

## Special Analysis

### Term Deposits Yielding Net Negative Return after inflation

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#### Implications

- Term deposits that were opened in 2009 and matured on, or will mature after, December 2009, are yielding net negative return when adjusted for inflation.
- Consumers are wary of raising inflation, and are shying away from short-term deposits despite an increase in overall deposits.
- Balances of longer-term deposits (over one year) are stable for now but could be impacted if growth in the inflation rate persists beyond 2010.

#### Overview

November of 2009 was a turning point in the annual inflation rate – a shift from deflation (-0.18 percent) to inflation of 1.84 percent. The trend of growing inflation has continued in December of 2009 (2.72 percent), and is very likely to continue during most of 2010.

The projection is that the annual inflation rate will continue to rise in 2010, as long as the Fed fund rate is unchanged. Recently, the Fed signaled that it is considering an alternative to the “traditional” fund-rate increase to absorb some of the excess liquidity in the market and control inflation.

This new approach consists of the rate that the Fed is currently paying banks on reserves deposited in the Central Bank. Currently, the rate that the Fed is paying the banks is 0.25 percent. By raising the rate the Fed pays on reserves, banks would be encouraged to deposit more of their money with the Central Bank, achieving the goal of taking money out of the market. As of February 2010, reserves deposited at the Central Bank amount to \$1.1 trillion. Congress gave the Fed authority to pay interest on reserves in October 2008.

The increase of 25 basis points in the discount rate that took effect on February 19 is not projected to have a noticeable impact on loan or deposit rates because this rate is applicable only to emergency loans from the Fed. Currently, there are only about \$14 billion in such loans outstanding.

#### Purpose

The purpose of this analysis is to examine the impact of the annual inflation rate on the yields of short and long-term deposits. In addition, this analysis examines the amount of balances in short (less than one year) vs, long (over one year) term deposits during the four quarters of 2009. A decline in short-term-deposit balances, in the fourth

quarter of 2009, could suggest that consumers are anticipating an increase in the annual inflation rate, and are holding off on making time commitment with their money until the interest rates on such deposits will exceed the annual inflation rate.

### **Analysis**

- We obtained the annual inflation rate, by month, from January 2009 through December 2009.
- We obtained the national average APY for CDs and MM, monthly, from January 2009 through December 2009.
- We analyzed the variance between the annual inflation rate and the national average APY for deposits from January 2009 through December 2009.
- We analyzed the net return of a 12-month \$10K CD that was opened in January of 2009, and matured in December 2009.
- We analyzed the distribution of term-deposit balances in FDIC institutions, from January to December 2009.

### **Findings**

- We found that November of 2009 was a turning point between a deflation of -0.18 percent to inflation of 1.84 percent (Table 1).
- We found that term deposits that were opened in the first ten months of 2009, and matured in December of 2009, have yielded a net negative return when adjusted to inflation (Figure 1)
- We found that a 12-month term deposit that was opened in January of 2009, at the, then an APY of 1.59 , and matured in December of 2009, yielded a net negative return of -1.13% (Figure 2).
- We found that all-term deposits declined from \$2, 529 billion to \$2,191 billion during 2009. A decline of \$337 billion, or 13.4 percent (Table 2).
- We found that short-term deposits of up to one year declined from \$2,729 billion to \$2,227 billion during the examined period. A decline of \$502 billion, or 18.4 percent (Table 2).
- We found that term deposits of one year and over increased from \$494 billion to \$548 billion during the examined period. An increase of \$54 billion, or 10.9 percent (Table 2)

### **Discussion**

The findings point to a growing concern among depositors about the impact of higher inflation on the buying power of their money. For example, a 12-month CD of \$10K, which was obtained in January of 2009 at the national average rate of 1.59, has matured in December of 2009 with a net negative return of -1.13%. This means that the buying power of this \$10K deposit was reduced to \$9,887 when matured in December.

The decline in the buying power is a reflection of the increase in the Consumer Price Index (CPI), from January to December 2009, as measured by the Bureau of Labor Statistics.

One possible explanation of the decline in short-term deposits is that consumers were reluctant to lock-in their funds anticipating that inflation will rise in late 2009 or early 2010 due to the massive liquidity in the market. Thus, locking-in short-term

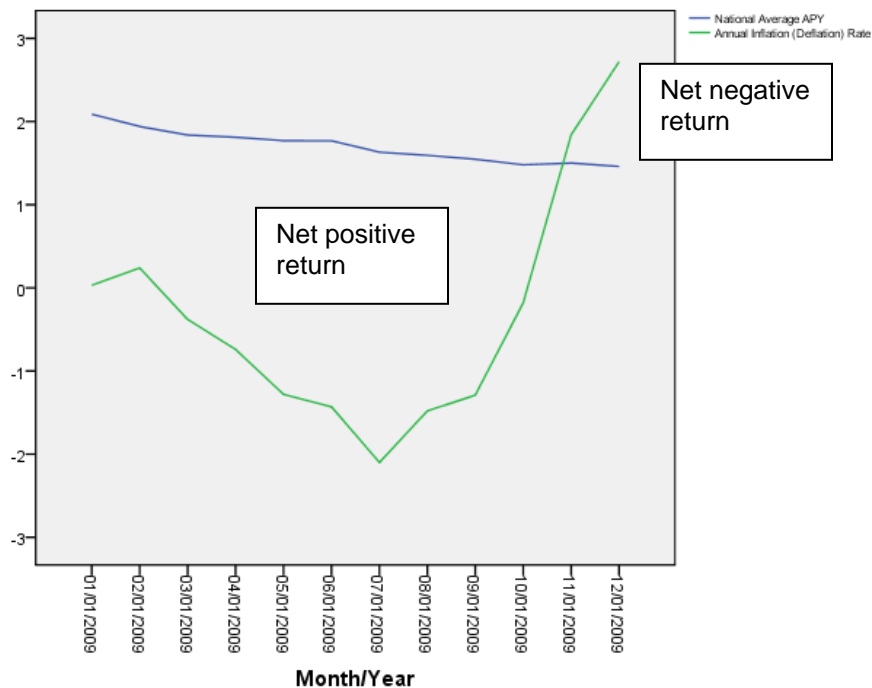
deposits at relatively low interest rates, anticipating that the inflation rate will rise, was not very appealing. It's important to note that only short-term deposits (up to one year) are on the decline. Deposits of over one year had a modest gain in balance, which could mean that there is anticipation that the Fed will increase the fund rate, pushing deposit rates back up.

**Table 1**  
Net return on deposits January through December 2009

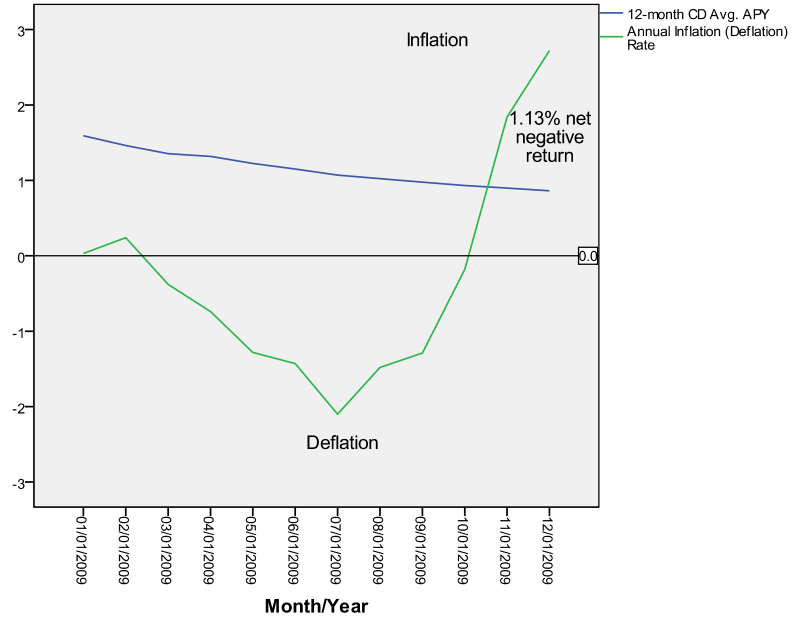
Month/Year	National Average APY	Annual Inflation (Deflation) Rate	Net ROD on Avg. APY
Jan-09	2.09	0.03	2.06
Feb-09	1.94	0.24	1.70
Mar-09	1.84	-0.38	2.22
Apr-09	1.81	-0.74	2.55
May-09	1.77	-1.28	3.05
Jun-09	1.77	-1.43	3.20
Jul-09	1.63	-2.10	3.73
Aug-09	1.59	-1.48	3.07
Sep-09	1.55	-1.29	2.84
Oct-09	1.48	-0.18	1.66
Nov-09	1.50	1.84	-0.34
Dec-09	1.46	2.72	-1.26

Source: Bureau of Labor Statistics and MRI

**Figure 1**  
Net (Positive and negative) return on the average deposit APY in 2009



**Figure 2**  
 Net negative return of a 12-month \$10K CD that matured in December 2009.



**Table 2**  
 Increase/decrease in term deposits during 2009 (Billions)

Period	Total deposits in US offices	All-term deposits	Non-term deposits	Less than one year	One year and over
Q1 2009	\$7,538	\$2,528	\$5,010	\$2,729	\$494
Q2 2009	\$7,555	\$2,439	\$5,116	\$2,611	\$501
Q3 2009	\$7,553	\$2,321	\$5,232	\$2,437	\$529
Q4 2009	\$7,696	\$2,191	\$5,505	\$2,227	\$548
<b>Variance</b>	<b>\$158</b>	<b>-\$337</b>	<b>\$495</b>	<b>-\$502</b>	<b>\$54</b>

Source: FDIC

**Figure 3**  
 Shift from term to non-term deposits during 2009 (Billions)

