

## Special Analysis

### Impact of FDIC Deposit Insurance Fund (DIF) Balance on Deposit APY

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#### Purpose

The purpose of this analysis is to examine the relationship between the balance level of the FDIC Deposit Insurance Fund (DIF), and the average interest-rate paid on deposit products.

#### Analysis

We examined the linear relationship (Regression) between the DIF quarterly balances and the national average APY for CDs and MM for the past five years (Q4 2004 to Q2 2009). The raw data for the FDIC DIF balances was obtained from the FDIC Quarterly Reports, and the raw data for the national average APY for deposit products was obtained from MRI's database.

The national average APY consists of a sample of CDs and MM as follows: CD - Regular, 3, 6, 9, 12, 24, 30, 36, 48 and 60 months. CD - Special, 3, 6, 9, 12, 24, 30, 36, 48 and 60 months. MM - Regular and MM - Special. The statistical analysis is based on a convenience sample of 1,300 institutions as was determined by a-priori, two-tailed test. The t-Test was based on the following parameters: Alpha=0.05; Power=0.95; Effect size=0.20.

- We established the DIF balances as the Independent Variable (IV).
- We established the national average APY as the Dependent Variable (DV)

#### Findings

- We found that 60.7% of the variance in the national-average APY for deposit products can be explained by the variance in the DIF balance (Table 1).
- We found the analysis of variance (ANOVA) is very significant (Alpha < 0.01) See table 2.
- We found a strong linear relationship between the DIF balance and the average-national APY (Beta .779), and very significant (Alpha < 0.01). See Table 3.

## Implications

- Historically, the level of the FDIC DIF balance had a substantial and significant impact on the average APY for deposit products. When the DIF balance was higher, the average APY was higher and conversely.
- For every \$4.8 billion fluctuation in the DIF (up or down), the average APY was impacted by 10 bps in the same direction.
- It is unclear how a replenishment of the DIF through a pre-payment will impact the national-average APY for deposit products.

**Table 1**

R-Square of DIF balances (IV) and national-average APY (DV)

### Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .779 <sup>a</sup> | .607     | .584              | .54282                     |

a. Predictors: (Constant), Fund Balance

**Table 2**

Analysis of Variances

### ANOVA<sup>b</sup>

| Model |            | Sum of Squares | df | Mean Square | F      | Sig.              |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1     | Regression | 7.747          | 1  | 7.747       | 26.293 | .000 <sup>a</sup> |
|       | Residual   | 5.009          | 17 | .295        |        |                   |
|       | Total      | 12.756         | 18 |             |        |                   |

a. Predictors: (Constant), Fund Balance

b. Dependent Variable: Average APY

**Table 3**

### Coefficients<sup>a</sup>

| Model |              | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|--------------|-----------------------------|------------|---------------------------|-------|------|
|       |              | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)   | 1.283                       | .420       |                           | 3.055 | .007 |
|       | Fund Balance | 4.773E-5                    | .000       | .779                      | 5.128 | .000 |

a. Dependent Variable: Average APY

Source: FDIC Quarterly Reports and Market Rates Insight database.