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**Cash Flow Reporting by Financial Companies:**

**A Look at the Commercial Banks**

**EXECUTIVE SUMMARY**

In this research report we survey the cash flow reporting practices for a sample of fifteen of the largest, independent and publicly-traded U.S. commercial banks. In the process, we find many reasons why cash flows are typically not important measures of financial performance for the banks. For our sample, we adjust reported operating cash flows for classification differences, for non-cash transfers of loans and investments between categories that impact operating cash flow, and for the effects of acquisitions. In the adjustment process we find some notable changes to operating cash flow. In particular, we see declines in adjusted operating cash flow for Bank of America, JP Morgan Chase and Wells Fargo, and increases in adjusted operating cash flow for Citigroup, Fifth Third Bancorp, KeyCorp, PNC Financial and SunTrust Banks. **We seek your comments on how bank cash flows should be measured.**

Analysts who evaluate the financial performance of commercial banks will want to give consideration to adjustments such as these when examining bank finances. Bank regulators and the FASB may also want to consider these adjustments and the somewhat limited disclosures of information relevant for the adjustments that are presently provided by the banks. More detailed information on items such as brokered deposits and acquisition-related cash flows would be helpful.

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**Georgia Tech Financial Analysis Lab**

The Georgia Tech Financial Analysis Lab conducts independent research on financial reporting and analysis issues. Independent information is vital to effective investment decision-making. Accordingly, we think that research organizations, such as our own, have an important role to play in providing information to market participants.

Because our Lab is housed within a university, all of our research reports have an educational quality, as they are designed to impart knowledge and understanding to those who read them. Our focus is on issues that we believe will be of interest to a large segment of stock market participants. Depending on the issue, we may focus our attention on individual companies, groups of companies, or on large segments of the market at large.

A recurring theme in our work is the identification of reporting practices that give investors a misleading signal, whether positive or negative, of corporate earning power. We define earning power as the ability to generate a sustainable stream of earnings that is backed by cash flow. Accordingly, our research may look into reporting practices that affect either earnings or cash flow, or both. At times, our research may look at stock prices generally, though from a fundamental and not technical point of view.

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<b>Company</b>	<b>Companies Named in this Report</b>	<b>Page</b>
Bank of America	5, 6, 7, 16, 18, 24, 25, 26, 28	
Bank of NY Mellon		6, 26
BB&T		6, 9, 10, 26
Capital One		6, 26
Citigroup	4, 6, 9, 11, 15, 18, 23, 24, 25, 26	
Fifth Third		6, 9, 18, 25, 26, 28
JP Morgan Chase & Co.	5, 6, 14, 20, 21, 23, 25, 26, 28	
KeyCorp		5, 6, 9, 10, 25, 26, 28
Northern Trust		6, 26
PNC Financial	6, 9, 17, 18, 25, 26, 28	
Regions Financial		6, 13, 27
State Street		6, 27
SunTrust		6, 9, 18, 25, 27, 28
U.S. Bancorp		6, 8, 9, 10, 11, 12, 27
Washington Mutual		5, 6, 13, 27
Wells Fargo	6, 8, 9, 10, 18, 24, 25, 27, 28	

## **Cash Flow Reporting by Financial Companies: A Look at the Commercial Banks**

**By Charles W. Mulford and Eugene E. Comiskey**

### **Introduction**

While operating cash flow and free cash flow are often viewed as important financial measures, these cash flow amounts are much less important for financial companies, including commercial banks, than for non-financial firms. In evaluating the performance of commercial banks, analysts tend to focus on such accrual metrics as net interest margin, the loan loss reserve, non-interest income and expense, and book value, including various regulatory measures such as tier one and tier two capital and tangible common equity.

Like non-financial companies, commercial banks must provide a statement of cash flows and report their cash flows as being derived from operating, investing or financing activities. Do these categories have meaning for commercial banks? More importantly, does reported operating cash flow have information value of relevance for the financial analysis of a commercial bank?

In seeking answers to these questions, in this research report we examine the cash flow reporting practices for commercial banks. We look at the key components of their operations and detail how the cash flow aspects of those operations are reported. We employ a sample of the fifteen largest independent and publicly-traded U.S. commercial banks as measured by total assets as of December 31, 2008. As we examine the cash flow reporting practices for these firms, we are careful to look for flexibility and differences in reporting, where a transaction that one bank considers to be operating-related might be reported by another to be an investing or financing-related activity.

We found that the banks were generally consistent in their cash flow classification practices. That is not to say that there were no classification differences. For example, while most firms report sales of federal funds as an investing activity and purchases of federal funds as a financing activity, at least one bank, Citigroup, includes its federal funds transactions in the operating section of the cash flow statement. As a result, operating cash flow for Citigroup cannot be directly compared to operating cash flow at other banks.

We also found that acquisitions can and do have a very significant impact on the operating cash flow for some commercial banks. When acquisitions are effected, to the extent there is a cash payment, assets acquired and liabilities assumed are reported as cash flow from investing activities. If the acquisition is effected with debt or equity, then the transaction is not reported on the cash flow statement but is simply footnoted. However, many acquisitions entail the purchase of net trading assets, or trading assets less trading liabilities. While the acquisition of these assets does not entail an operating use of cash, their ultimate sale will provide a virtually effortless increase to operating cash flow that is non-recurring.

Among the cash flow reporting practices for the commercial banks, what did stand out in our study are the effects on operating cash flow of important non-cash transactions. These are transactions that have no explicit current cash flow effect but that have significant implications for *future* reported operating cash flow. Because they have no current cash flow effect, they are not reported in the body of the statement of cash flows, but rather are presented as footnotes to the statement. For example, a transfer of investments that are held as available-for-sale to a trading classification would have no current cash flow effect and would be presented as a footnote to the statement of cash flows. The ultimate sale of these investments would increase operating cash flow. However, the sale of investments that were not transferred and remain as available-for-sale securities would increase investing cash flow. In our study we found many similar kinds of transfers. For example, the transfer of a group of loans either into or out of a held-for-sale portfolio would also be reported as a non-cash transaction, but would have a subsequent effect on both operating and investing cash flow.

In the research report, we take the effects of classification differences, acquisitions, and non-cash transactions into account in an effort to revise the reported operating cash flows of our sample companies to a more consistent and comparable basis. While many of the banks saw no material differences in their adjusted versus reported operating cash flow, for some there were noteworthy effects. For example, in 2008 Bank of America reported operating cash flow of \$4,034 million. However, once adjusted for a non-cash transfer of \$10,900 million to trading investments, a transaction that would have been reported as an operating use of cash had the trading securities been purchased with cash instead of with other investments, Bank of America's adjusted operating cash flow was a negative \$6,866 million. In the other direction, for 2008, KeyCorp reported negative operating cash flow of \$220 million. However, once adjusted for a net \$3,236 million in loans transferred out of the held-for-sale category to the loans held for investment portfolio (\$3,695 million transferred out and \$459 million transferred in), KeyCorp's adjusted operating cash flow is a positive \$3,016 million.

In the study we highlight the arbitrary nature of cash flow classifications for commercial banks. For example, while changes in loan balances for loans held for investment purposes are reported as investing cash flow, similar changes in loans held for sale are reported as operating cash flow. Similarly, increases or decreases in investments classified as available-for-sale or held-to-maturity are reported as investing cash flow while investments classified as trading securities are reported as operating cash flow. Banks have much flexibility in classifying loans or investments as operating or investing activities, affecting the comparability of reported operating cash flow.

We also address the reporting of deposits. Increases and decreases in deposits, whether routine customer-driven transactions or brokered, whether demand deposits or time restricted, are reported as financing cash flow along with the proceeds of borrowings and sales of common stock. Such a classification appears misguided. While brokered deposits could be viewed more as a financing activity, customer-driven deposits of both the demand and time-restricted variety would appear to be more of an operating activity. The very health of a bank's operations depends on its deposit base and its ability to attract a growing stream of deposits. Consider, for example, Washington Mutual. During 2008, the bank failed and was acquired by JP Morgan. During 2007, Washington Mutual saw a decrease in its deposits of \$32,030 million. That decline continued in 2008 where during the first six months of the year the bank saw its deposits decline

by another \$3 million. While these declines in deposits were reported as financing uses of cash, an operating designation may have better reflected the bank's declining fortunes.

In the paper we look at the reporting of deposit activity by our sample banks. Unfortunately, the banks do not consistently label deposits as being derived from traditional customer-driven transactions or from brokered activities. As such, we could not effectively identify what could be considered to be operating-related deposit activity. Accounting standard setters should take note.

Overall, we think that there is enough consistency in the reporting of cash flows for the commercial banks to say that cash flow classification for them is meaningful. However, we think that to obtain a measure of operating cash flow that has information that is value relevant for the financial analysis of a commercial bank, certain adjustments must be made. In particular, we think that adjustments for classification differences, for non-cash transactions and for acquisitions should be made to reported operating cash flow before it is used in analysis. We also think that changes in a bank's customer deposit base, excluding brokered deposits, should be included in operating cash flow. In the remaining sections of this report we provide support for our points of view.

### The Sample

Based on total assets, we employ a sample of the fifteen largest independent, publicly-traded commercial banks in the U.S. as of December 31, 2008. A list of these banks and their reported total assets is provided in Exhibit 1.

Exhibit 1. Sample Banks (in \$ millions).

Bank	Total Assets Dec. 31, 2008
Bank of America	\$ 1,817,943
Bank of NY Mellon	237,512
BB&T	152,015
Capital One	165,913
Citigroup	1,938,470
Fifth Third	119,764
JP Morgan Chase & Co.	2,175,052
KeyCorp	104,531
Northern Trust	82,054
PNC Financial	291,081
Regions Financial	146,248
State Street	173,631
SunTrust	189,138
U.S. Bancorp	265,912
Wells Fargo	1,309,639

Source: Company Form 10-K Annual Reports to the Securities and Exchange Commission, December 31, 2008.

The banks refer to themselves as diversified financial services holding companies. At the heart of each institution is a commercial bank that takes deposits, extends credit and provides trust and investment services. Through subsidiaries, these companies provide other financial-related services, including loan servicing, mortgage and investment banking, asset management, securities brokerage, and insurance services, particularly credit-related insurance. All of these services combined constitute the operations of our sample commercial bank holding companies.

## Loans

Commercial banks extend credit to individual and corporate customers in the form of secured and unsecured loans. These loans might be term loans, that amortize or pay out over time, or demand notes that are due, in total, on a certain maturity date. The banks earn up-front fees for arranging and committing to these loans and they earn interest on the borrowed amounts that accrues over time. Banks will accrue interest on a loan while the loan is in good standing. Interest increases net income and operating cash flow, though interest that is accrued but not collected is subtracted from net income in calculating operating cash flow. Typically, a loan is considered to be in good standing until it is more than three months past due. At that point, the accrual of interest on the loan is discontinued.

Interest income, known also as interest revenue, as generated by Bank of America for the years 2008, 2007 and 2006 is summarized in a footnote that is excerpted below:

Interest income (in millions):	2008	2007	2006
Interest and fees on loans and leases	\$ 56,017	\$ 55,681	\$ 48,274
Interest on debt securities	13,146	9,784	11,655
Federal funds sold and securities purchased under agreements to resell	3,313	7,722	7,823
Trading account assets	9,057	9,417	7,232
Other interest income	4,151	4,700	3,601
<b>Total interest income</b>	<b>85,684</b>	<b>87,304</b>	<b>78,585</b>

Source: Bank of America Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 110.

According to the note, Bank of America reports several sources of interest income, not just income generated by its loan portfolio. Besides loan interest, interest income is also derived from investments in debt securities, from federal funds sold or loaned to other banks, from treasury securities purchased by the bank under agreements for resale and from interest on its trading securities.

Most of the banks, Bank of America included, have a portfolio of loans that are held for investment purposes through maturity and a portfolio of loans that are held for sale. The intent with loans held for sale is to earn fees for arranging the loan and some interest during a holding period, but to exit from the lending arrangement through sale to another party who will carry the underlying paper.

Interest income and fees earned on loans, whether the loan is held or ultimately sold, are reported as operating cash flow. However, the classification of changes in loan balances, that is, the lending and collection of principal on the loans, depends on whether the loan is carried as an investment or as held for sale. The disbursement of the principal amount of a loan that is held for investment purposes is reported as an investing use of cash. Collections of principal on that loan, or even the proceeds from the sale or securitization of that loan are an investing source of cash. In contrast, the principal amounts of loans that are held for sale are reported as operating cash flows. That is, if a loan is originated or purchased with the intent of later negotiating a sale, the loan amount and any proceeds from sale or securitization are reported as operating cash flow. Such loans that are held for sale are viewed as a form of financial inventory. They are originated or purchased with the intent of a subsequent sale.

On one hand, the investing versus operating treatment for loans held for investment versus loans held for sale makes sense. One is held for investment, the other for sale. In practice, however, the differences between the two are not that great. Moreover, the implications for operating cash flow can be significant.

Consider, for example, U.S. Bancorp. During 2008 the bank reports a \$14,776 million investing use of cash for the net increase in loans outstanding. The bank also reports as investing cash flow a \$123 million source of cash and a \$3,577 million use of cash for what are referred to as proceeds from sales of loans and purchases of loans, respectively. Yet in the operating section of its cash flow statement, U.S. Bancorp also reports a \$32,563 million use of cash for loans originated for sale in the secondary market, net of repayments and a \$32,440 million source of cash for proceeds from sales of loans held for sale. If the company had included the proceeds from sales of loans and the use of cash for purchases of loans in the calculation of operating cash flow, operating cash flow would have been reduced by \$3,454 million (i.e., \$3,577 million use less \$123 million source) or 65.1%. In 2007 and 2006, the net effect of purchases of loans net of the proceeds from sales of loans was an investing use of cash in the amount of \$2,178 million and \$2,306, respectively. Had these transactions been included with operating cash flow, operating cash flow in 2007 and 2006 would have been lower by 75.0% and 42.8%, respectively.

A loan that is held for investment may later be sold or a loan that is held for sale may ultimately be held for investment. Moreover, banks move loans between these categories all of the time. The effects of this movement is not reported on the cash flow statement but rather is disclosed as a supplemental note that details non-cash operating, investing and financing activity.

For example, in 2008, Well Fargo transferred \$1,640 million in loan principal from its loans that are held for investment purposes to loans that are held for sale. When these loans were made, the principal amount was reported as an investing use of cash. Now, when they are sold, the amount collected will be reported as an operating source of cash. Such a transfer provides a one-time boost to operating cash flow. It is important to note, however, that working the other way, during 2008 Wells Fargo also transferred \$1,195 in loan principal from loans that are held for sale to loans held for investment. The Company also moved \$544 million from loans held for sale to securities available for sale – a transfer that has cash flow effects that are the same as making a transfer to loans held for investment. For Wells, the net effect on cash flow is minimal because transfers into loans held for sale were offset by transfers out of that category. However, one

should take note of the dichotomy in cash flow classification for loans held for investment and loans held for sale and the ease with which transfers between the two categories may take place.

We found several banks that transferred funds from their loans held for sale category to loans held for investment. For example, during 2008, Citigroup transferred \$15,891 million in loan principal from its loans held for sale category to loans held for investment purposes. During 2008, KeyCorp made a similar transfer, moving \$3,695 million in loan principal from loans held for sale to loans held for investment, though the bank also moved \$459 million to loans held for sale. These moves impact in a negative way the operating cash flow for both banks. That is, the proceeds from collections of loans held for investment will be reported as an investing source of cash versus an operating source if the loans were carried as held for sale.

In Exhibit 2 we summarize the non-cash transfers of loan balances into and out of the loans held for investment and loans held for sale categories. Note that such transfers are not rare as several banks made them.

**Exhibit 2. Non-cash Transfers between Loan Categories (dollars in millions)**

	<b>2008</b>	<b>2007</b>	<b>2006</b>
<u>Transfers from loans held for investment to loans held for sale:</u>			
Fifth Third Bancorp.	\$532	\$1,982	
KeyCorp	459		\$2,474
PNC Financial		288	2,280
SunTrust		4,054	
Wells Fargo			32,383
<u>Transfers from loans held for sale to loans held for investment:</u>			
BB&T Corp.		264	
Citigroup	15,891		
Fifth Third Bancorp	1,692	782	138
KeyCorp	3,695		
PNC Financial	1,763		
SunTrust Banks	656	837	
Wells Fargo	1,195	2,133	
<u>Transfers from loans held for investment to foreclosed assets:</u>			
BB&T Corp.	600	179	85
Citigroup	3,439	2,287	1,414
KeyCorp	130	35	72
U.S. Bancorp	307	180	145
Wells Fargo	3,031	2,666	1,918
<u>Transfers from loans held for sale to foreclosed assets:</u>			
Wells Fargo	136		

Source: Form 10-K Annual Reports to the Securities and Exchange Commission.

In Exhibit 2 we see examples of several banks that transferred loans formerly held for purposes of investment or for purposes of sale to a foreclosed assets category. The banks in our sample all reported cash inflows from sales of such foreclosed assets as an investing source of cash. One could make the argument that foreclosed assets are assets that are held for sale similar to loans held for sale, and that an operating classification is more appropriate. However, banks are treating the cash proceeds from sales of foreclosed assets much like cash received from collections of loans that are held for investment.

Because cash collected from sales of foreclosed assets are reported as investing cash flows, banks, such as Wells Fargo, BB&T and U.S. Bancorp, which made transfers from the loans held for investment category to foreclosed assets, would not alter the classification of cash ultimately received for the foreclosed assets. However, when the foreclosed assets are sold, banks that transferred loans held for sale to foreclosed assets, such as Wells Fargo and KeyCorp, would effectively lower their operating cash flow, because collections that would have been reported as operating cash flow will now be reported as investing cash flow.

Not included in the table are transfers made by Wells Fargo from loans held for sale to mortgage servicing rights, in the amounts of \$3,498 million, \$3,720 million and \$4,118 million, in 2008, 2007 and 2006, respectively. These transfers will also reduce operating cash flow.

### ***The Allowance for Loan Loss***

As part of their lending activity, banks must estimate the principal amount of loans that will not be collected. This estimate, a contra-asset that is subtracted from the total loan balance on the balance sheet, is referred to as the allowance or reserve for loan loss. Increases in this loan loss reserve, referred to as the provision for loan loss, an expense item, reduces earnings. Actual loan losses, that is, loans that are written off as being uncollectible, are charged against the loan loss reserve. While the loan loss provision impacts earnings, the expense is non-cash and does not lower operating cash flow. Similarly, other changes in the loan loss reserve, due to write-offs of loans deemed to be uncollectible or recoveries of loans that were previously written off, are non-cash transactions and do not alter operating, investing or financing cash flow.

### **Services**

Commercial banks have many avenues for earning commissions and fees that go well beyond the traditional lending function. Trust services, mortgage banking and servicing, investment banking and other investment services are all rich sources of commissions and fees for the banks. Citigroup provides a summary of its commissions and fees schedule in a footnote that is excerpted below:

The following table presents commissions and fees revenue for the years ended December 31:

<i>In millions of dollars</i>	2008	2007	2006
Investment banking	\$ 2,284	\$ 5,228	\$ 4,093
Credit cards and bank cards	4,517	5,036	5,191
Smith Barney	2,836	3,265	2,958
ICG trading-related	2,322	2,706	2,464
Checking-related	1,134	1,108	911
Transaction Services	1,423	1,166	859
Other Consumer	1,211	649	279
Nikko Cordial-related <sup>(1)</sup>	1,086	834	—
Loan servicing <sup>(2)</sup>	(1,731)	560	660
Primerica	415	455	399
Other ICG	747	295	243
Other	(141)	71	58
Corporate finance <sup>(3)</sup>	(4,876)	(667)	735
<b>Total commissions and fees</b>	<b>\$11,227</b>	<b>\$20,706</b>	<b>\$18,850</b>

(1)Commissions and fees for Nikko Cordial have not been detailed due to unavailability of the information.

(2)Includes fair value adjustments on mortgage servicing assets. The mark-to-market on the underlying economic hedges of the MSRs is included in *Other revenue*.

(3)Includes write-downs of approximately \$4.9 billion in 2008 and \$1.5 billion in 2007, net of underwriting fees, on funded and unfunded highly leveraged finance commitments, recorded at fair value and reported as loans held for sale in *Other assets*. Write-downs were recorded on all highly leveraged finance commitments where there was value impairment, regardless of funding date.

Source: Citigroup Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 139.

All commissions and fees that are collected in cash are reported as operating cash flow. Note, however, that some components of the commissions and fees reported by Citi are non-cash items. For example, the items labeled as loan servicing income and the corporate finance item include non-cash sources of income and expense. Loan servicing income includes non-cash, fair value adjustments on the Bank's mortgage servicing assets. Similarly, corporate finance income includes writedowns of certain highly leveraged finance commitments that were recorded at fair value.

Depending on the bank, loan servicing activities can be a major source of income. Cash paid to acquire these rights are reported as investing cash flow. Operating expenses that are capitalized as mortgage servicing rights are also reported as investing cash flow. However, these rights are typically reported at fair value. Changes in the fair value of mortgage servicing rights, while affecting income as seen in the Citi example above, are non-cash items and do not alter cash flow. Consider changes in the reported amount of mortgage servicing rights reported by U.S. Bancorp that are excerpted below:

Year Ended December 31 (Dollars in Millions)	2008	2007	2006
Balance at beginning of period	\$1,462	\$1,427	\$1,123
Rights purchased	52	14	52
Rights capitalized	515	440	398
Rights sold	–	(130)	–
Changes in fair value of MSRs:			
Due to change in valuation assumptions	(592)	(102)	26
Other changes in fair value	(243)	(187)	(172)
Balance at end of period	\$1,194	\$1,462	\$1,427

Source: U.S. Bancorp. Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 84.

From the U.S. Bancorp note, the mortgage servicing rights purchased and rights capitalized in 2008 of \$52 million and \$515 million, respectively, would be reported as an investing use of cash. Any proceeds received for the rights sold in 2007 would be reported as an investing source of cash.

### Deposits

As members of the Federal Reserve System, commercial banks are able to take deposits that are insured by the FDIC.<sup>1</sup> These low or no-interest bearing deposits are an important source of financing to the banks. Increases and decreases in these deposits, whether or not they are interest bearing, covered by FDIC insurance, demand or time restricted, or brokered, that is, sold by a third party, are reported as financing sources and uses of cash on the banks' statements of cash flow.

As we noted earlier, while brokered deposits could be viewed more as a financing activity, more traditional customer-driven deposits of both the demand and time-restricted variety would appear to be more of an operating activity. The very health of a bank's operations depends on its deposit base and its ability to attract a growing stream of deposits.

Consider the deposit activity shown below for Washington Mutual during 2007, the company's last full year of independent operations:

<sup>1</sup> Insurance limits are for \$250,000, returning to \$100,000 for all but certain retirement accounts on January 1, 2010.

December 31, (in millions):	2007	2006
<b>Retail deposits</b>		
Checking deposits:		
Noninterest bearing	\$ 23,476	\$ 22,838
Interest bearing	25,713	32,723
<b>Total checking deposits</b>	<b>49,189</b>	<b>55,561</b>
Savings and money market deposits	44,987	41,943
Time deposits	49,410	46,821
<b>Total retail deposits</b>	<b>143,586</b>	<b>144,325</b>
Commercial business and other deposits	11,267	15,175
<b>Brokered deposits:</b>		
Consumer	18,089	22,299
Institutional	2,515	22,339
Custodial and escrow deposits	6,469	9,818
<b>Total deposits</b>	<b>\$ 181,926</b>	<b>\$ 213,956</b>

Source: Washington Mutual Inc., Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2007, p. 24.

As seen above, between 2006 and 2007, Washington Mutual's deposit base declined from \$213,956 million to \$181,926 million, a reduction of \$32,030 million. During that time, the bank's retail deposits declined from \$144,325 million to \$143,586 million, or \$739 million and its commercial business and other deposits declined from \$15,175 million to \$11,267 million, or \$3,908 million. While reported as a financing use of cash, one could argue that the declines in these more traditional customer-related deposits would be more suitably included in the operating section of the cash flow statement. The decline in their balances reflects operational stress. The same could be said for the custodial and escrow deposits, which declined from \$9,818 million in 2006 to \$6,469 million in 2007, or \$3,349 million. The balances of these deposits are related to certain service operations provided by the bank. For example, an escrow deposit may be made prior to a real estate loan closing. As business operations of the bank rise and fall, the balance of these deposits should follow suit, suggesting the appropriateness of an operating label.

The brokered deposits, those labeled as consumer and institutional in the above display, would appear to be less of an operating cash activity and more deserving of a financing label. These are funds that are raised in bulk amounts, through third-party brokers, similar to loan transactions.

Consider also the deposit activity of Regions Financial during 2008. That year, the bank reported a decline in its deposits of \$4,757 million – a financing use of cash. However, deposits labeled as customer deposits, actually increased. Excluding \$900 million of deposits assumed from another bank in an FDIC-assisted transaction, customer deposits at Regions increased by

\$3,020 million during 2008. This increase in customer deposits would more appropriately be included in operating cash flow.

Unfortunately, the available disclosures related to deposit activity is somewhat spotty. Banks do not consistently disclose information on the amounts of funds raised through brokered deposits. Typically, disclosures are more focused on the amounts of interest-bearing and non-interest bearing deposits, U.S. and foreign deposits, and time deposits of \$100,000 or more in amount. While time deposits of \$100,000 or more could be viewed as brokered deposits, they are not always brokered. Moreover, some brokered deposits may be made for denominations of less than \$100,000.

The display below provided by JP Morgan is somewhat typical of the disclosures provided by the surveyed banks on their deposit activity:

December 31, (in millions)	2008	2007
U.S. offices:		
Noninterest-bearing	\$ 210,899	\$129,406
Interest-bearing	511,077	376,194
Non-U.S. offices:		
Noninterest-bearing	7,697	6,342
Interest-bearing	279,604	228,786
<b>Total</b>	<b>\$1,009,277</b>	<b>\$740,728</b>

At December 31, 2008 and 2007, time deposits in denominations of \$100,000 or more were as follows.

December 31, (in millions)	2008	2007
U.S.	\$ 147,493	\$134,529
Non-U.S.	58,247	69,171
<b>Total</b>	<b>\$ 205,740</b>	<b>\$203,700</b>

Source: JP Morgan Chase & Co. Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 190.

Note that JP Morgan does not disclose brokered deposits. Without consistent information on brokered deposits, it is difficult to determine the portion of deposits that are customer-related and therefore deserving of an operating designation. Unless disclosures are changed or improved, analysts are left to fend for themselves, possibly making estimates based on available public information.

Banks may also carry deposits with other banks. When such deposits are made, their increase is reported as an investing use of cash. A reduction in such a deposit is an investing source of cash.

### ***Federal Funds Sold and Purchased***

As deposit-taking institutions, commercial banks must maintain a minimum level of cash reserves relative to their deposits. These reserves must be held as vault cash or as a deposit made with the Federal Reserve Bank. Banks with excess reserves, that is, reserves in excess of the minimum Federal Reserve requirements, may lend those reserves to other banks. These loans are referred to as federal funds sold, or in effect, loaned to other banks. Banks with insufficient reserves may borrow those reserves from other banks. These borrowings are referred to as federal funds purchased. Most banks classify the sale of funds to the Federal Reserve, that is, federal funds sold, as an investing cash activity. In effect, these are loans made to other banks. Federal funds purchased are typically classified as a financing activity, as these banks are effectively borrowing funds from other banks.

Closely related to the purchase and sale of federal funds is the sale of treasury securities under an agreement to repurchase and the purchase of treasury securities under an agreement to resell. Rather than purchase or borrow federal funds, a bank with insufficient cash reserves may raise them by selling treasury securities to another bank under an agreement to repurchase them in the very near term. The bank with excess reserves that purchases the treasury securities would simultaneously agree to resell them. Like federal funds sold, treasury securities purchased under an agreement to resell is typically classified as an investing activity. Similarly, treasury securities sold under an agreement to repurchase, like federal funds purchased, is classified as a financing activity.

Citigroup, Inc., however, serves as an exception. The bank classifies both federal funds sold and securities purchased under resale agreements and federal funds purchased and securities sold under repurchase agreements as operating cash flow. Had the bank followed others and classified these activities as investing and financing cash flow, respectively, operating cash flow would have been higher in 2008 and 2007 by \$9,017 million and \$18,840 million, or 9.3% and 26.3%, respectively, and in 2006, operating cash flow would have been lower by \$41,490 million or 25,145%.

Citi's operating treatment of its federal funds activity notwithstanding, an investing and financing treatment, consistent with current GAAP, appears to be more appropriate for these cash flow activities. Federal funds sold are effectively federal funds loaned to other banks and are a form of investing activity. Federal funds purchased are effectively amounts borrowed, consistent with a financing classification.

### ***Investments and Trading Activities***

As financial institutions, commercial banks have a robust investing business that goes well beyond their lending activities. Banks might invest in debt or equity securities or derivatives linked to such securities. The positions taken may be considered to be part of the bank's trading activities or investments.

#### ***Trading Activities***

The trading activities of a bank are an important part of its profit-seeking business operations. A bank's balance sheet will typically report both trading assets, where the bank has taken a long position in an underlying security, and trading liabilities, where the bank's investment is a short

position. Bank of America discloses the following trading account assets and liabilities at December 31, 2008:

(Dollars in millions)	<b>December 31</b>	
	<b>2008</b>	2007
<b>Trading account assets</b>		
U.S. government and agency securities	\$ 84,660	\$ 48,240
Corporate securities, trading loans and other	34,056	55,360
Equity securities	20,258	22,910
Foreign sovereign debt	13,614	17,161
Mortgage trading loans and asset-backed securities	6,934	18,393
<b>Total trading account assets</b>	<b>\$159,522</b>	<b>\$162,064</b>
<b>Trading account liabilities</b>		
U.S. government and agency securities	\$ 32,850	\$ 35,375
Equity securities	12,128	25,926
Foreign sovereign debt	7,252	9,292
Corporate securities and other	5,057	6,749
<b>Total trading account liabilities</b>	<b>\$ 57,287</b>	<b>\$ 77,342</b>

Source: Bank of America Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 127.

The cash payments and receipts from these trading activities, including the purchase amounts of its trading positions, any interest income generated by the positions or interest expense incurred by the positions during the holding period, and any gain or loss on sale, are all reported as cash provided or used from operating activities. Trading activities are considered to be part of the bank's daily operations, its business, and as such, an operating designation appears appropriate.

Bank of America, like other banks, also employs derivatives positions which the bank uses to hedge various risks, including interest rate and foreign currency risk. Depending on the nature of the hedge employed, that is, whether it is considered to be a fair value hedge or cash flow hedge, any income or loss from the hedge may be reported in earnings or in accumulated other comprehensive income. The cash flow classification of these hedges, that is, whether their cash flow effects are reported in operating, investing or financing cash flow, is often not disclosed. In earlier research we found little consistency in the classification of the cash flows associated with such hedging transactions. Please refer to our research report dated August 2007, "The Cash Flow Classification of Payments and Receipts Associated with the Termination of Interest Rate Swaps," by Eugene Comiskey and Charles Mulford. The report can be obtained at [www.mgt.gatech.edu/finlab](http://www.mgt.gatech.edu/finlab). More direction from the FASB on the classification of hedge-related cash flows is warranted.

### **Investments**

As financial institutions, banks make other investments that are not considered to be trading positions. These too might be made in debt or equity securities or related derivatives. Such investments might be classified as a held-to-maturity or as an available-for-sale security.

Consider the following disclosure of the investment positions of PNC Financial as of December 31, 2008:

In millions	Amortized		Unrealized		Fair Value
	Cost		Gains	Losses	
<b>December 31, 2008</b>					
<b>SECURITIES AVAILABLE FOR SALE</b>					
Debt securities					
US Treasury and government agencies	\$ 738		\$ 1		\$ 739
Residential mortgage-backed					
Agency	22,744	371	\$ (9)		23,106
Nonagency	13,205		(4,374)		8,831
Commercial mortgage-backed	4,305		(859)		3,446
Asset-backed	2,069	4	(446)		1,627
State and municipal	1,326	13	(76)		1,263
Other debt	563	11	(15)		559
Total debt securities	44,950	400	(5,779)		39,571
Corporate stocks and other	575		(4)		571
Total securities available for sale	\$ 45,525	\$ 400	\$(5,783)		\$40,142
<b>SECURITIES HELD TO MATURITY</b>					
Debt securities					
Commercial mortgage-backed	\$ 1,945	\$ 10	\$ (59)		\$ 1,896
Asset-backed	1,376	7	(25)		1,358
Other debt	10				10
Total debt securities	3,331	17	(84)		3,264
Total securities held to maturity	\$ 3,331	17	(84)		\$ 3,264

Source: PNC Financial Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 108.

Held-to-maturity and available-for-sale investments are considered investments and not trading positions. As such, while the income from these investments, interest and dividends, are reported as operating cash flow, the purchase amounts and proceeds from sale, including the effects of any gain or loss, are reported as cash provided or used from investing activities.

### ***Investments and Cash Flow Reporting***

An important dichotomy exists in the reporting of cash flows from trading and investing positions. If an investment is classified as a trading position, the cash flow from its purchase or sale is classified in the operating section. If an investment is classified as either a held-to-maturity or an available-for-sale security, or some other designation, such as an equity-accounted investment, where the bank has a sufficiently large ownership position to exert significant influence over the investee, the cash flow from its purchase or sale is classified as investing cash flow. All interest or dividend income from investments, regardless of the classification of the investment, is reported as operating cash flow. Gains or losses on sale are reported in earnings regardless of an investment's cash flow classification. For cash flow reporting, those gains and losses are included in the proceeds from sale. They alter operating cash flow for trading positions but are reported in investing cash flow for all other investment classifications.

While the cash flow classification of trading and investments positions makes intuitive sense, the lines dividing these classifications are very thin. What one bank classifies as an investment another might classify as a trading position. Similarly, the same bank may make different

classifications at different times, or even change the classification for an investment. Such changes in classification are considered to be non-cash transfers and are reported as a supplemental note to the cash flow statement. Consider, for example, the transfers among investment account classifications noted in Exhibit 3.

**Exhibit 3. Non-cash Transfers between Trading and Investment Categories** (dollars in millions)

	2008	2007	2006
<u>Transfers from investments held-to-maturity to trading:</u>			
None noted in sample			
<u>Transfers from trading to investments held-to-maturity:</u>			
Citigroup	\$33,258		
<u>Transfers from investments held as available-for-sale to trading:</u>			
Bank of America	10,900		
SunTrust Banks		\$15,143	
<u>Transfers from trading to investments held as available-for-sale:</u>			
Citigroup	4,654		
PNC Financial	599		
Wells Fargo		1,268	
<u>Transfers from loans held for sale to investments held as available-for-sale:</u>			
Wells Fargo	544	7,949	

Source: Form 10-K Annual Reports to the Securities and Exchange Commission.

In reviewing Exhibit 3 it is clear that non-cash transfers among investment account classifications are common and can significantly cloud the usefulness of the cash flow statement's operating designation. Consider, for example, Citigroup's transfer of \$33,258 million in investments to the held-to-maturity category from the trading designation. The purchase of these investments, if classified as a trading investment, was reported as an operating use of cash. Now that they have been transferred to the held-to-maturity category, the proceeds from their sale will be reported as an investing source of cash. Of course, if the values of these investments are falling, their classification as a held-to-maturity security could shield the income statement from the losses prior to sale. The bank may be less concerned about the cash flow classification of these investments than their near-term earnings effect. Though, the securities may be transferred back to a trading classification prior to sale. If so, the proceeds from sale would be reported as operating cash flow.

In 2008, Bank of America transferred \$10,900 million in securities to the trading desk from an available-for-sale classification. The purchase of these securities was reported as an investing

use of cash. The proceeds from their ultimate sale, as a trading vehicle, will be reported as operating cash flow.

Wells Fargo transferred loans that were held for sale to investments that are held as available-for-sale securities. At the time of their sale, had these loans been classified as held for sale, any proceeds received would have been classified as operating cash flow. Now that the loans are classified as investments that are held as available-for-sale securities, any future proceeds from sale will be reported as an investing source of cash.

### ***Mark-to-Market Accounting***

Full fair-value or mark-to-market accounting is required for investments carried as trading securities, including debt and equity securities and related derivatives. By *full* fair value accounting, we mean that the item in question is reported at fair value on the balance sheet date and changes in that fair value, including gains and losses, are included in the calculation of net income.

Investments that are carried as available-for-sale securities are also reported at fair value on the balance sheet. However, changes in the fair value of such securities are included in the other comprehensive income component of shareholders' equity. Debt securities that are held to maturity are carried at amortized cost and are not adjusted to fair value for normal market fluctuations. Note that a decline in the fair value of a security that is held as an available-for-sale security or a held-to-maturity security that is not expected to recover before the entity sells the security, would be considered to be an other-than-temporary decline and would be accounted for as a downward adjustment to the carrying value of the underlying investment and as a charge against earnings.

Commercial banks, like all companies reporting under U.S. GAAP, may apply, but are not required to apply, full fair value accounting, with gains and losses recorded in earnings, to virtually any financial asset or liability on their balance sheets. As such, fair value accounting may be applied to any loans or investments, or, for that matter, any liabilities.

From a cash flow point of view, fair value accounting is a non event. As banks write assets and liabilities up and down for changes in their fair value, recording income statement gains and losses in the process, no cash changes hands before sale or settlement. Thus, while these transactions may be considered extremely important from an earnings point of view, prior to sale or settlement, they do not impact cash flow. As such, because these gains and losses affect earnings but not cash flow, they are removed from net income in calculating operating cash flow.

### **Other Financing Activities**

Beyond their deposit activity, banks raise funds through the sale of commercial paper, other short-term borrowings and long-term debt. Borrowed funds and cash paid for the redemption of borrowed amounts are reported as financing activities on the statement of cash flows. Interest on these liabilities is recorded as an expense, reducing earnings as well as operating cash flow. The sale of stock, both common and preferred, including any funds raised through the Troubled Asset Relief Program (TARP), is also reported as financing cash flow, including any dividends paid.

A financing designation for debt and equity issues would appear to properly capture the essence of these transactions. The funds are not raised through sustainable operations, but rather through less sustainable financing activities. Regarding interest and dividends paid, one could argue that an operating designation for interest paid and a financing designation for dividends paid are at odds. This classification, however, is one that is consistent with the classification of interest expense and dividends paid on the income statement and statement of shareholders' equity, respectively. Interest expense is subtracted in calculating net income. Dividends are viewed as a distribution of profits and are not subtracted in determining net income. The classification of their cash flows is handled in a similar manner so that cash provided by operating activities is defined consistent with the definition of net income.

### **Acquisitions**

Acquisitions provide a means for large and growing commercial banks to supplement internal growth, adding new markets and market share to existing ones, adding new deposits and loans, and providing an opportunity to use synergies to cut operating costs and boost cash flow. In effecting an acquisition the banks may use some amount of cash along with non-cash resources such as stock and debt. The net cash used, or received, as a result of acquiring another company or bank is reported as an investing use or source of cash. Any non-cash payments are reported in a footnote to the cash flow statement.

Consider, JP Morgan. In the investing section of its 2008 cash flow statement, the bank reports \$2,128 million in net cash received in business acquisitions or dispositions. Also disclosed as part of the bank's non-cash activities, is the following statement:

In 2008, the fair values of noncash assets acquired and liabilities assumed in the merger with Bear Stearns were \$288.2 billion and \$287.7 billion, respectively; approximately 26 million shares of common stock, valued at approximately \$1.2 billion, were issued in connection with the Bear Stearns merger.<sup>2</sup>

The company provided a more detailed description of the transaction in the notes to its financial statements. In Exhibit 4 we provide a summary of the assets received and liabilities assumed in the Bear Stearns acquisition:

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<sup>2</sup> JP Morgan Chase & Co., Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 121.

**Exhibit 4. Fair Value of Assets Received and Liabilities Assumed in the Acquisition of Bear Stearns by JP Morgan Chase & Co., May 30, 2008.**  
(dollar amounts in millions)

<b>Assets (excluding goodwill)</b>	
Cash and due from banks	\$ 534
Federal funds sold and securities purchased under resale agreements	21,204
Securities borrowed	55,195
Trading assets	136,535
Loans	4,407
Accrued interest and accounts receivable	34,677
All other assets <sup>a</sup>	35,848
<b>Total assets (excluding goodwill)</b>	<b>\$ 288,400</b>
<b>Liabilities</b>	
Federal funds purchased and securities loaned or sold under repurchase agreements	\$ 54,643
Other borrowings	16,166
Trading liabilities	24,267
Beneficial interests issued by consolidated VIEs	47,042
Long-term debt	67,015
Accounts payable and other liabilities	78,532
<b>Total Liabilities</b>	<b>\$ 287,665</b>
<b>Bear Stearns net assets (excluding goodwill)</b>	<b>\$ 735</b>
Goodwill	761
<b>Purchase price</b>	<b>\$ 1,496</b>

<sup>a</sup>Amount includes an adjustment designed to account for net losses recorded by JP Morgan under the equity method for a period during which the company was acquiring Bear Stearns shares.

Source: JP Morgan Chase & Co. Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 127.

The total purchase price paid by JP Morgan in acquiring Bear Stearns was \$1,496 million, consisting of \$1,198 million in common stock issued and \$298 million in stock purchased for cash. Acquisition costs of \$27 million and the \$242 million fair value of employee stock awards

granted were settled with shares of Bear Stearns held by JP Morgan in a grantor trust and did not alter the purchase price.

For its \$1,496 million, JP Morgan received assets (excluding goodwill) with a fair value of \$288,400 million and assumed liabilities of \$287,665 million. The difference between the price paid of \$1,496 million and the fair value of net assets received of \$735 million (\$288,400 minus \$287,665) is \$761 million, the portion of the purchase price assigned to goodwill.

The immediate acquisition-related cash flow effects of the transaction are limited. These items, consisting of the \$298 million in cash paid for Bear Stearns shares and the acquired \$534 million in cash received from Bear Stearns were reported as cash flow from investing activities. However, after the date of acquisition, the acquired assets and assumed liabilities can have significant implications for operating cash flow. Consider, for example, that among the assets acquired are trading assets of \$136,535 million. When these assets are sold or collected they will provide an incremental boost to operating cash flow – an incremental boost to operating cash flow that was not generated by operations. Viewed another way, these are assets that would normally require an operating use of cash to be placed on the balance sheet. Because they were acquired as part of a business acquisition, however, they were placed on the balance sheet no associated use of cash. The company also assumed trading liabilities of \$24,267 million.<sup>3</sup> The satisfaction of these liabilities will require the use of operating cash flow. The combination of acquired trading assets less trading liabilities indicate that future operating cash flow for JP Morgan will benefit for a net amount of \$112,268 million (\$136,535 million minus \$24,267 million).

Because the \$112,268 million in incremental operating cash flow is the result of an acquisition and not normal operating activities, it does not have the normal recurring quality that is expected of cash provided by operating activities. Moreover, the calculated amount does not include the incremental effects of the Washington Mutual (WaMu) transaction. In the WaMu acquisition, JP Morgan acquired \$5,691 million in trading assets, assets that will provide incremental operating cash flow as they are sold or collected. The bank also assumed \$585 million in trading liabilities. The net incremental effect on operating cash flow arising from the WaMu acquisition is \$5,106 million (\$5,691 million minus \$585 million). Together, the acquired net trading assets of the Bear Stearns and Washington Mutual acquisitions will add \$117,374 million (\$112,268 million plus \$5,106 million) to operating cash flow, a substantial amount.

Acquisitions muddy the analysis waters and make it difficult for analysts to assess performance and evaluate internal rates of growth. Accordingly, companies effecting acquisitions must disclose certain pro-forma measures, including what revenues, net income and earnings per share would have been were the combined companies consolidated for all periods presented.

Consider JP Morgan's pro-forma disclosure of the effects of the Bear Stearns and Washington Mutual acquisitions provided in Exhibit 5.

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<sup>3</sup> As part of the acquisition, JP Morgan also acquired accrued interest receivable and accounts receivable of \$34,677 million and assumed accounts payable and other liabilities of \$78,532 million. While a significant portion of these assets and liabilities are likely to be operating related, we cannot be sure as to the amount. Accordingly, we have excluded them from our calculations and focused our attention instead on the acquired trading assets and liabilities.

**Exhibit 5. Excerpts from JP Morgan's Pro-forma Disclosure of Financial Information Reflecting Bear Stearns and Washington Mutual Acquisitions** (amounts in millions, except per share data)

The following unaudited pro forma condensed combined financial information presents the results of operations of the Firm as they may have appeared if the Bear Stearns merger and the Washington Mutual transaction had been completed on January 1, 2008, and January 1, 2007.

Year ended December 31, (in millions, except per share data)	2008	2007
Total net revenue	\$ 68,071	\$92,052
Income (loss) before extraordinary gain	(14,141)	17,733
Net income (loss)	(12,235)	17,733
Diluted earnings per share:		
Income (loss) before extraordinary gain	(4.22)	5.01
Net income (loss)	(3.68)	5.01

Source: JP Morgan Chase & Co. Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 127.

While the required pro-forma disclosures are helpful in determining the acquisitions' effects on revenues and earnings, what is sorely missing and not required under Generally Accepted Accounting Principles is a pro-forma disclosure of what operating cash flow would have been had the acquisitions been in effect for the reporting periods presented. In our view, this is a yawning gap in GAAP and would serve analysts well as they attempt to assess the effects of acquisitions on operating cash flow.

In the absence of such a disclosure, analysts should take note of acquired operating-related assets and liabilities, especially trading account assets and liabilities, and remove their incremental effects from operating cash flow. Because the addition of operating-related assets, such as trading securities, to the balance sheet would normally require a use of operating cash flow, we think that in the year of acquisition the cash flow effects of such acquired operating-related assets should be subtracted from operating cash flow. Similarly, the cash flow effects of acquired operating-related liabilities should be added back to operating cash flow.

Unfortunately, the details provided by JP Morgan of assets acquired and liabilities assumed in the Bear Stearns and Washington Mutual acquisitions are more the exception than the rule. More typically, banks do not provide sufficient detail to identify acquired operating-related assets and liabilities. Consider, for example, Citigroup. On its statement of cash flows, the company discloses an investing use of cash of \$15,614 million in 2007 for business acquisitions. The notes to the company's financial statements identify many acquisitions that were made that year, including ABN Amro Mortgage Group, Old Lane Partners, L.P., Bisys Group, Inc., and

Grupo Financiero Uno. Details, however, are limited. For example, relating to its acquisition of ABN Amro (AAMG), Citigroup states,

As part of this acquisition, Citigroup purchased approximately \$12 billion in assets, including \$3 billion of mortgage servicing rights, which resulted in the addition of approximately 1.5 million servicing customers. Results for AAMG are included within Citigroup's *North America Consumer Banking* business from March 1, 2007 forward.<sup>4</sup>

Information on specific asset types acquired or liabilities assumed were not disclosed. If there were trading account assets or other operating-related assets acquired or liabilities assumed, those amounts were not made public in their annual filing.

Bank of America provides a much more useful summary of the assets acquired and liabilities assumed in its 2009 acquisition of Merrill Lynch. For example, the company notes that it acquired trading account assets and derivative assets of \$87.9 billion and \$97.7 billion, respectively. The company also disclosed that it assumed trading account liabilities, derivative liabilities and accrued expenses and other liabilities of \$18.1 billion, \$72.0 billion and \$100.8 billion, respectively. Assuming that all of these items are operating-related, if combined, their net liability balance of \$5.3 billion is not material. At least we know.

In the Wells Fargo acquisition of Wachovia, Wells discloses the acquisition of \$44,102 million in trading account assets. Detailed disclosures of other acquired operating-related assets and liabilities, however, were not provided.

Given the lack of consistent detailed disclosures of their amounts, we cannot recommend that analysts routinely adjust reported operating cash flow for acquired operating-related assets and liabilities such as trading securities. We do recommend that when a sizable acquisition is effected, that at a minimum, analysts seek to determine the amounts of acquired trading account assets and liabilities as these accounts can be material and their liquidation can provide an immediate though nonrecurring boost to operating cash flow.

### **Adjusting Reported Operating Cash Flow**

For 2008 we adjusted reported operating cash flow for inconsistent cash flow classifications, for non-cash transfers of investments between trading and non-trading categories, for non-cash transfers of loan balances between held-for-sale and held-for-investment categories and for trading securities purchased in acquisition transactions. The results are presented in Exhibit 6.

In the Exhibit we did not adjust reported operating cash flow for cash flows arising from customer-related deposits, moving that cash flow from the financing to the operating section. The disclosures provided by the banks were not sufficient to measure brokered deposits in a consistent manner that is required to make the adjustment.

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<sup>4</sup> Citigroup, Inc. Form 10-K Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 134.

Exhibit 6 provides some interesting insights into the cash flows of the surveyed banks. For example, while Bank of America reported operating cash flow of \$4,034 million during 2008, once adjusted, the bank's operating cash flow is a negative \$6,866 million. JP Morgan's reported operating cash flow of \$23,098 million adjusts to a negative \$94,276 million. At Wells Fargo, adjusting for acquired trading securities and loan transfers also reduced reported operating cash flow significantly, from a negative \$4,831 million to a negative \$43,560 million. Regarding the effects of acquisitions, in each of the three cases with acquisitions one could argue that the banks did not actually use operating cash flow when transferring assets to the trading category or in purchasing trading securities in the acquisitions. However, the increases in these net trading assets would have used operating cash flow had the assets been purchased through normal channels and their ultimate sale, if not effected in 2008, will increase operating cash flow by a significant amount in a future period.

In the positive direction, Citigroup saw its reported operating cash flow of \$96,540 million adjust upward to \$159,360 million. We made adjustments for federal funds classified as operating cash flow, for loan balances transferred from the held-for-sale category and for investments transferred from the bank's trading portfolio. Also seeing increases in adjusted operating cash flow were KeyCorp, where reported operating cash flow of negative \$220 million was adjusted upward to a positive \$3,016 million and Fifth Third Bancorp, where reported operating cash flow of \$3,104 million was adjusted to \$4,264 million. Small adjustment increases were also seen for PNC Financial and SunTrust Banks.

**Exhibit 6. Adjustments to Reported Operating Cash Flow, Year Ended December 31, 2008 (dollars in millions)**  
**(These are proposed conceptual adjustments done in the spirit of discussion. The adjustments are not necessarily in accordance with generally accepted accounting principles. Please refer to the conclusion section of this research report where we seek input on these and other possible adjustments to reported operating cash flow.)**

	Bank of America	Bank of NY Mellon	BB&T	Capital One	Citigroup
Reported operating cash flow	\$ 4,034	\$ 2,914	\$ 5,355	\$ 3,357	\$ 96,540
Loan transfers (to) from held-for-sale					15,891
Investment transfers (to) from trading	(10,900)				37,912
Net federal funds (provided) used in operating cash flow					9,017
Trading (assets) liabilities and (loans held for sale) purchased in acquisitions	0 <sup>a</sup>				
<b>Adjusted operating cash flow</b>	<b>\$ (6,866)</b>	<b>\$ 2,914</b>	<b>\$ 5,355</b>	<b>\$ 3,357</b>	<b>\$ 159,360</b>

	Fifth Third	JP Morgan	KeyCorp	Northern Trust	PNC
Reported operating cash flow	\$ 3,104	\$ 23,098	\$ (220)	\$ 855	\$ 7,414
Loan transfers (to) from held-for-sale	1,160		3,236		1,763
Investment transfers (to) from trading					599
Net federal funds (provided) used in operating cash flow					
Trading (assets) liabilities and (loans held for sale) purchased in acquisitions		(117,374) <sup>b</sup>			(2,185) <sup>c</sup>
<b>Adjusted operating cash flow</b>	<b>\$ 4,264</b>	<b>\$ (94,276)</b>	<b>\$ 3,016</b>	<b>\$ 855</b>	<b>\$ 7,591</b>

--continued

**Exhibit 6 (continued). Adjustments to Reported Operating Cash Flow, Year Ended December 31, 2008 (dollars in millions)**  
**(These are proposed conceptual adjustments done in the spirit of discussion. The adjustments are not necessarily in accordance with generally accepted accounting principles. Please refer to the conclusion section of this research report where we seek input on these and other possible adjustments to reported operating cash flow.)**

	Regions	Street	SunTrust	US Bancorp	Wells Fargo
Reported operating cash flow	\$ 2,006	\$ (1,956)	\$ 3,700	\$ 5,307	\$ (4,831)
Loan transfers (to) from held-for-sale			656		4,829 <sup>d</sup>
Investment transfers (to) from trading					544 <sup>e</sup>
Net federal funds (provided) used in operating cash flow					
Trading (assets) liabilities and (loans held for sale) purchased in acquisitions					(44,102) <sup>f</sup>
<b>Adjusted operating cash flow</b>	<b>\$ 2,006</b>	<b>\$ (1,956)</b>	<b>\$ 4,356</b>	<b>\$ 5,307</b>	<b>\$ (43,560)</b>

<sup>a</sup>For Bank of America, the Merrill Lynch transaction closed on January 1, 2009 and is not reflected here. No trading assets were reported as acquired in the Countrywide transaction.

<sup>b</sup>For JP Morgan, Washington Mutual trading assets of \$5,691 and trading liabilities of \$585 and Bear Stearns trading assets of \$136,535 and trading liabilities of \$24,267 result in net trading assets acquired of \$117,374.

<sup>c</sup>For PNC Financial, National City trading assets were not separately disclosed. The amount reported is for acquired loans held for sale.

<sup>d</sup>For Wells Fargo, loans transferred from held-for-sale include \$3,498 million in loans transferred from held-for-sale to mortgage servicing rights.

<sup>e</sup>For Wells Fargo, \$544 million was transferred from loans held for sale to investments held as available-for-sale.

<sup>f</sup>For Wells Fargo, the Wachovia transaction included trading assets of \$44,102. No separate disclosure of trading liabilities acquired, if any, was provided.

Source: Form 10-K Annual Reports with the Securities and Exchange Commission for December 31, 2008 for the indicated companies.

## Concluding Comments

This study provides many reasons why cash flows may not be important measures of financial performance for the commercial banks. While banks are generally consistent in their classifications of cash flows from operating, investing and financing activities, the significant and frequent effects of non-cash transfers and the cash flow impacts of acquisitions cloud for them the usefulness of the statement of cash flows.

We surveyed the cash flow reporting practices for a sample of fifteen of the largest, independent and publicly-traded U.S. commercial banks. We adjusted their reported operating cash flows for classification differences noted in the treatment of federal funds transactions, for non-cash transfers of loans and investments between categories that impact operating cash flow, and for the effects of acquisitions on operating cash flow. In the adjustment process we found notable changes to operating cash flow. In particular, we saw declines in adjusted operating cash flow for Bank of America, JP Morgan and Wells Fargo, and increases in adjusted operating cash flow for Citigroup, Fifth Third Bancorp, KeyCorp, PNC Financial and SunTrust Banks.

Analysts who evaluate the financial performance of commercial banks will want to give consideration to adjustments such as these when examining bank finances. Bank regulators and the FASB may also want to consider these adjustments and the somewhat limited disclosures of information relevant for the adjustments illustrated in Exhibit 6. More detailed information on items such as brokered deposits and acquisition-related cash flows would be helpful.

## Seeking Comments

As a final thought, with this research report our intent is to open a dialogue and seek comments on how analysts define operating cash flow for the commercial banks. For non-financial companies, cash flow is an important measure of financial performance. For banks, it is given only limited, if any, attention. It would seem that there is information to be gained from a reliable measure of operating cash flow for the banks.

We think that the reason that bank cash flow is given such limited attention is that for the banks, most analysts believe that under GAAP, operating cash flow is not properly measured. Even our adjusted amounts, designed mainly for discussion purposes, do not necessarily give more meaningful amounts. The irony of deriving an adjusted operating cash flow measure for 2008 of \$159,360 million for Citigroup but an adjusted operating cash flow measure for 2008 of *negative* \$94,276 million for JP Morgan is not lost on us. These are two companies whose financial fortunes diverged significantly during 2008. Shouldn't their cash flows reflect that divergence?

Certainly our adjusted operating cash flow measures would have been more comprehensive and reliable had customer-related deposit activity been included. Unfortunately, we could not identify the amounts of brokered deposits from available disclosures. We also needed more disclosures on acquired operating-related assets and liabilities. Adjustments for these amounts may have changed our results.

Are there other items that we should include in operating cash flows or items that should be excluded from it? For example, for banks are commercial paper borrowings truly a financing activity, or is an operating designation more appropriate? If so, what about other borrowings? Should all investment activity, not just purchases and sales of trading securities, be included in operating cash flow? What about loans held for investment purposes or assets held pursuant to foreclosure proceedings? Do these constitute investing or operating activities? What about deposits? Should all deposit activity, including brokered deposits be included in operating cash flow or financing cash flow? Are there other adjustments to consider? What about non-cash transfers? Should the implied cash flow associated with these actions be reported on the statement of cash flows? We would greatly appreciate your thoughts.