Deposit Pricing

Mitigating Interest Expense in Today's Rising Rate Environment

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Summary

Financial institutions grappling with rising rates for retail deposits and increased competition for funding can benefit from understanding and practicing deposit pricing strategies. Deposit pricing that incorporates segmentation, in particular, can mitigate cost changes, help raise funding, or do both.

Introduction

In December 2015, the Federal Open Market Committee (FOMC) increased the federal funds target rate for the first time in seven years during which record low market rates were near zero. Since then, the rate has been raised eight more times and we have had a 225 basis points increase in the effective fed funds rate. During this same period, loan growth has exceeded deposit growth, and institutions have been paying higher rates for retail deposits. But you may have noticed that in 2019, wholesale market rates have actually dropped in some cases, and the Fed is keeping the target rate where it is for now. So are we out of a rising rate environment? Do financial institutions need to worry any longer about rising interest expenses as it relates to deposit pricing?

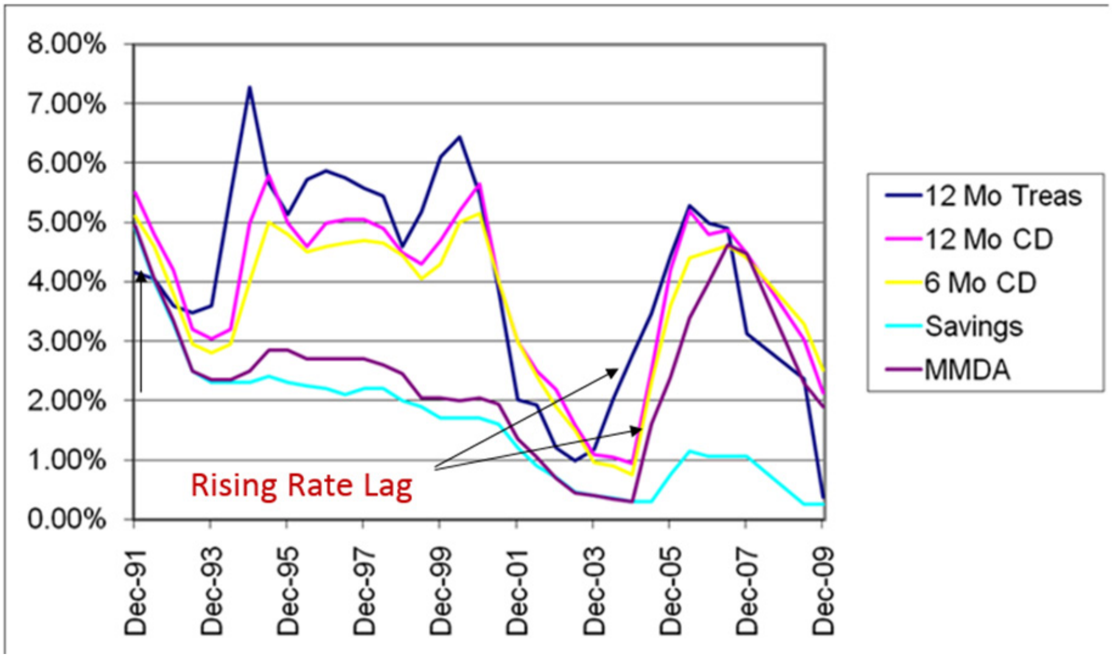
The answers are "not necessarily" and "absolutely." For most of you, deposit rates are still rising and it is happening for two reasons. The first is that historically, it takes a number of months before retail rates catch up to wholesale market rates. In other words, your rates may lag behind changes in market or competitor rates. This means that even if the market has stabilized, you haven't caught up yet. The second and more significant reason is simple supply and demand. There are institutions in every market that have to raise funding quickly to meet lending needs. Some of your local competitors are likely to have been paying higher rates to attract new deposits. In addition, we now live in a world where online institutions like Ally and Marcus are regularly bidding up deposit rates in every market with their online savings account promotions.

We generally expect funding costs to rise during rising rate environments – they always do. What we don't have to accept is that our costs must rise at the same level as they rise for others, or even at the same level they have done for us in the past. We can mitigate these costs changes in any rate environment by understanding and practicing segmentation strategies in our deposit pricing.

A Primer on Segmentation Pricing Strategies

Historically, when the Fed Funds rate increases and/or treasury rates rise financial institutions have "paid-up" for new deposits by increasing deposit account interest cost to varying degrees depending on type. For example, banks and credit unions typically bump CD (term) account rates at or close to the full movement in the market rates, while non-maturity accounts are priced-up in varying degrees less than that of the Fed Funds rate - depending on account type. In fact we know from historical data in general how much different categories react to market rate changes.

EXHIBIT - HISTORICAL MARKET BETA AND LAG



This chart shows us historical average retail deposit rates relative to the 12-month Treasury rate. If you follow how the 12-month CD rate tracks relative to the Treasury rate, you notice that when rates rise, the CD rates respond within a few months – typically 6 to 12 months. You also notice that the CD rates respond by a higher percentage to market rate changes than savings or money market deposit account (MMDA) rates. However, in recent rate environments, MMDA accounts have responded almost as much as CD rates have. We call the percentage response to market changes the beta. A beta of 100% would mean that my rates have responded by absorbing the entire market rate increase.

In our current rate environment, we know there are institutions with CD rates that have responded very close to the combined recent market rate change of 225 basis points, meaning they have a beta of close to 100%. If these institutions did not segment, then they actually paid more than the market rate for new CD balances. How is that possible?

How Institutions End Up Overpaying

Let's consider a typical example of how an institution will "pay up" in rising rates. This institution has raised CD rates once, but not by a lot so it is still losing CD balances at about 10% per quarter. So they decide to raise rates another 20-30 basis points across the board in order to stem the balance loss. The following cost analysis shows us the projected cost of these rate increases if it works – if it retains the 10% balances we have been losing and gets back to a more typical 5% growth rate:

Marginal Cost Analysis

Name:	Pay up to retain CD balances
Date:	5/31/2019
Rate Env (bp):	50

Summary

	Balance	Expense	Cost	BnchMk	Spread
Strategy 1	3,604	30	0.829%	2.540%	1.711%
Strategy 2	4,204	47	1.121%	2.540%	1.419%
Marginal Cost	601	17	2.876%	2.540%	-0.336%

Current					Strategy 1					Strategy 2				
					Notes:	Continue to lose 10% of balances				Notes:	Retain and attract new money			
Accounts	Term	Current Rate	Maturities	Decay %	New Rate	Beta	Retention %	Retention $	Expense	New Rate	Beta	Retention %	Retention $	Expense
		0.829%	**4,004**	**0.0%**	**0.829%**			**3,604**	**30**	**1.121%**			**4,204**	**47**
12 Mo CD - 1K	12	0.400%	300		0.400%	0.00	90.0%	270	**1**	0.600%	0.40	105.0%	315	**2**
12 Mo CD - 25k	12	0.600%	454		0.600%	0.00	90.0%	409	**2**	0.900%	0.60	105.0%	477	**4**
12 Mo CD - 100K	12	0.900%	3,250		0.900%	0.00	90.0%	2,925	**26**	1.200%	0.60	105.0%	3,413	**41**

The bottom line of this deposit pricing approach is shown in the chart's summary section. The simple math of dividing interest expense by total balances shows us that we will increase our average cost from our current 0.829% to 1.121%, which seems reasonable given changes in market rates. However, notice the marginal cost results. The actual cost of raising $601,000 (which is really retention plus growth) is 2.876%. It cost us more than the market rate to hang on to these balances because we are paying up on everyone who has a renewing CD whether or not a) they know it or b) they care about that. Well, everyone cares about getting the best rates on their CDs, don't they?

"It cost us more than the market rate to hang on to these balances because we are paying up on everyone who has a renewing CD whether or not a) they know it or b) they care about that."

A Pricing Strategy Alternative

Let's look at an alternative approach to deposit pricing that tests this statement – that everyone always wants the best rate. A commonly used alternative to just paying up to retain balances is to introduce CD specials. So using the case described above (which is not unusual by the way), what if we introduced an off-maturity special in order to find out who wants the best rate? And to be sure we aren't going to lose those depositors to the best rate in our market, we are going to go ahead and pay the top market rate. However, we are not going to raise rates on our standard CDs because we know that many of those depositors may not be rate sensitive now. They have other things going on in life, and they just want their CD to renew.

Marginal Cost Analysis

Name:	Segment with special
Date:	5/31/2019
Rate Env (bp):	50

Summary

	Balance	Expense	Cost	BnchMk	Spread
Strategy 1	3,604	30	0.829%	2.540%	1.711%
Strategy 2	5,104	56	1.090%	2.540%	1.450%
Marginal Cost	1,500	26	1.717%	2.540%	0.823%

Current					Strategy 1					Strategy 2				
					Notes:	Continue to lose 10% of balances				Notes:	Best rate only on special			
Accounts	**Term**	**Current Rate**	**Maturities**	**Decay %**	**New Rate**	**Beta**	**Retention %**	**Retention $**	**Expense**	**New Rate**	**Beta**	**Retention %**	**Retention $**	**Expense**
		0.829%	**4,004**	**0.0%**	**0.829%**			**3,604**	**30**	**1.090%**			**5,104**	**56**
12 Mo CD - 1K	12	0.400%	300		0.400%	0.00	90.0%	270	**1**	0.400%	0.00	90.0%	270	**1**
12 Mo CD - 25k	12	0.600%	454		0.600%	0.00	90.0%	409	**2**	0.600%	0.00	90.0%	409	**2**
12 Mo CD - 100K	12	0.900%	3,250		0.900%	0.00	90.0%	2,925	**26**	0.900%	0.00	90.0%	2,925	**26**
13 Mo Special - 25K	13				0.000%	1.00	0.0%	0		1.250%	2.50	100.0%	500	**6**
13 Mo Special - 150K	13				0.000%	1.00	0.0%	0		1.950%	3.90	100.0%	1,000	**20**

What we did here is create a special, and created pricing tiers. We segmented in two ways – by offering an off-maturity special (we could have made it 15 months, or even a bit longer) and we offered a "volume discount" by creating a $150,000 tier paying the best rate in our market. We think if we do this, we can actually raise additional CD funding.

In this case, the cost of the new funding is a much more reasonable 1.71% - less than the top rate offered and lower than our wholesale alternatives!

This basic segmentation pricing strategy is designed to separate rate-sensitive deposits from non-rate-sensitive deposits, thereby mitigating the institution's cost of interest. Now, you can argue with the assumptions used in this example, but we can tell you that having observed many experiments exactly like this in the real world, those assumptions are pretty accurate. We know through quite a bit of trial and error that when you execute a simple promotional CD offer, some percentage of existing CD holders will always decline the offer – depending on how it is structured and promoted.

Another segmentation feature is used to take advantage of the fact that consumer rate preferences change over time. What will happen is that customers in the lobby who open a new term account will virtually always opt for one of the promos, especially if the customer service rep makes them aware of it. But come maturity time if you renew the CD into a standard rate product, only a percentage of those special holders will make the effort to come in and shop for another special. Some will always do that of course, but that is exactly why you are doing segmentation in your deposit pricing – you are finding out who they are.

Other Ways to Segment

When you look at the distribution of balances among your account holders, you will invariably discover that a small percentage of your depositors holds a large percentage of the balances. This is particularly true in MMDA and savings accounts. You want to treat the best depositors well, but it still has to be cost effective, applied consistently, and fit into an overall pricing strategy. How? For starters – do you know who these depositors are? If so, you already have completed step one. Step two is to make them a segment and create a separate product line.

A common way to do this retroactively is with "stealth" products. These are rates that do not appear on your rate sheet and are generally not made available to customer service reps but are available to your best depositors usually when they bring it up. We are starting to see institutions become more proactive, however, and rather than wait until someone complains, they will introduce different relationship-based product lines that identify exactly what a depositor has to do to qualify for the institution's "best rates." A private banking program can be designed to simply re-package the products and services that appeal to this segment and thus avoid the fairness issues that invariably come up when you create rates that are not available to everyone. We have seen several community institutions create private banking programs staffed by one individual.

There are also multiple ways of defining relationship pricing that can be used across the product line – both published on a rate sheet and available as needed by officers. The common ones usually involve deposit rate bumps for a defined set of products (for example a direct deposit checking account gets you a defined number of basis points added to any standard rate).

Segmenting MMDA Balances

This sector is tricky. Historically, MMDA balances used to have lower betas than they do today. Now we see markets that have price leaders paying MMDA rates that represent 80-90% betas given the recent market increases. But if you have strong loan demand, no excess liquidity and are reluctant to borrow from the wholesale market, it is essential to raise money in this sector because of its popularity. One of the fastest-growing segments we have observed recently is business MMDA accounts – for attracting the liquidity that exists because of the recent profitability of many smaller businesses.

MMDA sectors are popular today because of our almost inverted yield curve – short term rates are higher than many longer term rates so I know as a depositor I can get a pretty decent rate without having to commit to a CD term.

Complicating this is the fact that MMDA product lines are often made up of multiple products – many of them left over from earlier segmentation strategies. When rates effectively went to zero for a few years, these products started to fill up with non-rate sensitive depositors.

Financial institutions still want to start with a basic approach of separating rate-sensitive from non-rate- sensitive depositors . The approach used today is going to depend on what the current product line looks like. Let's say for example that you currently have a regular MMDA and a premium MMDA. If you have not been pricing aggressively, it is likely that there isn't a large rate different between them, or the premium rate is below top of market. In that case, we would recommend introducing a new premium MMDA. Yes, another account. I know, we can hear the operations people groaning, but just remind them that there are 17 different flavors of M&Ms not counting the holiday special editions. (It turns out consumers don't mind having choices.)

The challenge in rolling out a new MMDA account is to consider all of the segmentation options you have available before doing so. You want to address the question that your CSRs are going to ask first – why in the world do we have another account already?

We've already discussed a couple of the segmentation choices, or barriers to entry, that financial institutions have available as they develop deposit pricing strategies. Here are a few more:

PRODUCT FEATURES THAT ACT AS BARRIERS

- Minimum Balance Requirements
- Balance Tiers
- Geography (market)
- New Money
- Relationship
- Channel (online vs branch)
- Limited Time

Deposit pricing strategies for MMDA balances should also start with determining rate sensitivity.

In MMDA sectors, we have seen success with geographic specials (offered in one market with lower market share), relationship requirements (have an open line of credit with us), and limited time offers. A limited time feature is straightforward; we will pay this rate until next November, at which time the rate for your account will revert to our standard published MMDA rate.

Below is a cost example that shows the creation of a new premium MMDA account that is based on the observation that our largest depositors are all well over the current high tier of $100,000.

Marginal Cost Analysis

Name:	MMDA new product
Date:	6/28/2019
Rate Env (bp):	0

Summary

	Balance	Expense	Cost	BnchMk	Spread
Strategy 1	26,959	179	0.665%	2.550%	1.886%
Strategy 2	33,859	300	0.886%	2.550%	1.664%
Marginal Cost	6,900	121	1.752%	2.550%	0.798%

Current					Strategy 1					Strategy 2				
					Notes	Continue to lose 15% annually!				Notes	New premium MMDA captures and grows			
Accounts	Term	Current Rate	Maturities	Decay %	New Rate	Beta	Retention %	Retention $	Expense	New Rate	Beta	Retention %	Retention $	Expense
Total/Avg		0.665%	31,717	15.0%	0.665%			26,959	179	0.886%			33,859	300
MM - 10K	0	0.150%	386	15.0%	0.150%	0.00	85.0%	328	0	0.150%	0.00	85.0%	328	0
MM - 50K	0	0.250%	1,148	15.0%	0.250%	0.00	85.0%	976	2	0.250%	0.00	85.0%	976	2
MM - 100K	0	0.550%	6,980	15.0%	0.550%	0.00	85.0%	5,933	33	0.550%	0.00	85.0%	5,933	33
Premium MM - 10K	0	0.400%	2,918	15.0%	0.400%	0.00	85.0%	2,480	10	0.400%	0.00	85.0%	2,480	10
Premium MM - 50K	0	0.500%	4,305	15.0%	0.500%	0.00	85.0%	3,659	18	0.500%	0.00	85.0%	3,659	18
Premium MM - 100K	0	0.850%	15,980	15.0%	0.850%	0.00	85.0%	13,583	115	0.850%	0.00	85.0%	13,583	115
New Prem MM - 100K	0	0.000%	0	15.0%	0.000%	0.00	0.0%	0		1.300%	1.00	100.0%	2,100	27
New Prem MM - 250K	0	0.000%	0	15.0%	0.000%	0.00	0.0%	0		1.950%	1.00	100.0%	4,800	94

In this example, we introduce a new premium MMDA to try to retain balances we've been losing at a rate of about 15% annually. The lowest tier for the new account is $100,000, and the best rate is available at $250,000. We do not change the rates on the standard products for now (though some do if they haven't raised them at all). We also define some specific relationship requirements for the new account. The marginal cost of raising this funding is most likely well below the marginal cost of raising it in a CD product.

Conclusion

Rising rate environments need not cause a knee-jerk high-cost deposit pricing reaction based on bank or credit union competitor pricing. But effective cost control is going to involve a segmentation of customers and pricing strategies that might not be in place yet. These deposit pricing strategies can be implemented in financial institutions looking to mitigate the impact of rate changes while retaining and growing deposits. Even with moderate cost benefits, the practice of segmentation will prepare financial institutions for upcoming changes in the rate and economic environments. You will get better at considering product options as you go through the exercise, and your staff will be better trained to understand what you are trying to accomplish with segmentation strategies.

Additional Resources

Why Your Institution Should Leverage a Core Deposit Study

Stress Testing: Why It Shouldn't (and Won't) Go Away

Leveraging Digital Channels & Capabilities for Revenue Growth

Real Price of Risk, Loan Pricing and Risk Rating

CECL for Community Banks: The Practical Path

How Community Banks Can Regain the Small Business Lending Market

CECL'S Impact on Your ALM Modeling

ABOUT ABRIGO

Abrigo is a leading technology provider of compliance, credit risk, lending, and asset/liability management solutions that community financial institutions use to manage risk and drive growth. Our software automates key processes – from anti-money laundering to asset liability management to fraud detection to lending solutions – empowering our customers by addressing their Enterprise Risk Management needs.

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Darryl Mataya is a Senior Advisor at Abrigo, where he manages the Farin deposit and loan pricing services and consults regularly with institutions. He has been part of the banking industry since the 1980s, first as a designer and developer of software solutions. In 1995, he and Tom Farin co-founded Farin Financial Risk Management's Internet division. Darryl runs the funding track program at the Graduate School of Banking at the University of Wisconsin-Madison. He is a graduate of Gustavus Adolphus College and has a graduate degree from the Wisconsin School of Business at UW-Madison.