

Determinants of Bank Prices

For the past 25 years Phoenix-Hecht has been collecting and analyzing thousands of actual bank account analysis statements each year from corporations to report on pricing trends. Each year, the Blue Book of Bank Prices™ publication is compiled from actual bank account analysis statements for the month of March submitted by participating companies. After careful review of each statement, those which exhibit the greatest product usage are selected for analysis. The selected statements represent the largest banks in term of cash management activity. Collectively, these banks derive in excess of 14 billion dollars of revenue from the corporate cash management market.

The underlying trend in the Blue Book project has been the annual increases in list price, the frequency in which discounts have been applied and the average amount of the discount.

Historically, list price has been closely correlated to the Consumer Price Index (CPI) for the previous year. To better understand what factors affect prices that corporations pay for bank

| | Average List Price Increase | CPI (previous year) | Frequency of Discounts | Discount |
|------|-----------------------------|---------------------|------------------------|----------|
| 2004 | 2.4% | 1.9% | 43.0% | 34.5% |
| 2005 | 2.7% | 3.3% | 40.2% | 33.9% |
| 2006 | 2.7% | 3.4% | 43.3% | 36.6% |
| 2007 | 1.9% | 2.5% | 41.3% | 36.2% |
| 2008 | 3.5% | 4.1% | 41.4% | 36.5% |
| 2009 | 3.6% | 0.1% | 43.1% | 37.0% |

services, Phoenix-Hecht performed extensive linear regression analysis on each of services included in the Blue Book of Bank Prices™. The analysis measured the quantitative effect, and the significance of that effect, on pricing for several factors that could potentially affect price. Once identified, the significant factors can be incorporated into a regression equation to predict bank prices.

The factors identified for study were:

- *Presence of credit relationship, and the borrowing rate paid*
- *Geographic location of the bank providing the services*
- *Volume of services purchased*
- *Geographic location of the corporation receiving the services*
- *Total fees paid by the corporation to the bank*

As expected, not all of these variables proved to be significant predictors of price for individual services. In analyzing the results of a regression analysis, it is important to remember that a range of prices exists for any given service and a regression does not predict a single price, but rather a distribution of possible prices around a central, or expected, price.

As a result of the regression analysis, three factors were found to be significant in predicting prices for the specific services:

- *Volume of services purchased*
- *Geographic location of the corporation receiving the services*
- *Total fees paid by the corporation to the bank*

The absence of credit from the list of significant factors may seem surprising. The absence does not imply that credit is never a factor in determining price for non-credit services. Rather, the presence of credit is often accompanied by larger total monthly fees, so that the contribution of credit to determining price in a regression analysis is diminished by its correlation with total fees paid. Total fees paid by a corporation to an individual bank have been increasing as a result of the corporate consolidation of banking relationships. Companies are increasing the use of the same bank for both credit and non-credit services as they buy more from existing banks.

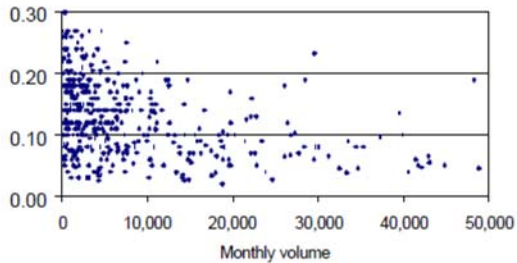
| Cash Management Only Relationships | |
|---|-------|
| | 2008 |
| Sales \$500 million and above | 26.0% |
| Sales \$100 - \$500 million | 32.0% |
| Sales \$40 - \$100 million* | 26.7% |
| *2009 | |

| Company Buys New Services Only From Existing Banks | | |
|---|-------|-------|
| | 2000 | 2008 |
| Sales \$500 million and above | 61.7% | 74.0% |
| Sales \$100 - \$500 million | 73.0% | 78.8% |
| Sales \$40 - \$100 million* | 71.1% | 76.5% |
| *2001, 2009 | | |

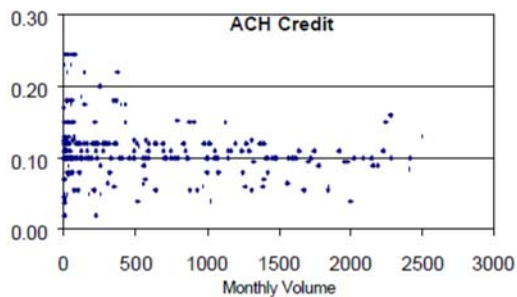
Geographic location of the bank providing the services had been an important pricing factor in the past, and geographic cost differentials, namely labor, were reflected in a service's pricing. This differential in recent years has become less important as the market has become more dominated by merger-created banks. These banks have a large footprint and service a national market from multiple geographic diverse operational centers and have been standardizing pricing across operational regions.

In the analysis, volume was almost always the most significant predictor of the price, as would be expected. For many high-volume services, such as controlled disbursement, significant volume is the most obvious and likely factor to affect pricing. Indeed, many banks publish price schedules with stated lower prices at higher volume levels. Large transaction volumes are not necessarily defined in the same manner across banks. In bidding on business and quoting prices, banks are becoming more cognizant of the hidden additional customer service and error correction expense liability often associated with the business. Often the high volume based pricing can be a function of a bank's existing capacity in terms of equipment and staffing.

Volume/price relationship for a sampling of controlled disbursement checks paid



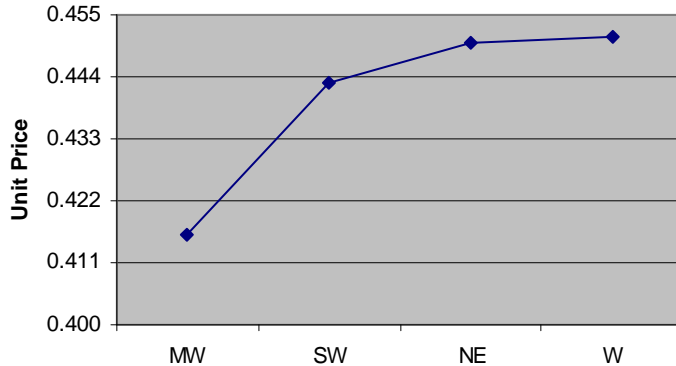
For some high volume services, prices did not go down linearly as volume increased. ACH Credits are a good example of volumes not generating significant pricing differences.



In those cases, the natural logarithm of volume proved to be a better predictive variable. Using the log of volume reduces the influence on price of very large volumes.

Even if banks are national in scope, they may need to adjust prices to match the regional competition for corporate business, or they may be unable to significantly increase prices in areas that have had historically lower prices, making the geographic location of the corporation receiving the services an influential pricing variable.

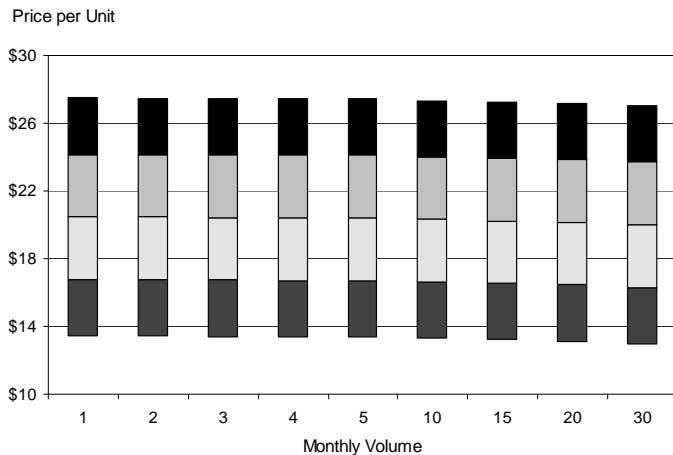
**Wholesale Lockbox Remittance Processing Sample
Bank Variations**



To the extent that banks and corporations base their negotiations on the value of whole relationship, rather than the amount of one service purchased, prices may be lower when the total fees are relatively high. It is not unusual to see many of the individual service items on the same analysis statement discounted slightly. Typically, a five to fifteen percent discount is attributed as an overall relationship discount when it is observed applied to low volume services. As an example, the average expected price for account maintenance falls six percent for only five accounts.

Account Maintenance

Expected Price Quartiles by Volume



Summary

Predictive equations can model pricing for cash management services as long as the user recognizes that some service prices can be predicted with more accuracy than others. Typically, prices for services that are volume-driven, such as items deposited, can be predicted more accurately than services that are not volume-driven, such as account maintenance monthly fees. Today’s challenge for the corporate consumer is to ensure the fee structure they are paying to their banks is reasonable given the transaction volumes and total value of the relationship in both terms of dollars spent and quality received. The Blue Book of Bank Prices™ can serve as a useful benchmarking tool for standard service items.