

FURTHER EVIDENCE OF BANK WINDOW DRESSING: THE EFFECT OF BASLE  
CAPITAL STANDARDS

by

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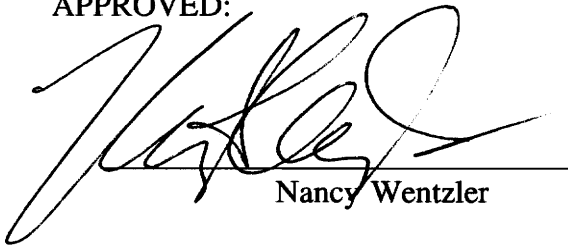
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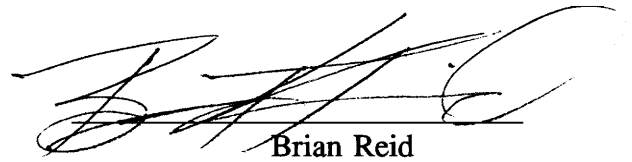
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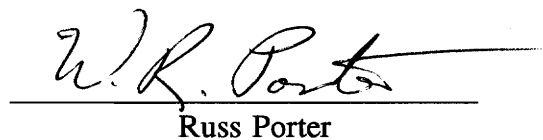
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(ABSTRACT)

Banks have a suspected motivation to engage in window dressing of regulatory Call reports. Through a more structured definition of window dressing and a higher frequency data set, a more robust test of window dressing is adopted than in previous studies. This study focuses on the possible influence that the Basle Capital Accord may have on bank window dressing. The results suggest that banks have not been inclined to alter balance sheet manipulations following the implementation of the Basle Accord. A rigorous sources and uses analysis further indicates that banks in fact are not strategically window dressing, but merely reacting to customer activity.

**Dedicated to Monica and Angela**

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## I. Introduction

On a quarterly basis, banks submit balance sheet and income data to federal banking regulators (Federal Reserve, OCC, OTS, NCUA, and FDIC). These data are used to assess the financial condition of banking institutions. Bank managers no doubt are aware of the scrutiny and visibility of the reports. This may prompt bank management to engage in "window dressing" to improve their Call reports each quarter. The term "window dressing" is defined for this thesis as short-term transactions with no clearly defined business purpose, intended only to alter the financial positioning of the bank. As J.L. Robertson, Member of the Board of Governors of the Federal Reserve System, testified before the House "Legal and Monetary Affairs Subcommittee" in October 1963, "Window dressing by banks has two aspects. It involves, first deceptive transactions that have no genuine business purposes, and second, a deceptive balance sheet resulting from those transactions."<sup>1</sup>

The window dressing transactions are presumed to occur several days preceding the Call report, span the Call report date, and unwind several days after the Call report date. These transactions can be easily facilitated through Fed Funds sales or purchases, repurchase agreements, and reverse repurchase agreements. Transactions such as asset sales, securitizations, and large loan bookings are not considered window dressing in the strict sense as these transactions are generally longer term and usually

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<sup>1</sup>"Hearing before a Subcommittee of the committee on Government Operations", House of Representatives. October 2, 1963. p 2.

facilitate a strategic business purpose. Therefore, careful analysis must be considered before declaring the existence of window dressing.

This thesis, an extension of a paper by Linda Allen and Anthony Saunders <sup>2</sup>, will examine whether potential window dressing activity has altered among large commercial banks since the implementation of higher capital standards and increased risk-based deposit insurance premiums. This heightened attention focused on capital may have motivated banks to engage in window dressing in an effort to alter their capital ratios. The form of the Basle Accord adopted by United States banking regulators allows for banks faced with less than acceptable capital positions to be restricted from certain lines of business or business transactions in an effort to restore capital to a sound and safe level.

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<sup>2</sup>Linda Allen and Anthony Saunders. "Bank Window Dressing: Theory and Evidence," *Journal of Banking and Finance*, Nov. 16, 1992. pp 585-623.

## II. Literature Review

This thesis is based primarily on a previous study by Linda Allen and Anthony Saunders. Their definition of window dressing entails "the use of short term financial transactions to manipulate accounting values around quarter-end reporting dates."<sup>3</sup> However, they also include banks' activities to accommodate customer transactions to be considered window dressing. This definition allows Allen & Saunders to interpret any increases or decreases in bank balance sheets as window dressing.

Unfortunately, this definition is too general and does not distinguish between genuine business transactions and those that are designed to manipulate balance sheets around quarter-end dates. For instance, Allen & Saunders find that banks increase real estate and consumer loans on the Call date and conclude that banks are engaging in window dressing. However, it is unlikely that window dressing is taking place. First, real estate loan and consumer loan transactions are rarely temporary in nature and difficult to manipulate. Second, it is unclear why banks would choose to increase these loans at quarter-end. It is more likely that banks are accommodating their customers demands for credit, yet Allen & Saunders classify this activity as window dressing.

In addition, Allen & Saunders' formal test for identifying window dressing is inconclusive. Their test is based entirely on Call report data. The Call report includes end-of-period and quarterly averages for numerous balance sheet items. Their

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<sup>3</sup>Allen & Saunders, p. 586.



methodology is to calculate a percentage difference between the quarterly average and the end-of-period balance. If the difference is positive or negative, then window dressing is interpreted to take place. Even though Allen & Saunders measure the "reverse" window dressing transaction as the percentage difference from the end-of-period balance to the next Call report's quarterly average, they do not incorporate the results in any rigorous analysis of the results to derive any conclusions. Furthermore, comparing quarter-end values to quarter average values is problematic because normal balance sheet growth would tend to make quarter-end values to be greater than quarter average values.

Finally, Allen & Saunders devote little attention to the vehicles of window dressing. They merely report which items are found to change significantly without providing any discussion or conclusion of why a particular item is considered to facilitate window dressing.

I find this interesting, especially since the window dressing measure for total assets, does not necessarily indicate a window dressing event. There must be some framework to relate the movement of total assets to the underlying asset components and provide an analysis of any relation found to exist. A thorough examination of the balance sheet components will provide useful information in determining whether any temporary changes in the balance sheet may be classified as window dressing.

It is however, from the Allen & Saunders piece that I propose a more robust test of window dressing. The proposed test, discussed later in the paper, is the result of the availability of a higher frequency data set, a more stringent definition of

window dressing, and a comprehensive methodology. By investigating the effect of the introduction of the Basle Accord, I am able to hypothesize the direction of any anticipated window dressing measures in the period before and after the event. This will allow for a conclusive determination of the effect of Basle.

### III. Background

Bank capital was loosely monitored with varying standards among the different federal and state bank regulators before 1981. Capital regulations introduced since have become progressively more stringent, eventually leading to the Basle Accord. The Basle Accord, agreed upon in 1988, is an international agreement among twelve industrialized countries to assure global financial safety and soundness<sup>4</sup>. The Accord offers uniform guidelines regarding capital regulation for the banking industry across international boundaries.

In December 1981 a capital standard was initiated which differentiated between bank charters and bank size. Additionally, a distinction between primary and secondary capital was established with separate requirements on primary and total capital. Finally, in April 1985, uniform capital requirements of 5.5% of primary capital and 6% of total capital were established. The 1985 standards removed any distinction between banks and all banks were subject to the requirements. The capital ratios were constructed as capital to total assets. This structure excluded off-balance-sheet activity and did not differentiate between the riskiness of asset types.<sup>5</sup>

In July 1988, The Committee on Banking Regulations and Supervisory Practices (Basle, Switzerland) struck an accord in which agreeing nations submitted to

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<sup>4</sup>Rose, Kolari, Fraser, p. 398. The 12 countries are Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, United Kingdom, United States, and Luxembourg.

<sup>5</sup>Summarized from Berger, Kashyap, and Scalise. Appendix B-2.

uniform capital standards. The version adopted by the United States was proposed by the FFIEC in January 1989 and implemented in December 1992. The FFIEC solution was to divide capital into two components, Tier 1 capital and Tier 2 capital. Table 1 outlines the new capital structure.

TABLE 1

<p>Tier 1 Capital components</p> <ul style="list-style-type: none"><li>Common stockholders equity</li><li>Noncumulative perpetual preferred stock</li><li>Minority interest in consolidated subsidiaries</li><li>Less goodwill and other ineligible intangibles (including mortgage servicing rights)</li><li>Less net unrealized losses on marketable securities</li></ul> <p>Tier 2 Capital components</p> <ul style="list-style-type: none"><li>Allowance (reserve) for loan losses</li><li>Limited-life preferred stock</li><li>Hybrid capital instruments</li><li>Subordinated debt</li><li>Revaluation reserves</li><li>Less investments in unconsolidated subsidiaries, reciprocal holdings of banking organizations' capital securities, other deductions</li></ul>
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A further innovation of the Basle Accord-based capital standards introduced the notion of risk-weighted assets. Assets and certain off-balance sheet items, are placed in four categories; each category assuming to contain assets of similar risk. The categories weight assets by 0%, 20%, 50%, and 100%. Table 2 outlines the report of condition and income items by risk weighted category.

TABLE 2

<b>Balance Sheet</b>
<b>Category 1: 0% Risk Weight</b>
Cash and balances due from Federal Reserve Banks
Treasury and government agency securities
GNMA mortgage-backed securities
Federal Reserve stock
OECD government unconditionally guaranteed securities
Repurchase agreements, securities lending, certain collateralized letters of credit, and other collateralized on- and off- balance sheet exposures
<b>Category 2: 20% Risk Weight</b>
Cash items in the process of collection
FNMA, FHLMC mortgage-backed securities
State and local government general obligation bonds
Claims on other banks
US government, its agencies, and OECD government conditionally guaranteed loans and claims
<b>Category 3: 50% Risk Weight</b>
State and local government revenue bonds
Selected private mortgage-backed securities
Mortgage loans on 1-4 family residential property
<b>Category 4: 100% Risk Weight</b>
All other private loans not previously mentioned (commercial and industrial, commercial mortgage, LDC, etc)
Bank premises
Industrial development bonds
Certain intangible assets
<b>Off-Balance Sheet</b>
<b>Category 1: 0% Risk Weight</b>
Loan commitments with less than 1 year to maturity
<b>Category 2: 20% Risk Weight</b>
Commercial letters of credit and other trade-related claims
<b>Category 3: 50% Risk Weight</b>
Loan commitments with maturities of 1 year or more, revolving credit facilities, etc.
<b>Category 4: 100% Risk Weight</b>
Standby letters of credit, assets sold with recourse, counterparty credit risk exposure in derivatives contracts

Combining the notion of tiered capital with risk weighted assets, regulators can monitor bank capital in a more comprehensive fashion. The two concepts are combined by assigning a schedule of "Prompt Corrective Action" based on ratios of

Tier 1 and Total Capital to Total Risk Weighted Assets, and leverage. (Leverage is assets divided by equity capital) The Prompt Corrective Action schedule (PCA) is further divided into mandatory and discretionary actions. This allows some latitude between banks and among different federal regulators. The PCA details actions which may or must be applied to the institution. The actions become more restrictive as the capital level worsens. The five categories include well capitalized, adequately capitalized, under capitalized, significantly undercapitalized, and critically undercapitalized.

In December 1991, FDIC Improvement Act (FDICIA) was passed. This act instituted a risk-based premium schedule which was to be implemented beginning in December 1993. FDICIA also stepped up the supervisory profile of the FDIC in an attempt to underscore the need of a sound banking system. The new premium schedule introduced the dimension of risk in assessing deposit premiums. The same notion of applying risk weighted capital ratios therefore became explicitly entrenched in deposit premium assessments. Following the capital levels outlined in the PCA, as the capital position worsens, deposit insurance premiums increase; a further incentive to maintain sufficient capital.

The new capital adequacy and risk-based FDIC insurance premiums provide a motive to reduce the size of the balance sheet and to temporarily shift balances from one asset to another. It is anticipated that banks may attempt to take advantage of window dressing to enhance their capital ratios by temporary reductions in the balance sheet. The capital to asset ratios will then be increased if total assets are reduced

At about the same time the FDIC risk-based premium schedule was implemented, deposit insurance premiums were drastically increased. These events are expected to provide a strong incentive for banks to window dress any deposit liabilities. Banks have long been suspected of engineering programs to decrease insurable deposits in an attempt to reduce premiums.

## V. Data

One of the elements allowing for a more robust examination of window dressing includes a higher frequency data set. By comparing a weekly balance sheet survey of about 160 of the larger U.S.-chartered commercial banks (*Weekly Report of Assets and Liabilities for Large Banks*, FR2416) to their quarterly Call report data, a comprehensive test of window dressing can be developed. The weekly balance sheet report contains items with identical definitions on the Call report. This allows for consistent comparisons between the two data surveys. The micro data from the survey is confidential, thus only aggregate data are considered in this study. This study will also expand the list of items tested when compared to the Allen & Saunders data set. To provide a more insightful sources-and-uses analysis, a balance sheet skeleton is used. The sample period for all data series is from 1990Q1 through 1995Q3.

<u>Assets</u>	<u>Liabilities</u>
Cash & Due From	Transaction Accounts
Securities	NonTransaction Deposits
FF sold and Reverse Repo's	FF bought and Repo's
Real Estate Loans	Bank notes and subordinated borrowing
Loans to banks	Large Time Deposits
Security Loans	
Agricultural Loans	
C&I loans	
Loans to govmnts	
Lease Financing	
Total Assets	Total Liabilities

The availability of higher frequency data is expected to improve the quality of the window dressing test by allowing the temporary nature of any window dressing transactions to be readily highlighted. The methodology will observe the value of a balance sheet item directly before the Call date and immediately after the Call date.



Any temporary transactions will therefore be evident. However, temporary transactions may not be apparent when using quarterly averages to compare to the Call report. Furthermore, the use of quarterly averages may be incorporating trends and distorting or hiding any true window dressing transactions.

#### IV. Methodology

From the *Weekly Report of Assets and Liabilities for Large Banks*, a rigorous test of window dressing is formulated. Calculating the average of the two previous Wednesdays before the Call date for each item used from the weekly balance sheet, and a similar average for the two weeks following the Call date, a "before" and "after" position can be determined for each item. By comparing these averages to the corresponding item from the Call report, a notion of window dressing can be generated. Specifically, two percentage differences are calculated

$$BEFORE\_CHG_{t,i} = \left( \frac{CALL_{t,i} - BEFORE_{t,i}}{BEFORE_{t,i}} \right) \cdot 100$$

$$AFTER\_CHG_{t,i} = \left( \frac{AFTER_{t,i} - CALL_{t,i}}{CALL_{t,i}} \right) \cdot 100$$

Where  $BEFORE_{t,i}$  is the average of item  $i$  from the immediate two Wednesdays preceding Call date  $t$ ;  $AFTER_{t,i}$  is the average of item  $i$  from the immediate two Wednesdays ensuing Call date  $t$ ; and  $CALL_{t,i}$  is the balance sheet item  $i$  on date  $t$ .

The formal window dressing test then compares  $BEFORE\_CHG_{t,i}$  with  $AFTER\_CHG_{t,i}$ . Window dressing can be interpreted as an instance where  $BEFORE\_CHG_{t,i} > 0$  and  $AFTER\_CHG_{t,i} < 0$ , or conversely  $BEFORE\_CHG_{t,i} < 0$  and  $AFTER\_CHG_{t,i} > 0$ . This test of window dressing reliably captures the balance sheet item from the Call report bracketed by an average level of the item before and after

the Call report date. Any temporary shifting of funds will be visible as the balance sheet item increases or decreases on the Call date, followed by an opposite transaction ensuing the Call date. This structure will allow the temporary nature of the window dressing transaction to become evident.

The central theme for this study will examine the effect of the implementation of risk-based capital standards on bank window dressing measures. Two events introduced at about the same time incorporated the risk-based capital notion: the Basle Accord-induced FFIEC risk-weighted capital monitoring program, and the FDIC risk-based insurance premium schedule. To accomplish this, an equivalent means test is then applied to the window dressing measure of an item in the periods before and after Basle. For example, the first test will compare the mean Total Asset window dressing measure from the time period 1990Q1-1992Q3 to the mean Total Asset window dressing measure of the sample from the time period 1992Q4-1995Q3. It is hypothesized that banks are motivated to reduce assets in the period following the Basle implementation. Therefore, the means equivalency test will be structured to identify a decrease in the window dressing measure of total assets in the period following Basle. In both cases, the mean of BEFORE\_CHG and AFTER\_CHG will be considered. Or, more formally:

$$H_0: \text{BEFORE\_CHG}_{1990Q1-1992Q3, \text{Total Assets}} = \text{BEFORE\_CHG}_{1992Q4-1995Q3, \text{Total Assets}}$$

$$H_a: \text{BEFORE\_CHG}_{1990Q1-1992Q3, \text{Total Assets}} > \text{BEFORE\_CHG}_{1992Q4-1995Q3, \text{Total Assets}}$$

and

$$H_0: \text{AFTER\_CHG}_{1990Q1-1992Q3, \text{Total Assets}} = \text{AFTER\_CHG}_{1992Q4-1995Q3, \text{Total Assets}}$$

$$H_a: \text{AFTER\_CHG}_{1990Q1-1992Q3, \text{Total Assets}} < \text{AFTER\_CHG}_{1992Q4-1995Q3, \text{Total Assets}}$$

A structural change of window dressing behavior about the implementation date of the Basle Accord will be identified if  $H_0$  is not rejected

## VI. Results

The initial step of the analysis requires an investigation of any change in window dressing behavior of total assets. Table 3, below, average differences in total assets. The first column is the average increase of total assets on the Call date. The second column is the average decrease in the period immediately following the Call date. The 1978-83 and 1984-86 time periods are results from Allen & Saunders using their methodology. The 1990-92 and 1992-95 results are from the weekly balance sheet survey and use the methodology described for this study.

TABLE 3

Time Period	Increase on Call Date	Decrease after Call Date
1978-83*	2.20% (18.15)	-1.44% (-1.19)
1984-86*	3.73% (37.11)	-0.16% (-1.86)
1990-1992	1.48% (14.26)	-0.36% (-4.07)
1993-1995(Q3)	1.48% (16.60)	-0.26% (-2.77)

\*Allen & Saunders p. 597, 606  
t statistics shown below in parenthesis

As Allen & Saunders found, on the Call date, total assets are observed to increase by a statistically significant percentage after 1986. During the time period following the Call date, total assets are observed to decrease, but at a lesser rate than they increased. Therefore, in the aggregate banks are seen increasing total assets on

the Call date and running the increases off at a slower rate than the assets were increased.

The test of the equivalent means is calculated via SAS's PROC TTEST. In the test of BEFORE\_CHG, or the percentage change of the average of the previous two Wednesday's to the Call date, the results indicate the t value of

$$\text{BEFORE\_CHG}_{1990\text{Q1-}1992\text{Q3,Total Assets}} - \text{BEFORE\_CHG}_{1992\text{Q4-}1995\text{Q3,Total Assets}} = 0 \text{ as } -0.0398$$

(Pr>|T| = 0.9682). Thus, we do not reject  $H_0$  and conclude the average percentage increase of total assets are the same in both subperiods. In the case of AFTER\_CHG,

or the percentage change from the Call date to the average of the two ensuing

Wednesday's, the results indicate the t value of  $\text{AFTER\_CHG}_{1990\text{Q1-}1992\text{Q3,Total Assets}} -$

$$\text{AFTER\_CHG}_{1992\text{Q4-}1995\text{Q3,Total Assets}} = 0 \text{ as } .8220 \text{ (Pr>|T|=0.4112), so again we do not}$$

reject  $H_0$  and conclude that in the two weeks ensuing the call date, the average percentage decline of total assets are the same for both subperiods.

These results counter what would be expected after the introduction of more stringent capital measures. In an effort to increase capital ratios, one would expect the increase in total assets to be smaller after the introduction of Basle as banks attempted to boost their capital ratios. As shown in Table 3, the means difference test indicates that banks did not alter their management of total assets about the implementation of Basle.

A further point to investigate is the window dressing measure of the components of total assets as well as total liabilities. Perhaps Basle prompted a change in the vehicles employed to facilitate the window dressing observation. This

evidence may have altered window dressing strategies of commercial banks as well. Specifically, the temporary shifting of assets down the risk spectrum, as outlined in Table 2.

The results of the means equivalency tests are organized in Table 4 below. Columns (1) and (3) are the percentage differences on the Call date from the two-week average preceding the Call date for the two subperiods. Columns (2) and (4) are the percentage differences on two-week average following the Call date following the Call date. Column (5) indicates the t-statistic from the test that the two means in columns (1) and (3) are equal. Column (6) indicates the results from the same test, but compares the means in columns (2) and (4).

To summarize Table 4, the results indicate there was no statistically significant difference in the window dressing behavior of individual asset items in the period before and after the implementation of the Basle Accord. Each asset component tested concludes that  $H_0$  is not to be rejected for both BEFORE\_CHG and AFTER\_CHG, or the mean window dressing measure of asset components did not change given the implementation of the Basle Accord.

However, the liability components are observed to be affected by the implementation date of the Basle Accord, although the broad total liability measure has not been affected. Deposit figures continue to pass the window dressing test at significant levels, but change magnitude noticeably. The event which is affecting the change in deposit behavior is likely to be the risk-based premium introduction. Transaction deposits are still increasing on the Call date, but at a slower rate than in

the time period after the implementation of Basle. Large time deposits continue to follow an established window dressing pattern with the window dressing measure amplified in the period after Basle. Fed Funds bought and Reverse Repo's have also changed behavior. The item no longer resembles a window dressing pattern, but now increases significantly on the Call date rather than decreasing. Also of note is the anomaly of bank notes and subordinated debt. It is unclear why this item would follow a window dressing pattern or why the introduction of Basle would affect it's behavior.

Table 4

Item	-----Before Basle-----		-----After Basle-----		T Test that (1) - (3) = 0	T Test that (2) - (4) = 0
	BEFORE_CHG	AFTER_CHG	BEFORE_CHG	AFTER_CHG		
Trading Account	103.798 (2.496)	113.863 (2.521)	115.032 (1.873)	80.025 (1.302)	0.1518 (0.8794)	-0.4444 (0.6568)
Securities	1.544 (3.198)	2.008 (2.028)	0.571 (2.177)	1.045 (3.000)	-1.7644 (0.0778)	-0.9137 (0.3609)
FF sold and Reverse Repos	123.436 (1.801)	114.578 (5.752)	218.779 (2.405)	104.757 (3.656)	0.8383 (0.4019)	-0.2819 (0.7780)
Real Estate Loans	0.848 (1.828)	0.082 (0.725)	0.633 (5.372)	0.206 (1.532)	-0.4467 (0.6551)	0.7062 (0.4801)
Security Loans	209.999 (1.295)	14715.13 (1.857)	-13.912 (-5.020)	3004.814 (1.336)	-1.3729 (0.1699)	-1.4150 (0.1572)
Agriculture Loans	14.843 (1.609)	10.053 (1.564)	2.761 (2.288)	3.499 (2.606)	-1.2917 (0.1966)	-0.9933 (0.3206)
C&I Loans	0.492 (2.404)	3.886 (0.932)	20.901 (1.497)	-1.225 (-4.568)	1.4700 (0.1416)	-1.2166 (0.2238)
Loans to Governments	22.566 (1.361)	1.939 (0.608)	2.682 (2.506)	11.396 (2.546)	-1.1898 (0.2342)	1.7237 (0.0849)
Lease Financing	35.454 (2.930)	-1.328 (-2.307)	50.258 (2.513)	61.167 (0.981)	0.6349 (0.5255)	1.0081 (0.3135)
Total Assets	1.484 (14.26)	-0.361 (-4.074)	1.478 (16.604)	-0.256 (-2.769)	-0.0398 (0.9682)	0.8220 (0.4112)
Transaction Deposits	11.985 (31.04)	4.253 (15.903)	9.634 (12.500)	1.629 (-1.603)	-2.7358 (0.0063)	2.5083 (0.0122)
Non Transaction Deposits	-0.251 (-2.170)	1.098 (9.412)	-0.787 (-6.454)	2.108 (10.775)	-3.1866 (0.0015)	4.4477 (0.0000)
FF bought and Repos	-1.203 (-2.094)	3.387 (3.453)	2.988 (3.394)	1.273 (0.922)	3.9955 (0.0001)	1.2501 (0.2113)
Bank notes and sub debt	-16.921 (-4.691)	126.629 (18.122)	-30.008 (-19.984)	189.290 (24.560)	-3.3367 (0.0009)	6.0262 (0.0000)
Large Time Deposits	-1.260 (-3.879)	1.933 (4.090)	-3.597 (-8.428)	7.848 (7.713)	-4.3642 (0.0000)	5.2912 (0.0000)
Total Liabilities	1.676 (15.175)	-0.460 (-4.831)	1.690 (16.473)	-0.337 (-3.272)	0.0946 (0.9246)	0.8714 (0.3836)

Note: Cols 1-4, t statistics below in parenthesis  
Cols 5-6, p value below in parenthesis



## VII. Conclusions

From the results, it is evident that Basle has no impact on the window dressing propensity of banks total assets. Banks continue the same temporary patterns in both periods, before and after Basle. However, an exception is the component of total liabilities, large time deposits, which does indeed resemble a classic window dressing pattern in both periods.

Further, an examination of asset components and their behavior around the implementation of Basle reveals that assets are not strategically managed to elicit a window dressing event. It was anticipated that any temporary changes in the balance sheet would be facilitated by Fed Funds and Repo's, which is not the case.

And second, the window dressing measure of large time deposits continues a window dressing pattern affected by the implementation date of the Basle Accord. This deposit item can easily be manipulated by banks in the wholesale brokered deposit market. The CD's can be structured to mature several days before a Call date and not roll over or reissue until immediately after the Call date. The increased deposit insurance premiums observed in the early 1990's may have induced banks to reduce insurable deposits through an aggressive managed CD program. In any event, the window dressing of the balance sheet item, large time deposits, appears to be apparent. It should be noted that although large time deposits window dressing measure is systematically decreased at the Call date, the absolute dollar volume of the decrease is masked by the increase in transaction accounts.

## VIII. Summary

This thesis extends original research by Linda Allen and Anthony Saunders and investigates the propensity of banks to engage in window dressing. My contribution is to use the implementation of the Basle Capital Standards and risk-based deposit insurance premiums to see if banks attribute a change in window dressing behavior, if at all, to these events. In addition, this study uses a higher frequency dataset, and a more clearly defined definition of window dressing. A weekly Wednesday report of large banks balance sheets, used in conjunction with the quarterly Call reports is the basis for the new test of window dressing. By calculating the average of a balance sheet item for two Wednesday's prior to the Call date and an average of the two Wednesday's following the Call date, and comparing the averages to the corresponding item on the Call report, a measure of window dressing can be defined. A percentage difference from the two week average preceding the Call date to the Call report is calculated. Similarly, a percentage difference from the Call report to the two week average ensuing the Call date captures the second part of the temporary window dressing transaction. The pair of percent differences are the indication of window dressing. If the sign of the two percent differences are opposite, then window dressing can be interpreted to exist for that item.

There have been extensive cases documented indicating that bank strategies and lending habits have been altered since the implementation of the Basle Accord. I test the event that the window dressing measure of total assets has changed in the period before and after Basle. Finding that there is no change in the window dressing

measure of total assets, I further investigate the components of the balance sheet. Applying the same test to a balance sheet skeleton, I find that asset components remain unaffected by the Basle Accord. However, large time deposits are found to decrease after implementing Basle than before. This item may be reacting to FDIC insurance premiums which increased dramatically in the early 1990's, and have only recently began to decrease to more "normal" levels.

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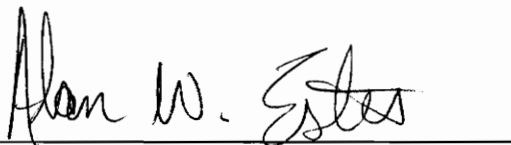
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