

Multiple Account Management: Part 1

The Effect of Multiple Relationships on **Targeting Existing Customers**

This first of three articles on multiple account management begins an exploration of the dynamics of benefits and costs. The author emphasizes that the analysis presented here only scratches the surface of this complex and challenging topic—a full investigation would require a dedicated team of analysts. Nonetheless, this article tackles the initial question of revenue generation. Two banks' portfolios are analyzed. While the banks remain anonymous, this study is based on two actual examples of reported trade lines in TransUnion's files as of April 2004, which were revisited and analyzed in April 2006. **by Ezra Becker**

With the markets

for credit products reaching a saturation point, it gets harder and more expensive to acquire new customers. So banks turn inward and cross-sell additional products to their existing customers. And why not? Conventional wisdom cites three main benefits:

1. It is an excellent avenue for organic growth. Indeed, many banks use it as the only marketing channel for certain products.
2. Customers who have more than one relationship with a bank are generally more profitable to the bank than are those who use only a single product.
3. Customers who use multiple products tend to be more loyal and less likely to default on their debts.

From a cost perspective, it's far less expensive to insert a solicitation buckslip into a customer's monthly account statement than it is to mail a solicitation separately. Banks also can mine existing customer behavior data that they collect to preapprove an appropriate candidate pool for a given solicitation.



There are, in fact, many cost-effective ways to investigate the effects of multiple customer relationships, and the potential long-term benefits on how you view and market to your customer outweigh the initial cost outlay.

However, two problems with cross selling are often overlooked:

1. There is increased concentration risk. For example, a consumer who defaults on three credit products might cause a significantly bigger overall loss to a bank than a consumer who defaults on a single debt obligation.
2. There may be circumstances where the conventional wisdom fails, e.g., where multiple relationships do not increase profitability, or even result in smaller returns.

So what's the bottom line? Many institutions don't know one way or the other. Their data-gathering infrastructure is inadequate to provide an ongoing, comprehensive view of the global risk/reward dynamic presented by a given consumer with multiple product relationships. Why?

- Up until now, there just hasn't been the need. Business units (e.g., mortgage, credit card, auto loan) have historically operated as independent entities, and the business-unit owners and staff were compensated based primarily on the performance of their own portfolios.
- Financial institutions generally conduct multiple-relationship profitability studies as special, one-time efforts that require a great deal of data

and analytical coordination—an expensive process in terms of time, personnel commitment, and computational resources. Considering a price tag of several million dollars and the commitment of significant internal resources, it is hard to justify the expense of building the necessary infrastructure for an ambiguous, hard-to-quantify return.

Costs and resource issues aside, the impact of multiple relationships on consumer behavior has come under increasing regulatory scrutiny as of late. Banks that are unable to provide adequate business intelligence regarding this issue have faced an increasingly concerned response from regulators, requiring in some cases additional, restrictive risk policy guidelines.

There are, in fact, many cost-effective ways to investigate the effects of multiple customer relationships, and the potential long-term benefits on how you view and market to your customers outweigh the initial cost outlay. Once you add in the possibility of increased regulatory oversight, it becomes clear that the more information you have in this area, the better off you are in supporting your marketing and business processes.

Let's begin with an analysis of revenue generation. *Ceteris paribus*,

Any study of this type must first define what constitutes a relationship. Obviously, a consumer who has declared bankruptcy has stated in a general sense that he or she can no longer maintain any relationship with a given bank, so loans in bankruptcy status are not included for analysis. Accounts that the consumer has closed, and accounts that have been sold, securitized, or transferred by the bank to an outside financial institution no longer represent a relationship, and they are excluded as well.

Naturally, there are situations that provide some level of ambiguity, and a judgment call must be made. For example, how should one define loans in delinquency status? In other words, at what point does a consumer who can no longer pay to maintain an account *de facto* consider that relationship terminated? There are many approaches to this question, and all are valid to some extent under different circumstances. This study considers only those trades that were less than 90 days past due (DPD) as of April 2004, because many financial institutions consider 90 DPD as the onset of serious delinquency. The loans considered here were on essentially equal footing at the beginning of the performance period, so any differences in the end state would not be confounded by differences in initial delinquency status.

Another ambiguous relationship exists for revolving credit instruments that have not been closed but have been quiescent for a period of time. Does the consumer still consider there to be a relationship but simply has not used that product for some time? Or does the consumer consider the relationship ended but has not bothered to notify the bank? Any bank analyst that explores this dynamic should choose a cutoff that best fits his or her portfolio's natural usage cycle (also called *velocity*). This study includes only those loans/lines of credit that were verified within 12 months of the April 2004 observation point.

While the assumptions made here are sufficient for a first-pass analysis of this dynamic, any bank performing such an analysis for itself should take the utmost care in defining relationships and exclusions, so the results are as accurate, comprehensive, and meaningful as possible.

or “all other things being equal,” is there evidence that consumers with multiple account relationships carry larger balances or carry balances longer and therefore generate more interest income? Some analytical results presented here challenge the conventional wisdom and provide a basis for further research.

The Portfolios

Let’s consider data from two different banks—Bank A and Bank B—with a diverse representation of credit products classified into the following broad categories:

- Auto loans (A).
- Credit cards (C).
- Mortgages (M).
- Home equity loans (H)—treated separately so as not to distort loan size and liquidation calculations. HELOCs are excluded, primarily because the volume is insignificant in the selected banks.
- Student loans (S).
- Installment loans (I).

Some products have been excluded from this analysis for the following reasons:

- Some would likely have introduced other dynamics that could confound this exploration of consumer account relationships—e.g., commercial installment loans and business credit cards are not considered in order to avoid questions of how consumers view their personal credit relationships versus their business credit relationships.
- Others have insufficient account volume—e.g., medical/health care loans and agricultural loans—and inclusion would have added unnecessary complexity for little or no

incremental knowledge. Even so, the trades considered in this analysis represent well over 90% of all trades reported for each bank.

For purposes of this paper, the nomenclature A2, as an example, represents a consumer with an auto loan and one other relationship with the bank. A2 also can refer to a *segment* of auto loan customers who have one other relationship with the bank. The volume of customers with more than four relationships is significantly smaller than for those with three relationships or less, so the former are aggregated into a single group. This aggregation helps provide sufficient volume for meaningful analysis.

Where Conventional Wisdom Proves Correct

Credit card balances increase as the number of relationships increase. For Bank A, the April 2004 C1 average credit card balance was \$804, C2 was \$1,880, C3 was \$3,476, and C4 was \$6,187. As well, April 2006 credit card balances showed the same trend: C1 average credit card balance was \$420, C2 was \$665, C3 was \$1,130, and C4 was \$1,449. While the April 2004 average credit card balances were relatively flat for Bank B, the April 2006 average credit card balances showed the same upward trend as a function of relationship: the April 2006 average credit card balance for C2 was 18% greater than C1, C3 was 34% greater than C1, and C4 was 56% greater than C1.

It is interesting to note that liquidation rates decreased as a function of the number of relationships for Bank A but increased for Bank B. The Bank A

C1 credit card liquidation rate was 46%, C2 was 29%, C3 was 27%, and C4 was 26%. For Bank B, the C1 credit card liquidation rate was 48%, C2 was 65%, C3 was 67%, and C4 was 77%. Thus, for Bank A it is clear that credit card customers with multiple relationships have greater balances and maintain their balances longer, strongly suggesting increased interest revenue. Bank B’s story is slightly more complex: While account holders with multiple relationships tend to have higher credit card balances, they also tend to pay off those balances faster. Even so, all other things remaining equal, these accounts should generate increased interest income for Bank B as well.

Where Conventional Wisdom Fails

Student loan balances for Bank A decrease as the number of relationships increase: the April 2004 S1 average student loan balance was \$6,889, S2 was \$5,918, S3 was \$3,228, and S4 was \$2,992. As another example, Bank B’s April 2004 average auto loan balances decreased as a function of the number of relationships, and (to make matters worse) liquidation rates over the 24-month

It is important to observe that the effect is not always what one would expect and can be a function of account age, loan type, bank business model, customer base, and other factors.

performance period increased. A1 had a beginning average auto loan balance of \$13,887 and a liquidation rate of 67%, while A4 had a beginning balance of \$12,535 and a liquidation rate of 72%. Thus, it might be more lucrative for Bank A to sell student loans outside of existing relationships and avoid cross sell of student loans into their other portfolios; ditto for Bank B and auto loans.

The Distribution of Account Age as a Function of the Number of Relationships

For Bank A, 55% of S1 had been on the books as of April 2004 for 24 months or less, while only 53% of S2 fell in the same age range, 40% for S3, and 36% for S4. For Bank B, 73% of A1 had been on the books as of April 2004 for 24 months or less, while 69% of A2 fell in the same age range, 68% for A3, and 68% for A4. The difference in age distribution by number of relationships leads one to ask whether there may be a primary sequence or set of sequences by which customers with multiple accounts add to their accounts. For example, it may be that most of the M3 population first opened their mortgage loans, then opened an auto loan, and finally opened a credit card account, *in that order*. From a strategic perspective, this type of insight might then be incorporated into preference tables for cross-sell efforts to customers based on which products they already have.

Multiple Account Dynamics Can Differ by Loan Type

The direction of the age trend discussed above is not universal; rather, it appears to depend on product. For Bank A, 54% of I1

had been on the books as of April 2004 for 24 months or less, 67% of I2 fell in the same age range, 70% for I3, and 81% for I4. This is the opposite of the trend shown for Bank A student loans. Clearly, banks should consider the timing of cross sell within the customer credit lifecycle for each product independently to maximize response rates of cross-sell efforts into each specific portfolio.

Multiple Account Dynamics Can Differ between Banks for the Same Loan Type

April 2004 credit card utilization rates increase as a function of the number of relationships for Bank A, but decrease for Bank B. For Bank A, the average credit card utilization rate rises monotonically from 10% for C1 to 25% for C4, whereas for Bank B the April 2004 credit card utilization rate drops from 21% for C1 to 18% for C4. Therefore, Bank B does not necessarily benefit as much from cross selling credit cards (as opposed to marketing outside the existing customer base), whereas Bank A might indeed prefer to cross sell credit cards to existing customers.

Conclusions

Clearly, the presence of multiple relationships can have an effect on customer behavior. It is important to observe, however, that the effect is not always what one would expect and can be a function of account age, loan type, bank business model, customer base, and other factors. Bearing that in mind, financial institutions should conduct extensive analysis of multiple relationships, by portfolio and over time. Thus, they can better understand the influence of multiple relationships

on customer behavior and how one might make use of that insight to increase cross-sell effectiveness, maintain customer loyalty, and ultimately improve financial returns.

It is critical to note that a key relationship type has been omitted from this analysis, namely, that of demand deposit accounts. Many banks consider DDAs to provide a prime channel for cross-sell opportunities. Moreover, DDAs can serve as a key medium for fostering customer loyalty, as positive customer interaction with branch staff can be a dominant factor in shaping customers' perceptions of the bank. DDA relationships are not reported to credit-reporting companies, so TransUnion could not include those data in its analysis. Nonetheless, banks that perform this kind of exploration should certainly incorporate data on DDA relationships to get an appropriate global perspective on their customers. □

Contact Ezra Becker by e-mail at ebecker@transunion.com.

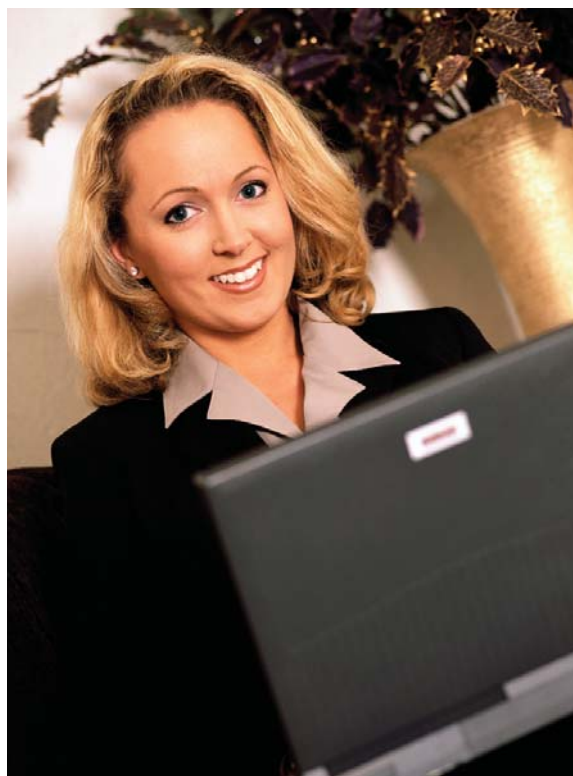
Part 2 of this series (to appear in the November issue of *The RMA Journal*) will focus more specifically on the risk impact of multiple relationships, with an analysis of both the probability of default and the severity of default as a function of multiple relationships. The third article (December/January) will discuss some of the applications of multiple relationship data, and how one might employ this type of business intelligence to reduce expenses, improve cross sell, and effectively measure and manage customer loyalty.

Multiple-Account Management: Part 2

One Person, Many Customers

The Effect of Concentration Risk on Loss Rates

This second of three articles on multiple-account management examines the impact of multiple-account relationships on both the probability of default and the severity of loss within consumer credit portfolios. The author emphasizes that the analysis presented here only scratches the surface of this complex and challenging topic. Two banks' portfolios are compared. While the banks will remain anonymous, the portfolio contents are based on two real examples of reported trade lines in TransUnion's files as of April 2004 that were revisited in April 2006. by Ezra Becker



In the October 2006 issue of *The RMA Journal*, the concept of multiple-account dynamics was introduced and an analysis of interest revenue generation was presented, exploring the conventional wisdom that customers with multiple-account relationships with a given financial institution generally are more profitable than customers with only one account relationship. The conclusion was that, while the conventional wisdom holds true at times, often the opposite is the case, and in

some instances the number of account relationships has no readily apparent influence on the balance curve. The number of relationships a customer has can indeed impact revenue dynamics, but the nature of that impact can be complex and at times counterintuitive, and may be a function of credit product, customer base, business model, portfolio age, and other factors.

That initial study was based on the premise of *ceteris paribus*, that all other things remain equal. Specifically, there was no acknowledgment of variance in losses as a function

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of number of relationships. However, the fact that revenue generation can be affected by multiple-account relationships naturally suggests that losses could be affected as well. That begs several questions:

- Is it possible that multiple-account relationships can cause losses within a given portfolio to increase?
- Or is the conventional wisdom correct, in that multiple-account holders feel an increased sense of loyalty to the bank and hence present less risk?
- How do we quantify loyalty from a risk perspective?

To address these questions, this second study focuses on the impact of multiple-account relationships on both the probability of default and the severity of loss within consumer credit portfolios.

The Portfolios

To maintain a consistent approach, this analysis uses the same loan classifications, data exclusion criteria, performance window, and relationship criteria as the first study and applies them to the same raw data from the same banks. However, because of the relatively low occurrence of default over the two-year performance window, it was necessary to aggregate all customers with more than one relationship into a single group of multiple-account holders. Thus, the nomenclature is now slightly different. For example, A1 represents a customer or segment of customers with only an auto loan relationship, while C2+ represents a customer or segment of customers with a credit card relation-

ship and at least one other relationship with the bank.

We must also define what is meant by default. This article considers a loan to be in default if its status is 90 days past due, or worse, and is denoted by 90+. Subcategories of default (based on reporting codes to TransUnion) include:

- Bankruptcy (B).
- Contractual charge-off (CCO).
- Late-stage collection (LSC).
- Other major derogatory status (DS). These include foreclosure, garnishment, repossession, and other miscellaneous derogatory states. DS is classed separately from CCO because the bank has some form of security interest in these cases (e.g., the house or the car), in contrast to a charge-off, where no security might be available.
- Serious delinquency (SD). This classification includes loans that are more than 90 days past due but do not yet qualify for inclusion into one of the four segments listed above (e.g. a credit card that is 120 days past due).

The Basel II formula for expected losses is the simple prod-

uct $E [Loss] = PD * LGD$, where PD is the probability of default and LGD is the conditional loss given default, also known as the *loss severity*. Delinquency is measured at the end of the performance window (April 2006), and default is determined accordingly. For bankruptcy, charge-off and other major derogatory status, loans, the account balance as reported is used as the actual LGD for that loan. For the other 90+ loan segments, the account balance at the end of the performance window is used as an estimate of LGD. While this is, perhaps, not the best possible estimation method, most banks close accounts beyond the 90 DPD stage of delinquency and place those accounts in a non-accrual status.

Results

The results regarding losses were both more consistent and more compelling than those for revenue generation. They generally support the conventional wisdom regarding multiple-account default risk, and perhaps may also form the beginning of a response to increased regulatory scrutiny of losses within multiple-account relationships.

Table 1

Portfolio	Probability of Default (PD)			
	Bank A		Bank B	
	# of Relationships		# of Relationships	
	1	≥2	1	≥2
Auto	2.96%	1.86%	1.89%	1.35%
Card	N/A	N/A	6.15%	5.71%
Installment	3.66%	2.89%	3.24%	2.64%
Mortgage	0.75%	0.28%	2.33%	1.17%
Student Loan	7.89%	8.41%	N/A	N/A
2nd Lien	N/A	N/A	0.64%	0.45%

The results regarding losses were both more consistent and more compelling than those for revenue generation.

The probability of default generally decreases with multiple relationships. As shown in Table 1, for both banks, accounts with multiple relationships had a lower PD than those with only one relationship.

Bank A's installment portfolio showed the least improvement from multiple relationships—a 21% decrease in PD. The largest improvement from multiple relationships was in the mortgage portfolio—a 63% decrease in PD. Bank A's student loan portfolio was the only anomaly, with PD increasing as the number of relationships increased.

Bank B's credit card portfolio showed the least improvement from multiple relationships—a 7% decrease in PD. The largest improvement due to multiple relationships was, again, in the mortgage portfolio—a 50% decrease in PD.

The significant decrease in PD within mortgage portfolios suggests further study to ascertain the loss behavior in other portfolios for consumers who also have a mortgage with a given bank. These consumers may be more hesitant to default on their other debt obligations for fear it may somehow impact their mortgage loan.

Arguably, the almost universal

Portfolio	Bank A		Bank B	
	# of Relationships		# of Relationships	
	1	≥2	1	≥2
Auto	\$4,506	\$4,190	\$15,455	\$13,542
Card	N/A	N/A	\$3,525	\$3,223
Installment	\$22,174	\$23,455	\$37,855	\$15,449
Mortgage	\$145,171	\$133,733	\$170,268	\$208,323
Student Loan	\$64,208	\$2,636	N/A	N/A
2nd Lien	N/A	N/A	\$39,395	\$48,981

decrease in PD for multiple-account holders could be attributed to differences in the distribution of risk between the two subsets of customers. For example, if an auto loan portfolio measures risk using the VantageScoreSM credit score and employs a score cutoff of 680 for account approval, while every other portfolio in the bank uses a VantageScore cutoff of 720 for approval, then all else being equal the A2+ population would have a risk distribution shifted toward lower risk relative to A1. To explore this argument, a VantageScore value was calculated for each customer. Within each portfolio, the customers were then segmented into 10 score bands, and PD was compared within each. A decrease in PD for customers with multiple relationships relative to those with a single relationship was observed in 82% of the score bands.¹ This result demonstrates an impact on risk that is not adequately captured by even the most cutting-edge risk-scoring techniques, an impact that could be considered a quantifiable measure of loyalty.

The severity of loss does not fit a simple rule of thumb.

As shown in Table 2, severity impact as a function of multiple relationships can vary by portfolio within the same bank.

For Bank A, average LGD improvement from multiple-account relationships was 7% in the auto portfolio and 8% in the mortgage portfolio. Once again, a curious dynamic occurs in Bank A's student loan portfolio, where the S2+ average LGD is only 4% of the S1 average LGD. The opposite dynamic was seen in the installment loan portfolio, where multiple-account relationships caused a 6% degradation in LGD.

For Bank B, multiple-account holders had 12% less severe auto loan losses, 9% less severe credit card losses, and 59% less severe installment loan losses than the respective single-account holder segments in those portfolios.

Again, the mortgage portfolio showed the opposite dynamic—multiple-account relationships caused a 22% degradation in LGD.

Severity as a function of multiple relationships can also differ for the same product at different banks. Average mortgage LGD improved by 8% for multiple-account holders at Bank A but degraded by 22% at Bank B.

Table 3

Portfolio	Expected Loss			
	Bank A		Bank B	
	# of Relationships		# of Relationships	
	1	≥2	1	≥2
Auto	\$133	\$78	\$292	\$183
Card	N/A	N/A	\$217	\$184
Installment	\$812	\$678	\$1,227	\$408
Mortgage	\$1,089	\$374	\$3,967	\$2,437
Student Loan	\$5,066	\$222	N/A	N/A
2nd Lien	N/A	N/A	\$252	\$220

Conversely, average installment LGD degraded by 6% for multiple-account holders at Bank A, but improved by 59% at Bank B.

There is no immediately obvious reason for the differences in loss severity as a function of relationships between loan types within a single bank, or for the same loan type in different banks. Clearly, each financial institution must explore data relative to its specific business model, customer base, and historical risk policies to gain insight into the drivers of multiple-account relationship loss severity.

Expected losses are generally lower in any given portfolio for customers with multiple relationships. As shown in Table 3, expected losses were lower for multiple-account holders than they were for single-account holders within every portfolio at both banks. For Bank A, the smallest difference was 17% in the installment loan portfolio, and the largest improvement was 66% in the mortgage portfolio. For Bank B, the smallest difference was 13% in the home equity loan portfolio, and the largest improvement was 67% in the installment loan portfolio.

The driving force for this phenomenon appears to be the probability of default, which dominates the expected loss equation in those instances where LGD was greater for the multiple-relationship segment than for the single-relationship segment.

Conclusions

These initial results suggest that the conventional wisdom is correct: Customers with multiple accounts pose less risk to a bank in any given portfolio than those with only one relationship, and the driving factor for which is the probability of default. This represents necessary, but not sufficient, evidence that responsible risk management practices within each portfolio independently might be adequate to protect the risk position of the bank as an enterprise. This is not to suggest, however, that multiple-account relationship studies should stop here, or that this evidence alone is all that federal regulators would or should require. There are other dimensions to multiple-account relationship risk that have not been examined here, which could have a profound impact on loss dynamics. For example, consider

that the ability of multiple-account holders to transfer balances between accounts has not been remotely acknowledged. Even so, the results presented here provide a solid step forward in understanding multiple-account dynamics and suggest that multiple-account relationships do not present a hidden, dramatic risk to the safety and soundness of a bank.

Again, it is critical to note that demand deposit accounts (DDAs), a key relationship type, have been omitted from this analysis. DDAs can serve as a key medium for fostering customer loyalty, because positive customer interaction with branch staff can be a dominant factor in shaping customers' perceptions of the bank. Because there is a correlation between DDA performance and loan performance—after all, most customers pay their debts with funds drawn from their checking accounts—banks that perform this kind of analysis should certainly incorporate data on DDA relationships to obtain an appropriate global perspective on their customers. □

Contact Ezra Becker by e-mail at ebecker@transunion.com.

Notes

1 Notably, only the lowest decile of Bank A's student loan portfolio showed $P(90+|S1) < P(90+|S2+)$; the other nine deciles showed $P(90+|S1) \geq P(90+|S2+)$. This reversal at the more granular level is an excellent example of Simpson's Paradox.

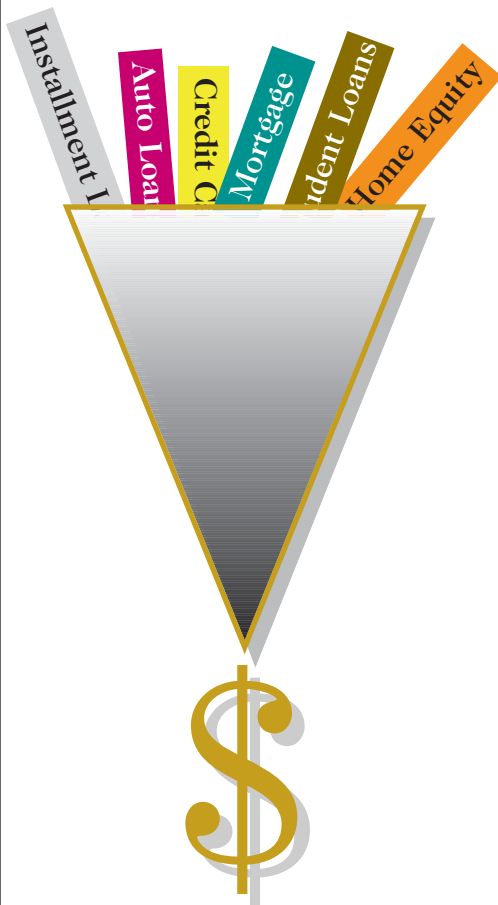
Part 3 of this series (to appear in the December-January issue of *The RMA Journal*) will discuss some of the applications of multiple-relationship data, and how one might employ this type of business intelligence to reduce expenses, improve returns, and effectively measure and manage customer loyalty.

Multiple-Account Management: Part 3

Some Multiple-Account-Based Profit Management Strategies

This final article on multiple-account management discusses some applications of multiple-relationship data and how this type of business intelligence can reduce expenses, improve returns, and effectively measure and manage customer loyalty.

by Ezra Becker



In the past two issues of *The RMA Journal*, we explored the concept of multiple-account dynamics through analyses of interest revenue generation, probability of default, loss severity, and expected losses. We can summarize these analyses as follows:

- The number of relationships a customer has can impact revenue dynamics, but the nature of that impact can be complex and at times counterintuitive, and it may be a function of credit product, customer base, business model, portfolio age, and other factors.
- Expected losses consistently decrease as a function of multiple-account relationships, driven pri-

marily by lower default probabilities.

- The conventional wisdom that multiple-account holders are more profitable than customers with only one account is likely true in many cases. This final article describes several of the myriad ways in which financial institutions can use multiple-account-relationship data to effectively improve account acquisition rates, portfolio management and collections strategies, customer loyalty, and regulatory response.

Multiple-Relationship Strategies

While these strategies may not work in every situation or for every bank, they do highlight several areas of the customer life-cycle

where a bank may profit from multiple-account management strategies. By way of illustration, the following discussion revolves around Joe Customer, a fictional consumer who has a checking account, credit card, auto loan, and unsecured personal loan with the similarly fictional ABC Bank.

Address regulatory concerns. Federal regulators have been increasingly scrutinizing the risk presented by multiple-account holders. Most financial institutions have been unable to identify even the extent of multiple-account relationships across their portfolios, let alone quantify the additional risk, if any, presented by these customers. This has resulted in a conservative approach by regulators, who in many cases have required that additional, restrictive policies be enacted to counter the perceived incremental risk. However, it appears that Joe Customer and other multiple-account holders do not, in fact, present any incremental risk to their respective financial institutions—indeed, the data suggests that they present *less* risk to the enterprise overall. It is likely that the inability to identify multiple-account relationships is of as much concern to regulators as the potential risk itself; in other words, the lack of insight into one's portfolios is troubling in its own right. Thus, ABC Bank's ability to provide reports describing the extent of multiple-account relationships and their associated risk profiles would go a long way toward assuaging the concerns of regulators in this regard and may even allow ABC and its brethren

institutions to lobby successfully for relaxed risk criteria for multiple-account holders.

Tailor risk criteria to manage loss rates while improving acquisition rates. Like many financial institutions, ABC Bank applies the same risk criteria to applicants and targeted marketing segments regardless of existing relationships. The trend toward lower default probabilities as a function of the number of relationships suggests that ABC Bank could use lower score cut-offs for approving these applicants while maintaining equivalent default rates. As an alternative, ABC could offer applicants who are existing ABC customers greater credit limits within each of ABC's existing credit quality grades. By extending more attractive offers, ABC Bank should be able to acquire customers who may otherwise have considered their respective offers inadequate. In either case, or in combination, the use of multiple-account relationship data in account acquisition should increase ABC Bank's acquisition rates while containing expenses and loss rates.

Improve cross-sell efforts. As discussed in the first article of this series [October 2006], the differences in account age distributions between single- and multiple-account holders suggest there may be a primary sequence or set of sequences through which multiple-account holders obtain their accounts. For example, the majority of customers with a checking account, credit card, auto loan, and unsecured

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personal loan may have obtained those accounts *in that order*. This information could be incorporated into preference tables as an optimal order for cross-sell initiatives. The likely result would again be increased response rates without corresponding increases in expenses or default rates.

Improve customer service. Multiple-account relationship data can be used to improve the customer experience during interactions with customer service. For example, Joe might consider it tedious to call four different customer-service numbers to notify ABC Bank of a change of address. If during the first call the customer-service representative offers to change Joe's address on all four accounts, Joe might be impressed with ABC Bank's efficiency. In the same vein, many banks now offer the ability to link accounts through online account-management access. It might be a simple matter to add a universal address-change functionality to streamline the data collection effort.

Consider also that Joe might call to ask for his account balance, confirm the posting of a payment, or find out his next payment-due date. The ability to provide this

Using multiple-account relationship data can reduce customer-service expenses, improve the customer experience, and ultimately increase customer loyalty.

information on all of Joe's accounts in one call can reduce the number of incoming calls to ABC Bank's call centers and the aggregate call time spent with any given customer. As well, this may give Joe the favorable impression that ABC Bank truly knows him as an individual customer. Moreover, this functionality should reduce the average wait time for other callers in the customer-service queue. Therefore, using multiple-account relationship data can reduce customer-service expenses, improve the customer experience, and ultimately increase customer loyalty.

Improve retention efforts.

Like many banks, ABC's approach to customer retention does not involve any high degree of analytical sophistication. The bank uses a set protocol and metrics in its attempts to retain customers who seek to close an account. When Joe calls to close his credit card account, the bank's metrics do not consider overall profitability. That's because even those metrics that base the extent of retention incentives on an acceptable level of financial return do not account for additional relationships. This is particularly important when we consid-

er the possibility that when Joe closes one account, he likely may close other accounts as well. It might be in ABC Bank's best interest to offer Joe a far lower interest rate on his credit card account if that lower rate convinces him to maintain his hugely profitable unsecured personal loan and checking account with ABC.

Conversely, ABC Bank may choose to offer *fewer* incentives to retain Joe as a credit card account holder if he clearly is not a profitable customer in any of his accounts, or if analysis indicates that customers with Joe's profile actually are more profitable with only an auto loan, unsecured personal loan, and checking account.

Clearly, for this application of multiple-account data to be successful, ABC Bank first must quantitatively evaluate Joe's historical and likely future performance. But even without those metrics (which can be difficult to develop), multiple-account relationship data at the very least could provide ABC Bank with salient talking points to use in its attempt to retain Joe as a credit card customer. References to his long history with the bank, the convenience of ATMs for accessing his checking account, and so forth may 1) engender loyalty; 2) more pragmatically, prompt him to recognize and appreciate the benefits he receives through his overall relationship with ABC Bank; or 3) result in some combination of the two.

Streamline collections efforts. Consider a hypothetical situation in which Joe is 30 days past due for \$100 on each of his credit accounts and also \$100

overdrawn on his checking account. Joe complains to his friends that he has received a collections call from ABC almost every day this month, and each time he works out a payment plan he receives yet another call from a collector who knows nothing of his prior arrangements. One of Joe's friends, a risk analyst at ABC, tells Joe flatly that this is impossible, because ABC has an enterprise-wide policy of limiting collections calls to no more than five per month on any collections account.

While Joe and his friend may argue the matter at length, they probably are both correct. Like many banks, ABC has a separate collections team for each portfolio, and each team strictly adheres to the five-call-limit policy. However, these collections teams are working independently to collect what is due on their individual portfolios without regard to Joe's status in other portfolios. For his part, Joe neither realizes nor cares that the collectors who are calling him represent different portfolios. From his perspective, ABC Bank is a single entity that has interrupted his dinner 20 times this month. Although Joe initially had good intentions to eventually repay his debt, his attitude toward the bank is now quite sour. While he has \$240 he could use to partially pay what is overdue, he has de facto terminated his relationship with ABC Bank—ABC will eventually charge off all of his debt.

If, however, ABC Bank were to employ multiple-account relationship data in a centralized collections process, Joe would receive far fewer calls and might

be more receptive to the collector who does make successful contact. Moreover, that collector would be able to establish a single payment plan for Joe, who would be more likely to remit the \$240 he has available. While ABC Bank would have to develop an appropriate allocation policy for this payment, overall the situation is far better for everyone concerned. Joe maintains his relationship with the bank because he does not feel undue frustration with the collections process—in fact, he might actually appreciate the chance to make good on all of his obligations through a single payment plan. As well, Joe will not have several charge-offs reported on his credit file. ABC Bank collects some of the money due, with an improved likelihood of recouping the entire outstanding debt.

Now, consider the same scenario, but from a different perspective. Within each portfolio, a collections account with only \$100 overdue may not qualify for an aggressive collections effort. Thus, each collections team might send Joe a letter or two, which he may not even open because he mistakenly assumes they are marketing solicitations. If multiple-account data were employed in a centralized collections process, Joe's total overdue debt of \$400 might qualify him for a more aggressive strategy, such as a series of phone calls. The more aggressive strategy might work to garner a successful recovery where the individual, weaker strategies do not.

In either scenario, the use of multiple-relationship data can again lead to more effective col-

lections efforts through a better customer experience.

Conclusion

Multiple-account relationship data can be successfully incorporated into strategies throughout the consumer credit life-cycle to effectively improve account acquisition rates, portfolio-management and collections strategies, customer loyalty, and regulatory response. The best use of this data depends on each financial institution's business model, customer base, product set, risk tolerance, and level of analytical and technological sophistication. While clearly there can be considerable costs associated with devel-

oping the infrastructure and performing the underlying analyses necessary for successful implementation of such strategies, it also is clear that the competitive advantage and risk-management insight thereby gained can be equally impressive. With regulatory requirements and competitive pressure increasing, the question for most financial institutions will not be *whether* to incorporate multiple-account dynamics into risk management strategies, but *when* to do so. □

Contact Ezra Becker by e-mail at ebecker@transunion.com.