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The rise of deferred tax assets in Japan: The role of deferred tax accounting in the Japanese banking crisis ☆

Douglas J. Skinner *

Graduate School of Business, University of Chicago, 5807 South Woodlawn Avenue, Chicago, IL 60637, USA

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ABSTRACT

This paper provides evidence on the role of deferred taxes in the recent financial crisis among Japanese banks. Upon adoption of deferred tax accounting in FY1998, the major Japanese banks recognized net deferred tax assets of ¥6.6 trillion ($55 billion). Without these assets, the banks would have been insolvent. The evidence supports the conclusion that Japanese regulators used deferred tax accounting as part of a regulatory forbearance strategy, and that bank managers used these assets to bolster their banks' regulatory capital. The results show how ostensibly similar accounting rules can be implemented very differently, and so have implications for IFRS.

1. Introduction

This paper provides evidence on accounting for deferred taxes by Japanese banks from fiscal 1998, when deferred tax accounting was first adopted by the banks, through fiscal 2003. The main goal of the paper is to document the role of deferred taxes in the decade-long crisis in the Japanese banking sector. I investigate whether: (1) deferred taxes were used by the Japanese Government and bank regulators at the Ministry of Finance ("MOF") and Financial Services Agency ("FSA") as a tool of *regulatory forbearance*; that is, to give the major Japanese banks the appearance of financial health when in fact many were insolvent, (2) managers of the banks themselves used the discretion inherent in deferred tax accounting to practice *regulatory capital arbitrage*; that is, to manage reported levels of regulatory capital in such a way as to avoid falling below minimum capital thresholds.

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* Tel.: +1 773 702 7137; fax: +1 773 702 0458.
E-mail address: dskinner@chicagogsb.edu

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I first provide aggregate evidence on changes in the financial strength of the major Japanese banks from 1982 to 2003 to show how deferred tax assets (hereafter, DTAs) became a significant part of their regulatory capital. The bursting of the bubble in Japanese stock and real estate prices in the early 1990s and the subsequent economic malaise caused a steady decline in the financial strength of these banks. During the first part of the 1990s, the banks were able to maintain necessary levels of regulatory capital by realizing gains on their large holdings of equity securities. This source of financial slack ran out in about 1998.

The timing and circumstances of the introduction of deferred tax accounting in Japan are consistent with its use as a tool of regulatory forbearance. The rule was introduced in 1998, when the banks' other sources of regulatory capital had been depleted. The rule was introduced at a time when Japanese accounting rules were set by a committee of the MOF, was issued in conjunction with a change in Japanese corporate law that allowed deferred taxes to be included on corporate balance sheets for the first time, and was introduced quickly, with only 4 months between the initial exposure draft and the final statement. Perhaps most important, the rule was accompanied by a decision by regulators at the MOF to allow banks to include DTAs in their regulatory capital. This decision was unique—bank regulators in other countries either do not recognize DTAs for regulatory capital purposes or impose a stringent cap. The rule was immediately adopted (earlier than required) by almost all Japanese banks. Because of the unusually rapid rule-making process, little accounting or auditing guidance accompanied the new rule, making it difficult for auditors to verify the reasonableness of the banks' DTAs.[1] When first recognized in fiscal 1998, net DTAs at the major Japanese banks totaled ¥6.6 trillion, or about 29% of shareholders' equity; *all* of the major Japanese banks would have fallen below minimum capital levels without this accounting change.[2] The recognition of these DTAs allowed the Government to characterize these banks as healthy, helping to rationalize its decision to inject ¥7.5 trillion in new capital.

DTAs continued to be an important source of regulatory capital for Japanese banks after F1998, most notably in F2002 when the major banks' DTAs totaled ¥7.5 trillion, or 60% of equity. The collapse of Resona Bank likely signaled the beginning of the end for DTAs in Japanese banks. Resona failed in May 2003 when its auditors refused to sign off on its DTAs, causing it to fall below minimum capital levels. The Government immediately stepped in to save the bank, injecting ¥1.96 trillion in new capital. In the period after Resona there has been a decline in the major banks' use of DTAs, although DTAs still represent a significant fraction of equity for some banks.[3] Overall, the evidence supports claims by economists that accounting helped to prolong the Japanese financial crisis by allowing regulators and politicians to mask the true extent of the banks' economic problems,[4] consistent with the economic consequences literature (Watts and Zimmerman, 1986; Holthausen and Leftwich, 1983).

The second type of evidence that I present is a bank-level cross-sectional analysis of the regulatory capital arbitrage hypothesis as applied to deferred tax accounting in Japanese banks. I find that in F1998 Japanese banks initially recognized large gross DTAs that were mainly attributable to large current and past losses and loan loss provisions. Given the relatively stringent Japanese tax laws, these DTAs largely reflect the economic situation of these banks rather than accounting discretion. However, I also find that the *net* DTAs recognized by these banks were also large, increasing their regulatory capital. The banks recognized these relatively large net DTAs in spite of large and persistent losses, weak financial positions, and poor future prospects, factors that normally limit the ability of entities to recognize DTAs. The future earnings necessary to justify the net DTAs recognized by the banks in F1998 were substantially larger than the earnings they subsequently realized; further, these differences are negatively related to the banks' regulatory capital positions, indicating that managers of weaker banks made more aggressive DTA choices (correlation of $-.46$).

Cross-sectional regressions estimated for F1999 through F2003 provide further support for the regulatory capital arbitrage hypothesis. While gross DTAs are, as expected under GAAP, driven largely by past and current profitability, the banks' net DTAs are negatively related to their adjusted regulatory capital positions, indicating that banks with larger capital deficiencies recognized larger net DTAs. This result holds after controlling for other factors that affect the realizability of banks' DTAs, such as bank size and profitability.

In the end, it is clear that DTAs provided an important source of regulatory capital for Japanese banks, and that less well-capitalized banks utilized DTAs to a larger extent than healthier banks. The results raise the question of why managers of these weak banks, which were at times reporting large and persistent losses, were not required to report larger valuation allowances against their banks' DTAs, and why banks in Japan, unlike those elsewhere in the world, were permitted to

[1] Accounting for deferred taxes provides managers with significant discretion because the realizability of DTAs depends on managers' assessments of their firms' ability to generate sufficient levels of future taxable income (Miller and Skinner, 1998; Schrand and Wong, 2003; Dhaliwal et al., 2004). Deferred taxes provide an especially difficult challenge for auditors because there is no objective evidence they can use to verify managers' estimates of the realizability of DTAs.

[2] ¥6.6 trillion is equivalent to about $55 billion using the exchange rate in effect in late 1998 (about 120¥/$). This exchange rate can be used as a rough approximation throughout the period of this study.

[3] The ratio of net DTAs to Tier I capital was 49% for SMFG, one of the Japanese megabanks, at March 31, 2005. Beginning in F2005, the FSA has limited the extent to which the major Japanese banks can include DTAs as part of Tier I regulatory capital (the limit is 40% in F2005, 30% in F2006, and 20% in F2007).

[4] For example, see Fukao (1998, 2000), Hoshi (2001), Hoshi and Kashyap (2001), as well as a recent survey of Japanese financial reporting practice (Benston et al., 2006, Chapter 8). For evidence on regulatory forbearance during this period, and in particular that bank regulators allowed banks to "evergreen" loans to impaired borrowers ("zombies") to avoid the realization of losses on their balance sheets, see Peek and Rosengren (2005).