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Via e-mail to: [baselcommittee@bis.org](mailto:baselcommittee@bis.org)

Secretariat of the Basel Committee on Banking Supervision  
Bank for International Settlements  
CH-4002 Basel, Switzerland

*Re: Strengthening the resilience of the banking sector*

We are submitting this letter in response to the announcement of the Basel Committee on Banking Supervision (the “Basel Committee”) that it has opened the comment period for its December 2009 proposal regarding strengthening the resilience of the banking sector (the Proposal or Basel III). We appreciate the opportunity to provide our views on this Proposal.

In this letter, we will mainly focus on the new capital requirements in the Proposal, namely the Common Equity Component of Tier 1 capital (Common Equity Tier 1) and the new Tier 1 and Tier 2 capital. We will first try to get a sense of how the United States and China are likely to respond to Basel III, especially the new capital requirements. Then we attempt to analyze some of the important implications of both countries' potential implementations of Basel III. In addition, we will comment briefly on other aspects of the Proposal, including the internal ratings based (IRB) approaches and some general regulatory issues.

## **I. COMMENT ON THE CAPITAL REQUIREMENTS**

This part consists of both historical analysis and quantitative analysis. We first try to understand how the United States and China responded to Basel II when it was first promulgated, as well as the rationale behind their responses. Then we conduct a preliminary quantitative analysis on the potential impact of Basel III on Chinese banks. Based on the findings from our historical and quantitative analyses, we discuss the likely responses to Basel III on the part of both American and Chinese regulators.

### *A. Historical Analysis: The United States*

#### *1. The United States and Basel II*

In the mid-1990s, when Basel II was being discussed, regulators believed that technological advances in modeling risk had basically eliminated financial risk.<sup>1</sup> Efficiency became regulators' foremost concern (as they claimed that 'the great moderation' and advances in securitization had all but eliminated macroeconomic risk), and internal risk models were

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<sup>1</sup> *The Gods Strike Back*, ECONOMIST, Feb. 11, 2010 ("This purported new paradigm hinged, in large part, on three closely linked developments: the huge growth of derivatives; the decomposition and distribution of credit risk through securitisation; and the formidable combination of mathematics and computing power in risk management that had its roots in academic work of the mid-20th century.").

turned to as the appropriate means for dealing with such reduced risk.<sup>2</sup> In light of this, American regulators, especially Chairman Alan Greenspan of the Federal Reserve Board, began calling for modification of the original Basel I capital requirements as early as 1996.<sup>3</sup> Greenspan and other American regulators deemed the ‘risk bucket’ approach of Basel I too simple for regulating the increasingly sophisticated instruments that banks were using, creating too many opportunities for arbitrage and the like.<sup>4</sup> In essence, American regulators were pushing for regulations that would allow banks more leeway in assessing their own risk because of views that that risk had been sufficiently reduced by financial innovation. For example, the Federal Reserve Board, which also negotiated on behalf of the United States with the Basel Committee, has been criticized for its loose monetary policy and hands off approach during the 2000s.<sup>5</sup>

Another peculiar consequence of this optimistic view of financial innovation was the experimental feeling of the Basel II proposal. As Daniel Tarullo puts it, Basel II’s IRB approaches “were developed entirely during the international negotiation itself, rather than adapted from regulatory systems already in use in one or more countries . . . the IRB approaches are essentially untested, the regulators adopting them are taking at least a leap of faith . . . .”<sup>6</sup> This kind of novelty is arguably the result of widespread belief (at the time) in banks’ capabilities in risk-management; that is, belief that banks could police themselves likely spurred on a proposal that hinged on such internal self-policing.

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<sup>2</sup> *Id.* (noting that regulators further believed that banks could police themselves).

<sup>3</sup> DANIEL K. TARULLO, *BANKING ON BASEL: THE FUTURE OF INTERNATIONAL FINANCIAL REGULATION* 89 (2008).

<sup>4</sup> *Id.* at 8.

<sup>5</sup> *The World Economy: A Monetary Malaise*, *THE ECONOMIST*, Oct. 9, 2008 (“In the most recent episode the Fed stands accused of three main errors. Mistake number one was to loosen the monetary reins too much for too long in the aftermath of the 2001 recession. Fearing Japan-style deflation in 2002 and 2003, the Fed cut the federal funds rate to 1% and left it there for a year. Mistake number two was to tighten too timidly between 2004 and 2006. Mistake number three was to lower the funds rate back to 2% earlier this year in an effort to use monetary policy to alleviate financial panic. The first two failures fuelled the housing bubble. The third aggravated the commodity-price surge.”).

<sup>6</sup> TARULLO, *supra* note 3, at 6.

Despite all this, American regulators were still cautious about allowing too much freedom in banks' own monitoring of risk. Specifically, though large banks favored Basel II's IRB approaches because implementing them would effectively lower their capital requirements and make them more competitive vis-à-vis their European rivals (American banks and regulators were also heavily concerned with preserving the competitive equity of international banks),<sup>7</sup> regulators required three years of transition for those largest 'core banks' that would be allowed to use the advanced IRB approach. Other banks could, under these agreements, choose either to opt in to that advanced approach or an alternative 'standardized' approach (which, as of 2008, still had not been fully developed). Of course, with the recent financial crisis, Basel II's requirements have become de facto obsolete<sup>8</sup>:

Sadly, bank supervision is as dysfunctional as the banks. The Basel II accords took five years to negotiate. Local regulators interpreted them differently and many failed to enforce them. Confidence in their integrity is now so low that many investors and some banks and regulators have abandoned Basel as their main test of capital.<sup>9</sup>

## *2. Lessons from Basel II, and for Basel III*

Now, of course, much contrary to the feeling at the time of Basel II's promulgation, regulators are much more aware of systemic risk and the growing interconnectedness of banks.<sup>10</sup>

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<sup>7</sup> *Id.* at 162; *All Together Now*, ECONOMIST, July 26, 2007.

<sup>8</sup> *Mewling and Peking*, ECONOMIST, Oct. 23, 2008.

<sup>9</sup> *Regulating Banks: Inadequate*, ECONOMIST, Mar. 12, 2009.

<sup>10</sup> *The Gods Strike Back*, *supra* note 1. ("It turns out that in financial markets "black swans", or extreme events, occur much more often than the usual probability models suggest. Worse, finance is becoming more fragile: these days blow-ups are twice as frequent as they were before the first world war, according to Barry Eichengreen of the University of California at Berkeley and Michael Bordo of Rutgers University. Benoit Mandelbrot, the father of fractal theory and a pioneer in the study of market swings, argues that finance is prone to a "wild" randomness not usually seen in nature. In markets, "rare big changes can be more significant than the sum of many small changes," he says. If financial markets followed the normal bell-shaped distribution curve, in which meltdowns are very rare, the stockmarket crash of 1987, the interest-rate turmoil of 1992 and the 2008 crash would each be expected only once in the lifetime of the universe. This is changing the way many financial firms think about risk, says Greg Case, chief executive of Aon, an insurance broker. Before the crisis they were looking at things like pandemics, cyber-

This is especially true given the peculiar nature of competition in the financial sector: rather than having success hinge on the uniqueness of a business model, success depends on *keeping up* with the competition, i.e. engaging in much the *same* sorts of activities, whether securitization or some other risky activity. This is then exacerbated by an American market ethos that emphasizes free markets and freedom of competition. The consequence is, of course, a race to *not be left behind* that culminates in lack of full comprehension (of all the innovative securities and their risks) across the board. Engaging in that race further increases the interconnectedness of the entire sector, as banks inevitably mainly trade with each other, over and over again. As stated in *The Economist*,

A further hazard was summed up by the assertion in 2007 by Chuck Prince, then Citigroup's boss, that "as long as the music is playing, you've got to get up and dance." Performance is usually judged relative to rivals or to an industry benchmark, encouraging banks to mimic each other's risk-taking, even if in the long run it benefits no one. In mortgages, bad lenders drove out good ones, keeping up with aggressive competitors for fear of losing market share. A few held back, but it was not easy: when JPMorgan sacrificed five percentage points of return on equity in the short run, it was lambasted by shareholders who wanted it to "catch up" with zippier-looking rivals.<sup>11</sup>

Given this, regulators must consider policies that take advantage of banks' now large amount of risk-aversion in consideration of inevitable risk-taking or at least risk-neutrality in (future) good times. In other words, though the banking sector will likely be very cautious while the memory

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security and terrorism as possible causes of black swans. Now they are turning to risks from within the system, and how they can become amplified in combination.").

<sup>11</sup> *Id.*

of the recent crisis is fresh and ‘disaster myopia’ is large,<sup>12</sup> once economies recover and banks (along with their regulators) begin believing that they have adequately tamed risk, riskier activities may once again be pursued, and another financial crisis could take place.<sup>13</sup> In short, “Even at the national level, macro-prudential regulation is hard. First, regulators tend to be captured by the industry. Second, the seeds of disaster are sown when all looks well, the economy is booming and banks have healthy profits. It takes an iron will to be contrarian at such times.”<sup>14</sup> The possibility of banks acting on such confidence is especially large in the United States, given its political makeup: “Imagine the scene in Congress in 2015. The economy is booming, but Americans cannot get mortgages because some pen-pusher in Basel says the banks are taking too much risk. The banks would be freed faster than you can say ‘swing voter’.”<sup>15</sup> Bureaucratically fragmented and historically extremely skeptical of centralized authority, the United States is particularly tied to voter sentiment (which could very well be in favor of more risk-taking activity for banks in a bull market, as JPMorgan’s shareholders clearly were) and particularly prone to disagreement within its regulatory ranks (as was the case during the promulgation of Basel II).<sup>16</sup> This is even more of a concern in the banking sector, as so much of its success is also dependent on the public’s perception of a bank’s riskiness or level of sophistication.

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<sup>12</sup> *Id.* (“Another factor in the build-up of excessive risk was what Andy Haldane, head of financial stability at the Bank of England, has described as “disaster myopia”. Like drivers who slow down after seeing a crash but soon speed up again, investors exercise greater caution after a disaster, but these days it takes less than a decade to make them reckless again. Not having seen a debt-market crash since 1998, investors piled into ever riskier securities in 2003-07 to maintain yield at a time of low interest rates. Risk-management models reinforced this myopia by relying too heavily on recent data samples with a narrow distribution of outcomes, especially in subprime mortgages.”).

<sup>13</sup> *Id.*; see also *Blocking Out the Sirens’ Song*, *ECONOMIST*, Feb. 11, 2010 (“After every crisis bankers and investors tend to forget that it is their duty to be sceptical, not optimistic.”)

<sup>14</sup> *Buttonwood: Spin and Substance*, *ECONOMIST*, Apr. 8, 2009.

<sup>15</sup> *Id.*

<sup>16</sup> See current debate in Congress over financial reform bill.

### 3. *The United States and Basel III*

With the effective abandonment of Basel II before its full implementation and movement toward Basel III, American regulators are now focusing on drastically reducing reliance on banks' own internal models and increasing focus on the interconnectedness of banks and risks therein.<sup>17</sup> The problem is, and has always been, the trade-off between safety (and lack of profitability for both banks and creditors) and financial growth.<sup>18</sup> For instance:

Clearly, regulators could simply raise all banks' capital to a level that would keep even the outliers from failure. But that would be prohibitively expensive. For America's four giant banks, raising core capital to 20% of risk-adjusted assets could require them to raise an additional \$30 billion-odd of annual income (to provide a return on that extra capital). If pushed through to customers, that might raise the weighted average interest rate they charge by roughly a percentage point, from 6% now. That would hurt economic growth.<sup>19</sup>

A perfect illustration of the high degree of risk aversion at the present moment is the whole slew of financial reform bills currently debated by Congress,<sup>20</sup> the most drastic of which is Obama's January 2010 proposal (dubbed the 'Volcker plan') to tax the United States' largest banks in order to recoup their bailout money, to drastically curtail risky activities of those banks, and to require financial regulators to "limit the scope and scale of firms that pose a 'grave' threat

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<sup>17</sup> *Fingers in the Dike*, ECONOMIST, Feb. 11, 2010 ("In an equally big philosophical shift, the new measures will lean against "procyclicality", or the tendency of rules to exaggerate both the good and the bad. Banks will be required to accumulate extra capital in fat years that can be drawn upon in lean ones. Until now the rules have encouraged higher leverage in good times and much lower in bad times, adding to distress at just the wrong moment. Securities regulators contributed to the problem, frowning on boom-time reserve-building as possible profit-smoothing in disguise. The new proposals will encourage "dynamic" provisioning, which allows banks to squirrel away reserves based on expected losses, not just those already incurred.").

<sup>18</sup> *Base Camp Basel*, ECONOMIST, Jan. 21, 2010.

<sup>19</sup> *Id.*; see also *Fingers in the Dike*, *supra* note 17 ("There are also worries over increases in capital charges for securitisations, exposure to swap counterparties and the like. These make sense in theory; to treat mortgage-backed securities as almost risk-free was nonsense. But the new rules swing too far the other way, threatening to choke off the recovery of asset-backed markets.").

<sup>20</sup> *Blocking Out the Sirens' Song*, *supra* note 13 ("Bloomberg counts some 50 bills and other serious proposals for financial reform in America and Europe.").

to stability.”<sup>21</sup> This plan is more radical than the increased capital charges for trading assets proposed by the Basel Committee of international bank supervisors,<sup>22</sup> because it not only addresses the likelihood of bank failures (with capital requirements), but it also attempts to curtail the actual size of banks.<sup>23</sup>

The plan’s effects are hard to gauge. Commercial banks may be unfazed by curbs on trading. Most have already pared their prop-trading desks. However, JPMorgan Chase considers having to divest Highbridge, a big hedge-fund firm, to be “horrible.” Things could be trickier for investment banks that became bank holding companies during the crisis. Having built up its deposit base, Morgan Stanley would face a hard choice between remaining as bank and going back to being a broker that can trade freely. Goldman, which gets 10% or more of its revenue from prop-trading, will surely do the latter. That raises an awkward question: once it is cut loose from banking restrictions, and from Fed funding, would it not continue to enjoy implicit state backing? Would it really be allowed to fail if it blew up?<sup>24</sup>

Of course, the risk-aversion evident in the Volcker plan is unlikely to last into a full economic recovery.<sup>25</sup> As *The Economist* so nicely puts it, all of this uncertainty means that these regulations have more of a potential of creating “an illusion of increasing stability.”<sup>26</sup> The disaster myopia at the present moment and its implications for the timing of regulations should

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<sup>21</sup> *Glass-Steagall Lite*, *ECONOMIST*, Jan. 22, 2010.

<sup>22</sup> *Id.*

<sup>23</sup> *Fingers in the Dike*, *supra* note 17 (“Regulators can tackle the issue either by addressing the “too big” part (shrinking or erecting firewalls within giants) or the “to fail” bit (forcing them to hold more capital and making it easier to wind down bust firms). Until recently the focus was on the second of these approaches. But since President Obama’s unveiling of two initiatives last month—a tax on the liabilities of big banks and the “Volcker rule”, which proposed limits on their size and activities—momentum has been shifting towards some combination of the two.”).

<sup>24</sup> *Glass-Steagall Lite*, *supra* note 21.

<sup>25</sup> *Fingers in the Dike*, *supra* note 17 (“Whatever form it takes, systemic policing would face a problem. During booms, governments are loth to take the punchbowl away, at least until the next election. Nor do they want to be criticised for their own contribution to systemic risk.”).

<sup>26</sup> *Id.*



be borne in mind by the Basel Committee, especially in regard to a country like the U.S. whose regulators are particularly sensitive to public sentiments.

Another concern that the Basel Committee should take into account is the problem of “who should implement what” systemic regulation. Given the fact that any proposal promulgated by the Basel Committee would not have the force of international law<sup>27</sup> and that U.S. federal regulators never sought Congressional approval in implementing Basel II,<sup>28</sup> the Basel Committee, in working with American regulators, needs to consider carefully the legitimacy of any further international regulatory proposal. This is especially true given how fragmented American regulatory authority is and given the recent spate of attacks on the Federal Reserve Board’s monetary policy and authority moving forward.<sup>29</sup> This touches on deeper concerns over supervisory authority and reform in the United States:

[T]here is no broad agreement on how systemic regulation might work, or who should do the regulating. Most economists see the job falling naturally to central banks, because of their closeness to markets and because of the link between capital standards and monetary policy through the price of credit. But there are political obstacles, particularly in America, where a large and vocal contingent in Congress accuses the Fed itself of being a threat to stability, pointing to loose monetary policy as a cause of the housing mania.<sup>30</sup>

Full implementation of Basel III, Volcker’s plan, and other restrictions would impose drastically higher capital requirements on U.S. banks. As a recent report issued by Oliver

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<sup>27</sup> TARULLO, *supra* note 3, at 2.

<sup>28</sup> *Id.* at 127.

<sup>29</sup> *Bunning Statement on Bernanke: ‘You Are the Definition of a Moral Hazard,’* WALL ST. J., Dec. 3, 2009.

<sup>30</sup> *Fingers in the Dike*, *supra* note 17.

Wyman and Morgan Stanley states, the investment banking industry could experience an 8% drop in profitability.<sup>31</sup> This would include:

[F]ull implementation of Basel III capital standards, requiring the banks to build a large capital cushion in excess of \$30 billion to \$40 billion more than current levels; full implementation of the Volcker Rule, separating proprietary trading from bank holding companies; very restrictive “living wills, causing substantial trapped liquidity; and significant limitations imposed on derivative and securitization markets, such as forcing all over-the-counter trades on to a regulated exchange, crushing the banks’ highly profitable O.T.C. brokerage units.<sup>32</sup>

This extreme is unlikely, but it is possible, given the disaster myopia and a particularly high aversion to risk at the moment. The Basel Committee should consider how desirable such consequences are for the short and long terms, and adjust its proposals according to any domestic regulations that may be adopted by the fragmented and politically sensitive regulatory structure of the United States.

#### *4. Moving Forward*

As discussed, the new requirements under Basel III, if widely adopted, would force banks in the United States to raise a significant amount of capital while cutting into their profits. One of the most common arguments that will probably be raised against Basel III (and against broad international regulations more generally) is the argument that no one-size-fits-all approach is viable, given the differences in legal, economic, social and governmental infrastructure across the globe.<sup>33</sup> However, we suggest that one response to this argument would be to look to the

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<sup>31</sup> Cyrus Sanati, *Putting a Price on New Financial Rules for Banks*, N.Y. TIMES, Mar. 16, 2010.

<sup>32</sup> *Id.* (noting that a 4% drop with moderate regulatory changes is the most likely scenario).

<sup>33</sup> Furthermore, “America's failure to rationalise its highly fragmented domestic system suggests there is little chance that it would cede real power to international regulatory bodies.” *Repairs Begin at Home*, ECONOMIST, Jan. 31, 2008.

Chinese banks that emerged from the recent financial crisis unscathed and the degree to which that was due to their higher amount of capitalization. Of course, one response to *this* would be to cite differences in Chinese legal, social, economic and governmental infrastructure. At the very least, starting such a discussion could move international regulators towards cooperation in acknowledging the idea that despite differences and problems with a one-size-fits-all-approach, there are lessons to be learned from other countries' experiences and potential good to come from wider convergence in international financial regulation.<sup>34</sup> This is an issue of trust, which we believe the Basel Committee should consider at least as much as the substance of the regulations themselves. In sum, Basel III needs to be much more than a set of regulations. It needs to be borne of a truly collaborative process and legitimized by that process.

## *B. Historical Analysis: China*

### *I. China on Basel II*

Like the United States, China as of now has not fully implemented Basel II. In the Chinese perception, the main innovations of Basel II in capital requirements included: placing greater emphasis on credit risk in calculating the total risk-weighted assets (i.e., denominator for calculating the capital adequacy ratio) and allowing banks to employ their own internal ratings based (IRB) approaches to calculate credit risk. Only the first two innovations related to capital requirements. The Chinese banking regulators welcomed the capital requirement innovations, mainly as a means of improving the Chinese banking system's capacity to manage risk. However,

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<sup>34</sup> This is especially true given growing mistrust among international regulators: "But regulators are also apparently becoming much more concerned about banks' domestic lending and much less inclined to trust other supervisors. If so, the multinational bank will suffer." *Bank Regulation: Save Yourself*, ECONOMIST, Dec. 11, 2008; see also *Repairs Begin at Home*, *supra* note 33 ("Equally, national regulators ought to be more open with one another. Too many supervisors still think about financial instability in narrowly national terms, even though catastrophes at big banks have international consequences."). Additionally, nationalistic regulation could disincentivize international expansion.

the most recent decision was that implementation of Basel II, even among the “big four” formerly state-owned and internationally active banks, should be delayed until 2012. The proffered reason for the delay is that the Chinese banks are deemed to be technically and structurally unequipped to employ IRB approaches. Concerns were also expressed that implementing Basel II would yield lower capital adequacy ratios and hence heighten the capital requirements for Chinese banks.

Before Basel II was promulgated, Liu Mingkang, Chairman of the China Banking Regulatory Commission (CBRC) wrote a letter to the Basel Committee, spelling out principles of Chinese policy that remain controlling up to this day. Liu stated explicitly that the G10 should not compel non-G10 countries to implement Basel II, and that “for emerging market economies, relatively far into the foreseeable future, implementing Basel I would be the practical choice.”<sup>35</sup>

Liu noted:

“Compared to just implementing Basel I, implementing Basel II would only slightly increase the risk sensitivity of capital supervision and regulation, but would heighten the capital requirements for the entire Chinese banking industry. Globally, Basel II may have a negative impact on the capital flow of developing countries. Basel II may also put the banks of emerging market economies at a disadvantaged competitive position, especially on the operations of their foreign branches and subsidiaries.”<sup>36</sup>

Hence the Chinese decision was to delay implementation of Basel II for at least a few years after 2006, when Basel II should be implemented in the G10 countries. However, Liu resoundingly

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<sup>35</sup> *Zhongguo Yinjianhui Dui Xin Basaier Ziben Xieyi De Yijian He Jianyi [Opinions and Suggestions by the CBRC on the New Basel Proposals]*, GUOJI JINRONG BAO [INTERNATIONAL FINANCE], Aug. 1, 2003. Most literature discussing Basel II would refer to it as the “new capital accord,” in reference to Basel I as the old capital accord. All translations in this paper would simply use “Basel II” rather than the “new capital accord” to avoid confusion with the Basel III.

<sup>36</sup> *Id.*

affirmed Basel II's emphasis on risk management. Liu believed that the big Chinese banks should introduce IRB approaches and welcomed technical guidance from the Basel Committee, global consulting firms, and credit rating agencies. Small Chinese banks should also learn the best practices in credit risk management.<sup>37</sup>

In line with Liu's pronouncements, shortly before the promulgation of Basel II, the CBRC promulgated the 2004 Rules on Regulating Capital Adequacy for Commercial Banks,<sup>38</sup> which has been termed Basel I.5.<sup>39</sup> The Rules largely followed the Basel I framework, but incorporated the idea of market risk and some elements of Basel II's pillar 2 (supervisory review) and pillar 3 (market discipline). Several features of the Rules are noteworthy:

- Compared to Basel I,<sup>40</sup> the Rules do not include “hybrid debt capital instruments” among the enumerated categories of supplementary or tier 2 capital, most likely because Chinese banks did not use such instruments at the time. Note that such hybrid instruments used by the global banks of developed countries took a large share of the blame for causing the financial crisis.
- The Rules do include capital long-term subordinated debt within tier 2, about which scholars of Chinese banks have repeatedly expressed concerns.<sup>40</sup>
- The Rules do not mention operational risk, which, along with credit risk and market risk, should go into the denominator of total risk-weighted assets in the Basel II calculation.
- The Rules do not specify what regulatory measures would be taken for banks that do not meet Basel II standards on time.<sup>41</sup>

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<sup>37</sup> *Id.*

<sup>38</sup> Shangye Yinhang Ziben Chongzulu Guanli Banfa [Rules on Regulating Capital Adequacy for Commercial Banks], ST. COUNCIL GAZ. (2004).

<sup>39</sup> Liu Mingkang, *Tuidong Xin Ziben Xieyi Shishi, Tisheng Yinhangye Fengxian Guanli Shuiping [Promote Implementation of Basel II, Enhance Risk Management of the Banking Industry]*, ZHONGGUO JINRONG [CHINA FINANCE], 2007.2 at 8.

<sup>40</sup> Basel Committee, International Convergence of Capital Measurement and Capital Standards, July 1988.

<sup>40</sup> *Infra* note 52.

Thus, the capital requirements imposed by the Rules largely followed Basel I. The main Chinese regulation dealing with implementation of Basel II was the 2007 *CBRC Guidance on Implementing Basel II for the Chinese Banking Industry*.<sup>42</sup> The Guidance stipulated that:

- Before the end of 2008, CBRC would amend the current capital regulations.
- In 2009, CBRC would conduct impact assessment of Basel II on the big internationally active banks.
- In 2010, the big internationally active banks should implement Basel II. If not ready then, they should start implementing Basel II no later than 2013.
- In 2011, other commercial banks can opt to implement Basel II.
- Stating the end of 2010, other commercial banks should follow the amended CBRC regulations.
- The big internationally active banks should use the IRB approaches. CBRC encourages using the advanced IRB approach for calculating credit risk.

Then in 2008 the CBRC promulgated a series of five Guidance documents, including guidance on credit risk exposure, IRB approaches to credit risk, credit risk mitigation, operational risk, etc.<sup>43</sup> Parallel with the various CBRC Guidance and starting as early as 2004/2005, the “big four” banks began, with help from foreign consulting firms and others, to develop their own IRB models for measuring credit risk.<sup>44</sup> For example, to be more in line with

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<sup>41</sup> For a good comparison of the CBRC Rules and Basel II, see Xu Wenhao, *Basaier Xin Ziben Xieyi Yu Woguo Shangye Yinhang Ziben Chongzuly Guanli Banfa Bijiao Yanjiu* [Comparison of Basel II and China's Rules on Regulating Capital Adequacy for Commercial Banks], CAIJING JIE [FINANCE WORLD], 2009.5 at 4-5.

<sup>42</sup> Zhongguo Yinhangye Shishi Xin Ziben Xieyi Zhidao Yijian [Guidance on Implementing Basel II for Chinese Banking Industry], ST. COUNCIL GAZ. (2007).

<sup>43</sup> *Yinjianhui Fabu 5 “Shangye Yinhang Xinyong Fengxian Neibu Pingji Tixi Jianguan Zhiyin” Deng 5 Ge Jianguan Guizhang* [CBRC Promulgates 5 Guidance Documents, Including Guidance on Internal Ratings for Credit Risks in Commercial Banks], 2008. In 2009, CBRC promulgated two more Guidance documents relating to capital requirements.

<sup>44</sup> See e.g., Luo Ping & Feng Wenbo, *Zhongguo Yinhangye Shishi Xin Ziben Xieyi De Zhanlue Sikao* [Strategic Thinking on Chinese Banks' Implementation of Basel II], GUOJI JINRONG YANJIU [STUDY OF INTERNATIONAL

the Basel II IRB approaches, some banks began to rate credit risks by twelve rather than the previous five levels.<sup>45</sup> The preparations, however, were evidently insufficient, for the CBRC in 2009 announced that implementation of Basel II by the big banks would be postponed to 2012, not 2010, as originally stipulated in the 2007 *Guidance on Implementing Basel II*.<sup>46</sup> Indeed, only this year would the CBRC begin to assess the progress made in implementing Basel II by some of the big banks.<sup>47</sup>

From the CBRC regulatory documents and statements outlined above, it is evident that China was reluctant to fully implement Basel II. What was at the root of this reluctance? The officially proffered reason was that Chinese banks and regulators are not technically or structurally equipped to implement Basel II measures. The practically significant technical insufficiency involves lack of data, computer systems for collecting and analyzing data, etc. On the structural side, there is a consensus that, in order to employ IRB approaches, banks must first have an effective system of identifying the source of credit risks, setting the standards for how much risk to tolerate, evaluating potential risk, alerting to the presence of excessive risk, and preventing and responding to risks. Moreover, the various functions should be performed by an integrated supervisory system within the bank. Chinese banks, on the other hand, do not have an integrated system of monitoring, evaluating, and responding to risk. Rather, risk assessment is

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FINANCE] 2006.11 at 23-28; *Xin Basaier Xieyi Xia De Dan? Zhong Zi Hang Repeng "Neibu Pingji Fa" [Egg Born Under Basel II? Chinese Banks Enthusiastically Support IRB Approaches]*, 21 SHIJI JINGJI BAODAO [21<sup>ST</sup> CENTURY ECONOMIC REPORT], May 12, 2003.

<sup>45</sup> See e.g., *Basaier Xin Ziben Xieyi Shaqitengteng Zhongguo Yinhangye Linzhenmoqiang [Chinese Banking Industry Prepares for Basel II]*, 21 SHIJI JINGJI BAODAO [21<sup>ST</sup> CENTURY ECONOMIC REPORT], Sept. 25, 2003.

<sup>46</sup> *Yinjianhui: Big Banks will Implement Basel II in 2012 [CBRC: Da Yinhang 2012 Nian Zhixing Basaier Xin Xieyi]*, Oct. 26, 2009.

<sup>47</sup> For example, the CBRC would assess the progress of the China Communications Bank this year. *Hu Huaibang: Tigao Zigongsi He Haiwai Yewu Gongxian Du [Hu Huaibang: Increase the Contribution from Foreign Branches and Transactions]*, 21 SHIJI JINGJI BAODAO [21<sup>ST</sup> CENTURY ECONOMIC REPORT], Apr. 1, 2010.

performed severally by different departments within the bank.<sup>48</sup> Finally, such mechanisms for risk management must be backed up by legal and structural guarantees. In China, on the other hand, legal protections for bank loans are not always sufficient, and banks are sometimes subject to administrative interference and cannot make independent decisions. The structural shortcomings of the Chinese banks explain both China's delay in implementation and welcoming stance toward IRB approaches, the development and implementation of which are viewed as an important means of improving banks' capacity to internally control and manage risk.<sup>49</sup>

Another concern underlying the reluctance in implementation might have been the fear that implementation would increase the capital requirements for Chinese banks. Liu's letter mentioned above explicitly stated the concern. In 2004, banking reform in China had only just initiated, and the future of the big banks in clearing bad debt was still uncertain. It was natural for the CBRC to be concerned about capital adequacy at that time. Moreover, though China has not yet conducted an impact assessment regarding Basel II, Taiwan has. The Taiwanese assessment showed that employing Basel II's standardized approach to calculating credit risk would lower the capital adequacy ratio by anywhere from 0.35% to 11.42%, and that employing the foundational IRB approach would lower the ratio even further.<sup>50</sup> Subsequent developments in Chinese banking might confirm the concern of inadequate capital.

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<sup>48</sup> See e.g., Deng Zhiyi, *Dangqian Daxing Yinhang Gaige Yu Fazhan Mianlin De Jiyu He Tiaozhan [Opportunities and Challenges Currently Faced by the Big Banks in Reform and Development]*, ZHONGGUO JINRONG [CHINA FINANCE], 2007.10 at 35 (author is an official from CBRC); *Xin Basaier Xieyi Yu Woguo Shangye Yinhang Fengxian Guanli [Basel II and Credit Risk Management by Commercial Banks in China]*, JINRONG SHIBAO [FINANCIAL TIMES], Feb. 23, 2004.

<sup>49</sup> *Supra* note 35. For another good summary of the Chinese regulatory position and the policy considerations behind it, see Luo Ping, *Xin Ziben Xieyi Dui Xinxing Shichang Guojia De Yinxiang Ji Zhongguo De Shishi Jihua [Basel II's Effect on Emerging Market Economies and China's Implementaion Plan]*, 231 XIN JINRONG [NEW FINANCE] 44 (2008).

<sup>50</sup> Feng Pengxi, *Xinxing Shichang Guojia Xin Ziben Xieyi Shishi Qingkuang Jiqi Fazhan Qushi [The State of and Trends in the Implementation of Basel II in Emerging Market Economics]*, GUOJI JINRONG YANJIU [STUDY OF INTERNATIONAL FINANCE], 2006.11 at 32.



From the promulgation of Basel II up till now, several developments in Chinese banks have engendered concerns from scholars. The first relates to long-term subordinated debt. Recall that the 2004 *Rules on Capital Adequacy* included within tier 2 capital long-term subordinated debt. Since subordinated debt, at least before maturity, qualifies as tier 2 capital, holding subordinated debt can boost the bank's capital adequacy ratio. The 2004 *Rules on Capital Adequacy* and general reform measures for the big banks (e.g., privatization, international IPO) created pressure to meet capital adequacy standards. As a result, many of the big banks issue and hold each other's subordinated debt. Holding each other's subordinated debt means that any associated risk remained within the banking system and default by any one bank might trigger a credit crisis. Moreover, subordinated debt no longer qualifies as capital after maturity, and hence only boosts capital adequacy for the short term.<sup>51</sup> Another less realistic concern relates to securitization. A study shows that Chinese banks, some with high bad debt and the need to increase nominal capital adequacy, has strong incentives to use securitization to engage in regulatory capital arbitrage.<sup>52</sup> However, there is not yet any evidence that Chinese banks actually engage in such practice. At any rate, despite these worrisome developments, the Chinese banks have weathered the financial crisis very well and are not likely to be affected by the (non)implementation of the new Basel proposals (Basel III). Note that subordinated debt, despite its long-term risks, still holds up the capital adequacy of Chinese banks in our impact assessment in Part II.

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<sup>51</sup> See e.g., Sun Lianyou & Zhou Bin, *Shiguo Jituan Zhuyao Guoji Yinhang Feichuantong Ziben Gongju Yunyong Ji Qishi* [Lessons from the Use of Nontraditional Capital Instruments by International Banks of G10 Countries], 246 DANGDAI CAIJING [CONTEMPORARY FINANCE] 34-37 (2006).

<sup>52</sup> Zhang Yuxi, *Shangye Yinhang Zichan Zhangquanhua Zhong De Jianguan Ziben Taoli Yanjiu* [Study of Regulatory Capital Arbitrage by Commercial Banks through Securitization], 281 DANGDAI CAIJING [CONTEMPORARY FINANCE] 58, 61-62 (2008).

## 2. *China and the Financial Crisis*

Innovative financial instruments took a large share of the blame for the financial crisis. Before the financial crisis, some in China called for diversifying capital instruments,<sup>53</sup> but the banking regulators remained cautious. After the financial crisis, the Chinese bank regulators must find their caution vindicated. According to a CBRC official, China included long-term subordinated debt in tier 2 capital, but never introduced short-term subordinated debt or hybrid debt capital instruments. The official noted that several years ago the regulators toyed with the idea of introducing long-term subordinated debt that could be “stepped-up,” a form of a hybrid instrument. The China Merchant Bank indeed issued some convertible bonds.<sup>54</sup> On the whole, however, Chinese bank regulators were cautious. Thus, somewhat self-congratulatory, the official observed:

“Now to look at it, the lesson of the financial crisis requires us to rethink bank operations and regulatory ideas and policies. For developing countries, regulatory authorities have a greater imperative to persist in traditional, effective, and the most basic regulatory principles and methods, and not be confused by the various dazzling innovations in financial instruments and regulatory institutions.”<sup>55</sup>

More evidence of CBRC’s toying with the idea of introducing some hybrid instruments comes from the 2009 *CBRC amendment to the 2004 Rules on Capital Adequacy*. In the capital requirement area, the main revision was adding “hybrid debt capital instruments” to tier 2

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<sup>53</sup> See e.g., Li Lan & Wang Yongmao, *Basaier Xin Xieyi Ziben Chongzulu Yaoqiu Yu Woguo Guoyou Yinhang De Yingdui Cuoshi* [How Chinese State-owned Banks Should Respond to the Capital Adequacy Requirements of Basel II], XI’AN JINRONG [XI’AN FINANCE], 2006.6 at 38-39.

<sup>54</sup> *Infra*.

<sup>55</sup> Luo Ping, *Ziben Jianguan Zhidu De Zhongda Gaige: Tigao Ziben De Zhiliang He Shuiping* [Important Reform in Capital Regulation: Improve the Quality and Level of Capital], 245 XIN JINRONG [NEW FINANCE] 7, 10 (2009). For similar advocacy of and self-congratulation for caution, see Liu Mingkang, *Jinrong Weiji Dui Zhongguo Yinhangye Yingxiang Youxian* [Impact of the Financial Crisis on the Chinese Banking Industry is Limited], ZHONGGUO JINGJI ZHOUKAN [CHINA ECONOMIC WEEKLY], 2009.8 at 13.

capital.<sup>56</sup> One may reasonably infer, though not conclude, from the revision, that Chinese banks might have introduced to some degree hybrid instruments so as to warrant a need to regulate them. Regardless of any potential inference from the revision, the financial crisis means that the Chinese banking regulators are not likely to introduce innovative financial instruments in the foreseeable future.

### 3. *China on Basel III*

As evident from the foregoing discussion, China avoided the worst consequences of the financial crisis because it stayed away from innovative financial instruments, especially hybrid debt instruments and derivatives. For precisely the same reason, any move from Basel II to Basel III would have little impact on the capital adequacy of Chinese banks, as will be demonstrated by our quantitative analysis in Part II.

Also recall that the Chinese response to Basel II focused on the technical and structural insufficiency of the Chinese banks to employ IRB approaches. The proposed Basel III requirements would make some changes to IRB approaches. Most of the changes center on counterparty risk. The main problem that Basel III identifies and aims to solve is the failure to account for “wrong-way risk”—an exposure to a counterparty that is adversely correlated with the credit quality of that counterparty.<sup>57</sup> The counterparty risk most closely related to the financial crisis arises from over-the-counter (OTC) derivatives. Chinese banks, however, do not engage in OTC derivative trading as actively as banks from developed countries. The Industrial & Commercial Bank of China, for example, stipulates that credit risk from financial derivative

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<sup>56</sup> Guanyu Xiugai “Shangye Yinhang Ziben Chongzulu Guanli Banfa” De Jueding [Decision to Amend the Rules on Capital Adequacy for Commercial Banks], cl. 2, ST. COUNCIL GAZ. (2009).

<sup>57</sup> Basel Committee, Strengthening the Resilience of the Banking Sector, Dec. 2009; Sullivan & Cromwell, LLC., Bank Capital and Liquidity Requirements, Dec. 28, 2009.

instruments never encompasses off-balance-sheet OTC derivatives.<sup>58</sup> Thus the potential changes to the IRB approaches under Basel III would have only limited impact on whatever IRB approaches the Chinese banks would manage to develop and adopt by 2012.

Though China has largely escaped the financial crisis and the Basel III framework is likely to have only limited impact on the capital adequacy of Chinese banks, the CBRC has kept abreast of new regulatory developments after the financial crisis. The two most recent Guidance documents issued by the CBRC in 2010 added sections on securitization, off-balance sheet transactions, derivatives, and risks in addition to credit, market, and operational risk.<sup>59</sup> As mentioned before, however, changes in CBRC regulations do not always correspond to an actual need for the change. New regulations for derivatives do not conclusively establish greater use of derivatives by Chinese banks. Given the relative paucity of risky financial instruments used by Chinese banks, it remains likely that Basel III will have limited impact on Chinese banks. Hence Chinese banks should be at least neutral toward, if not supportive of, Basel III. Indeed, if developed countries' adoption of Basel III entails higher capital requirements for their banks, Chinese banks, little affected by Basel III, may be in a financially more robust position than their Western counterparts, and the Chinese government may actually favor adoption of Basel III.

### *C. Historical Analysis Conclusions*

So far, we have reviewed the responses of the United States and China to previous Basel Committee proposals. From our analysis, we can draw some tentative conclusions: both the United States and China will implement Basel III, although they may each alter the basic proposal to some degree. The United States is likely to adopt a version of Basel III that is

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<sup>58</sup> ICBC Second Quarterly Report of 2009.

<sup>59</sup> Shangye Yinhang Zichan Zhengquanhua Fengxian Baolu Jianguan Ziben Jiliang Zhiyin [Guidance on Risk Exposure from Securitization by Commercial Banks], ST. COUNCIL GAZ. (2010); Shangye Yinhang Ziben Chongzulu Jiandu Jiancha Zhiyin [Guidance on Supervising Capital Adequacy of Commercial Banks], ST. COUNCIL GAZ. (2010).

compatible with its domestic financial reform; however, all such reforms would in turn be subject to change down the road as the U.S. political and economic climate changes. For China, its implementation of Basel III will face fewer domestic obstacles. As such, Basel III's more stringent capital requirements are likely to last in China, though in the near future, Chinese regulators are likely to make revisions to Basel III that are similar to those ones made to Basel II.

#### *D. Quantitative Analysis*

To understand the implications of implementing the revised capital requirements, including the newly added Common Equity Component of Tier 1 Capital, we conducted a preliminary impact assessment of the Proposal on Chinese banks. The banks covered by our assessment are the Bank of China (BOC), the Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), the Bank of Communications (BCOMM), China Merchants Bank (CMB), and CITIC Bank. These six banks are the largest six listed banks in China and in total represent about 50% of the total assets of Chinese banking industry. All the financial data about these six banks comes from their quarterly and/or annual reports.<sup>60</sup>

Our impact assessment comprises two parts. First, we attempt to calculate the Common Equity Tier 1 capital ratios for the banks in our sample. Then we examine qualitatively the Proposal's potential impact on those banks' Tier 1 and Tier 2 capital.

##### *I. Common Equity Component of Tier 1 Capital*

###### *a. Common Equity*

Only securities that meet the 14 criteria set out in the Proposal can be included in the Common Equity Component of Tier 1 Capital. Among the six banks we covered, the majority finance their business with two types of financial instruments: common equity and long-term

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<sup>60</sup> We acknowledge that our methodology necessarily implies that we will have to omit small and medium size banks, because we are not able to get firm-level data about their capital adequacy. However, this omission will not affect our overall analysis and conclusion.

subordinate debt, with only China Merchants Bank having once issued convertible bonds. Thus those highly complex and debt-like hybrid financial instruments issued by many banks in the United States and Europe (that were counted as “equity” under Basel II,) will not present issues to most Chinese banks. This is mostly due to the extremely cautious attitude of the Chinese regulators discussed in our historical analysis in Part I. On the whole, the Chinese banking industry and banking regulators are extremely humble compared to their American and European peers. Before the crisis, they recognized that their financial knowledge and skills were not sophisticated enough to handle highly complex financial instruments and operations, so they chose to shy away from really competing with or simply mimicking western banks. Indeed, China Merchants Bank’s contemplation of issuing convertible bonds to raise capital raised a huge amount of controversy in China’s financial world.

Given the limited types of securities Chinese banks have, the question of what type(s) of financial instruments constitutes Common Equity Component of Tier 1 capital becomes quite simple: it is merely common equity<sup>61</sup>.

Here the differences in accounting standards between China and other countries come into play. According to China’s accounting standards, banks need to retain a certain percentage (usually 10%) of their net income as General Risk Reserve, and another portion (usually 20% or more) as Earned Surplus. General Risk Reserve comes from retained earnings, and its purpose is to absorb future losses. Thus it qualifies as Common Equity Tier 1.

Earned Surplus also comes from retained earnings. Though the purpose of Earned Surplus is also to absorb future losses in a strict sense, not all of it may be available to absorb losses, because part of Earned Surplus, called Statutory Welfare Reserve, is required by law to be

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<sup>61</sup> According to the Proposal, the term “Common Equity” in this context means common shares plus retained earnings and other comprehensive income net of the associated regulatory adjustments.

dedicated to the welfare of employees. Although ultimately a large part of this Statutory Welfare Reserve takes the form of tangible assets owned by banks (e.g., cafeteria, hospital, or kindergarten, etc), for prudential purposes, we only include 50% of Earned Surplus into the Common Equity Component<sup>62</sup>.

In sum, in order to obtain the value of retained earnings for Chinese banks, we add up three parts: General Risk Reserve, Undistributed Profit and 50% of Earned Surplus.

b. Regulatory adjustments

We followed the Proposal to make regulatory adjustments to the Common Equity Tier 1 Capital. Below is a brief explanation of our treatment of each regulatory adjustment:

- Stock surplus—because only common stocks are involved in our calculation, so stock surplus of common stocks is also included.
- Minority Interest—deduct.
- Unrealized gains and losses on debt instruments, loans and receivables, equities, own use properties and investment properties—no adjustment
- Goodwill and other intangibles—deduct
- Deferred Tax Assets (DTA)—from what we can tell from the annual reports, most DTAs of Chinese banks are temporary. For prudential purpose, we deduct all DTAs that appear on the balance sheets, net of any associated liabilities.
- Investment in own shares (treasury stock)—deduct if there is any.
- Investment in the capital of certain banking, financial and insurance entities which are outside the regulatory scope of consolidation—deduct if disclosed. Otherwise, deduct the disclosed amount of the entire investment of other entities, for prudential purpose.

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<sup>62</sup> In fact, according to Ministry of Finance of China, starting from 2006, Chinese banks no longer need to retain Statutory Welfare Reserve. So our treatment of Earned Surplus tends to underestimate the Common Equity Component.

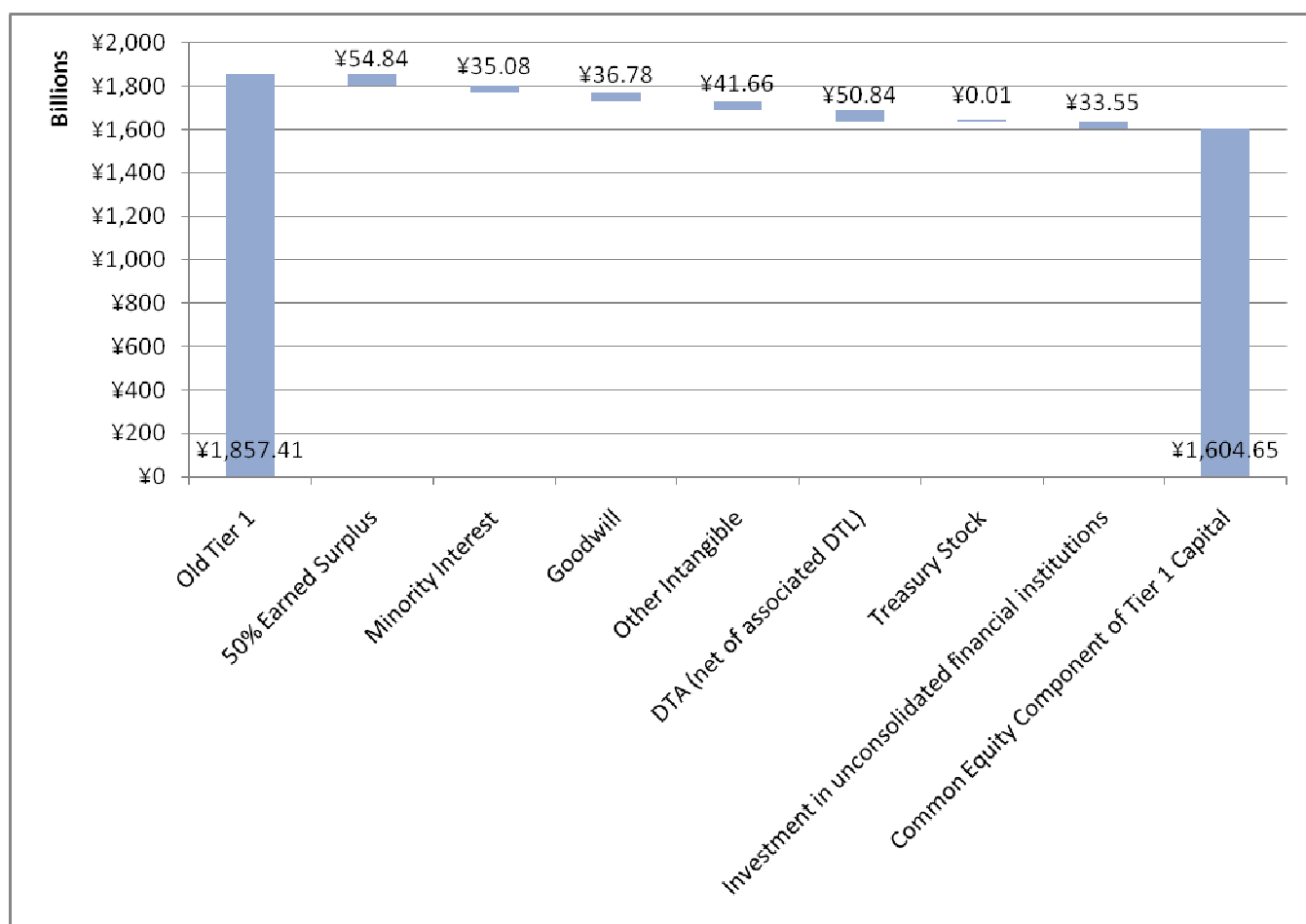
- Shortfall of the stock of provisions to expected losses—this amount is usually zero. For the banks we covered, their provisions to expected losses are usually higher than 100%.
- Cash flow hedge reserve—it is really difficult to tell which part of this reserve is “related to the hedging of projected cash flows which are not recognized on the balance sheet”. So in general we do not make adjustment to this account.
- Cumulative gains and losses due to changes in own credit risk on fair valued financial liabilities—again, it’s very difficult to figure this out from the information disclosed in the annual reports. Many times, banks did not disclose relevant information; even when they did mention this, they usually did it qualitatively. So we did not make adjustment to this account.
- Defined benefit pension fund assets and liabilities—deduct the assets if there is any, while leave the liability part alone.
- Remaining 50:50 deductions—add 1250% of relevant assets to the Risk-Weighted Assets. Sometimes when investments in financial institutions and other entities are not separately disclosed, we add the entire investments. This tends to underestimate the Common Equity Component ratio.
- Risk Weighted Assets (RWA)—the only change we made to RWA is to add 1250% of the remaining 50:50 deductions above. When it is impossible to distinguish investment in financial institutions and other commercial entities, we add the whole thing.

### c. The Results

The table below provides a quick summary of our calculations of the Common Equity Component of Tier 1 Capital Ratio for Chinese banks. For a more detailed illustration, please see Table 1 in the Appendix.



Bank	Common Equity Component Ratio
BOC	8.18%
ICBC	8.84%
CCB	8.69%
BCOMM	7.70%
CMB	5.88%
CITIC	10.07%



As of the second quarter of 2009

Note the sharp contrast between the results of our impact assessment on Chinese banks and Morgan Stanley's impact assessment on U.S. and European banks. The following tables present the Morgan Stanley calculation for western banks.

## Morgan Stanley Calculation of European Bank' Common Equity Tier 1 Capital Ratios

High to Low Q309				
Core T1 Run-up	Period	Eqty T1 Before	Eqty T1 After MS adj	Change
SHB	Q309	11.1%	10.0%	-1.1%
SEB	Q309	11.3%	10.0%	-1.8%
RBS	Q309	11.7%	9.8%	-1.9%
NDA	Q309	10.7%	9.7%	-0.9%
NBG	Q309	11.0%	9.5%	-1.5%
UNBNOR	Q309	9.1%	9.1%	0.0%
SWED	Q309	9.9%	9.0%	-0.9%
DANSKE	Q309	8.4%	7.7%	-0.7%
EFG	Q309	8.6%	7.5%	-1.1%
PIRAEUS	Q309	8.4%	7.5%	-1.0%
SAB	Q309	7.7%	7.2%	-0.5%
CSG	Q309	11.3%	7.0%	-4.3%
ALPHA	Q309	7.3%	6.8%	-0.4%
BBVA	Q309	8.0%	6.8%	-1.2%
STAN	1H09	7.6%	6.8%	-0.8%
POP	Q309	8.1%	6.8%	-1.4%
MIDM	Q309	7.3%	6.7%	-1.1%
BKT	Q309	6.6%	6.6%	0.0%
BTO	Q309	7.5%	6.6%	-0.9%
SAN	Q309	7.7%	6.4%	-1.3%
ISP	Q309	7.5%	6.0%	-1.5%
UBS	Q309	11.5%	5.7%	-5.8%
BARC	1H09	7.1%	5.6%	-1.5%
BNPP	Q309	7.6%	5.6%	-2.2%
Dexia	Q309	10.3%	5.6%	-5.3%
EU Banks	Q309	8.1%	5.5%	-2.6%
Aarea	Q309	7.3%	5.4%	-2.0%
UCI	Q309	7.0%	5.0%	-2.2%
SocGen	Q309	8.3%	5.3%	-3.1%
NRK	Q309	8.1%	5.1%	-2.9%
Erste	Q309	6.5%	5.1%	-1.4%
HSBC	1H09	8.8%	4.9%	-3.9%
BMPB	Q309	5.9%	4.7%	-1.2%
Postbank	Q309	4.9%	3.4%	-1.5%
BOI	1H09	6.6%	2.5%	-4.0%
LLOY	1H09	6.3%	2.5%	-3.8%
ODK	Q309	3.7%	2.0%	-1.7%
KBC	Q309	4.0%	1.8%	-2.3%
AIB	1H09	5.9%	0.9%	-5.1%
CASA (#2)	Q309	9.1%	-0.1%	-9.3%
CASA (#1)	Q309	9.1%	-0.1%	-9.3%

Source: Banks Regulation-- European banks most challenged – dividends at risk, Morgan Stanley Research Europe, January 27, 2010

## Morgan Stanley Calculation of American Banks' Common Equity Tier 1 Capital Ratios

Exhibit 119

### US LC Common Tier 1: Forecast, without buybacks and without buybacks and divi hike

Common Tier 1 Ratios	3Q09	2009E	2010E	2011E	2012E	2013E
AXP	9.7%	9.9%	10.0%	9.8%	10.0%	9.7%
BAC	7.3%	8.4%	9.6%	7.1%	7.2%	7.6%
BBT	8.4%	8.4%	9.4%	9.0%	8.4%	8.6%
BK	9.9%	10.5%	10.9%	9.8%	8.9%	8.7%
C	9.1%	9.6%	9.3%	9.0%	9.0%	9.1%
COF	11.1%	11.8%	8.2%	8.6%	9.0%	9.1%
FITB	7.0%	6.9%	6.6%	7.3%	7.7%	7.7%
JPM	8.2%	9.0%	8.6%	9.0%	9.0%	9.2%
KEY	7.6%	6.6%	5.6%	5.8%	6.4%	7.0%
NTRS	12.6%	13.0%	12.8%	11.8%	9.9%	9.1%
PNC	5.5%	6.1%	7.4%	8.6%	8.8%	9.1%
RF	7.8%	7.8%	7.1%	7.4%	7.6%	7.6%
STT	13.6%	15.3%	15.0%	13.9%	11.9%	11.4%
STI	7.3%	7.0%	6.6%	7.0%	7.6%	7.8%
USB	6.8%	6.7%	7.6%	7.8%	8.0%	8.0%
WFC	5.1%	6.1%	6.8%	7.6%	8.1%	8.1%
Median	7.9%	8.4%	8.7%	8.7%	8.6%	8.6%

Source: Banks Regulation-- European banks most challenged – dividends at risk, Morgan Stanley Research Europe, January 27, 2010

For Chinese banks, besides the deduction of 50% Earned Surplus we made, the biggest deductions come from DTA and Intangible Assets (including Goodwill and other Intangibles); whereas in Europe, according the Morgan Stanley research report we cited, the biggest deductions come from DTA and Minority Interests and Stakes.

The average Common Equity Tier 1 ratio for Chinese banks is 8.42%. Please note that throughout our calculation, we tried to be conservative about Chinese banks' ratios wherever there is an ambiguity arising from accounting treatment or legal issues, so our numbers tend to underestimate Chinese banks' true ratios. This is not even to mention that many Chinese banks have already announced plans to raise capital in the next couple of years<sup>63</sup>. It is therefore

<sup>63</sup> *Hua Xia Bank to Raise Capital*, WALL ST. J., Apr. 14, 2010 (noting that in recent months, a number of Chinese banks have announced capital-raising plans, including Industrial & Commercial Bank of China Ltd., Bank of China Ltd. and Bank of Communications Co.).

probably fair to say that no matter what minimum Common Equity Tier 1 ratio the Basel committee determines, it will not affect Chinese banks significantly. Chinese banks will stay above the minimum requirement very easily. Contrast this with the impact on western banks. European and American banks are projected to have a Common Equity Tier 1 ratio of 5.5% and 7.9%, respectively. Only a few Nordic and Greek banks have comparable ratios to Chinese banks. According to a Morgan Stanley prediction, even by 2012, after most European and American banks inject more capital into their capital base to boost their common equity Tier 1 ratios, their ratios would only be comparable to Chinese banks' ratios today.

We also conducted a predominance test, which verifies that the predominant form of Tier 1 capital for Chinese banks is Common Equity.

Bank	Common Equity Tier 1	Old Tier 1	Predominance Test
BOC	¥409,831	¥490,524	83.55%
ICBC	¥488,275	¥581,870	83.91%
CCB	¥425,967	¥461,873	92.23%
BCOMM	¥120,525	¥141,807	84.99%
CMB	¥64,882	¥82,466	78.68%
CITIC	¥95,176	¥98,874	96.26%

As of second quarter of 2009; in millions of RMB

We therefore believe that Chinese banks can also easily pass the predominance test no matter how high the percentage the Basel Committee ultimately determines. Although we did not find comparable data for American and European banks, from the effects that new Common Equity Tier 1 criteria would have on their capital ratios, we can infer that a large portion of their old core Tier 1 capital was not Common Equity.

Another way to look at the impact of Common Equity Tier 1 is to compare it with the old Tier 1 capital in absolute terms. The table below illustrates the difference between the old Tier 1

capital ratios as reported by banks' financial reports and the new Common Equity Tier 1 ratios by our calculations.

Bank	Tier 1 Capital	Common Equity Tier 1 Ratio	Difference
BOC	9.43%	8.18%	1.25%
ICBC	9.97%	8.84%	1.13%
CCB	9.30%	8.69%	0.61%
BCOMM	8.81%	7.70%	1.11%
CMB	6.50%	5.88%	0.62%
CITIC	10.45%	10.07%	0.38%
Average			0.85%

As of the second quarter of 2009

Note that, on average, the Common Equity Tier 1 ratio of Chinese banks is only less than 1% lower than the old Tier 1 capital ratio. This number speaks loudly for us: for Chinese banks, the predominant form of Tier 1 capital is common equity, and implementing the new capital requirement will not have significant impact on their capital ratios.

## *2. Tier 1 and Tier 2 capital*

The Proposal also set out new criteria for Additional Tier 1 Capital. Recall that most Chinese banks we covered only have common equity and long-term subordinate debt. The former is included in the common equity component of Tier 1, and the latter is already included in the Tier 2 capital under Basel II. The new set of criteria in the Proposal for Tier 1 capital will therefore not phase out any financial instrument from the Tier 1 capital of Chinese banks as it would for many American and European banks. Indeed, the only item that is included in Tier 1 capital under the current framework but is not included in the Common Equity Component of Tier 1 under the Proposal is Minority Interest, which may as well be included in the Additional Tier 1 Capital according to the Proposal. So the Proposal will not affect Chinese banks' Tier 1 capital ratios significantly. Their Tier 1 ratios should basically remain the same.

Nor will the new Proposal affect Chinese banks' Tier 2 capital ratios significantly. All the six banks we covered use long-term subordinate debt, which qualifies as Tier 2 capital. China Merchants Bank has convertible bonds, which we believe also qualify as Tier 2 capital. Another major type of Tier 2 capital for Chinese banks is general loan-loss provision, which qualifies as Tier 2 capital as well. Therefore, the Proposal will only have slight impact on Chinese banks' Tier 2 capital, if at all. Below is a quick overview of the six Chinese banks' capital adequacy ratios.

Bank	Tier 1 Capital	Tier 2 Capital
BOC	9.43%	11.53%
ICBC	9.97%	12.09%
CCB	9.30%	11.97%
BCOMM	8.81%	12.57%
CMB	6.50%	10.63%
CITIC	10.45%	12.04%

As of the second quarter of 2009

### *3. Summary of the Quantitative Analysis*

Our quantitative analysis of the potential impact that the Proposal would have on Chinese banks provides empirical support for our projection about China's likely response to Basel III based on our historical analysis. In contrast to American and European banks, Chinese banks will experience little immediate impact from implementation of Basel III. Therefore Chinese regulators and banks will at least be indifferent to Basel III, if not supportive.

## **II. IMPLICATIONS OF THE UNITED STATES' AND CHINA'S IMPLEMENTATIONS OF BASEL III**

In this part, we briefly discuss several noteworthy implications of the implementation of some form of Basel III by both China and the United States.

We begin with the banking sector. If all other variables, including regulatory, accounting, legal environment, etc, remain the same, change in the single variable capital requirement will affect banks' operations and profitability. Because Chinese banks will be very likely to meet whatever minimum capital ratio(s) ultimately determined by the Basel Committee, and a number of them have already announced plans or intentions to raise additional capital in the near future, it is fair to say that the Chinese banks' operations will not be significantly affected by the new capital requirements, at least in the short term.

By contrast, most banks in the United States and in Europe will be short of capital relative to the new capital requirements, at least in the short term. Their operations will therefore be significantly affected in the following ways:

- 1) Their cost of capital will rise. Because banks need to hold more common equity, which is more expensive than debt because of higher risk and less-favorable tax treatment, their cost of capital will increase. As a result, all they can do is to pursue fewer projects with higher Internal Rate of Return (IRR).
- 2) Lending interest rate will go up. Because banks need a higher IRR to justify their investment, they will charge a higher interest rate for their loans.
- 3) Their lending capacity will be restrained. To raise and maintain their capital ratio, the banks have to keep the amount of risky assets under control, which essentially means that the size and risk level of assets will both decrease.

Since the banking sector plays a critical role in any economy, the above effects on the banking sector will have implications for the overall economy. First, as banks' lending capacity will be restrained to a large degree, at least in the short term, credit creation in the economy will slow down. Recall that when Basel I was implemented in the U.S. in the early 1990s, there were serious debates concerning Basel I's possible contribution to the credit crunch in the 1991-92 recessionary period. Second, the American banking sector will probably not be very helpful to the United States' already fragile economic recovery in the near future. On the other hand, Chinese banks will truly be doing "business as usual," which means they can keep funding Chinese economic growth as they have been doing for the past decade. Additionally, because Chinese banks are well-capitalized, and given the fact that Chinese currency (RMB) is widely expected to appreciate, Chinese banks will be more capable of financing overseas acquisitions by Chinese companies.

The apparent strength of Chinese banks vis-à-vis western banks, however, may not be such a clear-cut blessing for China. Until recently, China's economic growth had been heavily dependent on export, which is in turn determined by the aggregate demand by consumers outside China. In the past couple of years after the financial crisis hit, China experienced dramatic decline in its export sector. If economic recovery is going to be slow in the United States and other countries, then China's export will continue to be weak. Indeed, China even recently reported a trade deficit for the first time in the past six years. The main reason that the Chinese economy continued to grow despite drops in exports was that the Chinese government launched a massive economic stimulus plan right after the crisis broke out, which was accompanied by astonishingly high growth of bank loans. This rapid loan surge gave rise to a huge amount of serious concerns about potential rebound in nonperforming loans (NPL) for many Chinese banks.



In other words, China is building up very large potentially low-quality loan portfolios in exchange for short-term economic growth.

Thus, in the short run, if the Basel committee sets very stringent capital requirement, then it will be very burdensome for most banks in the U.S. and Europe and their economies. Although China may gain some advantage in terms of international competition, its economy may not have the capacity to generate sufficient endogenous sources of growth, thus putting its banking sector at risk in the long run as well.

In the long run, the Basel Committee's more rigid capital requirements would restore the market's confidence in banks. Once banks in the U.S. and Europe and other parts of the world meet the required capital ratios, they will be able to truly return to "business as usual." If at that time the U.S. and European economies have mostly recovered from recession, then they will be on a trajectory of rapid growth based on a solid banking sector. The long-term prospect for China, however, could be more mixed. On one hand, economic growth in the U.S. and Europe could again lead to growth in China's export sector, which in turn boosts the overall economy; on the other, the Chinese domestic economy may be full of uncertainties. There have been many warnings about economic bubbles in the Chinese economy. In the unfortunate scenario that China's real estate sector experiences a big slowdown, which then leads to an overall slowdown of the Chinese economy, Chinese banks' NPL could increase dramatically overnight. At that time, it cannot be guaranteed that Chinese banks will still be able to meet the rigid new capital requirement. This scenario is not unlikely because Chinese banks' fine record of risk management is a very recent phenomenon. Only in the past decade, when the Chinese government determined to completely reform and restructure the big state-owned banks, did the big state-owned banks manage to get rid of a huge portfolio of NPL that had been accumulated

for decades. After the bad assets were carved out and fresh capital was injected by the government, Chinese banks started to have a clean and impressive balance sheet, which meet all sorts of capital requirements. We do not want to downplay the efforts that Chinese banks spent on improving their own risk management in this reform process, and they did make huge progress. However, we think that it is fair to say that Chinese banks' current high capital ratios do not result from a better risk management system, but more from the surgical reform and the blessing of continuing economic growth in the past several years. The Chinese banks' still fledgling risk management system may not weather a significant economic downturn.

On the whole, the Chinese banks' ability to meet the new capital requirement more easily than their Western peers does not imply that they are much safer. In the past several years, the six Chinese banks we covered have held much higher capital ratios than required by Basel II, which we interpret as an insurance against potential economic downturn. Chinese regulators may therefore welcome a stringent capital requirement proposed by Basel, for the Proposal would give Chinese regulators additional lever when they try to make banks tighten credit supply and hold more capital, which is always quite difficult when the economy is growing as fast as Chinese economy is right now. As with Basel II, Chinese banking regulators may take advantage of the implementation of Basel III to further enhance the risk management and capital reserve level of Chinese banks, so that China's banking sector could avoid the trap that the U.S. banking sector unfortunately fell into prior to the financial crisis.

In sum, a more stringent capital requirement might face strong objections from the U.S. and European banks on the grounds that it would affect short-term economic recovery. In the long run, however, both Chinese and western banking sectors and their economies will benefit. Considering the U.S. and China's responses to Basel II and their consequences, we suggest that

Basel Committee insist on a more stringent capital requirement, for the benefit of the long-term stability and prosperity of the world's economy.

### **III. IRB APPROACHES AND RISK MODELS**

We would also like to say a few words about the revisions Basel III made to IRB approaches. These revisions reflected the lessons that Basel Committee learned about the defects of the current IRB model from the financial crisis. We will not get into details of the revisions, but we would like to comment on the limitations of the IRB approach in general.

One underlying assumption of the IRB approach is that the IRB model can reasonably reflect the risk profile facing banks. Therefore, each bank can decide the amount of capital it needs to hold to keep solvency based on the specifics about its own business. In addition, with regulator's approval of the model, the regulator recognizes the validity of the model and agrees that the model can give a reasonable estimate of risks that banks take.

As we briefly touches upon in the United States part of the historical analysis, in the pre-crisis financial world, there had been a widely-accepted notion that because of securitization and internationalization and other financial innovations, the risk had been well diversified worldwide and among many different kinds of institutions, thus the overall risk level of the financial system was greatly reduced. It is exactly because of this belief that IRB model was built in the way that allowed big banks that could do a lot of securitizations to hold less capital, as their risks were thought to be better diversified. However, as it turned out that, unfortunately, those securitizations and other related innovative financial instruments did not reduce risk of the system, but brought the system down, in large part because a large portion of securitized financial products, in the end, were held by those banks themselves.

There are two issues we'd like to comment on. The first issue is the effectiveness of the model itself. The IRB model is descriptive and statistical by its very nature, thus is not designed to fully reflect the truth of economic activities, which is fine. As long as the model can truly give us a good-enough estimate of the size and probability of losses, it is a useful tool. However, the financial crisis taught us a good and expensive lesson: the current IRB models failed disastrously. The IRB model did not fully reflect the risk that banks were taking, not even a piece of it. Many assets that are later found to be highly risky or toxic were thought to be able to reduce the overall risks for banks, and thus were assigned a very low risk weight. Correlations between asset classes were ignored and underestimated, and the liquidity issue was also underappreciated.

These problems and others were identified in the Proposal, and their corrections were given. We welcome these revisions. However, we are skeptical that, after all these corrections, how much better will the corrected model be? Will it really correct the defects that have been identified? Moreover, what went wrong this time may not go wrong next time, and what goes wrong next time may be something worked this time. What about those defects that have not been identified?

As any scientific investigation, the development of a "good-enough" model is surely a trial-and-error process, and the model will get better and better as lessons of failures are learned and our knowledge of science expands. This is how human society has been making progress in many areas. Nevertheless, we do not think that the regulation of banking sector should rely on this trial-and-error process, simply because the cost of failure is too high. Our society cannot afford to let banks do experiments to refine the risk model while putting people's employment and the entire economy at stake. Notably, according to the World Bank, 53 million more people could be trapped in poverty because of current global financial crisis, and 200,000 to 400,000

more babies could die each year between now and 2015 if the crisis persists<sup>64</sup>, let alone tens of millions of people lost their jobs worldwide. Even worse, because risks were wrongly estimated in the “good” times, big mistakes have been made in both consumption and investment. Americans have spent way too much money on consumption and their saving rates were driven down to low single digit; too much capital were misallocated to innovative financial assets that were later found to be toxic, while sources of real economic growth such as education and renewable energy were heavily underinvested; and the American government is running a historic fiscal deficit to keep the economy going. Much of the cost will have to be borne by the next generation of Americans. Obviously, the benefit of trying new risk models to increase risk sensitivity was arguably to make large sophisticated banks have more capital to invest and thus create more economic growth. We do not want to doubt the sincerity of people who made these arguments, but when the market is filled with complacency and arrogance, sophistication unintentionally became a tool to conceal self-deceit. So in the end, probably the only benefit was the higher compensation of banks’ executives and employees resulting from temporary higher profits in those booming years.

And compared to the cost of the failed risk model, the benefit is too small, or at least not the benefit that regulators should pursue. This situation was exacerbated by the second issue we would like to comment on, namely, the regulator’s approval of the model. When regulators approve the risk model, this approval grants the model legitimacy, which essential forgoes a large part of banks’ responsibility of risk management. The implication is that the regulator will be mutually responsible for the consequences of adopting this risk model. So when the model

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<sup>64</sup> Financial Crisis Could Trap 53 Million More People in Poverty (Feb. 12, 2009) (The World Bank press release).

turned out to be fatally wrong, regulators cannot blame banks, because they are both part of the mistake.

Based on the discussion above, we suggest that Basel Committee should move away from its reliance on IRB approaches in devising new banking regulation policies, but focus on traditional, simple yet effective policy tools to ensure safety and soundness of the banking sector, such as capital requirement, leverage ratios, etc. It might be argued that as risk management technique continues to improve, IRB approach may ultimately prove to be effective in both containing risk and maximizing economic growth opportunities. We do not dispute that this may be true one day. However, before we are truly sure that we have reached that point, regulators should not put the entire economy and people's jobs and even their lives at stake to do this experiment. In designing future banking regulatory framework, regulators' overarching objective is not economic efficiency, but the safety and stability of the system. Regulators should not assume that risk management will be significantly improved, should not assume that our scientific knowledge and intellectual capacity will expand rapidly, and should certainly not assume that human nature in the financial world will change. Before we can figure all these out, the best way to hedge against these uncertainties is capital requirement, especially common equity, and probably leverage ratio.

As a clarification, we are not suggesting that the Basel Committee and the banking industry should abandon the IRB approaches entirely. The currently mature risk management method widely adopted by banks would not have been available to us without generations of bankers' efforts to develop more and more effective ways of controlling risks. The possibility and potential benefits of developing a more advanced and truly effective risk management technique warrant serious study and tryout. In light of the caution we have drawn above to

careless experiment of risk models, we suggest that banking regulators set a precondition for banks who would like to adopt experimental risk management approaches which may lead to a lower capital requirement—let the banks share the upside with the state and the society; specifically, a bank would automatically be subject to a much higher and progressive tax rate if the bank applies to adopt the IRB approach and the regulator approves. In this way, banks would want to make sure the new model would really work and bring in additional profits to justify the higher tax rate before applying to use the sophisticated models; meanwhile, the government can share the upside with banks (not just the downside when the government bails banks out) if the new approach is truly effective, and can use the additional tax revenue for potential bailout if the new model goes south and gets the firm into serious trouble.

#### **IV. A STRUCTURAL ISSUE**

Last but not least, we would like to comment on a structural issue. We are sympathetic towards financial regulators, because the incentive structure of finance and regulation does not create much advantage for regulators. As a former top United States banking regulator pointed out,<sup>65</sup> “a good metaphor to describe the situation facing banking regulators is that people would never cheer on goalies in a hockey game”. Indeed, when the financial market is booming, people cheer on financiers and forget about regulators; while in the market downturn, people blame regulators and the government bail financiers out. So it seems to us that regulators do not have the correct incentives, or at least are extraordinarily underappreciated by the public, to really effectively regulate banks. And although we do not have a satisfactory solution, we raise this issue to the Basel Committee to suggest that there are certain structural issues that should be

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<sup>65</sup> We had a chance to speak with a former US Comptroller of the Currency in Mar. 2010. Due to the off-the-record agreement, we cannot identify the source.

addressed. For if they remain unresolved, they could likely prevent banking regulators (i.e. the Basel Committee) from making further progress of a lasting kind.



## Appendix

Table 1: The Calculation of Chinese Banks' Common Equity Component of Tier 1 Capital

Bank	Period	Old Tier 1	-	50% Earned Surplus	-	Minority Interest	-	Goodwill	-	Other Intangible	-	DTA (net of associated)	-	Treasury Stock	-	Investment in unconsolidated financial institutions	Common Equity Component of Tier 1 Capital	Old RWA	1250% adjustment	New RWA	Common Equity Component Ratio
BOC	Q209	490524	-	11675.5	-	28287	-	1878	-	12137	-	19617	-	8	-	7091	409830.5	4971226	41033.75	5012259.8	8.18%
ICBC	Q209	581870	-	12325	-	4504	-	23581	-	24090	-	11312	-	0	-	17783	488275	5494937	25815	5520752	8.84%
CCB	Q209	461873	-	13461	-	1758	-	1525	-	1127	-	10784	-	0	-	7251	425967	4889313	13643.75	4902956.8	8.69%
BCOMM	Q209	141807	-	12968	-	522	-	200	-	1151	-	5786	-	0	-	655	120525	1565359	591.25	1565950.3	7.70%
CMB	Q209	82466	-	3326.5	-	0	-	9598	-	2388	-	1600	-	0	-	672	64881.5	1100838	3276.25	1104114.3	5.88%
CITIC	Q209	98874	-	1080.5	-	4	-	0	-	770	-	1743	-	0	-	101	95175.5	945333	126.25	945459.25	10.07%

Table 2: Morgan Stanley Calculation of European Bank' Common Equity Tier 1 Capital Ratios

Exhibit 88

**Basel 3 forecast to reduce common equity T1 by ~€241bn today, but only ~€139bn post adjustments by 2012**

		Old Core	New Core	Change	New Core	Change vs.	Old Core	New Core	New Core	Change
		T1	T1 (before MS)	EUR'm	T1 post MS adj	Old EUR'm	T1 Ratio	T1 Ratio	Ratio (MS adj)	MS adj vs Old
Benelux	Q309	21,632	10,087	(11,545)	10,087	(11,545)	7.4%	3.4%	3.6%	-3.8%
	2012e	28,779	22,994	(5,784)	23,762	(5,017)	12.0%	9.6%	10.6%	-1.4%
Austria	Q309	13,055	8,799	(4,256)	8,799	(4,256)	7.0%	4.7%	5.7%	-1.3%
	2012e	18,089	13,336	(4,753)	13,475	(4,613)	8.9%	6.6%	8.1%	-0.8%
Germany	Q309	16,267	8,622	(7,645)	9,622	(6,645)	4.1%	2.2%	2.5%	-1.6%
	2012e	17,132	12,705	(4,426)	13,877	(3,255)	4.3%	3.2%	3.6%	-0.7%
Italy	Q309	67,463	47,553	(19,910)	49,846	(17,617)	7.3%	5.1%	5.5%	-1.8%
	2012e	90,894	70,437	(20,457)	76,540	(14,354)	8.2%	6.3%	7.0%	-1.1%
France	Q309	104,415	35,520	(68,895)	47,520	(56,895)	8.3%	2.8%	4.1%	-4.2%
	2012e	134,723	79,714	(55,009)	106,858	(27,865)	8.5%	5.0%	7.2%	-1.3%
I-Banks (EUR'm)	Q309	55,707	32,088	(23,619)	32,088	(23,619)	9.7%	5.6%	5.8%	-4.0%
	2012e	77,506	64,285	(13,221)	73,545	(3,961)	10.6%	8.8%	10.3%	-0.3%
UK (EUR'm)	1H09	200,138	128,298	(71,839)	128,298	(71,839)	8.4%	5.4%	5.6%	-2.8%
	2012e	273,754	214,557	(59,197)	224,573	(49,181)	10.2%	8.0%	8.6%	-1.6%
Ireland	1H09	14,423	3,665	(10,758)	3,665	(10,758)	6.2%	1.6%	1.6%	-4.6%
	2012e	7,262	(2,035)	(9,297)	(1,740)	(9,002)	3.6%	-1.0%	-0.9%	-4.5%
Nordics (EUR'm)	Q309	58,020	52,465	(5,555)	52,465	(5,555)	10.0%	9.1%	9.2%	-0.8%
	2012e	70,311	62,971	(7,340)	64,080	(6,232)	10.7%	9.6%	9.9%	-0.8%
Spain	Q309	84,851	70,117	(14,734)	70,117	(14,734)	7.8%	6.4%	6.6%	-1.2%
	2012e	122,990	103,283	(19,707)	105,136	(17,854)	9.6%	8.1%	8.5%	-1.2%
Greece	Q309	18,332	15,418	(2,914)	15,418	(2,914)	9.0%	7.6%	7.9%	-1.1%
	2012e	23,706	20,671	(3,035)	20,833	(2,874)	10.0%	8.7%	9.1%	-0.8%
<b>Total (EUR'm)</b>	<b>Q309</b>	<b>654,302</b>	<b>412,633</b>	<b>(241,670)</b>	<b>427,925</b>	<b>(226,377)</b>	<b>8.1%</b>	<b>5.1%</b>	<b>5.5%</b>	<b>-2.6%</b>
	<b>2012e</b>	<b>865,145</b>	<b>662,920</b>	<b>(202,226)</b>	<b>720,938</b>	<b>(144,207)</b>	<b>9.3%</b>	<b>7.1%</b>	<b>8.0%</b>	<b>-1.3%</b>

Source: Morgan Stanley Research estimates

Source: Banks Regulation-- European banks most challenged – dividends at risk, Morgan Stanley Research Europe, January 27, 2010