



UPDATED REPORT  
NSF/OD FEE ANALYSIS  
FOR 2006

JANUARY 9, 2007

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## Executive Summary

Bretton Woods has been actively involved in analyzing NSF/OD fees for banks since 1998. The firm has performed several analytical reports over the years.

The research exhibited in this report is an update to the analysis Bretton Woods conducted in the Fall of 2004 and initially updated in February 2005 to quantify NSF/Overdraft fee trends. Additionally, Bretton Woods expanded the previous study to analyze the NSF/OD activity by state. Since FDIC and NCUA report data by the bank's headquarters, service charge income is skewed for certain states that headquarter large bank holding companies (e.g. North Carolina; Bank of America and Wachovia).

To adjust for this skewing, Bretton Woods obtained the deposits by state (FDIC reports these numbers based on the branches resident in the state) and calculated the ratio of states deposits to total deposits in the United States. This ratio was then applied to the service charge income to more reasonably determine the NSF/OD income and number of NSF items at the state level. There are some fairly significant differences by state in the usage and impact of NSF's at the household level. Alaska, Colorado, Idaho and Indiana have a low of .20% of NSF fees to average household income while Missouri, New York, Nevada and Alabama all have NSF fees to average household income exceeding .50%. The national ratios are .41% with a median of .37%

The following is a high level recap of the analysis:

- The majority of personal checks are written for amounts under \$100 according to **The 2004 Federal Reserve Payments Study - Analysis of Noncash Payments Trends in the United States: 2000 - 2003**
- Another study of NSF fees by state, conducted by CheckAgain, another Fiserv Connection (<http://166.73.20.151/statefees.asp>) indicates a median NSF fee of \$25, an average NSF fee of \$27 with a high of \$40 and a low of \$15.
- Many financial institutions have increased their ODP limits to the \$700 - \$900 levels and expanded the service to small business checking accounts with limits in the \$1,500 to \$2,000 range.
- The cost of the ODP service is very expensive since most items presented against insufficient funds are lower dollar amounts, usually under \$100 because most financial institutions pay item in a high dollar to low dollar sequence. The result is that more items are presented against insufficient funds. Most overdrafts are satisfied when the customer receives a paycheck. If a person is paid bi-weekly, the average overdraft is \$100 and the overdraft is outstanding for seven days. With an average NSF fee of \$27.40 (Fall 2006 bankrate.com study) per item, the APR is 1,429%. Should the overdraft be outstanding fifteen days, the ARP is 664% and if outstanding for thirty days, then the APR is 333%.

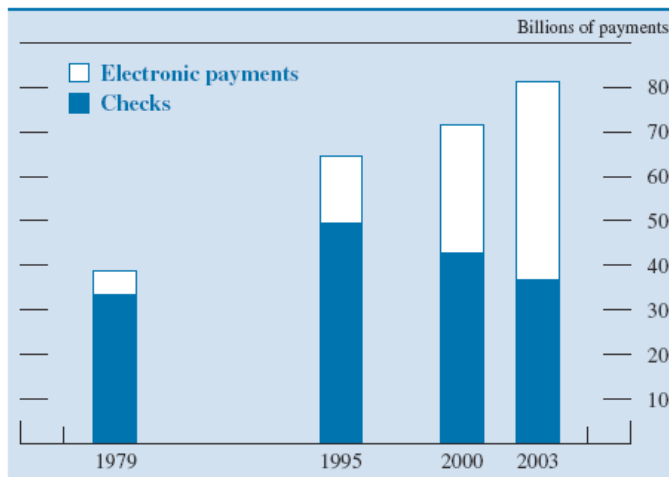
Since the last analysis, the following general statements apply:

- NSF/OD prices have risen significantly although this does not fully account for the total increase in NSF fees.
- New tiered NSF fees from banks are increasing costs for consumers
- Some banks are applying a daily fee in addition to the per item NSF/OD fee
- A recent trend has banks paying debits from high dollar to low dollar across all transaction types. Historically, banks would pay teller cash items and then ACH items before paper check items. The new methodology has the effect of increasing the number of NSF items.
- While the number of checks has declined, total payments (check, Debit Card, ACH and ATM) have increased annually. *See Table 1.* Banks are now paying these electronic items into overdraft. This is a significant contributing factor.
- NSF fees represent 3.6% of total checking account balances and .41% of household incomes
- NSF fee prices are rising at a faster rate than the Consumer Price Index.
- NSF/OD fees are becoming a greater contributor to bank profitability
- The large banks (> \$10 billion in assets) represent 16% of all FDIC insured financial institutions account for 77% of NSF fees booked.
- Community banks under \$300 million in assets represent 66% of all banks account for 13% of NSF fees booked.

## Findings

Payment preferences are shifting away from check to debit and credit card transactions. Accordingly, late fees and penalties, while increasing overall, are shifting to the new payment preferences of customers.

### 1. Annual number of noncash payments in the United States, selected years



SOURCE: Federal Reserve Board.

The NSF/OD fee component of total bank revenue is increasing due to the following:

- Higher unit prices of the fees (NSF/OD and Merchant)
- Higher usage by customers.
  - NSF fee are somewhat price inelastic and higher prices do not negatively impact usage.

For 2006 (September 30, 2006 Annualized)

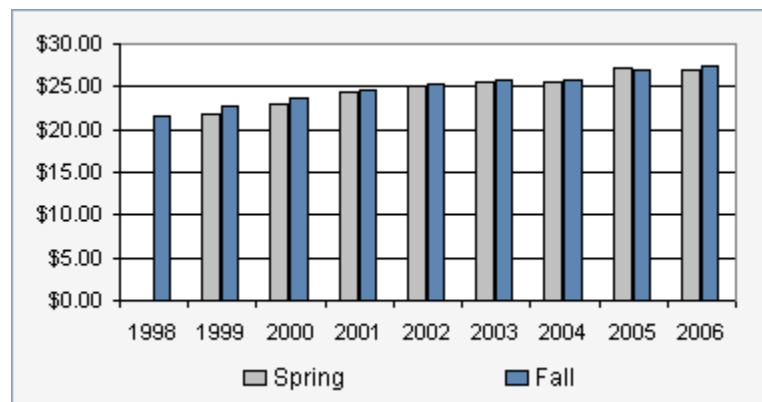
- 1.1 billion annual NSF items
- 20% or 19.9 million households account for 80% or 880 million NSF items for \$24.1 billion of NSF fees
- 55 NSF checks per year written by active NSF household
- \$1,507 in annual NSF fees paid by an active household

For all banks in 2006, NSF/OD fees represent 8.3% of pre-tax net income.

For 66% of all FDIC insured banks (all banks under \$300 million in assets), NSF/OD fees represent 26% of pre-tax net income

NSF/OD fees grew 5.2% from 2004 to 2005 and 6.4% from 2005 to 2006.

The average bounced-check fee increased from \$27.04 to \$27.40 since the Spring of 2006 survey. The average fee is the highest on record.



Bankrate.com Fall, 2006

The average bounced-check fee has increased with remarkable consistency since the twice-annual Bankrate.com survey commenced in 1998. The first survey, in fall 1998, carried an average bounced-check fee of \$21.57 and has increased about 27 percent since. In the Fall 2006 survey, nonsufficient funds or NSF fees established a new record high of \$27.40 for each occurrence, up from \$27.04 in the spring. There were 85 accounts posting increases in the bounced-check fee and just 32 decreases, compared to 39 increases and 19 decreases in the past survey.

Increasingly, banks are employing a tiered fee structure for bounced checks. Under the tiered structure, the cost of bouncing a check can increase as additional checks fail to clear.

For example Wachovia Bank has introduced a tiered fee structure for bounced checks. The first check will cost \$25, with the fee increasing to \$30 each for the second, third

and fourth checks, and anything beyond that is \$35 each. Furthermore, Wachovia's policy is typical of some other large banks, such as Bank of America and U.S. Bank, in that, when charging the fees, it counts all the occurrences during the past 12 months.

So while the cost of one bounced check at Wachovia decreased to \$25 from the previous survey, the cost of bouncing more than one check or repeatedly overdrawing the account during a 12-month period is now higher. The account holder that rarely bounces checks may benefit under the tiered structure, while more chronic NSD writers will pay more.

The Joint Guidance on Overdraft Protection Programs from the FFIEC dated February 18, 2005 highlights the controls financial institutions should place on such programs. In spite of this guidance, some banks appear to be exploiting the fee potential of these programs by raising the NSF/OF fee and adding tiered pricing and daily fees.

In the Fall of 2006, insufficient funds fee are now averaging \$27.40 from \$25.63 in the Spring of 2004 – a 6.9% increase. By contrast the Consumer Price Index is up 2% for the same period from the U.S. Department of Labor, Bureau of Labor Statistics (<http://www.bls.gov/cpi/>)

## Methodology

Bretton Woods analyzed the size and scope of the NSF/OD market with the following methodology:

- The service charge/NSF income analysis was updated from 2004 to the 2005 numbers from the FDIC (Federal Deposit Insurance Corporation) and NCUA (National Credit Union Administration)
- Claritas data of households with checking accounts and average household incomes by state
- Additional research extracted data from a variety of sources, including:
  - BAI Banking Strategies article, "Sizing NSF-Related Fees", January 2005
  - BAI Banking Strategies article, "Retailers' Role in the Demise of the Check", May/June 2005
  - The Depository Financial Institution Payment Study, Federal Reserve Bank, December 2004
  - FDIC, Statistics on Depository Institutions, <http://www2.fdic.gov/sdi/main.asp>)
  - NCUA data for credit union statistics in the United States for 2006, <http://ncua.gov/IndexCUQuery.htm>
  - Bankrate.com 2006 bank product pricing survey

This data was then utilized to logically calculate the NSF/OD usage patterns in 2006.

Service charge income data from all banks, thrifts and credit unions were gathered for December 2005 (\$40.0 billion) and for September 2006 annualized (\$42.2 billion). A 2003 Bank Administration Institute study indicated a 50% ratio of NSF fees to all service charges and fee income. However, it is Bretton Woods' opinion and experience that this is a very conservative number. Many commercial banks' NSF income is well in excess of 50% of total deposit service charge income and significantly higher in credit unions.

**For the purpose of this analysis, Bretton Woods uses a 70% ratio for banks and 80% for credit unions.**

Therefore, Bretton Woods estimates that NSF/OD income for 2006 will be in excess of \$22 billion. Divided by the average national NSF charge of \$27.04 (*Bankrate.com*), Bretton Woods calculates 1.1 billion debits presented against insufficient funds.

Another method to calculate the number of NSF items is derived from the 2004 Deposit Institution Payment Study, by the Federal Reserve Bank. It analyzed the national number of return check, return ACH debit and return debit card transactions, states that there are 80.9 billion debit transaction from checks, ACH, ATM and debit cards. The study also suggests that .51% of these transactions, 413 million, are returned as insufficient. The author's experience indicates that of all the debits presented against insufficient funds, banks now pay more items into overdraft than return the items. Assuming 60% of all items presented against insufficient funds are paid into overdraft and if 413 million items are returned equates to 40% of total items, then 1.03 billion items are presented against insufficient funds.

## Analytics

The following data and calculations are the basis for this paper's NSF/OD analysis. The data sources are FDIC, Statistics on Depository Institutions, <http://www2.fdic.gov/sdi/main.asp>; NCUA data for credit union statistics in the United States for 2006, <http://ncua.gov/IndexCUQuery.htm>; Bankrate.com, [http://www.bankrate.com/brm/news/chk/chkstudy/checking\\_study\\_bounced\\_check\\_fee\\_a1.asp?caret=6](http://www.bankrate.com/brm/news/chk/chkstudy/checking_study_bounced_check_fee_a1.asp?caret=6) and Claritas, <http://www.claritas.com/claritas/Default.jsp>

### Financial Institution and Household Data

- 8,976 2004 Financial Institutions (*FDIC Data*)
- 8,832 2005 Financial Institutions (*FDIC Data*)
- 8,743 2006 Financial Institutions (*FDIC Data*)
- 9,014 2004 Credit Unions (*NCUA Data*)
- 8,695 2005 Credit Unions (*NCUA Data most recent data*)
- 17,437 2005 Total Financial Institutions (Banks and Credit Unions)
- \$11.6 trillion = total assets
- \$ 7.7 trillion = total deposits
- 80.9 billion DDA transactions (*2004 Federal Reserve study*)
- 109 million US households – (*US Census Bureau*)
- 112.3 million US households (*Claritas 2006 estimate*)
- 89.4% of US households with checking accounts – (*Federal Reserve Bank*)
- 88.5% of US households with checking accounts – (*Claritas data*)
- 99.3 million households with checking accounts (*Claritas data*)

### Financial Data

#### Banks

- \$32.8 billion – 2004 service charge income (*FDIC Data*)
- \$34.5 billion – 2005 service charge income (*FDIC Data*)
- \$36.4 billion – September 2006 annualized service charge income (*FDIC Data*)

#### Credit Unions

- \$4.9 billion – 2004 fee income (*NCUA Data*)
- \$5.5 billion – 2005 fee income (*NCUA Data*)
- \$5.9 billion – September 2006 annualized service charge income (*NCUA Data*)

#### Total

- \$37.7 billion – 2004 service charge income
- \$40.0 billion – 2005 service charge income
- \$42.3 billion – September 2006 annualized service charge income
  
- Average NSF = \$25.80 (*Bankrate.com Fall 2003 survey*)
- Average NSF = \$27.40 (*Bankrate.com Fall 2006 survey*)



### Calculated Data - 2006

- \$22.0 billion NSF fees booked
  - *Conservatively assumes 50% of service charge income are NSF fees (Bank Administration Institute, Sizing NSF-Related Fee, January/February 2005, Volume LXXXI, Number 1; <http://www.bai.org/bankingstrategies/2005-jan-feb/sizing/>)*
- \$30.2 billion NSF fees booked
  - *Bretton Woods' estimate of 70% of service charge income for banks are NSF fees and 80% of credit union fee income comes from NSF fees*
- 1.1 billion NSF Items (checks and electronic)
  - *\$30.2 billion divided by \$27.40 average NSF fee*
- 11.08 NSF/OD per average household
  - *1.1 billion NSF items divided by 99.3 million households with checking accounts (Claritas data)*
- 880 million NSF's written by 20% of checking account households
  - *Standard Pareto analysis (80/20 rule) supported by Bretton Woods experience*
  - *1.1 billion NSF items multiplied by 80%*
- 19.9 million households write the majority of NSF items
- 55 NSF checks per year written by active household NSF writers
  - *99.3 million households with checking accounts multiplied by 20%*
  - *1.1 billion NSF items divided by 19.9 million active NSF households*
- \$1,507 in annual NSF fees paid by the active household
  - *55 multiplied by \$27.40*

**Table 1**

Type of payment	Number		Value		
	Billions of payments	Percent of total	Trillions of dollars	Percent of total	Average, in dollars
<i>2000</i>					
Check <sup>1</sup> .....	41.9	57.8	39.8	66.7	951
Electronic .....	30.5	42.2	19.9	33.3	651
Debit card .....	8.3	11.4	.3	.6	42
Signature .....	5.3	7.3	.2	.4	40
PIN .....	3.0	4.2	.1	.2	46
Credit card .....	15.6	21.6	1.3	2.1	82
General-purpose <sup>2</sup> ..	12.3	17.0	1.1	1.8	87
Private-label <sup>2</sup> .....	3.3	4.6	.2	.3	62
ACH <sup>4</sup> .....	6.1	8.4	18.2	30.6	2,984
CCD .....	1.0	1.4	13.1	22.0	12,585
Retail .....	5.1	7.0	5.1	8.5	1,005
EBT <sup>5</sup> .....	.5	.7	.0	.0	26
<b>Total noncash payments .....</b>	<b>72.4</b>	<b>100.0</b>	<b>59.7</b>	<b>100.0</b>	<b>824</b>
<i>2003</i>					
Check <sup>1</sup> .....	36.6	45.3	39.0	59.1	1,065
Electronic .....	44.3	54.7	27.0	40.9	609
Debit card .....	15.6	19.3	.6	1.0	40
Signature .....	10.3	12.7	.4	.6	42
PIN .....	5.3	6.6	.2	.3	38
Credit card .....	19.0	23.4	1.7	2.6	89
General-purpose <sup>2</sup> ..	15.2	18.8	1.4	2.1	93
Private-label <sup>3</sup> .....	3.8	4.6	.3	.4	76
ACH <sup>4</sup> .....	8.9	11.0	24.6	37.3	2,766
CCD .....	1.4	1.8	16.4	24.8	11,424
Retail .....	7.5	9.2	8.3	12.6	1,108
EBT <sup>5</sup> .....	.8	1.0	.0	.0	26
<b>Total noncash payments .....</b>	<b>80.9</b>	<b>100.0</b>	<b>66.0</b>	<b>100.0</b>	<b>815</b>
	Number		Value		
	Change over period (billions of payments)	Annual rate of change (percent) <sup>6</sup>	Change over period (trillions of dollars)	Annual rate of change (percent) <sup>6</sup>	
<i>Change, 2000–2003</i>					
Check .....	–5.2	–4.3	–.8	–.7	
Electronic .....	13.8	13.2	7.1	10.7	
Debit card .....	7.3	23.5	0.3	21.9	
Signature .....	5.0	24.9	.2	26.7	
PIN .....	2.3	21.0	.1	13.9	
Credit card .....	3.4	6.7	.4	9.9	
General-purpose ..	2.9	7.3	.3	9.5	
Private-label .....	.5	4.4	.1	11.5	
ACH .....	2.8	13.4	6.4	10.5	
CCD .....	.4	11.1	3.2	7.5	
Retail .....	2.4	13.8	3.2	17.6	
EBT .....	.3	15.4	.0	16.2	
<b>Total noncash payments .....</b>	<b>8.6</b>	<b>3.8</b>	<b>6.3</b>	<b>3.4</b>	