be an accounting impact?

DTAs are the accounting value ascribed to the impact of a reduced future tax burden and booked as assets. However, the

tax reduction impact is ultimately a function of future taxable income and the applicable tax rate at the time.

For example, if a company makes a tax loss of ¥10bn this year and subsequently recovers to make taxable income next year and beyond, it can cut taxable income by the ¥10bn (i.e., loss carry-forward). Under tax-effect accounting, the tax benefit is based on the existing effective tax rate, which is around 40%, resulting in a DTA of ¥4bn (¥10bn x 40%). If the effective tax rate falls to 20%, for example, a ¥10bn reduction in taxable income would only produce a tax benefit of ¥2bn (¥10bn x 20%). Therefore, when tax rates are lowered, DTAs need to be reduced by a corresponding amount.

Balance sheet

Assuming an existing tax rate of X%, a new tax rate of Y%, and DTA of ¥Z, the DTA write-down would be equal to $Z \times (X - Y)/X$. Assuming an existing tax rate of 40%, a new tax rate of 30%, and a DTA of ¥20bn, this would result in a write-down of ¥5bn (¥20bn x 10%/40%).

The same revision would be made to a deferred tax liability to reflect a lower effective tax rate, and the resulting valuation difference (unrealized gain) would increase net assets (increasing shareholders' equity). Valuation reserves not recorded on the balance sheet would also decline, which is something investors who adjust valuations to reflect valuation reserves should be aware of.

Income statement

The DTA reduction will be reflected in the income statement through the corporate tax adjustment. The negative impact is equal to $Z \times (X - Y)/X$.

Assume a bank consistently generates annual pretax profit of ¥10bn (as taxable income) and has DTAs of ¥8bn (i.e., two years' worth of tax reductions). Furthermore, assume the effective tax rate is lowered to 20% from 40%. We look at changes in current value assuming a discount rate of 10%.

Positive impact

Assume a bank consistently generates annual pretax profit of ¥10bn (as taxable income) and has DTAs of ¥8bn (i.e., two years' worth of tax reductions). Furthermore, assume the effective tax rate is lowered to 20% from 40%. We look at changes in current value assuming a discount rate of 10%.

Cash flow prior to the tax cut would be ¥10bn in the first year, ¥10bn in the second, and ¥6bn from the third year. As DTA benefits drop out from the third year, a 40% tax burden applies each year. After the tax cut, cash flow comes to ¥8bn from the third year out.

Enterprise value (40% tax rate)

$$= 100/(1+10\%) + 100/(1+10\%)^2 + 60/(1+10\%)^3 \dots$$

$$= 100/(1+10\%) + 100/(1+10\%)^2 + 60/10\%/(1+10\%)^2$$

Enterprise value (20% tax rate)

$$= 100/(1+10\%) + 100/(1+10\%)^2 + 80/(1+10\%)^3 \dots$$

$$= 100/(1+10\%) + 100/(1+10\%)^2 + 80/10\%/(1+10\%)^2$$

$$\text{Increase in enterprise value} = 20/10\%/(1+10\%)^2 = ¥16.5\text{bn}$$

Accordingly, we would estimate an increase in enterprise value of roughly 25%.

Applying this generally, we make the following assumptions:

Pretax profit = C, Current tax rate = t, Post-revision tax rate = t^1 ,
Discount rate = r, Deferred tax assets = D

1. Change in deferred tax assets

While $D \Rightarrow (t^1/t) D$, there is no cash flow impact as taxable income is not reduced.

2. Change in enterprise value

$$\text{Increase in enterprise value} \Delta = (t - t^1) C / \{r (1+r)^2\}$$

Appendix A-1

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