Benchmarking Branch Outcomes

Using Available Data to Analyze and Improve the Delivery of Retail Bank Services to Low-Wealth Communities

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Executive Summary

This report uses a unique data set provided by a large national bank to examine the usage of two bank branches located in lower-income communities in Chicago and Pittsburgh. The findings of the report suggest data collection strategies for federal bank regulators that would improve their monitoring of banks' provision of basic banking services in lower-income neighborhoods. Such banking services include the provision of checking and savings accounts as well as products such as debit and credit cards and a variety of delivery channels that range from bank branches to bank-by-phone and electronic funds' transfers. An improvement in the examination of banking services should encourage financial institutions to improve those services to the benefit of their lower-income customers. This report demonstrates that, despite oft stated concerns about increased regulatory burden, banks already collect key transactional and account data for marketing and other purposes and that these data could easily be collected and used to implement the Community Reinvestment Act (CRA) service test more effectively. This increased transparency would bring the service test in line with the data analyzed for the CRA lending and investment tests and provide an incentive to banks for improving their delivery of financial services to underserved households.

The report shows that if transaction- and account-level data were collected from all financial institutions active in a given market, they can be used to evaluate a bank's ability to attract and retain customers in low- and moderate-income markets. Such data could also be used to compare a bank's presence in lower-income communities relative to its presence in higher-income markets. Additionally, these data can be used to analyze gaps in access to retail banking services for lower-income communities or to better understand how customers in different types of communities use specific bank products and services. Additional types of analysis using such data could include examining geographic patterns of service delivery or measuring how effective specific branches are at serving their surrounding communities.

Introduction

This report uses a unique data set to suggest strategies for the federal bank examiners to improve their monitoring of banks' provision of basic banking services in lower-income neighborhoods. These services include the provision of checking and savings accounts, debit and credit cards, and delivery vehicles that range from bank branches to bank-by-phone and electronic funds' transfers. An improvement in the examination of banking services should, in turn, encourage financial institutions to improve those services to the benefit of their customers.

The ability of lower-income consumers to access low-cost and appropriate bank retail services is critical for their economic stability and their ability to build financial assets. Without such tools, modest-income families will have a difficult time building a financial safety net to help them meet such challenges as unexpected bills, periods of financial hardship, and saving for further education, or for a down payment on a home.

Despite recent instability in the banking industry, mainstream banks continue to be a critical source for transaction accounts such as checking and savings accounts. Research has shown that many lower-income and minority households do not have a deposit account with a mainstream bank, however, many who do still use higher cost financial service providers for many of their basic transactions. A recent study by the Center for Financial Services Innovation estimated that there were 21.6 million underbanked households in the U.S. (households that may have a checking or savings account but still made one or more nonbank financial transactions in the 30 days prior to being surveyed) and 18.5 million unbanked households who had no current checking or savings account.[1]

The federal Community Reinvestment Act (CRA) provides that regulated financial institutions have an "affirmative obligation to help meet the credit needs of the local communities in which they are chartered."[2] The law has been instrumental in increasing access to responsible mortgage loans, investment capital, and financial services for low- and moderate-income (LMI) households and neighborhoods. However, there are concerns that the CRA has not reached its full potential because of inadequacies in how compliance is measured and in how ratings by which banks are assessed are determined. In particular, the CRA monitoring process, a three part, periodic examination, has not been successful in measuring banks' performance in providing retail banking services to lower-income communities.

The CRA "service test" has been the subject of extensive criticism by community development researchers and advocates who argue that the test utilizes insufficient quantitative data, and superficial and inconsistent qualitative data to evaluate a bank's response to retail banking needs in low- and moderate-income communities. Further, critics have also pointed out that the service test merely evaluates what bank services are available, not whether those services are being successfully marketed and used by lower-income households.

In response to these criticisms, the federal bank regulators have told community reinvestment leaders that their hands are tied, they lack appropriate data to implement the service test more effectively, and the banks would stop any attempt to require them to collect new data for CRA monitoring purposes.

In March 2007, Woodstock Institute published Reinvestment Alert #31, *Measuring the Provision of Banking Services for the Underbanked: Recommendations for a More Effective Community Reinvestment*

[1] *Preference and Usage of Financial Services Providers, An inBrief from the Underbanked Consumer Study*, Center for Financial Services Innovation, October 7, 2008.

[2] 12 USC 2901; Title VII of Pub. L. 95-128, 91 Stat. 1147 (October 12, 1977).

Act Services Test. That Alert examined the CRA service test evaluations of 40 Chicago area banks. It illustrated that these evaluations were highly inconsistent in their assessments of banks' provision of banking services to lower-income communities and concluded that the service test could be substantially improved if bank examiners used performance-driven measurements and a standardized data set to evaluate service test outcomes.[3]

This report uses bank data that have not previously been publicly available to demonstrate that banks already collect key transactional and account data for marketing and other purposes. These data could easily be used to implement the CRA service test more effectively, and thus improve financial services to underserved households. The data were generously provided by National City Bank as a contribution to improving bank services for lower-income households.[4] In order to protect customers' privacy, no individual level data were provided to Woodstock Institute, but the Bank performed certain analyses suggested by the Institute which used Bank data aggregated to the block level. Such aggregation not only permits a straightforward geographical analysis, it also protects the identity of households within the block.

Background

Compliance with the Community Reinvestment Act occurs through a mandatory, periodic regulatory examination and is also triggered by applications for proposed bank mergers and acquisitions. The examination evaluates separately a bank's lending, investment, and service activity on the basis of the outcomes a bank achieves in those three areas.[5] Failure to meet the expectations of the Act can, at least in theory, result in sanctions including the delay or the denial of merger applications.[6]

The Community Reinvestment Act affects bank behavior not only because of the prescribed consequences, but also because of the public nature of the process.[7] The evaluation component of the examination is presented as a public rating. Possible ratings are "outstanding," "satisfactory," "needs to improve," and "substantial noncompliance."[8] Public ratings give CRA additional "teeth" because a bank's reputation may be damaged by a "needs to improve" or "substantial noncompliance" rating.

Despite its purpose to increase access to financial services in low- and moderate-income communities, the CRA has not achieved its full potential, in part, because of inconsistencies in how examinations are conducted and ratings are assigned. A Policy Brief published by the Brookings Institution in 2002 found

[3]Geoffrey Smith, Malcolm Bush, and Nathan Paufve, *Measuring the Provision of Banking Services for the Underbanked: Recommendations for a More Effective Community Reinvestment Act Service Test*. Woodstock Institute, Reinvestment Alert #31, March 2007.

[4]The arrangements for the use of the data in ways that protected customer confidentiality were made before the December 31, 2008 sale of National City Corporation to PNC Financial Services. Moreover, all the analyses provided by National City at the request of Woodstock Institute were completed before that date. Woodstock Institute is most grateful to staff of the former National City Corporation for their imaginative and generous involvement in this project.

[5]Woodstock Institute. *Measuring the Provision of Banking Services for the Underbanked: Recommendations for a More Effective Community Reinvestment Act Service Test.* 2007.

[6]Bostic, Raphael W. *Do CRA Agreements Influence Lending Patterns?* Board of Governors of the Federal Reserve System. 2002. Pg. 6-7.

[7]Bostic, Raphael W. *Do CRA Agreements Influence Lending Patterns?* Board of Governors of the Federal Reserve System. 2002. Pg. 7.

[8]www.ffiec.gov See: Community Reinvestment Act.

significant variation in service test scores and argued that those discrepancies were the result of the subjective and inconsistent criteria used by the bank examiners. [9] The Brief also argued that the service test is the least stringent of the three tests and is often the area that is "padded" to increase borderline CRA scores. Such padding would limit the already very low number of banks that received overall "substantial non-compliance" or "needs to improve" scores and thus save the bank regulators from dealing with inevitable protests from the banks receiving such grades.

The purpose of the service test is to evaluate how banks are serving the retail banking needs of low- and moderate-income neighborhoods. The test involves two components, retail banking services and community development services. The retail banking section includes a review of the distribution of bank branches in census tracts with different income levels, branch openings and closings in low- and moderate-income communities, and an overview of products and services tailored to low- and moderate-income needs. The community development services component involves a review of services whose primary purpose is community development.

While the lending and investment tests are primarily quantitative, the only quantitative component of the service test is the review of branch distribution and branch opening and closings. Moreover, the Brookings' study found that the quantitative criteria were inconsistently applied and the language guiding the qualitative components were ambiguously worded, factors that could result in highly subjective evaluation outcomes.[10] Additionally, the service test as currently implemented merely addresses the presence of delivery mechanisms, not the actual *delivery* of products and services.[11]

In 2007, Woodstock Institute reviewed the findings of the Brookings' study and provided suggestions to improve the service test. Among other recommendations, Woodstock recommended that, because the analyses employed in the service test were insufficient and did not accurately evaluate the extent of retail banking services actually delivered in low- and moderate-income neighborhoods, new metrics were needed. Specifically, Woodstock called for the development of a standardized data set that would allow for direct performance-based analysis of an institution's actual delivery of products and services.

Such a change would bring the service test in line with the more performance-based investment and lending tests and promote more vigorous service delivery. Moreover, since the service test accounts for 25 percent of all performance evaluation points, an improvement in the quality of this test would significantly increase the overall effectiveness of the CRA.[12]

Data Used in This Study

The Bank

The data utilized in this report were provided by National City Bank. National City Corporation, a major Midwestern bank holding company formally headquartered in Cleveland, Ohio with assets of

[9]Stegman, Michael et al. *Creating a Scorecard for the CRA Service Test*. Brookings Policy Brief, No. 96. 2002. Pg. 5.

[10]Stegman, Michael et al. *Creating a Scorecard for the CRA Service Test*. Brookings Policy Brief, No. 96. 2002. Pg. 4.

[11]As shown in Smith, Bush, and Paufve (2007), occasionally a bank would provide and examiners would report in the CRA examinations' Performance Evaluation or PE quantitative data about the use of a particular product. But such occasions were rare and such data are clearly not generally required.

[12]Woodstock Institute. *Measuring the Provision of Banking Services for the Underbanked: Recommendations for a More Effective Community Reinvestment Act Service Test*. 2007. Pg. 3.

approximately $140 billion, was purchased by PNC Financial Services Group headquartered in Pittsburgh, Pennsylvania, on December 31, 2008. The sale was a result of the extraordinary turbulence in the housing markets and in the capital markets, particularly the mortgage capital markets. Arrangements for the use of these data were made and completed before the announcement of the proposed sale. National City agreed to construct certain tables for use in this report. The text of the report, however, was written by Woodstock Institute, which is wholly responsible for its contents.

The Branches

Woodstock Institute received data from National City on two National City branches, one in Pittsburgh, Pennsylvania (in the East Liberty neighborhood), and the other in Chicago, Illinois (in the Logan Square neighborhood). The branches were chosen for several reasons. Both branches are in low- and moderate-income neighborhoods and serve predominantly minority communities. One is a new branch and the other is older, and somewhat different patterns of service might be expected in less- and more-established branches. The branches were also chosen because National City's staff thought that the branches had met or exceeded the Bank's expectations. The purpose of the project was not to evaluate National City's performance but to show how existing data can be used to improve the implementation of the CRA service test.

Description of the Pittsburgh Branch

National City has a substantial and longstanding presence in Pennsylvania and the Pittsburgh market in particular. In 2008, Pennsylvania was National City's third largest market in terms of number of offices, where it operated 222 branches.[13] The bank entered the Pittsburgh market in 1995 with the acquisition of Integra Financial Corp. Nearly 40 percent of National City branches in Pennsylvania were in Allegheny County, the home county of Pittsburgh, and in 2008, National City was the second largest bank in the Pittsburgh MSA by deposit market share holding 15.5 percent of area deposits.[14]

The East Liberty branch is a well established office. It is located at 5838 Baum Boulevard in the East Liberty neighborhood of Pittsburgh and originally opened in 1972. According to National City, the target service area for the East Liberty branch was the community within a 2.5 mile radius of the branch. According to the 2000 Census, the median household income in the East Liberty neighborhood was $18,778, or 66 percent of the median-income of the city of Pittsburgh. East Liberty's population was predominately African American at 72.5 percent. Roughly 21.5 percent of the neighborhood's population was white. The area had a small Latino population of 1.1 percent, comparable with the city as a whole. Over 8 percent of East Liberty residents over five years old speak a language other than English at home, a figure also comparable with the 9.2 percent observed in the city as a whole.[15]

Description of the Chicago Branch

National City's presence in Chicago is not as longstanding as its presence in Pittsburgh, but the Bank has attempted to grow in the region through both bank acquisitions and new branch construction. National City first entered the Chicago market in 1998 with the acquisition of First of America Bank based in Kalamazoo, MI. National City inherited a local branch network with a number of offices in downstate Illinois and suburban Chicago, but few in the City of Chicago. In 2007, National City also acquired

[13] FDIC. Institution Directory. As of January 29, 2009.

[14] FDIC Summary of Deposits. June 30, 2008. Data pulled February 17, 2009.

[15] American Fact Finder, Census 2000 Summary File 3.

MidAmerica Bank, a Chicago area thrift institution. In 2008, Illinois was National City's fourth largest market in terms of number of offices, where it operated 186 branches.[16] In 2008, nearly 35 percent of National City branches in Illinois were located within Cook County, the county where Chicago is located. In the City of Chicago, National City had 29 branches, over half of which had been opened since 2002.[17] In 2008, National City was the fifth largest bank in the Chicago region by deposit marketshare holding, 4.3 percent of area deposits.[18]

National City's California and Armitage branch located at 2800 W. Armitage in the Logan Square neighborhood of Chicago, opened in 2005.[19] According to National City, the target service area for the California and Armitage branch was the area within a two mile radius of the branch. The neighborhood has gone through a number of changes in recent years with substantial increases in property values and a large number of condominium conversions and new construction.[20] However, the neighborhood also remains fairly economically and racially/ethnically diverse. According to the 2000 Census, the median household income in the Logan Square neighborhood was $34,511, or 81 percent of the City of Chicago's median income. Logan Square had a large Latino population at 48 percent, nearly twice that of the city as a whole. Roughly 64 percent of area residents over five years old speak a language other than English at home, nearly twice that observed in the city as a whole.[21]

The Data Set

This study uses two data sets. One data set contains transaction-level data from the three-month period October, 2007 to December, 2007. The other contains household-level data for the month of November in three consecutive years, 2005, 2006, and 2007. Although the data sets are not interchangeable, there is some overlap in the variables included in each. The following analysis utilizes both data sets and includes analysis of household-level data, transaction-level data, and transaction-level data aggregated to the household level.

Both data sets are part of a larger data set used by National City for analytical and marketing purposes.[22] The data sets included some projected demographics and market segmentation information, as well as actual statistics on consumer and business behavior by block group and by household. These latter figures were the focus of Woodstock Institute's analysis, and included information on the number of accounts, product usage, branch usage, Census block location of the consumer's home, and statistics that relate to a household's contribution to National City's income from fees as opposed to income from interest payments. The data analyzed in this report excludes information on commercial transactions.

[16]FDIC. Institution Directory. As of January 29, 2009.

[17]It is unclear from FDIC data which of these branches were new offices opened by National City and which were offices gained through its acquisition of MidAmerica Bank.

[18]FDIC Summary of Deposits. June 30, 2008. Data pulled February 17, 2009.

[19]FDIC. Institution Directory. June 19, 2008.

[20]Becker, R., Little, D., and D. Mihalopoulos. http://www.chicagotribune.com/news/chi-code-overviewjan27,0,7299892.story January 28, 2008 (Date Accessed January 29, 2009).

[21]American Fact Finder, Census 2000 Summary File 3.

[22] Reference correspondence with National City.

Both the transaction-level and household-level data sets included information on all National City customers that used the target National City branches within the respective time periods, regardless of where the customers lived.[23] However, in some cases, the analysis examines consumer behavior by income-level of the census tract in which the customer lives. In other cases, data is aggregated by distance between the block in which the customer's home and the branch. The Chicago branch's target area is a two mile radius around the branch and data are aggregated into households within one mile of the branch, one to two miles of the branch, or outside the subject branch's target area. The Pittsburgh branch data are aggregated into households within one- and one-quarter mile, between one- and one-quarter and two- and one-half miles, and over two- and one-half miles to reflect the two- and one-half mile radius of the branch's target area.

Variables and Methodology

The variables used in the analysis are described here in detail to facilitate discussion in the community reinvestment world about how to use them to improve CRA service test examinations. Variables used in the analysis include:

(a) *Transactions per household:*
This statistic was derived from the transaction-level data and reflects the average number of transactions per household for National City branch customers in a Census tract during the period of analysis.

(b) "Percent transactions at target branch" and "percent transactions at other National City branches during the three-month period of analysis:"
These statistics shows the degree to which a household used the subject branch over other National City branches in the area.

(c) Percent of income from fees:
This statistic describes the degree to which a household's contribution to National City's income is derived from fees as opposed to other sources. Fees are defined as any National City income with the exception of interest and loan fee income.[24] In this analysis, households were grouped by the percent of their contribution to National City's income that came from fees in the following interval groups: 1 to 24.9 percent, 25 to 49.9 percent, 50 to 74.9 percent, and 75 to 100 percent. For example, if a household generated $100 in income for National City in a given period, and $20 of that income was from fees (and $80 from interest) then that household would fall in the 1 to 24.9 percent group.

(d) First account opened and last product or account opened:
These values permit an analysis of the average tenure of National City account holders and the most recent activity account opening activity of those account holders. Households are grouped by account-opening activity before 2004 and in each of the years 2005-2007.

(e) Last product or account type opened:
The National City data set includes information on the last product or account type opened by a household. Transaction accounts and online and telephone banking as well as Visa products were selected for the summary because of their popularity with both the Chicago and Pittsburgh households captured in the data.

[23]Reference correspondence with National City.

[24]Reference correspondence with National City.

(f) *Number of banking products a household owns at National City other than transaction accounts:*
The National City data set included information on the number of products owned by a household other than transaction accounts such as checking and savings accounts. The primary type of non-transaction account was credit cards.

(g) *Household total number of accounts:*
This variable sums all National City accounts, such as deposit accounts, checking accounts, safe deposit boxes, and insurance and brokerage accounts. Additionally, the variable includes ATM and check and debit cards as accounts.[25]

(h) *Income levels:*
The standard household income definitions for CRA purposes are: low-income = less than 50 percent of metropolitan area median-income; moderate-income = at or above 50 percent of metropolitan area median-income but less than 80 percent; middle-income = at or above 80 percent of metropolitan area median-income but below 120 percent; upper-income = at or above 120 percent of metropolitan area median- income.

Tables and Analyses

This section includes variables and analysis which may prove useful in a reinvigorated CRA service test examination. Some variables may prove more useful than others, but one of the purposes of this analysis is to permit a debate in the community reinvestment world about ways to use existing data to improve the service test. For this reason, a wide range of variables were included in the analyses. It should also be noted that the following analysis is based on data from two bank branches. We therefore are not attempting to draw conclusions about the Bank's performance in low- and moderate-income markets, but rather discuss possible uses of available data. The analysis would be much more robust if data were available from all financial institutions.

Table 1 lists the number of accounts in each of the two branches and the changes in those numbers between 2005 and 2007. Analysis of this number would illustrate the success a bank has had in attracting new customers. The numbers in Table 1 indicate that the rate of increase is at least partly a function of the age of the branch. The much higher rate of account growth at the Chicago branch is a function of its recent opening. If account-level data were available from all players in the market, such information could be used to measure how effective a bank has been in growing its presence in certain markets or submarkets, such as low- and moderate-income communities, relative to its competitors.

Table 1: Total Number of Accounts for Each Branch
November 2005-2007[26]

	2005	2006	2007	Percent Change 2005 to 2007
Chicago Branch	5,650	7,526	9,047	60.12%
Pittsburgh Branch	57,229	56,553	58,156	1.62%

[25]Reference correspondence with National City.

[26]Data taken from the block group level data set, November 2005, November 2006, and November 2007.

One possible method for measuring a bank's performance serving lower-income markets would be a market share analysis. Such an analysis would measure a bank's comparative efforts to serve different neighborhoods of different income levels. A bank's market share ratio would be the ratio of a bank's share of all consumer accounts (or the dollar amount of deposits in those accounts at a point in time) held by households in low- and moderate-income neighborhoods (LMI) compared to its share of all consumer accounts (or dollars) held by households in middle- and upper-income neighborhoods (MUI). As that ratio approaches 1.0, a bank could be said to have an equal presence in both markets and be successful in reaching customers in both LMI and MUI neighborhoods. We should note that the relationship between living in a particular census tract and banking at a particular branch is not automatic. A household may bank at a location outside of its neighborhood, for example close to a household member's work location. However, if data were reported by all players in the market, such analysis would still allow regulators to evaluate how successfully banks were serving households in lower-income communities.

Table 2 provides an indication of the types of communities a branch situated in a lower-income neighborhood is serving. The table looks at the number of accounts held by households by the income level of the census tract in which the household resides. This indication is an approximation because a census tract with a particular average income may include households of different income levels. However, the table is a reminder that the mere location of a branch in a lower-income neighborhood is not necessarily an indication of that branch's record of providing accounts to lower-income residents in those tracts.

Table 2: Number of Accounts by Account Holder's Census Tract Income Level
November 2007[27]

	Chicago Branch		Pittsburgh Branch	
Tract Income Level	**Accounts**	**Share**	**Accounts**	**Share**
Low-Income	1,439	15.9%	6,243	10.7%
Moderate-Income	4,532	50.1%	19,026	32.7%
Middle-Income	1,239	13.7%	19,716	33.9%
Upper-Income	1,837	20.3%	13,171	22.6%
Total	**9,047**	**100.0%**	**58,156**	**100.0%**

Table 3 looks at the number of accounts per household. Types of accounts include both transactional accounts and credit accounts. Such a variable might be valuable in understanding the behavior of households in different types of communities and their adoption of bank products. Table 4 shows that the number of accounts per household peaks at two accounts and then diminishes rapidly. The older Pittsburgh branch has somewhat higher percentages of households with three or more accounts.

Table 4 looks at transactions per household. Although this variable will be partly a function of accounts per household, it will also indicate a branch's continuing efforts to meet the needs of households. The lower rate of transactions in the Chicago branch is likely a function of it being a new branch. But branches of similar age in the same neighborhood owned by different banks may differ on this measure depending on the effort they make to market their services.

[27]Data taken from the block group level data set, November 2007.

Table 3. Number and Distribution of Accounts per Household
November 2007[28]

Number of Household Accounts	Chicago Branch	Pittsburgh Branch
1	34.4%	30.4%
2	45.2%	34.5%
3	13.3%	17.2%
4 or Greater	7.1%	17.9%

Table 4. Transactions per Household
October through November 2007[29]

	Number of Transactions	Number of Households	Transactions Per Household
Chicago Branch	4,248	5,274	0.81
Pittsburgh Branch	31,875	21,618	1.47

Table 5 shows the degree to which customers in lower-income neighborhoods are taking advantage of accounts in addition to basic checking and savings accounts, particularly electronic banking. Using such a table, a CRA examiner would have a good factual foundation for raising questions with the bank about patterns of service delivery. Customers able and willing to take advantage of such accounts increase their banking options, and the bank has the opportunity to increases its revenue. In the younger Chicago branch, the number of accounts per household does not vary among census tracts of different income-levels, while in the older Pittsburgh branch, the number of accounts per household increases with the income-level of the census tract. Notice the differences between Chicago and Pittsburgh in the amount of total credit/loans per household for low-, moderate-, and middle-income households. This may reflect the lack of mortgage activity from the Pittsburgh branch for households in these income groups or lower mortgage amounts in Pittsburgh relative to Chicago.

Table 6 breaks out transactions by type of transaction and census tract income level. One indication of the successful delivery of bank services is the number of types of transactions that a household uses. These numbers will likely be constrained by family income and size, but among bank comparisons can be made of levels of similar transaction types to households in communities with different income-levels. As table 6 shows, some products like safe deposit boxes are used infrequently. Transactions of other, more frequently used services such as checking account debits tend to increase with tract income-level. As the table also shows, the trends by income are more consistent in the older branch where presumably customers have had more time to sign up for and use all of the services available.

[28]Data taken from the block group level data set, November 2007.

[29]Data taken from the transaction level data set, a three-month aggregate, October through November, 2007.

Table 5: Number and Type of Account by Household by Census Tract Income Level and Average Credit/Loan Amount, November 2007[30]

	Low-Income	Moderate-Income	Middle-Income	Upper-Income	Total
	Number of Households with Accounts				
Chicago Branch	848	2,645	703	1,078	5,274
Pittsburgh Branch	2,606	7,852	7,061	4,099	21,618
	Number of Accounts				
Chicago Branch	1,439	4,532	1,239	1,837	9,047
Average per Household	1.70	1.71	1.76	1.70	1.72
Pittsburgh Branch	6,243	19,026	19,716	13,171	58,156
Average per Household	2.40	2.42	2.79	3.21	3
	Number of Deposit Accounts				
Chicago Branch	765	2,253	542	730	4,290
Average per Household	0.90	0.85	0.77	0.68	0.81
Pittsburgh Branch	4,052	11,971	12,343	8,063	36,429
Average per Household	1.55	1.52	1.75	1.97	2
	Number of Credit Accounts				
Chicago Branch	560	1,877	591	935	3,963
Average per Household	0.66	0.71	0.84	0.87	0.75
Pittsburgh Branch	1,310	4,408	4,566	3,157	13,441
Average per Household	0.50	0.56	0.65	0.77	0.62
	Number of Other Accounts				
Chicago Branch	114	402	106	210	832
Average per Household	0.13	0.15	0.15	0.19	0.16
Pittsburgh Branch	881	2,647	2,807	2,453	8,788
Average per Household	0.34	0.34	0.40	0.60	0.41
	Average Household Total Credit/Loan Amount				
Chicago Branch	$46,046.66	$55,755.80	$79,628.80	$265,712.99	$68,400.79
Pittsburgh Branch	$10,606.50	$7,444.83	$16,098.67	$100,842.06	$15,742.62

Multi-year data permits an analysis of a bank's continuing efforts to provide households with banking services. Table 7 shows distribution of both the years that customers' first accounts were opened and years that existing customers' most recent accounts were added. In Chicago, the younger branch, shows an increasing share of first accounts opened each year between 2004 and 2007 as the branch builds its customer base. In contrast, in Pittsburgh, most of the existing customers first opened an account in or before 2004. But the two branches added accounts for existing customers at roughly similar rates with most of those additional accounts being other than simple transactions accounts.

[30]Data taken from the block group level data set, November 2007.

Table 6: Number of Transactions by Transaction Type and Account Holder's Census Tract Income Level, October through November 2007[31]

	Low-Income	Moderate-Income	Middle-Income	Upper-Income	Total
Households					
Chicago Branch	391	1,213	56	22	1,682
Pittsburgh Branch	1,173	2,005	1,275	584	5,037
Safe Deposit Accounts					
Chicago Branch	14	27	0	0	41
Average per Household	0.04	0.02	0	0	0.02
Pittsburgh Branch	68	65	110	72	315
Average per Household	0.06	0.03	0.09	0.00	0.06
Total ATM Trans NC & Foreign					
Chicago Branch	1,435	3,602	241	66	5,344
Average per Household	3.67	2.97	1.00	3.00	3.18
Pittsburgh Branch	4,508	9,397	6,133	2,641	22,679
Average per Household	3.84	4.69	4.81	4.52	4.50
Total Checking Account Debits					
Chicago Branch	1,015	3,542	209	115	4,881
Average per Household	2.60	2.92	3.73	5.23	2.90
Pittsburgh Branch	7,728	12,976	11,073	7,013	38,790
Average per Household	6.59	6.47	8.68	12.01	7.70
Total Account Credits					
Chicago Branch	1,916	5,448	332	83	7,779
Average per Household	4.90	4.49	5.93	3.77	4.62
Pittsburgh Branch	5,587	10,584	7,484	3,777	27,432
Average per Household	4.76	5.28	5.87	6.47	5.45
Total EFT Debits					
Chicago Branch	679	1,940	71	24	2,714
Average per Household	1.74	1.60	1.27	1.09	1.61
Pittsburgh Branch	2,159	3,914	3,548	1,851	11,472
Average per Household	1.84	1.95	2.78	3.17	2.28
Total EFT Credits					
Chicago Branch	547	1,707	103	11	2,368
Average per Household	1.40	1.41	1.84	0.50	1.41
Pittsburgh Branch	2,568	4,518	2,812	1,255	11,153
Average per Household	2.19	2.25	2.21	2.15	2.21
Total Telephone Transactions					
Chicago Branch	53	51	3	4	111
Average per Household	0.14	0.04	0.05	0	0.07
Pittsburgh Branch	164	281	216	69	730
Average per Household	0.14	0.14	0.17	0.12	0.14
Total Account Debits					
Chicago Branch	2,858	7,296	423	93	10,670
Average per Household	7.31	6.01	7.55	4.23	6.34
Pittsburgh Branch	8,435	16,628	12,043	5,636	42,742
Average per Household	7.19	8.29	9.45	9.65	8.49
Total Debit Card Debits Including ATM					
Chicago Branch	4,504	11,540	786	188	17,018
Average per Household	11.52	9.51	14.04	8.55	10.12
Pittsburgh Branch	5,874	13,960	10,288	5,793	35,915
Average per Household	5.01	6.96	8.07	9.92	7.13
Total Online Banking Transactions					
Chicago Branch	577	1,237	979	3	2,796
Average per Household	1.48	1.02	17.48	0	1.66
Pittsburgh Branch	395	1,489	1,431	917	4,232
Average per Household	0.34	0.74	1.12	1.57	0.84

[31]Data taken from the transaction level data set, a three-month aggregate, October through November, 2007.

Table 7: Percent of First and Last Accounts Opened by Year
October Through November 2007[32]

	Chicago Branch	Pittsburgh Branch
Year of First Account		
2007	30.00%	7.51%
2006	24.41%	4.69%
2005	19.11%	4.33%
2004 and Before	26.47%	83.48%
Year of Most Recent Account		
2007	64.08%	51.23%
2006	23.19%	22.30%
2005	9.70%	10.28%
2004 and Before	3.03%	16.15%
Last Account Type		
Checking or Savings	23.48%	25.35%
Other	68.09%	52.16%

The more credit accounts a household has with an institution, the greater the percent of the income that household contributes to the bank as interest rather than fees. For banks, interest income is generated from mortgage and credit card interest payments. Non-interest fees are generated by ATM and other types of transaction-related fees. In general, Table 8 shows that households in moderate-income census tracts tend to have the highest share of their bank income generated by fees. Such a variable would be useful in understanding the relative importance of fee income for customers in communities of different income levels. Financial institutions have often cited the different cost and income structures of serving lower-income households as a challenge in profitably serving lower-income populations. There have frequently been concerns that banks were over-burdening lower-income customers with higher fee products. Collecting data on the percent of bank income generated by fees versus interest helps regulators better understand this dynamic.

Table 8: Percent Income From Fees by Census Tract Income Level
October Through November 2007[33]

	Low-Income	Moderate-Income	Middle-Income	Upper-Income
Chicago Branch				
1% to 24.9%	16%	48%	14%	23%
25% to 49.9%	14%	50%	16%	20%
50% to 74.9%	18%	56%	13%	14%
75% to 100%	18%	58%	10%	14%
Pittsburgh Branch				
1% to 24.9%	12%	34%	33%	22%
25% to 49.9%	11%	33%	38%	18%
50% to 74.9%	11%	37%	34%	18%
75% to 100%	14%	45%	28%	12%

[32]Data taken from the transaction level data set, a three-month aggregate, October through November, 2007.

[33]Data taken from the transaction level data set, a three-month aggregate, October through November, 2007.

Tables 9 and 10 take the data found in Table 8 and break it out by the income-level of a household's census tract. Understanding patterns of banks' opening of new and existing accounts will be critical in evaluating their delivery of service to low- and moderate-income communities. This variable also would allow regulators to understand how longstanding a bank's presence is in certain submarkets and how active a bank is at marketing new products to existing customers in those submarkets. Table 9 shows the Chicago branch with a substantial share of accounts in LMI tracts that were opened between 2006 and 2007, while in the Pittsburgh branch most first accounts for all income groups were opened in 2004 or before.

Table 9: Year of Household's First Account by Tract Income level
October Through November 2007[34]

	Low-Income		Moderate-Income		Middle-Income		Upper-Income		Total	
Chicago Branch										
2007	106	27.1%	391	32.2%	11	19.6%	3	13.6%	511	30.4%
2006	107	27.4%	328	27.0%	14	25.0%	0	0.0%	449	26.7%
2005	89	22.8%	250	20.6%	7	12.5%	15	68.2%	361	21.5%
2004 and Before	89	22.8%	244	20.1%	24	42.9%	4	18.2%	361	21.5%
Total	**391**	**100.0%**	**1,213**	**100.0%**	**56**	**100.0%**	**22**	**100.0%**	**1,682**	**100.0%**
Pittsburgh Branch										
2007	114	9.7%	186	9.3%	70	5.5%	29	5.0%	399	7.9%
2006	43	3.7%	119	5.9%	56	4.4%	16	2.7%	234	4.6%
2005	40	3.4%	90	4.5%	65	5.1%	13	2.2%	208	4.1%
2004 and Before	976	83.2%	1,610	80.3%	1,084	85.0%	526	90.1%	4,196	83.3%
Total	**1,173**	**100.0%**	**2,005**	**100.0%**	**1,275**	**100.0%**	**584**	**100.0%**	**5,037**	**100.0%**

Table 10 shows that, in both Chicago and Pittsburgh, most households in low- and moderate-income neighborhoods opened their most recent National City account in either 2006 or 2007.

Table 10: Year of Household's Most Recent Account by Tract Income Level
October through November 2007[35]

	Low-Income		Moderate-Income		Middle-Income		Upper-Income		Total	
Chicago Branch										
2007	237	60.6%	763	62.9%	21	37.5%	15	68.2%	1036	61.5%
2006	104	26.6%	288	23.7%	15	26.8%	4	18.2%	411	24.4%
2005	38	9.7%	135	11.1%	5	8.9%	3	13.6%	181	10.7%
2004 and Before	12	3.1%	27	2.2%	15	26.8%	0	0.0%	54	3.2%
Total	**391**	**100.0%**	**1,213**	**100.0%**	**56**	**100.0%**	**22**	**100.0%**	**1,685**	**100.0%**
Pittsburgh Branch										
2007	601	51.2%	1034	51.6%	621	48.7%	293	50.2%	2549	50.6%
2006	252	21.5%	425	21.2%	296	23.2%	115	19.7%	1088	21.6%
2005	122	10.4%	199	9.9%	137	10.7%	64	11.0%	522	10.4%
2004 and Before	198	16.9%	346	17.3%	221	17.3%	112	19.2%	877	17.4%
Total	**1,173**	**100.0%**	**2,005**	**100.0%**	**1,275**	**100.0%**	**584**	**100.0%**	**5,040**	**100.0%**

[34]Data taken from the transaction level data set, a three-month aggregate, October through November, 2007.

[35]Data taken from the transaction level data set, a three-month aggregate, October through November, 2007.

Table 11 illustrates the importance of locating branches in lower-income neighborhoods and suggests a metric for measuring a bank branch's outreach to lower-income households in its service area. The table looks first at all account holders who used the target branch regardless of where they live to see what percent of those households are in LMI communities. It then looks only at account holders living within one mile of the target branch to see what percent of those households are in LMI communities. Finally, it looks only at account holders in LMI tracts within a mile of the target branches and examines how often they use the subject branch versus other National City branches.

Table 11 also shows that in Chicago, most transactions at the branch, 71 percent, were made by account holders residing in LMI census tracts. When looking just at account holders residing within a one mile radius of the branch, we see that number increase dramatically. Nearly 98 percent of account holders living within one mile of the Chicago branch resided in LMI communities. Finally, we also see that of those account holders in LMI tracts within a mile of the subject branch, 84 percent of their transactions were at the target branch. This analysis indicates that the branch is serving the households in the LMI communities surrounding the branch, but also that the LMI account holders near the branch are heavily utilizing that branch as opposed to other National City branches in the area. While the numbers are not as stark at the Pittsburgh branch, a similar pattern holds.

Table 11: Number and Percent of Transactions by Account Holders Who Have Used the Target Branch, by Distance From Branch and by Census Tract Income Level
October Through November 2007[36]

	Chicago Branch	Pittsburgh Branch
Account Holders Who Have Used the Target Branch		
Transactions	10,443	37,151
From LMI Tracts	7,438	17,484
Percent From LMI Tracts	71.2%	47.1%
Account Holders Residing Within One Mile* Who Have Used the Target Branch		
Transactions	4,167	11,015
From LMI Tracts	4,066	6,691
Percent From LMI Tracts	97.6%	60.7%
Account Holders Residing in LMI Tracts Within One Mile* of the Target Branch		
At Target Branch	3,416	4,023
At Other National City Branches	650	2,668
Percent at Target Branch	84.0%	60.1%

Local knowledge would be necessary to figure out the difference between the two branches and the communities they serve but for the purpose of the service test most of the comparisons would be among banks and bank branches in the same or similar communities. The difference in usage between the two branches in the two different communities merely points to local characteristics that may affect usage. Such an analysis, however, would be critical in understanding how effective specific branches and institutions are at serving LMI households near the branch.

[36]Data taken from the transaction level data set, a three-month aggregate, October through November, 2007.

Conclusions

This report suggests that by using the two available data sets studied, bank regulators could better evaluate a bank's provision of retail banking services to lower-income communities and to lower-income customers than they can by means presently utilized in the CRA examination. Currently, regulators base a service test score solely on the presence of delivery mechanisms; however, these data sets would allow regulators to evaluate the actual delivery of bank services. As this report shows, if transaction- and account-level data were collected from all financial institutions active in a given market, they can be used to evaluate a bank's ability to attract and retain customers in low- and moderate-income markets. Such data could also be used to compare a bank's presence in lower-income communities relative to its presence in higher-income markets. Additionally, these data can be used to analyze gaps in access to retail banking services for lower-income communities or to better understand how customers in different types of communities use specific bank products and services. Additional types of analysis using such data could include examining geographic patterns of service delivery or measuring how effective specific branches are at serving their surrounding communities.

The most important finding of this report is that despite the long-time complaint of federal bank regulators that they lack the data to evaluate banks' performance under the service test, these data exist and are used by banks as part of the regular monitoring of their businesses. Banks regularly collect a variety of indicators on account holders and transactions including such critical variables as census tract location, account holder, number of new accounts opened, age of account, and percent of bank income generated by fees. Such data would give a useful picture of the degree to which banks are actually providing bank services to lower-income communities. While the distribution of bank branches, the only solid quantitative indicator currently used in the service test, is an important indicator, it is simply not sufficient because it is merely a proxy for the actual delivery of bank services. The data described in this report can be used in a variety of ways to provide quantitative measures of a bank's service test performance. It is critical that this available data be collected by regulators and analyzed under the CRA service test.

It is equally important that these data be made public. Analysis of public data made available through the Home Mortgage Disclosure Act (HMDA) and the CRA have proved critical in understanding mortgage lending patterns and small business lending markets. These data have allowed researchers and advocates to highlight gaps in access to credit, expose disparate lending patterns, and work with financial institutions to improve lending levels in low- and moderate-income communities. Similar data on bank services would serve an important role in adding necessary transparency to the provision of bank products to lower-income communities and provide an incentive for banks to improve their performance.

While the use of additional data described in this report would greatly enhance CRA service test examinations, other data are also critical.[37] The data in this report are aggregated to the census tract level. They, therefore, exclude data on the large percentages of low- and moderate-income people living in higher-income census tracts. Examiners should develop ways to include these households in their data collection. Examiners should also institute a systematic analysis of the full cost of retail products to ensure that the fees, terms, and conditions are reasonable. Banks should also report data on the services they provide to unbanked and underbanked households, and their success in using those services to recruit new customers.

[37]For a fuller listing of key data see Smith, Bush, and Paufve 2007, Pg.10.

The inescapable implication of this report is that, despite the denials of banks and bank regulators, banks regularly collect and analyze data that, if used in CRA examinations and made public, could dramatically improve the quality and usefulness of the CRA service test and the delivery of banking services to lower-income households and communities.

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