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FAIR VALUE ACCOUNTING AND ITS IMPACT ON BANKING SECTOR STABILITY

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ABSTRACT

In 2007 two rules SFAS 157 and SFAS 159 were adopted into fair value accounting scheme just into looming financial crisis. These rules had high pro-cyclical effect and significantly affected banking sector stability during the recession and its "profitability" during the years after the recession. Important parts of these rules were relaxed in April 2009 and then some other suspended in January 2016. First, FASB let the companies to use whatever valuation methods to value balance sheet securities in terms of fair value accounting they considered best within the SFAS 157 framework. Second, FASB scraped Debt Value Adjustments, part of SFAS 159, from income statements watched most by investors. This article reviews the implications of mark to market rules, its pro-cyclicality and impact on banks' balance sheets.

JEL CLASSIFICATION & KEYWORDS

■ M41 ■ M48 ■ SFAS 157 ■ SFAS 159 ■ BANKING CRISIS ■ MARK TO MARKET RULE ■ FAIR VALUE ACCOUNTING

INTRODUCTION

January 5, 2016 was a day which brought a very important decision of the Financial Accounting Standards Board (FASB) to the banking industry in the USA. FASB that day issued its final "Recognition and Measurement" accounting standard with few changes made to bank accounting. These few changes are very significant to balance sheet valuations of various banks in the USA and thus having influence on stability or instability of whole industry.

The new standard will take effect in 2018, but early adoption is possible. First adoption of Mark to Market rule, SFAS 157, went into effect on November 15, 2007 and significantly changed profitability of banking sector in the USA. That rule provided guidance on how banks should value securities. But this rule was not a single one, there were more rules, like SFAS 115 that required marking certain securities to market on the balance sheet. SFAS 157 has been loosened in April 2009 and banks could choose whether they will use its arrangements and together with some other rules emerged into something called by many market participants as mark to unicorn, mark to fantasy, or mark to fiction. The problem was that banks were allowed to value certain debts as profits thus changing losses into profitability. The new standard will thus eliminate possibility of generating profits during instances when company's credit rating was downgraded. Now only changes in the fair value of equity investments will be required to be recorded through income.

Mark to market rule, especially during a financial turmoil, is highly pro-cyclical. We will show that adopting such a rule on the eve of a recession is a terrible idea in general.

Nowadays there are many banks which hold non-negligible equity investment who need to talk with bank regulators on the possibility of excluding market value changes from regulatory capital. This should be solved during transitional period.

In this article we will focus on describing whole picture associated with these arrangements, analyzing the impact on banking sector and offering possible outcomes for the future. First we will summarize mark to market rules, focus on the pros and cons of mark to market and then analyze the impact on US banks.

Summarization of mark to market rules SFAS 157 and SFAS 115

SFAS 157 applied November 15, 2007, clarified fair value and provided guidance to management on how to measure fair value for different assets and did not change the number of instances where fair value is used.

The definition of fair value as in SFAS 157 "The price that would be received to sell assets or paid to transfer a liability in an orderly transaction between market participants at the measurement date."

Fair value can be according to SFAS 157 measured using three different ways:

1. Market approach when valuations are based on market information.
2. Income approach when security is valued by estimating future cash flows and earnings, and discounting to a present value.
3. Cost approach when value is determined by estimating how much it would cost to buy an asset of similar quality.

The concept of the Fair Value Hierarchy is introduced in paragraphs 22 through 31 in SFAS No. 157. It requires the fair value assets and liabilities to be allocated and prioritized according to different levels or hierarchies based using different inputs while Level 1 is most preferred:

- Level 1 is most desirable and shows assets/liabilities with the most transparent and tangible valuation techniques thus uses quotes in active markets for same assets.
- Level 2 uses inputs that are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. For example pricing a flat using the price of a similar flat in similar building across the street.
- Level 3 is least desirable and most unobservable of the levels. Level 3 uses valuation techniques and data that may not be verifiable and use many assumptions and estimates. For example assuming what would be the price of an asset or liability if its market would still exist, be liquid or orderly.

Companies were also forced under SFAS 157 arrangements to disclose information on methods used and valuation

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results of the assets and liabilities on their balance sheets. SFAS 157 is therefore a framework bringing instructions on valuation of large varieties of securities in various markets.

SFAS 115 on the other hand brought requirement to hold specifically defined securities at fair value, thus having them marked to market. All assets banks usually hold can be separated into three groups and two of them were required by this rule to be valued at mark to market.

1. Securities Held to Maturity (HTM) are debt securities (recorded at amortized cost) which are intended to be held by the investor till the maturity date.
2. Securities For Trading are securities, equity or debt investments made with the intent of reselling them in the near future for profit. These are considered highly liquid and are valued at fair value. In case there is unrealized profit or loss, this loss or profit becomes part of net income.
3. Securities Available for Sale (AFS) are securities bought for unknown period of time without intention to trade them actively and not being classified as HTM. As for trading securities, these show up on balance sheets at fair value. If the AFS generates unrealized profit or loss, then this becomes part of a shareholder's equity through Other Comprehensive Income.

Rule SFAS 159 (adopted in 2007) allows companies to value (it is a one way decision to make regarding that specific security) their HTM or AFS securities as For Trading securities. Therefore, all three types of securities can show up on a balance sheet as a part of income when they will generate unrealized loss on their assets or liabilities.

During whole year 2008 literally every financial institution complained about SFAS 157 due to plummeting valuations of held securities as many markets were becoming illiquid with widening spreads. This was generating greater losses to banks and those had both sides of balance sheet distorted just because benchmark assets were plummeting. This caused the Securities and Exchange Commission (SEC) to undertake an investigation and look into complaints of the industry. On December 30, 2008 SEC made public a statement (SEC, 2008) to improve not to suspend the Fair value accounting standards: "The Securities and Exchange Commission today delivered a report to Congress mandated by the Emergency Economic Stabilization Act of 2008 that recommends against the suspension of fair value accounting standards. Rather, the 211-page report by the SEC's Office of the Chief Accountant and Division of Corporation Finance recommends improvements to existing practice, including reconsidering the accounting for impairments and the development of additional guidance for determining fair value of investments in inactive markets, including situations where market prices are not readily available".

The pressure from Congress and the industry based on this report then forced the SEC to rethink its policy. During second half of March an information became public that on April 9, the rule SFAS 157 will be relaxed in such a way the industry will then be able to choose more freely how to value held securities. Therefore, the rule has not been suspended but amended with more guidance on how to fairly value securities so that investors can determine the value for themselves using methods they deem more accurate (Debevoise & Plimton LLP, April 17, 2009):

"FASB No. 157 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. FSP 157-4 makes clear that when a market for an asset or liability is inactive (i.e., there is a significant decrease in the volume and level of activity for an asset or liability when compared with normal market activity for the asset or liability (or similar asset or liability)), transactions or quoted prices may not be determinative of fair value because there may be increased instances of transactions that are not orderly. In those circumstances, a significant adjustment to those transactions or quoted prices or the use of one or more alternative valuation techniques (e.g., a present value technique) in addition to a market approach technique may be required to estimate fair value in accordance with FASB No. 157. In addition, it may be appropriate to disregard market inputs entirely to the extent that such transactions are not orderly (e.g., they represent forced or distressed sales)."

This amendment in our view does not suspend the rule but relaxes it giving the companies freedom to use different techniques to value those securities during times when a market is disorderly and inactive or illiquid.[1] During other times the three mentioned Levels are still in place. All financial statements are fully disclosed so every investor can see during due diligence what assets are valued using what methods.

Debt valuation adjustments generating income

On Tuesday January 5, 2016, FASB announced suspension of a rule that banking industry has long complained unfairly distorts banks' quarterly earnings.

SFAS 159 allowed to recognize market value declines in some debt instruments as earnings (income). This has been known as Debt Valuation Adjustment (DVA). (Wikinvest, 2016) states "… this valuation technique was used by financial firms in 2008 as a way to minimize accounting losses: as the market value of issued debt declined, companies would recognize the decline as income."

The changes will take effect for fiscal years and quarters starting after Dec. 15, 2017, for public companies. They apply to privately held companies, non-profits and other entities in fiscal years beginning after Dec. 15, 2018, and for quarters or other interim periods starting after Dec. 15, 2019. Anyway, as we wrote earlier, early adoption is possible and many banks will implement it in the coming months and most probably it will show up on quarterly earnings reports in March 2016.

The DVA will no longer be included in net income, but in "other comprehensive income". As Bloomberg puts it: "The DVA rule increased net income when a bank's bonds tanked, on the theory that the firm could buy back its bonds at a lower price and benefit from the decline in value. In practice, a financial institution in trouble, such as Lehman Brothers Holdings Inc. in 2008, is unable to buy back bonds because it can't get fresh financing." (Bloomberg, 2016).

Once a company chose to adopt SFAS 159 it was not allowed to change the valuation technique in the future, so this rule was nicknamed Fair Value Option.

Figure 1 compares 2008 bank Net Income with the Pre-Tax Gain from Fair-Valuing of Own Debt.

[1] For example discounting cash flows which was demanded by the industry as something used in terms of the mark to model rules.

Figure 1: Bank Net income comparison

Fiscal 2008 Pre-Tax Gains From Fair Valuing of Own Debt ($MM)

	Reported Pre-Tax Earnings (Loss) [1]	Pre-Tax Gain From Fair Valuing Of Own Debt [2]
Morgan Stanley	2,287	10,176
The Goldman Sachs Group, Inc.	2,336	2,075
Citigroup, Inc.	-53,055	8,221
JP Morgan Chase & Co	2,733	1,174
Credit Suisse Group [3]	-14,902	4,989

(1) From continuing operations before minority interest and extraordinary items.
(2) Only portion of gain related to "credit risk" when separately broken out in disclosures.
(3) Amounts in millions of Suisse francs.
Source: Moody's

Source: Image adapted from (Zero Hedge, 2009)

One could ask if the banks could make a profit by buying their own debt, why wouldn't they? Industry experts have criticized the rule since its adoption. It required banks to record big, counterintuitive gains and losses known as DVAs for moving earnings up and down from quarter to quarter regardless of how the banks' operations are performing. This was another significant source of pro-cyclicality of this mark to market rule.

Banks initially pushed for this rule to be implemented as it let them to "fix" accounting for their own debt that they sold to retail investors, called structured notes. This was great during the US banking crisis, but when the recession ended it became a major issue distorting balance sheets and earnings reports by hundreds of millions USD each quarter.

As reported by Michael Rapoport for WSJ: "for example in Q1 of 2012, Morgan Stanley's earnings were hurt by nearly $1.5 billion in losses tied to the rule. Just two quarters earlier, in the third quarter of 2011, the bank had a gain of $2.1 billion from the rule.

The effect on bank earnings recently has been more muted. Morgan Stanley recorded gains of this type totaling $477 million in the first nine months of 2015. A Morgan Stanley spokesman declined to comment." (Dow Jones Business News, 2016).

In the next chapter we will revisit historical evidence of Fair value accounting.

Fair value accounting and historical evidence[2]

Starting from 2007 we have experienced that Federal Reserve obtained more and more authority over the financial market supervision and regulation to effect the governing macroeconomic policy. Based on a profound study of the case (Simonson & Hempel, 1993) it can be argued that interagency 1938 Uniform Agreement on Bank Supervisory Procedures was to establish the same objective. They claim that Fed, in comparison to other banking agencies, sought greater leniency in bank examination in order to motivate credit creation while the main aim was to modify supervisory standards to match domestic macroeconomic policies. Year 1938 is obviously not the only example in history. The same thing occurred in 1991-92 when the authorities attempted to ease the credit crunch by subordinating bank examinations in case the debtor asked for more credit.

That is to say there are two groups of economists confronting against each other and arguing about importance of their own reasons.

[2] This chapter has been taken from (Hájek, Maitah, & Čadil, 2015)

Votes against the mark-to-model

The camp of economists who support MTM rule or fair value accounting, based on market price, claim that, according to Simonson and Hempel (1993, pp. 250), mark-to-model allows for "regulatory evaluation condescension by allowing troubled banks and thrifts to use misguiding accounting methods that industrialize undoubtedly biased values of their assets and capital. Such accounting distortions resolute regulators to escape admitting bank and thrift failures in a timely method and to delay resolving them". This particular approach is highly important as late resolution often increases the costs in a very dramatic way. Without resolution it makes it possible for bank managers and administration to prevent accounting from depreciation when the assets and capital of a financial company are close to going underwater. The average cost of forbearance between 1980 and 1990 according to (Congressional Budget Office, 1991) was about $66 billion in 1990 dollars. On the other hand (Gilbert, 1992) finds no links between the period of time poorly capitalized banks are allowed to operate and the size of losses to the Bank Insurance Fund.

The inability to detect and close insolvent or near-bankrupt banks in the presence of a deposit guarantee scheme may embolden portfolio managers to bet on resurrection by taking greater risk in hopes of higher return on investments. If such a scenario does not actually work as planned, then what happens is that the company eventually ends up in the hands of Federal Deposit Insurance Corporation (FDIC).[3]

Another huge problem that this group of economists emphasizes is that subordination of supervision to Federal Reserve inevitably leads to supervisory leniency as the combination of Fed's supervisory and monetary policy aims greatly oppose each other. For instance (The Hunt Commission Report, 1971) criticized the regulatory environment as the Fed's duties for supervision of financial market corporations diverged from responsibilities related to managing monetary policy. In complete compliance with the current report but with a totally different stress a House Banking Committee report on reforming the financial system characterized the potential use of bank authorities to achieve monetary policy objectives as a dangerous application of bank supervision (U.S. Congress, 1974).

Manfred Peterson analyzed the opinions of potential conflicts and compatibility of Fed's supervision and monetary policy objectives and ascertained that in general sense "bank examination data are not useful in formulating open market policy" (Peterson, 1977). However, he gave strong reasoning to the legitimacy of linking the application of specific monetary actions (credit controls, discount window administration), and sectors of credit markets as well as private banks (Peterson, 1977, pp. 34-36). He observed that the conflicts of objectives can from time to time be resolved exclusively by banking agencies and only in rare cases they should be brought to public arena.

We have to keep in mind that it was Great Depression that brought fair value accounting into balance sheet valuations. Various historical examples testify to the fact that when MTM was effective (1929, 1938, 1990, 2007) that is to say during credit crunches (before it has been suspended or eased), when market valuations were moving down, the balance sheets were damaged from all sides simply because of the depressed market prices without any consideration of debt repayments generating unchanged cash flows.

[3] For further discussion see (Barth, Brumbaugh, & Litan, 1990) and (Merton, 1977)

Votes against mark-to-market

However, the other camp of economists claim that fair value accounting causes strong pro-cyclical movements of balance sheet valuations which might "artificially" produce huge returns during economic expansion and great losses in the time of decline. We suggest to discuss a simple example: security nominal value is $100 while it produces annual cash flow of $10. According to historical prices and mathematical models it would be priced more or less steadily under mark-to-model accounting without taking into consideration its market value, despite the fact that it would no doubt be positively biased. However under mark-to-market accounting, when the price of assets would go up by 100 % its value would artificially become double though it is the very same security, as it used to be. The problem was not only in MTM rule, but it was the deadly combination of MTM performance (just ahead of financial recession) and the debtors' loans derivatives, which were ironically rated AAA.

Long time ago Jacob Viner (1939, pp. 109-110) opted for the subordination of bank supervision to macroeconomic policies. He predicted the negative trend of bank examiners to make judgments on loans in respect to economic perspective, by calling for credit expansion in boom phases and strengthening credit contraction during economic declines or recessions. Considering the fact that he was against such perversity he urged the authorities to adopt centralization of the bank examining functions under the Fed which would help to effectively combine "examination policy with credit control policy".

George Bach (1949) was absolutely for this approach. He directly addressed the "optimal relationship" between bank supervision and monetary (credit) policy" based on the results of Hoover Commission on the Organization of the Executive Branch of the Government.

In retrospective on the 1938 Uniform Agreement, he acclaimed the conferees to "avoid examination pressure to liquidate intrinsically sound assets in time of deflation" (Bach, 1949, pp. 280-281).

Next to Viner and Bach also Homer Jones, chief economist of the FDIC in the late 1930s, pointed out that the Uniform Agreement corrected supervisory rules that may have contributed to depression conditions. Not considering monetary policy issues or fiscal policies, he speculated that the new leniency in examination might contribute to economic recovery. Nevertheless, he doubted the usefulness of bank supervision for monetary control (Jones, 1940).

In the mirror of all these comments Simonson and Hempel (1993, pp. 251) stressed out that to ignore costs of supervisory leniency was "grave omission, given the apparent contribution of valuation forbearance policies to the collapse of many banks and of the savings and loan industry during the 1980s and early 1990s.[4] The discussion which took place between 1950s and 1970s relatively calmed down and was now less significant due to more or less untroubled economic and banking situation of the given period, when Donald Jacobs urged for greater discretion in bank supervision methods, that could contribute to mitigating business cycles and evading conflicts regarding monetary policy (Jacobs, 1964).

[4] Estimated dollar costs can be found in Congressional Budget Office (1991). For broader costs of disguising capital impairment in the savings and loans industry see White (1991, pp. 82-90, 223-230).

Motivation to change accounting methods[5]

What was the reason for introducing and then abolishing the mark-to-market rule several times throughout the history? While the rule was in force already during the Great Depression, it was eased in 1938 shortly after its adoption during the recession, the first remarkable economic recession following the Depression. A number of economists claimed that it is required for the banking system to provide more credit to the ones who really need it. In 1937-38 banks were accused of hampering an economic recovery shortly after they emerged from severe economic conditions of the thirties. Soon, once the faith in the economy seemed to be growing, the economy experienced a sudden recession. Banks were accused for hindering economic recovery by restricting lending.

In order to ease examination pressures, the banking regulatory agencies (FDIC, Comptroller of the Currency and the Fed) negotiated and created the 1938 Uniform Agreement on Bank Supervisory Procedures which was revised in 1949 and 1979. Simonson and Hempel (1993, pp. 249-250) present their findings that "researchers who have studied the effects of the 1938 Uniform Agreement generally concluded that the accounting distortions it created tended to disguise bank and thrift insolvencies, invited regulatory laxity and forbearance, and supported noneconomic decision making by bankers." However, they stress out that researchers did not tackle the issue of broader macroeconomic objectives related to the conflict of supervision and monetary policy underlying the Agreement.

Financial institutions experienced in 1991-1992 about the same accusations as in 1938 and again it lead the mark-to-market rule to stay longer in place. The case was paralleled almost identically when the administration and regulatory authorities claimed that the credit crunch could be healed by subordination of bank examination to the greater necessity for more bank credit. In both of the previously discussed cases the economy managed to restore itself relatively quickly.

CONCLUSION

We have reviewed the mark to market rules and revisited historical evidence of Fair value accounting. The implementation of SFAS 157 and SFAS 159 rules started to distort the balance sheets of financial companies on both sides, assets and liabilities and most importantly their earnings reports and thus income. On January 5, 2016 FASB disclosed Accounting Standards Update No. 2016-01 where under "Recognition and Measurement of Financial Assets and Financial Liabilities" announced suspension of Debt Valuation Rule in few years. This will make financial institutions show real income in their earnings statements. Due to DVA's pro-cyclicality effect that means the banks' income will shrink in many cases and for many investors unaware of this rule existence may start selling bank equities. Equity sell off combined with mounting debts of various banks stemming from non-performing loans to oil industry (Wells Fargo, Citigroup and others (Reuters, 2016)) and higher interest rates may just pave the way for another recession and possibly another banking crisis. Many banks are reporting losses for 2015 – e.g. Germany's biggest bank Deutsche bank announced a net loss of EUR 6.8 billion due to "a drop-off in client activity and a "challenging trading environment" hurt its securities-trading and investment-banking division, its biggest driver of profits". (MarketWatch, 2016). All this can merge under fragile economic environment into just another banking crisis hitting through

[5] This chapter has been taken from (Hájek, Maitah, & Čadil, 2015)

crisis contagion all developed economies. For such a recession it will be only good if balance sheets of financial companies will not be “damaged” by accounting rules. Income will not be significantly adjusted using pro-cyclical valuation techniques and financial sector stability can be analyzed fast based on numbers close-to-reality and not artificially adjusted using means of “mark to fantasy” because when a financial crisis hits, the stability of financial sector must be restored (in order to recover from the recession) fast in real terms and not just on made-up balance sheets with potentially serious implications for the future.

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