CANICCOR

AN INTERFAITH COUNCIL ON CORPORATE ACCOUNTABILITY

P.O. Box 426829, San Francisco, California 94142
Offices at 4407 20th Street, San Francisco, CA 94114
Phone: (415) 282-8497 - FAX: (415) 282-8497 - e-mail: johnlind01@yahoo.com

25 August 2010

Jennifer J. Johnson, Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue, NW
Washington, DC 20551

Dear Ms. Johnson:

Subject: Docket No. R-1386
Comments on the Community Reinvestment Act

Dear Ms. Johnson:

I am commenting on the Community Reinvestment Act (CRA) because CANICCOR serves as a consultant to a number of institutional investors that have social concerns in addition to investment concerns and meet regularly with all the major banks. For many years CANICCOR has prepared reports on major housing lenders annually concerning their lending both geographically and by race/ethnicity and gender. These reports have included housing lending, business/small farm lending, community development lending and also risk. Over the last year or so the emphasis has been on loan modifications, and Investors and CANICCOR have met with 10 major servicing banks.

Because of the infrequency of agency CRA Evaluations, CANICCOR began to develop an abbreviated annual CRA evaluation in the form of a spread sheet, a description of which is attached. It suffered from a number of flaws because proxies had to be found to fill in the gaps in the data. I have discussed some of these needs in my comments on HMDA, but there are also significant data needs on community development lending and investment, small business/small farm lending and access to banking services. The CANICCOR spread sheet covered not only assessment areas but also non-assessment areas, all significant affiliates as well as non-depository independent lenders that report under HMDA.

Because these CANICCOR reports are designed for institutional investors, CANICCOR comes to this analysis from the perspective of both the investor in these institutions but also an investor concerned about the social well being of its communities.

I hope that these comments will be helpful to the further development of the reporting of data under CRA and of the process of making CRA Evaluations both more extensive and more efficiently performed.

Geographic Coverage and Affiliate Activities:

Geographic coverage should be all lending whether inside or outside any assessment areas, but separate evaluations must be made inside and outside of any assessment areas because performances tend to be lower in the non-assessment areas.

Because most large lenders have not only retail lines but also wholesale and correspondent lines, their CRA evaluations should be over the whole geography of this lending. Large banks, like ING and Capital One, also some take deposits from their non-assessment areas. CANICCOR has generally evaluated separately the lending in both the assessment and non-assessment areas for retail and wholesale lines and the performances are generally better within the assessment areas. Presumably within these assessment areas, the lender often has other relations with the borrower by which the lender can better judge the creditworthiness of the borrower. There are two possible ways of separately evaluating the performances in assessment areas and the non-assessment areas

- CANICCOR has used as a reference the lending of all lenders from assessment areas and non-assessment areas[1] on a tract by track basis. The lending of the examined lender is then aggregated for its assessment areas or segments thereof and compared with the reference lending of all lenders in all in all tracts that conform to the examined lender's assessment area or segment thereof. A similar analysis is performed on the examined lender's non-assessment areas. This performance analysis is usually made at the MSA/MD level and aggregated upward geographically.

- A second choice is similar to that above but using separately the lending of all lenders segregated on each census tract by assessment or non assessment area of each lenders. This process would yield two tract level references, one for assessment area lenders and one for those having originations in their non-assessment areas. The result would automatically give unique relative performances for assessment area and for non assessment area loans of any examined lender.

By either method special purpose banks and similar institutions would be primarily evaluated in each MSA/MD in their non-assessment area lending by comparison with other lenders lending in their non-assessment area in that MSA/MD.

A major problem with these methods of peer comparisons is that fact that in 2009, the top three originators (Wells Fargo, Bank of America, and Chase) dominated the mortgage origination market with 41% of the market. Thus these three plus perhaps Citi need to be examined with more emphasis on community development and community outreach in the area of services because their lending significantly influences the average mortgage lending performance levels in many MSA.MDs. . See Access to Banking Services and Community Development below. On the other hand, caution is

[1] The CANICCOR method has been to determine the overall market in a given assessment or non-assessment area of evaluation within an MSA/MD and determine the fraction of loans in that overall market to LMI borrowers and then compare that fraction to the fraction of a given lender. If those fractions are within ±10% of each other, the performance is considered at the industry level.

needed if goals are set so that they don't become like the HUD goals for the GSEs. These goals resulted in purchases of subprime mortgages and mortgage securities in order to meet the goals.

As to what affiliates should always be included in the CRA exam, certainly mortgage affiliates, finance affiliates, and affiliates supplying small businesses and/or small farm loans, community development loans, foundations supplying community development grants, and whatever other areas might be added to CRA.

Mortgage affiliates should always be considered part of the depository in this calculation, since retail housing loans are usually processed by the mortgage affiliate. If finance company affiliates of institutions have a network of retail offices separate from the depository, the finance company should have its own assessment and non-assessment areas, for example CitiFinancial versus CitiMortgage, since they focus on different clientele. CANICCOR supports bringing credit card loans under CRA, as discussed below and this inclusion would bring many larger specialty banks directly into the CRA examination process.

This proposed process would make the evaluation applicable to both institutions with physical deposit taking facilities and those without.

CRA Performance tests, asset thresholds and designations.

As discussed below under Small Business Lending, most intermediate small institutions originate a larger volume of business loans than 1-4 family housing loans, but they report the latter under HMDA. Reporting should be required of small business lending to provide an adequate evaluation of these intermediate small institutions. From the discussion above, geographic and affiliate coverage should permit CRA coverage of many limited purpose institutions.

Careful thought should be given to including reporting and the CRA evaluation of credit card lending since credit cards include both personal loans as well as business loans. These distinctions are becoming more blurred as can be seen by the use of 1-4 family seconds, either closed-end or HELOCs, for business purposes by small business owners or for paying off credits cards, etc. See the comments below under Small Business Lending.

Small Business and Small Farm Lending:

CANICCOR requests that the CRA data on originations for small business loans be separated into C&I loans, real estate loans and credit card loans as is done with housing and personal lending, which is separated into 1-4 family residential properties, consumer loans and credit cards. Similarly **small farm loans should be separated in loans on farmland, agricultural production and credit card loans.**

CANICCOR has limited its analysis to loans to CRA-defined small businesses, not to all small business loans. CANICCOR has been concerned primarily with

commercial and industrial (C&I) loans, because small businesses usually rent/lease space and need funding for inventory, equipment, etc. At present this distinction is not made in the reporting of small business loans or loans to small businesses, and CANICCOR has had to estimate the separation by relative size of the loan. n addition, small businesses quite often use credit cards for smaller invoices, but they cannot usually be used for major inventory and equipment payments. CANICCOR attempted to eliminate them from the CRA data by excluding loans to small business to below about $15,000.[2]

Note that bank call reports (FFIEC 041 and FFIEC-031) Schedule RC-C Part I - Loans and Leases makes these separations for the depository's overall lending quarterly and then the June 30th Call Reports make the same separations of real estate and C&I for loans to small businesses (actually small business loans by the CRA definition) and lending for farmland and agricultural production for small farm loans.

CANICCOR urges the dollar definition of a small business and of a small farm be scaled annually by the median family income of the MSA/MD, just as housing loans are treated, or by some similar reference..

At present the definition of small businesses and small farms has been fixed in dollar amount of annual turnover for 15 years and has never accounted for the regional differences in doing business. During this time, inflation has made these limits obsolete. The question is then what sort of index should be used to define these entities?

While the cost of doing business is not directly related to the median family income of the area, the simplicity of using the median family income of the MSA/MD suggests its use. While inventory prices many not vary greatly across the country, owner and employee housing costs and incomes do. MSA/MD median family incomes vary considerably by nearly a factor of three across the country, according to the Census. Thus, the definition of the maximum yearly turnover of a small business should also vary by some factor roughly related to the median family income, since the major costs are wages and salaries as well as rent on the business facility. Such an index might not be so applicable to large businesses that have heavy capital expenses and relatively small labor force, but this is not so true of small businesses with turnovers of the order of a couple of million dollars a year.

In summary, **there should be a rethinking of the definition of small businesses and small farms for CRA purposes**.

CANICCOR urges that the loans to small businesses and loans to small farms be also separated into the same size categories of fixed sizes as that used for all small business loans and all small farm loans. See the following discussion for our preference for individual loan data.

---

[2] John E. Lind, "Small Business Loans", CANICCOR. This report shows the analysis the small business loans of 2004 but was revised in 2006.

For simplicity, these categories, currently ≤$100,000, >$100,000 to ≤$250,000, and >$250,000 to ≤$1,000,000 small business loans, could remain fixed over time and geographies. Such a fixing of these dollar ranges would then not require constant changes in the Call Report of 30 June for the reporting of the number and current value of small business and small farm loans in Schedule RF-C Part II - Loans to Small Businesses and Small Farms. Note that while the Call Report calls these loans "Loans to Small Business and Small Farms:, in CRA terms they are the current amount (UPB) of small business and small farm loans having original loan amounts as specified by the category on the books on 30 June.

CANICCOR urges that the dollar amount of individual small business loans be provided by census tract category within the county, rather than by total amount and number of loans. If necessary to prevent identification of the individual borrower, the census tract categories could be broadened. In such an arrangement is not possible, then the individual loans to small businesses and small farms could at least be categorized into the same categories as used for all small business loans and small farm loans.

The use of aggregate data by census tract category rather than individual loan data at the tract level is understandable in order to prevent the identity of the borrower from being known. CANICCOR therefore has uniformly distributed the loan amounts (CRA File Table D1 and D2) over the tracts of the given income category of each individual lender which are listed as having lending in them in the respective assessment or non-assessment areas (Table D6)[3]. This process results in a tract level file for each lender. From these individual lender data, an aggregate data file is created at the tract level. While this approach is not ideal, it does provide a reasonable method for handling the data.

As a result, more detailed data on the size of loans to small business is desirable. One approach would be use the same three categories that are used for small business loans (≤$100,000, >$100,000 to ≤$250,000, and >$250,000 to ≤$1,000,000). A preferable method would be to broaden the census tract categories while reporting individual loans to prevent identification of the borrowers.

CRA Thresholds: CANICCOR believes that the intermediate small institutions should provide more detailed small business loan data under CRA.

Total loan distribution for the 578 banks with assets between 500 million and 1 billion from Call Reports at yearend 2006 shows that 36.0% of the total loans and leases on their books were in commercial real estate and C&I lending, with the latter accounting for a third of the sum of the two. In contrast, 1-4 family housing loans, which are reported under HMDA, accounted for only 22.9% of the total amount of loans and leases. It is obvious that the niche of these smaller institutions is small business and also construction loans. Thus their originations

[3] John E. Lind, "Small Business Loans", CANICCOR. This report shows the analysis the small business loans of 2004 but was revised in 2006.

should be reported under CRA, but because of small numbers would require several years of originations to provide an adequate evaluation.[4]

Access to Banking Services:

The need for more effort by CRA reporting institutions to provide more services is easily observed in my neighborhood in San Francisco, which is not a low-moderate income or heavily minority area. The neighborhood has branches of the country's four largest banks but also a check cashing/payday lending store. Obviously the check cashing/payday loan store has found a suitable market in this neighborhood, which shows that there is a market extending even beyond LMI and heavily minority tracts.

Jonathan Mintz[5], NYC Department of Consumer Affairs, summarizes that CRA must (1) focus on retail banking products, (2) clearly define eligible products and services, and (3) systematically evaluate the promotion and uptake of these products. It seems to me that few CRA covered institutions have exerted much effort into analyzing what products such fringe banking institutions offer and how they could improve on them at a lower cost to the consumer.

Daniel Leibsohn[6] has examined the economics of payday loans showing that these institutions make their money basically on repeat customers for short term loans and that longer term loans of a couple of months or more could reduce overall borrower costs. An overview of the fringe banking system is provided by Caskey[7].

Before the present crisis, CANICCOR had been in some discussions with a couple of banks on these issues including Key Corp and Wells Fargo & Company. Wells Fargo developed a Direct Deposit Advance. In discussions with KeyCorp early in this decade, the investors learned that KeyCorp had developed a bank account with a paid debit card that could be loaded at ATMs. This program appeared to be quite successful in a major assessment area and KeyCorp had a considerable outreach campaign. . We have not checked back to find out the difficulties that may have ultimately developed with these products.

Paid debit cards provide greater safety in more dangerous neighborhoods for ATMs can be set up in well lighted places like super markets and used both to deposit pay checks and load debit cards. However, more outreach is required and a broader selection of products should be examined including limited payday advances, while understanding the overuse by the middle class of credit cards.

---

[4] For example at the end of 2010Q1 from the Call Reports, two examples at the far ends of the scale can be compared. Bank of Marin with assets of $1.19 billion had on their books 273 small business real estate loans with UPB of $331 million and 567 small business C&I loans with UPB of $104 million. At the other end of the asset scale, Redwood Capital Bank with assets of $0.201 billion held 106 small business real estate loans with UPB of $38 million and 145 small business C&I loans with UPB of $165 million. Thus both of these banks held significant numbers and UPBs for evaluation.

[5] Jonathan Mintz, Testimony at the Public Hearing on the Community Reinvestment Act Regulations, July 19, 2010.

[6] Daniel M. Leibsohn, "An Analysis of Business Models and Financial Feasibility of Fringe Banking Institutions" 2002

[7] John P. Caskey, "Fringe Banking: Check-Cashing Outlets, Pawnshops, and the Poor", Russell Sage Foundation (2004)

I would urge every large bank to have a strategic plan for developing access to banking services, focusing on the under-banked and unbanked, and specifying annually under CRA any community surveys, products developed and outreach with the success or failure of the particular plan by the number of products sold. Outreach may be one of the most important portions of the plans in LMI communities with high rates of under-banked and unbanked.

Community Development:

Reporting of Community Development Funding should be more detailed.

The current public reporting of Community Development loans under CRA is woefully lacking in information. At present only the total number and amount of loans for the reporting depository for originations and for purchases of loans and separately for any affiliates, but there is no indication of either the geography of the lending or the type of loan.

The type of community development lending is very important, since it ranges from specific direct loans for structures to loans to CDFIs, which may distribute its funding locally or over a large geographic area. But there are also other forms of support for community development that should be considered for reporting to give the entire picture. These include letters of credit, which can be very useful to the support of a development, grants from lender related foundations, investments as well as purchased participations.

To remedy this lack of information I suggest at a separate record be submitted for each loan or investment and propose the following structure at least as a starting point:

1. Record ID
2. Respondent – ID Agency Code
3. Activity Year
4. Depository or Affiliate
5. Amount funded or invested or granted in letters of credit during the year
6. Originated or Purchased
7. Type of Community Lending or Investment selected from:
    a. Loan direct
    b. Loan to CDFI
    c. Letter of Credit
    d. Grant
    e. Investment
    f. Participation
8. Purpose (housing, commercial, mixed, other)
9. Loan, investment, etc to value of any structure, for housing also provide:
    a. Number of housing units financed
    b. Type of any restrictions on units (income level, etc.)
    c. Number of restricted units
    d. Housing unit space by percentage in mixed structures
10. Below market financing: yes or no

11. Analysis of local need (text)
12. Region
13. State
14. MSA/MD
15. County
16. Tract
17. Name of Project

Obviously some of the above items, such as housing information, would be blank for non-housing community development forms. Regarding the geography, if the loan were to a national CDFI and not restricted geographically in any way, then the region would be national, and the state, MSA/MD and tract would be blank. Thus not all community development would be specified to the census tract level.

The type of community lending and investment specified in field 7 as well as fields 8 through 11 would help the CRA examiner to provide some relative weighting to the project versus other projects.

Finally, an analysis of local needs (11) is necessary to determine the real need of the local area, rather than a project that looks good by abstract standards but does not answer the needs of the community.

Regarding privacy issues, most community development activities of an institution are public so providing more details should not be an issue.

Ratings and Incentives:

Rating scale needs to be more finely divided:

A more finely divided rating scale is needed so the regulators and the public can differentiate the quality of the institution being rated from others of its peer group. The current scale could be divided into categories such as Outstanding, Superior, Satisfactory, Needs to Improve, and Substantial Non-Compliance with perhaps a plus or a minus, but the categories should be based on some form of a continuous numerical scale.

Because investors prefer up-to-date data on CRA, CANICCOR has attempted to develop a rating system based on the currently available, publicly released CRA and HMDA data on an annual basis This is obviously an on-going process at this point. CANICCOR has developed a rating scale based on a numeric value which in turn can be converted into a category scale. Investors are then provided with a report in the format of an excel-spread sheet[8] covering all institutions of with assets of $1 billion or more and other lenders with at least $1 billion in annual originations. The description of this spread sheet is attached. This report has been an ongoing effort to find suitable ways to evaluate numerically the performance in various sectors of an institution's lending on a comparative basis with other institutions of its peer group.

[8] John E. Lind, "Social Performance Analyses of the Lending of Financial Institutions", last revised June 2008.

Incentives:

Up until now the incentive for a high CRA Performance grate was primarily in the ability of the institution to more readily receive approval of an acquisition. With the present concentration in the banking system, additional incentives are needed. Possible additional incentives might be that assessment and examination fees could be based upon CRA performance[9] or that a very poor CRA rating might cause the loss of the institution's charter.

Discriminatory or other illegal credit practices on CRA Performance Evaluations:

CANICCOR in all its reports of an institution's social performance combined a CRA performance with an Equal Credit Opportunity Act (ECOA) performance, and in recent years with an analysis of risk. The separation of geographic discrimination from discrimination by income, race/ethnicity and gender is rather arbitrary since they have been inherently interconnected. Obviously acts that have proven to have broken the law or regulations must be considered in the CRA evaluation.

CRA disclosures and Performance Evaluations:

More Detailed Reporting of Data and Greater Frequency of Examinations:

By providing more detailed data, both the public as well as the federal examiners would have more information in a condensed and easily accessed format so that examinations could be made more efficiently and permit more frequent exams.

As discussed in the foregoing sections of these comments, much more detail should be provided publicly on individual community development loans and should also include reporting on investments, grants and letters of credit. Detailed data are needed on small business and small farms together with a redefinition of small businesses and small farms. Disclosure of information on access to banking services is more difficult to evaluate but should disclosed so that some guidelines can be developed.

Improving the CRA Performance Evaluations:

By providing more public information, examiners can more easily summarize the CRA Performance Evaluations and can cover more products such as credit cards larger geographies including non-assessment areas and all necessary affiliates. At present, published CRA Evaluations are somewhat wordy because of the lack of easily tabulated data and guidelines for evaluation. The added data would also help improve consistency of the exam process.

---

[9] Jonathan Mintz, Testimony at the Public Hearing on the Community Reinvestment Act Regulations, July 19, 2010.

I greatly appreciate this opportunity to make comments on the implementation of the Community Reinvestment Act, and I appreciate the efforts of the Federal Reserve in facilitating this update.

Sincerely Yours,

John E. Lind, Ph.D.
Executive Director

Enclosures:

John E. Lind, "Social Performance Analyses of the Lending of Financial Institutions", CANICCOR, June 2008.

John E. Lind, "Small Business Loans", CANICCOR, 2006 revision of a report on 2004 data.

cc: Vidette Bullock-Mixon, Director of Corporate Relations, General Board of Pension and Health Benefits, United Methodist Church

Harry Van Buren, Consultant to the Protestant Episcopal Church in the USA.

Valerie Heinonen, o.s.u., Valerie Heinonen, o.s.u., Consultant, Corporate Responsibility, Mercy Investment Services, Inc., Dominican Sisters of Hope, Ursuline Sisters of Tildonk, U.S. Province

William Somplatsky-Jarman, Mission Responsibility through Investment Committee, Presbyterian Church (USA)

Sr. Susan Vickers, RSM, VP Community Health, Catholic Healthcare West

Patricia Zerega, Corporate Social Responsibility, Church in Society, Evangelical Lutheran Church in America

CANICCOR
Social Performance Analyses of the Lending of Financial Institutions

by

John E. Lind, Ph.D.
CANICCOR[1]
June 2008

CANICCOR Social Performance Analyses for Investors is usually provided as an excel-spread sheet, which contains some 650 lenders. These lenders are either corporations with depository assets of greater than $1 billion or finance corporations with total single-family housing loan originations of $1 billion or more. Performances of smaller corporations are available upon request, but there may not be sufficient lending to permit a reliable performance evaluation.

[1] John E. Lind, CANICCOR, 4407 20th Street, San Francisco, CA 94114, 415-282-8497, johnlind01@yahoo.com

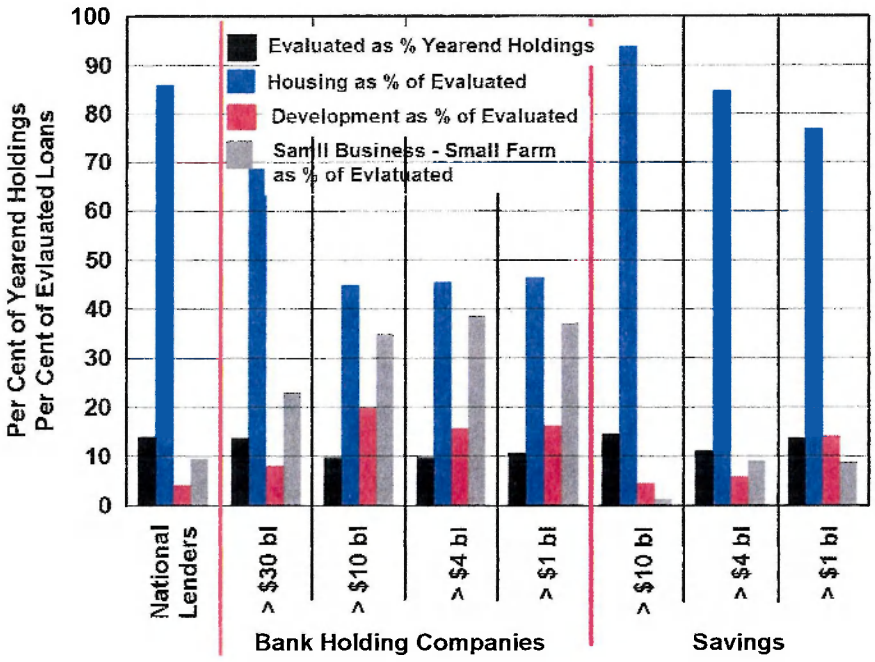
Overview

The CANICCOR analysis consists of separate analyses of the following data at the industry level and then at the peer group level. The basic information is provided under either the Home Mortgage Disclosure Act (HMDA) or the Community Reinvestment Act (CRA):

- **Purchase Mortgages** (HMDA) for owner occupancy with an estimate of the **risk** of the loans arising from high interest rates,
- **Multifamily Loans** (HMDA) after excluding structures of 50 or more units to focus on under served structures of less than 50 estimated units,
- **Development Loans**, (CRA), and
- **Small Business - Small Farm Loans**, (CRA) after excluding credit card sized loans.

Performances on these loan types are first computed relative to the **industry** as a whole and then converted to the relative **peer group** performances. The peer groups for corporations with depositories are based on total depository assets at yearend, while for finance companies the peer groups are based on total single-family origination volumes. The general distribution of these loan types within each bank or thrift peer group is given in the figure below:

Peer Group Distributions of Evaluated Loans between Loan Types for Banks and Savings, as well as the Total Evaluated Lending as an Equivalent Percentage of Total Loans and Leases Held at Yearend.



Note that the smaller banking companies tend to have proportionally greater amounts of small business-small farm lending (gray bars) and development lending (red bars) but smaller amounts of housing lending (blue bars).

Because of the mortgage crisis of 2007 and the fact that the latest data are from 2006, the analysis of the purchase mortgages for housing are computed based first on the overall

performance of the weighted averaged performances of loans with reportable rate spreads and loans with no reportable rate spread, i.e. rate spread of less than 3%. Then the performance is also given for only loans with no reportable rate spread. The latter exclude most of the subprime and alternative loans, which have borne the brunt to the crisis. **If these two social measures differ significantly, with the loans with no reportable rate spread having a lower social performance, then the lender was a significant subprime and alternative lender and should be evaluated cautiously.**

These primary peer performances are aggregated at the peer performance level to three higher levels and re-normalized for investor convenience:

- **Housing Loans,** consisting of Purchase Mortgages and Multifamily Loans.
- **Housing and Development Lending,** consisting of Purchase Mortgages, Multifamily Loans and Development Loans, and
- **Total Performance of all sectors**, Housing, Development and Small Business - Small Farm lending

Housing and Development Lending is computed because some investors are not concerned about small business – small farm lending, but development lending tends to be primarily low-income housing subsidized by tax credits, etc.

In addition for comparison with the CANICCOR performances, the latest **Federal CRA Regulatory Ratings,** from the FFIEC website, www.ffiec.gov, are averaged for all depository subsidiaries of each corporation. CRA performance ratings have greater depth but only cover the assessment areas, while CANICCOR's analysis includes both assessment and non-assessment areas.

Contents

TOUR of the EXCEL TABLE

This tour presents a section-by-section explanation of the CANICCOR Social Performance Analysis from left to right in the table. The more logical order is from right to left starting with the detailed analyses. On the other hand, most users will be primarily concerned with the analysis aggregated over several loan types and this is the order presented from the most aggregated to the least.

1. Lending Corporations and the Peer Group Structure:

The data are presented for three very different corporations to help the investor understand the workings of the table.

Year	Company	Ticker or ID	Acquisition or Sale Anticipated or Completed		Peer Structure		
			Acqis-ition	Sale	Class	Peer Group	Num. in Peer Group
2006	WACHOVIA CORP	WB			NAT'L LEND	NAT"L LEND	10
2006	VALLEY NATIONAL BANCORP	VLY			BANK	>=10 bil <30	31
2006	EAST WEST BANCORP, INC.	EWBC			BANK	>=10 bil <30	31

The year, corporate name and ticker or identifier are first presented. The identifier is unique to CANICCOR and is used for private corporations without ticker symbols.

The **Acquisition or Sale** data indicate any major acquisition or sale completed or in process after the year for which the data are analyzed. This information is important when a major lender acquires another major lender, because by comparing the analyses of the two corporations, some estimate of future performance can be made.

The **Peer Structure** represents a group of corporations consists of a class and within the class a set of peer groups. The Peer Class is a broad category such as bank, thrift, finance company, as well as specialty groups such as investment banks or home builders. These are broad categories which are independent of the size of the corporations. The Peer Group is a group of corporations within the given Peer Class that have relatively similar assets or, for finance companies, similar lending volumes. Nevertheless, in order to have a sufficient number of corporations for a statistical comparison, the asset or lending amount may vary by a factor of three or more. The National Lender class and peer group is unusual because it includes not only banks but a thrift and a company that, while holding a thrift, is really a finance company. This grouping is used because they are by far the largest lenders nationwide and must be inter-compared.

Corporate Examples are given with three very different distributions of lending between the three major sectors that CANICCOR evaluates. These provide very different challenges for investor analysis, depending upon the foci of concern of the investor.

2. Total Lending and Total Evaluatable Lending:

	U.S. Depositories Yearend		2. Total CANICCOR Evaluatable Lending Volume						
Ticker	Assets $ Billion	Total Loans & Leases $ Billion	Amount $ Billions	Dollar % of Total	Evalu-ation Re. Peers	Per Cent of Evaluatable Loans Purchase	Multi family	Devel-opment	Small Business
WB	638.31	417.37	30.82	7.4	Low	64.5	2.1	8.4	25.0
VLY	12.36	8.34	0.167	2.0	Very Low	62.2	4.6	29.7	3.5
EWBC	10.82	8.26	1.707	20.7	Very High	5.6	34.4	41.9	18.1

U.S. Depositories, which are subsidiaries of the corporation, have their total domestic assets and total domestic loans and leases provided from yearend bank call reports and thrift reports. The assets are used to permit grouping by peer group and the total loans and leases can then be compared to the loans of concern for this analysis that were originated during the year.

Total CANICCOR Evaluatable Lending is the total lending for which CANICCOR can compute a performance. This lending comes from data supplied under the Home Mortgage Disclosure Act (HMDA) and the Community Reinvestment Act (CRA). These data exclude large amounts of commercial lending and consumer lending like credit card lending and home equity lending.

The total **dollar Amount of Lending** that was evaluatable is given followed by its **Percentage** of the Total Loans and Leases. This percentage is then compared to the average for the peer group and an **Evaluation**[2] is made. In the three examples given in the table above, the percentage of evaluatable loans very from "Very High" for EWBC at 20.7% to "Very Low" for VLY at 2.0%

The **Percentages of Total Evaluatable Loans** of each of the four major types of loans are then provided. They are Purchase Mortgages, Multifamily Loans, Development Loans and Small Business-Small Farm Loans. Refinance loans are available under HMDA but are excluded from this analysis because they do not contribute directly to improvements in housing.

These percentages give the investor an overview of the types of lending the corporation made and which are the important types for the evaluation. For two of the three corporations above, purchase loans make up over three-fifths of their evaluatable lending and should be a major focus of the evaluation, although WB has significant small business lending and VLY significant development lending. In contrast for EWBC, the three loan categories other than purchase make up 94% of the lending.

[2] Evaluation: ±30% is average; 30% to 60% from average is High or Low, greater deviations are either Very High or Very Low.

3. Total Evaluated Lending:

Ticker	3. Total Evaluated Lending Performance								
	Peer Performance All Evaluatable					Performance No Risk Loans			
	Per Cent Evaluated	Peer Rank	Num-ber Peers	Peer Eval-uation	Numeric rel. Peers	Per Cent Evaluated	Peer Rank	Peer Eval-uation	Numeric rel. Peers
WB	100	8	10	Average -	-10	100	8	Average -	-5
VLY	33	5	31	High	22	33	5	High	22
EWBC	90		31	Developmnt		94		Developmnt	

Peer Performance of All Evaluated Lending consists of the following:

The loans that were capable of being evaluated are first given as a per cent of loans of all evaluatable loans. If the volume of lending to the sector being evaluated is so small that a statistically meaningful answer is not possible, the performance is listed as "na". For one corporation, WB, the lending was 100% evaluatable, but the other two were only 33% and 90% evaluatable. To determine which areas were not evaluatable, the results in the evaluations of each loan type need to be examined.

The **Peer Rank** followed by the number of corporations that were in the peer group. The **Peer Evaluation** is then based upon the **Numerical Peer Performance relative to Peers**, which is just to the right of it. This peer performance is the dollar weighted peer performances of each of the four basic lending sectors,[3] which is then renormalized relative to the new peer average.

The **performances are based upon the quality of the loan portfolio of originations**, not its size, so the investor must evaluate both the quality and the volume in making a decision. For example VLY had a very low lending volume as seen in the previous table section, and only 33% of that could be evaluated, i.e. 0.7% of total loans and leases. However, its performance was high at 22% above the industry level on what could be evaluated. The investor may not want to add this to its approved list because of the small volume rather than approving it on the basis of this high quality performance on the very small volume.

EWBC had a very high volume of lending at 21% of total loans and leases, but it is not ranked and has a peer evaluation of "Development". This is done because its development lending accounted for over 30% of its evlauatable lending. The problem here is that the evaluation of performance on development lending is set at 20% above the industry, which for large development lending volumes can dominate the evaluation. The investor needs to examine its other multifamily lending in the chart section 11 on page 12 to see that that lending performance was also very high. Thus the "Development" evaluation in this case could be replaced with "Very High", but this may not be so with others.

WB ranked 8th out of the 10 corporations in that peer group with an "Average –" evaluation. However as will be seen below, this low performance was a result of a high performance in housing being lowered by a poor performance in small business loans. Depending upon the investors focus this could be a below average or a high performing lender.

[3] Purchase loans, multifamily loans, development loans and small business-small farm loans.

The **Performances of Non Risk Loans** are computed to eliminate purchase mortgages with rate spreads above comparable treasuries of 3% or more. This analysis is done because in the followng year, 2007, many high-risk lenders were put out of business by the credit crisis. This performance evaluation compares only the lender's "no risk" loans with the industry of "no risk" loans, and gives an indication of how the lender may perform, when the 2007 data are available. Interestingly enough, WB improves when only no risk loans are analyzed.

4. Housing and Development Lending:

	4. Housing and Development Lending									
	Volume		Peer Performance All Loans				Performance No Risk Loans			
Ticker	Per Cent Evaluated Loans	Volume rel. Peers	Peer Rank	Number Peers	Eval-uation	Numeric rel. Peers	Per Cent Evaluated Loans	Peer Rank	Eval-uation	Numeric rel. Peers
WB	Low	75.0	3	10	High	12	75	4	High	17
VLY	Very Low-	29.7	1	31	Developmnt		30		Developmnt	
EWBC	Very High	76.3	10	31	High	10	76	11	High	10

Some investors are not concerned about small business-small farm lending, especially because it has a less precise measure of quality. These investors are focused upon housing which includes multifamily rental properties, and development lending. The latter includes many such very low income developments using tax credits, etc. Thus these sectors of lending are combined in this section of the table so that these investors can find an overall performance evaluation.

In this peer performance evaluation, the peer performance of the development loans is assumed to be 20% above the industry. The overall performance for Housing and Development is then the dollar weighted average of the two separate peer performances. The overall peer performances are renormalized to the corresponding peer average for the sum of the two types of loans.

Here WB and EWBC both receive "High" peer performance on the quality of their lending. WB's peer rank increases from 8th to 3rd for **All Loans**, because the small business-small farm loans have been eliminated. The "High" performance quality ratings for both WB and EWBC are on two different types of loans, with EWBC originating mostly multifamily loans and WB mostly single-family purchase loans. See the tables sections 9 and 11.. Again the performances of VLY were mostly un-evaluatable with essentially only the development lending being evaluatable.

EWBC receives a "Very High" on its volume evaluation while WB receives a "Low" and VLY a "Very Low".

5. Housing Loan Performance (Purchase and Multifamily):

5. Housing Loan Performance (Purchase and Multifamily)										
	Dollar Volume			Peer Performance All Loans				Performance No Risk Loans		
Ticker	Amount $ Billions	Per Cent Evaluated Loans	Volume Evaluated Re. Peers	Peer Rank	Num-ber Peers	Eval-uation	Numeric rel. Peers	Peer Rank	Eval-uation	Numeric rel. Peers
WB	79.199	66.6	Average -	3	10	High	12	4	High	17
VLY	0.232	66.8			30					
EWBC	0.885	40.0	Average -	11	30	Average +	8	11	Average +	8

One column has been eliminated for the representation on this page. It is "**Risk Class High if > 25%**". When "High" appears in this column, it means that more than 25% of the purchase loans had rate spreads of 3% or more, and a careful comparison must be made between the performances of **All Loans** and of **No Risk Loans**. For these examples, there are no serious differences between the two quality performance evaluations.

One peer was lost in the peer group of VLY and EWBC because it was a lender which essentially only originated development lending among the evaluatable loans. Note that the dollar volume of EWBC's lending declined from "Very High" to "Average-" because 42% of its evaluatable lending was development loans, and its quality Peer Performance declined from "High" to a still respectable "Average +". However, the EWBC's peer ranking remained about the same at 11th of 30.

6. Development Loan Performance and Federal CRA Ratings:

	6. Development Loan Performance						6. Federal CRA Rating	
	Dollar Volume		Peer Performance					
Ticker	Amount $ Billion	Per Cent Eval-Loans	Peer Rank	Num-ber Peers	Eval-uation	Numeric rel. Peers	Average Rating	% Assets Eval.
WB	2.59	8.4	4	10	Average +	1	Outstanding	121.5
VLY	0.0496	29.7	17	31	Very Low	-69	Satisfactory	67.6
EWBC	0.7147	41.9	2	31	Very High	346	Satisfactory	76.4

In the previous sections of the table the quality of the development loan performances was taken as 20% above the industry and then the dollar weight averaged into the overall performance. We prefer this approach since development lending was intended to be special lending to assist lender improve their regular performance score and not to substitute for it.

If, however, the lender essentially only makes development loans, the basis of the evaluation must be relative to the volume of other lender' development lending volume. This is done in the table above using the total depository domestic loans and leases as the volume reference for each lender. In this case EWBC is "Very High", WB is "Average +" and VLY "Very Low".

The Federal CRA Rating is not factored into the CANICCOR Evaluation but is meant to be compared to it. The Federal CRA Rating is the performance rating of each depository weighted by the dollar amount of assets at the time of the performance evaluation. Since each evaluation

covers several years, evaluations after the year of the CANICCOR evaluation were included, and as seen above for WB, these assets totaled 122% of the yearend assets of the CANICCOR evaluated year.

The federal grades are Outstanding, Satisfactory, Needs to Improve, and Substantial Non-Compliance. The federal evaluation occurs only about once every three years and is only upon lending within the assessment areas of the depositories, while the CANICCOR evaluation is every year and covers both assessment and non-assessment areas. The non-assessment areas are very important for housing loans. On the other hand, the federal analysis includes deeper evaluations of development lending and other additional areas such as investments and the distribution of branches.

7. Small Business and Small Farm Loan Performances:

7. Small Business and Small Farm Loan Performances									
Dollar Volume			Number Loans	Performances					Small Farm Num. % Total
	Per Cent Evaluated Loans	Volume Relative to Peers		Peer Rank	Num-ber Peers	Peer Eval-uation	Numeric rel. Peers	Numeric rel. Indust.	
WB	25.0	Very High	40245	9	9	Very Low-	-84	-78	1.2
VLY	3.5	Very Low	60	4	28	High	17	-8	0
EWBC	18.1	Low	732	28	28	Very Low-	-75	-99	0

Small business loans of less than $1 million and small farm loans of less than one half million are reported under CRA. These are to business of any size. CANICCOR first excludes all credit card sized loans and then basis its evaluation on the proportion of loans for $100,000 and under to small business and small farms with annual turnover rates of $1 million and under and $500,000 and under, respectively.

Since this is an evlaution at the basic level, numerical performances are given both relative to the peer group and relative to the industry as a whole. The peer volume for WB was "Very high", but the peer and industry performances were both "Very Low-", and their ranking was as 9th out of 9 peers. The volume of VLY was "Very Low-", but the peer performance was "High". For EWBC the volume and performances were "Low" and "Very Low-", respectively.

Housing Analysis Details

The analysis now turns to the detailed analysis of housing loans. At this level of the basic loan types, the lending is evaluated first relative to the **industry** as a whole and then relative to the **peer group**. The reverse order will be used by examining the overall performances of purchase loans and then investigating further into its breakdown by race/ethnicity. This purchase loan evaluation is based on the proportion of loans to low-moderate income borrowers. Since minority borrowers are of great concern and account for only about 20% of this lending, CANICCOR double weights the lending to Hispanic low-moderate income borrowers and triple weights lending to low-moderate income Black borrowers to make the lending of these two minority groups about comparable and to raise the overall proportion of their lending to about 40% of all low-moderate borrowers.

The un-weighted performances are given relative to the industry in table segment 9 of the table and should be consulted to determine if the lending is being evenly distributed by proportion between the various racial/ethnic groups.

8. Purchase Mortgages for Owner Occupancy Based on Weighted Low-Moderate Income Borrowers:

.Ticker	Details of Housing Loan Performances									
	8. Purchase Mortgages for Owner Occupancy Based on Weighted Low-Mod Borrowers									
	% Eval Housing Loans	Num-ber	All Low-Moderate Income Lending					No Reported Rate Spread		
			Peer Rank	Num Peers	Eval uation	Numeric Re. Peers	Numeric Re. Ind.	Per Cent Low-Mod	Eval-uation	Numeric Re. Peers
WB	96.9	78598	3	10	High	14	13	92.3	High	15
VLY	93.1	294		23		na	na	100.0		na
EWBC	14.1	115		23		na	na	100.0		na

In tale section 8, the percentage of evaluatable housing lending devoted to purchase mortgages is given. It is the dollar percentage of purchase mortgages plus multifamily housing loans. The CANICCOR analysis excludes refinance loans, and Home Equity Loans are not provided under HMDA. Refinance loans are excluded because they do not provide for first-time home buyers or possible improvements in housing. The volume of purchase mortgages is relatively constant over time, but refinance loans vary by multiples cyclically, depending on the interest rate.

Both WB and VLY are primarily singe-family housing lenders with over 90% of their lending in this area, while EWBC is primarily a multifamily lender with only 14% of its lending as single-family purchase mortgages.

The performance of **All Loans** to race/ethnicity weighted low-moderate borrowers could only be evaluated for WB with its 78,598 total purchase loans. Its **peer** performance was "High" at **14%** above the peer-weighted average and **13%** above the **industry**. The small volumes of lending by VLY and EWBC could not be evaluated. See section 9 for the numbers of loans that they originated to low-moderate income borrowers.

When all loans with rate spreads of 3% or more were excluded, the **peer performance** of WB actually rose slightly to **15**. WB had 92.3% of its loans without reportable rate spreads, so this

increase in peer performance upon excluding loans with risk rate spreads was probably caused by other members of the peer group having more loans with high rate spreads originated to low-moderate income borrowers.

9. Purchase Loans to Low-Moderate Income Borrowers:

Details of Housing Performances (Continued)												
Ticker	9. Low-Moderate Income Borrowers											
	CANICCOR Risk			All Race/Ethnicities			Black			Hispanic		
	Average Risk	Portfolio Risk	Risk Class	Number	Performance Eval.	Re. Ind.	Number	Performance Eval.	Re. Ind.	Number	Performance Eval.	Re. Ind.
WB	12.77	0.84		18243	High	15	2771	Average+	5	1974	High	13
VLY	0	0		40		na	1		na	3		na
EWBC	0	0		1		na	1		na	0		na

Performance:

This section of the table shows the individual performances of loans to all low-moderate income borrowers un-weighted as well as the individual performances in lending to Black and Hispanic low-moderate income borrowers.

First examine the second section of loans to "All Race/Ethnicities", where the performance of WB was "High " with a numerical value relative to the industry of 15. Compare this industry performance of 15 for all low-moderate income borrowers, unwighted, to the weighted performance in section 8 above of 12. The lower value of the weighted performance indicates that one or more performances of loans to minority ethnic/racial borrowers had a lower performances. Indeed this is the case for both Black and Hispanic borrowers, which had slightly lower performances of 5 and 13, respectively.

The other two lenders, VLY and EWBC had so few loans that they could not be evaluated. Table 8 shows that their total purchase mortgage originations were 294 and 115, respectively. VLY was on the verge of evaluation with 40 loans to all low-moderate income borrowers but with only 1 to Black and 3 to Hispanic low-moderate income borrowers.

Risk:

The risk of a loan is defined by CANICCOR as the product of the reported rate spread and the loan to income ratio of the borrower. If the rate spread were less than 3%, the rate spread was not reported under HMDA, so the **Average Risk** in the table is the numerical average over only loans with reportable rate spreads. For WB this average risk was 12.77. Recall that the traditional high loan to income ratio was about 3 and the minimum reportable rate spread is 3, so this yields a CANICCOR Risk of 9. Thus 12.77 is not unreasonable for it would be equivalent to an average loan-to-income ratio of 3 and an average rate spreads of a little over 4.

The **Portfolio Risk** is defined as the average risk weighted by the amount of the loan over all loans both with and without reportable rate spreads. For WB this portfolio risk was only **0.84**. Thus the average risk of loans with risk of 12.77 was reduced to 0.84 by dilution with a very large fraction of loans without reportable rate spreads (92.3% numericaly from table section 8)

that was nearly 12 fold greater than the amount with risk. The only reportable Risk Class is "High", which is the designation for more than 25% of the loans to low-moderate income having reportable rate spreads.

10. Purchase Mortgage Performances for All Income Borrowers:

This is a specialty section useful for evaluating Home Builders, which do not focus on low-moderate income borrowers, and for small volume lenders that cannot be otherwise be evaluated. Both WB and EWBC can be evaluated for overall lending to minorities, but EWBC has a very poor performance. The performances are based upon lending to minority borrowers.

11. Multifamily housing:

Ticker.	Details of Housing Performances (Continued)							
	11. Multifamily Housing Loans							
	% Eval Housing Loans	Volume Evluation	Estimated Number Units	Peer Performance				Industry Perfor-mance
				Peer Rank	Num Peers	Eval-uation	Numeric Re. Peers	
WB	3.1	Average +	7240	7	10	Low	-16	-8
VLY	6.9		78		22		na	na
EWBC	85.9	Very High	5054	6	22	Average +	7	11

The data on multifamily housing consists mostly of just the loan amount and census tract, since many multifamily borrowers are corporations. CANICCOR estimates the number of units financed from the loan amount and local housing prices. Our primary concern is the underserved market for housing with less than 50 units. Thus all loans for 50 estimated units or more are discarded. Multifamily lending on large structures of 50 or more units for lower income renters can be double listed as multifamily as well a development lending. Thus these multifamily loans have already been evaluated under development lending in table section 6.

The CANICCOR evaluation then asks how many of these estimated units might be rented to low-moderate income borrowers. Since renter incomes are less than purchaser incomes, the proxy used here is the proportion of borrowers purchasing single-family houses in the same census tracts that have incomes of under 120% of the metropolitan area median family income. While these proxies are approximate, they provide a uniform method of evaluating the various lenders.

As noted above, the percentage of housing loan volume that was devoted to multifamily housing was "Very High" for EWBC at 85.9%., while that for WB was "Average +" at 3.1%. WB is among the national lenders, which aside from Washington Mutual, make very few multifamily housing loans.

The industry and peer performances of EWBC were "Average +" at 11 and 7, respectively, above their respective industry and peer levels. On the other hand, WB's performance was "Low" at –8 and –16 below the industry and peer performances respectively. VLY financed too few units (78) to permit an evaluation.

Appendix

Peer Social Performances – A measure of Quality

Basic Method of Analysis:

The basic analysis of the performance for a given loan type is to compare in a given metropolitan area the proportion of loans the lender made during the year with the propostion of loans all lenders made, i.e. the industry. This social performance in the metropolitan area is equivalent to the percentage of loans by the lender to a **given sector**, e.g. low-moderate income borrowers, divided by the percentage of loans of all lenders in the metropolitan area to that sector, and is called the "industry social performance". The exact method is given in the footnote.[4]

Peer Performance:

There is no clear-cut way to create a peer performance from the industry performance, because different corporations originate loans in different parts of the country. Just to rank the corporations by their industry social performance ignores the relative amounts of lending, so small lenders with either a very high or very low peer performance can bias the median performance level. Mere ranking also ignores the unevenness in the distribution of the loans performances. To obviate this problem, CANICCOR has chosen to weight the industry peer performance of a particular loan type of each corporation by its total lending of that loan type to yield the average industry performance of the peers, and this average is subtracted from each peer corporation's industry performance to yield its peer performance[5]

Corporations are given a peer class based upon the majority of their subsidiaries being banks, savings or financial corporations. CANICCOR then added several other classes for small numbers of specialized corporations. These peer classes are then divided into arbitrary peer groups by loan volume or asset size, which for banks and savings institutions are the assets held at yearend as given by bank call and thrift financial reports for the 4th quarter of the year.

The peer groups need to be of sufficient size that one or two corporations do not dominate the group. The average peer performances of the lending in each area, but especially housing lending, should vary uniformly without abrupt changes between successive peer groups. However, this latter condition cannot always be maintained. These variations of the average peer performances on purchase loans for owner occupancy between peer groups can in part be explained as follows:

- Most of the largest national lenders lend significant volumes outside of their banking areas (assessment areas), where they have less local information because they have no branch

[4] The performance is actually computed as the ratio of the loans of the lender to the given sector divided by the number of loans by the scaled industry. By scaled industry, we mean the **total** of loans by all lenders in the metropolitan area scaled to the size of the lender's **total**. This results in a scaled number of industry loans to the sector of concern. This method is used so that these numbers of lender's loans to the sector and scaled industry loans to that sector can be summed to the corporate level for a corporate level performance.

[5] In computing the peer average for a group, if the performance of an individual lender is outside the range of ±40% of the industry average, the performance of that lender was set at the corresponding range limit in order to avoid the distortion of a few lenders with either very high or very low performances.

offices, and thus they perform more poorly than the industry so the industry average performance is raised in the peer performance.

- Smaller corporations, like regional banks, tend to lend more in their banking areas and thus perform better on average than the industry, so the industry average performance is lowered in the peer performance.

- Finance companies with small depositories have higher performances than those without depositories presumably because of the banking supervision of their depository subsidiary.

- Large savings institutions tend to be conservative because they hold more of their loans on their books to maturity and because the high interest rates problems of the 1980s have made them more cautious. Thus they have lower average performances relative to the industry as a whole.

- Asset Managers do little lending and depend upon targeted lending to improve their performances and/or larger amounts of development lending.

- Borrowers for new homes are more middle-income so, for homebuilders, the average peer group performance based on lending to low-moderate income borrowers is rather low. Their performance is better based upon lending to minorities of all incomes.

Thus investors, depending on their concerns, should adjust these averages to their concerns. The social performances relative to the industry are given in the spread sheet for comparison for each of the basic loan types (purchase mortgages for owner occupancy, multifamily loans and small business-small farm loans).

CANICCOR Volume Evaluations

Since the CANICCOR method of measuring social performance measures the **quality** of the portfolio of the year's originations and not the size of it, the investor must consider the amount of lending devoted to the categories of loans that are being evaluated. Table section 2 provides both total loans and leases held by depositories at yearend and the dollar amount of lending evaluated by CANICCOR. The evaluated loans are also given as an equivalent percentage of the total loans and leases at yearend in the depository portfolios. This percentage is then compared to its weighted average for the peer group, and a verbal evaluation is given.

Only peer group members that provide loans of a given loan type are included in these averages.

Development Lending is a special case: For the evaluation the overall quality of the performance, all development loans are assumed to be at 20% above the industry level since they are supposedly focused upon low-moderate income areas and people.

However, if development lending is the primary lending for the evaluation, the peer social performance and volume performance are conflated for development lending. This performance is then based on the dollar amount of development lending during the year **as a percentage of total depository loans and leases at year-end**. See table section 6.

Small Business Loans

by
John E. Lind, Ph.D.[1]
CANICCOR[2]
Revised: February 2006

SUMMARY

The average size of the small business loans in the non-assessment areas is less than $10,000, while that size in the assessment areas is about $100,000. Since the loans of most concern here are commercial and industrial loans (C&I) in the range of $20,000 to $100,000 to small businesses, a meaningful analysis can only be obtained if the very large numbers of very small loans are eliminated from the analysis.

This study shows that approximately two-thirds of all the small business loans are these very small, credit-card sized, loans. Thus their separation is essential to the understanding of the data. As determined by this analysis, the best separation for these very small, credit-card size, loans is to eliminate loan data averaging up to $13,000. This process eliminates only 2% of the assessment area loans but 92% of all non-assessment area loans. In order to analyze this data after separation, and industry database must be constructed from the lender database by distributing evenly the lending of each lender over the tracts in which the lender had made a loan. The reason for this averaging is that loans are reported for each county/assessment area as grouped by census tract income category rather than by census tract. Since different lenders may divide a given county differently between assessment and non-assessment areas, a tract level distribution is necessary.

Since the concern of this analysis is the lending of C&I loans to small businesses. However, the data report the aggregate of loans to small businesses in sizes up to and including $1 million loans. Thus estimates must be made of the numbers and amounts of small loans to small businesses of $100,000 or less but not less than $13,000, and the focus is upon this lending in low-moderate- and middle-income tracts of loan originations but not purchased loans (correspondent lines).

The resulting analysis permits clear performance rankings within and between commercial banks, credit card banks and savings institutions:

1. Commercial banks clearly make small loans within their assessment areas to small business but do not provide the very small. credit-card size, loans. This size of loans suggests mostly C&I lending by the commercial banks;
2. Credit card banks provide mostly very small loans of under $13,000 in their non-assessment areas, since their assessment areas are usually very small; and
3. Small savings institutions do not originate many small business loans but the loans that they do make to small businesses are usually average over $100,000 and must therefore be real estate loans.

---

[1] The author wishes to express his appreciation and thanks for the excellent database programming by Eric R. Wilcox, whose methods provided not only an audit of earlier work but also a wealth of detailed information which was not previously available.

[2] CANICCOR, P.O. Box 426829, San Francisco, CA 94142, (415) 282-8497; john.lind@caniccor.org

INTRODUCTION

Small business loans are defined as all loans of $1 million or less to any business and small farm loans are defined as all loans of $500,000 or less to any farm.

The class of loans of most value to small businesses and small farms with annual turnover rates of $1 million and $500,000, respectively, are those between about $20,000 and $100,000, since they provide for general inventory and equipment for on-going operations. These loans would be commercial and industrial (C&I) loans or agricultural production loans, as defined by bankers. These loan amounts would exclude very small ones that could be carried on the owner's credit card, as well as large ones for real estate (RE), which are often backed up by other assets of the owner such as his/her house.

There are two classes of loans reported under the Community Reinvestment Act that are relevant to these loans of concern. They are:

1. Loans to small businesses, which include all loans sizes. Unfortunately real estate (RE) loans of several hundred thousand dollars are included, as well as C&I loans.
2. Small business loans to any borrower of $100,000 and under, which include loans to both small businesses and larger corporations but exclude most real estate loans because of their size.

A superficial examination of the all the originations with valid non-zero income census tract categories in 2004 shows that there are 2.2 million loans within the assessment areas of the lenders with an average loan size of $102,200. On the other hand there are over twice as many loans in the non-assessment areas, i.e. 5.6 million, which have an average loan size of only $12,100. Thus it is obvious that the lending in the non-assessment areas is essentially all very small loans of approximately the size of credit card loans.

This study then develops methods to separate in an approximate fashion three groups of loans or loan types within the data:

1. Very small loans of about the size of credit-card loans,
2. Loans of $100,000 and less but larger than the very small loans, mainly of the C&I type, and
3. Loans over $100,000, which include many real estate loans.

Since this analysis focuses upon the lending to small businesses of $100,000 and under, exclusive of very small loans, and these loans are provided as a block of loans from zero to $1 million, methods are developed to make approximate separations of these loans into these three loan size categories.

The process is to separate out the very small loans from the rest of the loans and treat them as an entirely different loan type, deriving performances internally from that group only. In the same fashion the loans exclusive of the very small loans will be treated as a separate loan type and their performances of lending to small businesses will be based upon the total of all such loans to both small and larger businesses, exclusive of very small loans.

THE ANALYSIS

Method for Separating Very Small Loans

The upper limit for defining very small loans of approximately the size of credit card loans will be discussed below, but assuming such a limit can be defined, the basic problems of data analysis must first be discussed.

The separation of very small loans of credit card size from the database is not simple because individual loans are not recorded by each lender but only the total amount and number of loans in groups of loans by tract income level for each county/assessment area.

The process is to examine each lender's loans in each tract category for any tract category where the average loans size is less than the very small loan size limit. Those loans are then separated from the small business loans to be analyzed separately as a different loans time. **The remaining loans will be termed the clean small business loans and separately analyzed.**

Two categories of loans within the database are subjected to the process of cleaning out very small loans of under the limit:

1. Loans of $100,000 or less to any business, and
2. Loans to small businesses, which include loans of up to and including $1 million

While the loans to small businesses are a subcategory of all small business loans, the cleaning of these two categories may yield slightly different numbers because of the averaging of a greater number of loans in the former category (1). This problem will be discussed below and in the appendix. For the moment, we will assume that the results are identical.

Choosing the Upper Size Limit for Very Small Loans

Since the average loan amount in the non-assessment areas was $12,100 in 2004, this size suggests that credit card companies should be examined to determine if they contribute significantly to these numbers and what size loans they provide. Table I shows the percentages of loans to small businesses above various size limits for three diverse major credit card companies.

Table I. Per Cent of the Number of Loans to Small Businesses of Three Diverse Credit Card Banks above Various Size Limits

	American Express Centurion Bank	Chase Manhattan Bank USA, NA	MBNA America (Delaware), N.A.
Total Loans	173,663	42,614	421,661
Loan Size Limit	% of Loans at or above the Size Limit	% of Loans at or above the Size Limit	% of Loans at or above the Size Limit
15,000	0.3%	3.1%	0.04%
14,000	0.5%	3.8%	0.04%
13,000	0.7%	6.8%	0.06%
12,000	1.2%	13.7%	0.08%
11,000	2.0%	25.6%	0.18%
10,000	4.2%	55.9%	0.30%

These are truly diverse credit card lenders, with MBNA making essentially no loans greater than $10,000, American Express making 4.2% and Chase Manhattan making 55.9%. Since Chase Manhattan USA is affiliated with other major full service banks, it may be drawn upon by the full service banks for small business loans, while neither MBNA nor American Express had such affiliations in 2004. Since MBNA is now a part of Bank of America, its loans may become larger in the future.

Ultimately, what Table I shows is that the proper limit should be between $10,000 and $15,000. Further analysis in the Appendix is based upon average loan amounts and the self-consistency of the data for loans of $100,000 and less between the loans to all businesses and the loans to small businesses. This analysis suggests the best limit to be $13,000. When this limit of $13,000 is used, the results of the analysis are shown in Table II.

Table II. Numbers of Business Loans and their Average Sizes Reported in 2004[3]
Compared to their Numbers and Sizes after Removing Very Small Loans of Credit Card Size and to the Numbers and Average Sizes of the Very Small Loans that were Removed..
using the Very Small Loan Size Limit of less than **$13,000**

Lending Area	All Loans		All Loans Less Loans of less than $13,000		Only Loans of less than $$13,000	
	Number	Average Size $"000"	Number	Average Size $"000"	Number	Average Size $"000"
All Small Business Loans						
Assessment	2,177,121	102.2	2,132,745	104.2	44,376	8.0
Non-Assessment	5,593,619	12.1	430,915	91.4	5,162,704	5.4
Loans to Small Businesses						
Assessment	1,383,722	74.7	1,367,855	75.4	15,867	8.1
Non-Assessment	1,581,871	17.2	238,974	81.6	1,342,897	5.7

First of all, Table II shows that limit of $13,000 yields average loans sizes of nearly the same value for lending both to all business as to small businesses. The other totals and averages should not agree since the loans to small businesses are only a subset of all the small business loans. However, reasonable agreement might be expected for the very small loans.

Secondly, the numbers of very small loans within the assessment areas are very small and could probably be ignored if only the assessment areas are of concern.

[3] There are two sets of data that are problematic:

1. Loans without census tract categories but with assessment area designations amounted to 262,081 loans in the non-assessment areas; only 8% of these averaged larger than $13,000. Loans within the assessment areas totaled 35,980; but unfortunately 91% of these loans were $13,000 or larger. There were only an additional 591 loans without assessment area designations. Only 17,663 of all these loans were in the tract category as MFI not known; the rest were specified as tract not known.
2. Loans without assessment area designations but with census tract categories totaled 174,172 of which unfortunately only 6% were loans averaging less than $13,000. 37,844 loans matched only assessment areas of the lender; of these only 2070 averaged less than $13,000. 8,214 matched only non-assessment areas, of which 1,471 averaged less than $13,000. Thus a total of 41,522 loans, averaging greater than $13,000, were recovered. However, 128,172 loans matched both assessment areas and non-assessment areas, i.e. counties split between assessment and non-assessment areas, and thus they could not be assigned. As a final result, only the 46,063 loans, matching only either only the assessment areas only or only the non-assessment areas, could be uniquely assigned and added to the database.

Thus a total of 426,761 loans were excluded from this analysis.

Construction of the Industry Level Databases and Computing Performance

The industry tract level database or "Aggregate" data provided by the FFIEC is useless since subtracting out loans of under $13,000 from it would result in a database inconsistent with the lender database (FFIEC Disclosure Database) because of their different levels of aggregation. Thus a new industry tract level database is constructed from the lender database (FFIEC "Disclosure" database) in the following fashion:

Fortunately the CRA assessment areas (FFIEC D-6) database provides a listing of every census tract that is in each lender's assessment areas as well as other non-assessment area tracts in which that lender has originated a loan. Each tract has a notation as to whether the lender made a loan in that tract or not. Thus it is possible to distribute the loans reported in the county/assessment area database uniformly over those tracts in which the lender originated a loan. This approach is not exact, but the result is reasonably precise because the numbers of loans in any tract income category exceeds 12 in only 15.2% of the tract income categories within the assessment areas in the lender database and in only 7.6% of the tract income categories in the non-assessment areas.

Having constructed a tract level database containing all loans the industry originated, the performances can be computed relative to the industry by summing the clean industry level loans in the tracts of the assessment areas or non-assessment areas of each lender and scaling the clean industry total to the size of the lender's total clean loans in those areas. These scaling totals must be that for all small business loans exclusive of those of average loan size under $13,000 for the small business loan analysis. i.e. clean small business loans. The scaling for very small loans of approximately credit card size must be based on only the totals of all small business loans of less than $13,000.

The Performance Analysis of Small Loans, exclusive of Very Small Loans

The concern of this analysis is focused upon loans of less than $100,000 only to small businesses, but not to all businesses, and particularly to small businesses in low-moderate- and middle-income tracts. These loans averaging $13,000 up to $100,000 can be estimated from lender database in a similar fashion to the loans averaging under $13,000, as discussed above. The performance then is based upon the lenders proportion of these loans compared to all small business loans, exclusive of loans averaging less than $13,000.

Table III provides a comparison between the numbers and average sizes of these small business loans to only small businesses versus these properties of the loans to all businesses. These loans to all small business loans have an exact upper bound, but these loans to small businesses only have an estimated upper bound. Thus an estimate of the preciseness of the cut off is necessary for these loans to small businesses. To provide an estimate of the sensitivity of this cut off, the number of loans averaging between $100,000 and $110,000 is computed as a percentage of the loans of $100,000 and under exclusive of less than $13,000. This percentage is termed the "Sensitivity". The lower this sensitivity, the fewer loans in this narrow category near $100,000 and the more precise the cut off is.

As Table III shows these small loans to small businesses in the non-assessment areas has the lower sensitivity of only 2.2%, and the average loan amount is $36,700. This average loan

amount agrees reasonably well with the average loan amount for all these small business loans, which is $34,200. In the assessment areas, the average loan amount for these small loans to small businesses is $48,700 in contrast to the average loan amount of these small business loans to all businesses, which is $32,200, or about the same as loans to all businesses in the non-assessment areas.

This higher average loan amount for these small loans to small businesses either reflects the imprecision of the cut off or the fact that lenders provide larger loans to small businesses than businesses in general. The primary reason is probably the former reason, i.e. the imprecision of the cut off. Certainly the sensitivity of the cut off in the assessment areas is over twice that in the non-assessment areas for these loans because of the higher geographic density of the lending in the assessment areas.

Table III. Loans to Small Businesses
with Loans of greater than $100,000 and less than $13,000 Removed, i.e. Clean Loans
Compared to All Small Business Loans of $100,000 less than $13,000 Removed.

Lending Area	Loans to Small Business Averaging $100,000 and Less with Loans of Less than $13,000 Removed			Loans to All Business Averaging $100,000 or less with Loans of Less than $13,000 Removed	
	Number	Average Size $"000"	"Sensitivity" to $100,000 Limit	Number	Average Size $"000"
Assessment	1,030,020	48.7	5.3%	1,658,628	32.2
Non-Assessment	188,363	36.7	2.2%	303,952	34.2

*Sensitivity is defined as the number of loans with average loan amounts of greater than $100,000 and less than $110,000, expressed as a percent of loans of $100,000 and less, exclusive of loans under $13,000. The sensitivity shows the decline in the distribution at $100,000. If this percentage is high, then the separation at $100,000 becomes less precise.

Since this analysis seeks to focus on these small loans, the analysis will proceed as shown, but a performance of the robustness of the cutoff will be computed. The robustness performance is defined as the sensitivity of the industry in each county/assessment area to the lender's sensitivity, expressed as a percentage relative to the industry. Thus, if the lender's sensitivity is less than the industry sensitivity, the lender's cutoff is more precise than that for the industry as a whole, and the robustness performance for the cut off becomes positive. Examples are given below to show that this robustness is an effective measure of the precision of the cutoff, and how it can be used to indicate significant real estate lending.

Applications of the Analysis to Particular Lenders
Small Loans to Small Businesses in Low-Moderate and Middle Income Tracts

The focus of this analysis is upon C&I lending to small businesses, not only as a direct concern to foster new and creative businesses but also to provide employment especially to lower income employees. Thus the performance evaluation will concern loans of $100,000 and under, exclusive of loans averaging under $13,000, in low-moderate- and middle-income census tracts. Focusing on only low-moderate income tracts is too limiting because of the smaller numbers of loans and also lower income workers are often employed in middle-income tracts.

To illustrate the usefulness of this approach, three very different types of lenders are shown below. They represent:

1. A large commercial bank, which seeks to make significant numbers of small loans to small businesses;
2. A small savings institution, which has significant real estate lending to businesses, and
3. A credit card company which offers credit cards to many companies

Large Commercial Bank:

As is readily apparent in Table IV, the large commercial bank originates most of its small business loans within its assessment areas, with a performance level to the desired sector of 23% above the industry. Since these loans to small businesses are primarily $100,000 and less, they are probably C&I loans, for which the bank must have familiarity with both the local businesses and the local economic conditions. This information is usually obtained by a local bank branch. The assumptions that these loans are mostly C&I loans is strengthened because the sensitivity is only 1.3%. That is, the number of loans within $10,000 of the cutoff is equivalent to only 1.3% of the number of these loans below the limit. Thus most of the loan amounts are well below this limit. Since the industry as a whole has over twice that sensitivity, the robustness performance is 122% above the industry for the areas in which this bank's lending occurred. There were only 83 loans that averaged less than $13,000, so this lender was not in the business of providing very small loans.

Table IV. A Large Commercial Bank
Comparison of Small Loans to Loans to Small Business (≤ $100,000 to > $13,000) to those Loans to All Businesses in 2004
Loan Performances, Sensitivities, etc. are on loans in **low-moderate and middle income tracts**

As-. sess-ment Areas	Basis* Loans of ≤$1 million ≥$13,000	Loans to Small Businesses					Loans to All Businesses		
		Number	Perf. rel. Indust.	Sensi-tivity %	Robust-ness %	Average Loan $"000"	Number	Perf. rel. Indust,	Average Loan $"000"
AA	78076	25542	23	1.3	122	44.1	35830	0	43.3
NA	2328	799	-6	3.3	3	43.5	1227	-10	46.8

*Basis is all loans of $13,000 and up to and including $1 million of the lender that the industry portfolio is scaled to for the performance analysis of the small loans to small businesses.

The average loans amounts for loans to small business are in good agreement with the averages for all business to within about a thousand dollars within the assessment areas, thus substantiating the robustness of the cutoff.

Small Savings Institution:

Table V shows the performances of a small savings institution. Its performance should be contrasted with that of the large commercial bank above in Table IV. In both cases, the primary lending is within the assessment areas with essentially all loans above the very small loan limit of $13,000. This lender made only 7 loans below the $13,000 limit.

However in contrast, the sensitivity of the $100,000 limit for these small loans to small businesses is very large with the number of loans between $100,000 and $110,000 being equivalent to 43% of these loans of $100,000 and under, exclusive of loans of under $13,000. Thus the cutoff is very imprecise and the robustness performance is 78% **below** the industry level. This impreciseness of the cutoff is supported by average loan size of the small loans to small businesses within the assessment areas is $55,300 being significantly higher than the average for loans of that size to all businesses of $40,200 (data not shown).

Table V. A Savings Institution (S&L)
Comparison of Small Loans to Loans to Small Business (≤ $100,0 to ≥ $13,000) to all Loans to Small Businesses in 2004
Loan Performances, Sensitivities, etc. are on loans in **low-moderate and middle income tracts**

As-. sess- ment Areas	Basis* Loans of ≤$1 million ≥$13,000	≤ $100,000 to ≥$13,000					≤ $1 million to ≥$13,000		
		Number	Perf. rel. Indust.	Sensi- tivity %	Robust- ness %	Average Loan $"000"	Number	Perf. rel. Indust,	Average Loan $"000"
AA	1143	150	-60	43	-78	55.3	585	-18	142.6
NA	42	9	NA	11	-44	34.4	16	NA	246.0

*Basis is all loans of $13,000 and up to and including $1 million of the lender that the industry portfolio is scaled to for the performance analysis of the small loans to small businesses.

A useful comparison for this institution is to compare the performances on these small loans to small businesses to the performances on its total lending of $1 million and under to these small businesses. This latter performance would thus include all the real estate lending. Indeed the performances of all loans to small businesses is –18% relative to the industry, while the performance on loans of $100,000 and less is a more dismal –60% relative to the industry. The number of loans increases from 150 to 585 as the loan limit is increased from $100,000 to $1,000,000. That is, the number of loans increases by nearly four fold by including the larger loans! However, the average loans size of all loans to small businesses is only $142,600, which suggests a significant number close to the $100,000 cutoff and thus the cause of the lack of robustness of the cutoff.

Since a small business cannot support such large loans based on the collateral for C&I lending, these loans must be collateralized by real estate. Thus this savings institution follows the traditional approach of savings institutions of primarily lending on real estate.

Credit Card Bank:

In contrast to the commercial bank and the savings institution, the credit card bank shown in Table VI needs only minimal financial information for these very small loans. Its assessment area is usually very small in one metropolitan area, so most of its lending is in the non-assessment areas.

For the performances on these very small loans, our focus is upon loans below $13,000 in average size. We attempted to examine segments of this loans size range, but the density of the loans in the census tract income categories is too dense for an adequate definition, i.e. no meaningful separation exists. Since the industry scaling is based only on all these very small loans to all businesses, we decided to measure the lender's performance on the proportion of this total lending only to small business in only the low-moderate income tracts.

This credit card bank primarily provides loans of credit card size, and only 639 of the total of 806,829 loans average above the $13,000 limit. This bank's performances in lending to small businesses in low-moderate income tracts are outstanding, while the performances in lending to all businesses in low-moderate income tracts are about at the industry levels. The average loan sizes are about $5,000 and they are only slightly less for small business than for all businesses outside the assessment area, where the bulk of the loans were originated.

Table VI. A Credit Card Bank
Comparison of Very Small Loans to Small Business (Less than $13,000)
to those Loans to All Businesses in 2004
Loan Performances and average loan amounts are on loans in **low-moderate income tracts only**

As-. sess-ment Areas	Basis Loans of less than $13,000	Loans to Small Businesses					Loans to All Businesses		
		Number	Perf. rel. Indust.	Sensi-tivity %	Robust-ness %	Average Loan $"000"	Number	Perf. rel. Indust,	Average Loan $"000"
AA	2760	253	61			4.72	502	-8	6.24
NA	803430	74821	101			5.15	162529	6	5.46

*Basis is all loans of $13,000 and up to and including $1 million of the lender that the industry portfolio is scaled to for the performance analysis of the small loans to small businesses.

These loans of under $13,000 should in general be excluded from the small business lending analysis, since they merely serve as a convenience for the accounting process of small businesses. They are often backed by the credit of the owners. The owners could just as well use their personal credit cards and then charge the amount against the business. Thus these results are presented here merely as an illustration of type of analysis that can be done with these very small loans.

CONCLUSION

The method of analysis presented herein provides a very adequate method of separating out meaningful loan size categories from the aggregated data of each lender. It provides for separate comparisons within the groups of credit card lenders, commercial banks and savings institutions doing real estate lending.

The separation developed in this paper of loans by size is essential for any analysis because 61% of the total number of small business loans reported in 2004 were very small loans of the size of credit-card loans. Such small loans are so small that they serve neither the function of C&I loans nor of real estate loans. Therefore, these small loans need to be separated from the data before any meaningful analysis can proceed.

The only possible alternative is to analyze only the assessment area lending using the dollar amounts. For the lending within assessment areas, very small loans account for only 0.2% of the dollar amount of all small business loans and only 0.1% of dollar amounts of all loans to small businesses. However, this approach still requires developing an industry database of only assessment area loans because the very small loans account for 10% of the dollar amount of all small business and 6% of the amount of all loans to small businesses in the FFIEC aggregate database. That is the industry tract level database must be constructed from the lender disclosure database, as was done in this report. Since this process of using loan amounts requires nearly as much processing as the one using loan numbers in this report, the clearer analysis provided by the use of loan numbers in this report is recommended.

Obviously, the more desirable approach would be for the FFIEC, which aggregates the lender data, to provide the loans to small businesses separated into the three categories: loans under about $13,000, larger loans up to and including $100,000 and the remainder up to and including $1 million. Then the analysis would be essentially exact rather than approximate. However, the present analysis is reasonably robust in making these separations, as is shown by the examples given in this report.

APPENDIX

In an effort to more precisely define the limit between very small and small business loans, analyses were carried out for three different cutoffs between $10,000 and $15,000.

Table A1 shows the effect of using the $10,000 cutoff. At first the agreement looks very good because the average loan sizes are nearly the same for all categories between loans to small business and to all businesses. However, the $100,000 cutoff for all business loans is precise but that cutoff for loans to small businesses is imprecise and contains some loans over the limit. Thus the average loan amount for small loans to small businesses should be higher than that for all businesses. Also the average loan size of small loans is seemingly too high in the assessment areas and too low in the non-assessment areas by a factor of two.

Table A1. Effects of Separating Loans of Less than **$10,000** in Average Loan Amount from the Small Business Loan Database

	Loans of $100,000 and Less without Loans of under $10,000		Very Small Loans of under $10,000	
	Number*	Average Size $"000"	Number	Average Size $"000"
Assessment Areas				
Small Business Loans	**1,659,910**	**48.4**	26,251	5.7
Loans to Small Businesses	***1,035,871***	**48.5**	10,016	6.4
Non-Assessment Areas				
Small Business Loans	**714,245**	**21.1**	4,799,660	5.0
Loans to Small Businesses	***272,164***	**28.7**	1,259,096	5.4

*For these loans, the upper cut off of $100,000 is exact for the small business loans but only approximate for the loans to small businesses. Please see the discussion of this cut off for details.

Table A2 shows the effects of raising the cutoff to $13,000. Now the average loan amounts for small loans to all businesses are about the same both within and without the assessment areas. This result is not unreasonable since the $100,000 limit is precise for these loans. The average small loan size to small businesses is still high at $48,700 within the assessment areas where the density of lending is high and the cutoff more imprecise. In the non-assessment areas the small loans to small business average $36,700 or close to the small loan average to all businesses of $31,400. In the non-assessment areas the lender's loan density is lower and a more precise cutoff is possible.

Table A2. Effects of Separating Loans of Less than **$13,000** in Average Loan Amount from the Small Business Loan Database

	Loans of $100,000 and Less without Loans of under $10,000		Very Small Loans of under $10,000	
	Number*	Average Size $"000"	Number	Average Size $"000"
Assessment Areas				
Small Business Loans	1,641,785	**32.1**	44,376	8.0
Loans to Small Businesses	1,030,020	**48.7**	15,867	8.1
Non-Assessment Areas				
Small Business Loans	351,201	**31.4**	5,162,704	5.4
Loans to Small Businesses	188,363	**36.7**	1,342,897	5.7

*For these loans, the upper cut off of $100,000 is exact for the small business loans but only approximate for the loans to small businesses. Please see the discussion of this cut off for details.

Finally, when the cutoff is raised to $15,000, the average loan amounts of small loans remain at approximately the same levels as with the $13,000 cutoff. However, as the loan limit increases the average loan amounts of very small loans in the assessment areas increase significantly. At the $13,000 limit, the loan amounts for very small loans in the assessment areas are nearly double those of the non-assessment areas for both loans to all businesses and loans to small businesses. Since many of these very small loans are supplied by credit card companies that lend in all areas, these average loan values should not diverge too greatly.

Table A3. Effects of Separating Loans of Less than **$15,000** in Average Loan Amount from the Small Business Loan Database

	Loans of $100,000 and Less without Loans of under $10,000		Very Small Loans of under $10,000	
	Number*	Average Size $"000"	Number	Average Size $"000"
Assessment Areas				
Small Business Loans	1,628,628	32.2	57,533	9.4
Loans to Small Businesses	1,022,547	48.9	23,430	10.1
Non-Assessment Areas				
Small Business Loans	303.34.2	34.2	5,209,953	5.5
Loans to Small Businesses	173,844	37.7	1,351,416	5.8

*For these loans, the upper cut off of $100,000 is exact for the small business loans but only approximate for the loans to small businesses. Please see the discussion of this cut off for details.

Thus the best cutoff is probably at about $13,000. However, there is another approximate method to check this decision. If the cutoff increases too high, the imprecision of the cutoff for small loans to small businesses will yield more very small loans than the small loans to all businesses. But this inequality must not be so because of numbers of loans to small businesses is a subset of the all loans to small businesses. Table A4 shows the limit at which this rule is violated for each of the years 2002 through 2004.

Table A4. The number of records and the number of loans to small business in excess of the number of loans to all businesses below the given limit of the average loan amount for loans to small businesses

Limit of Average Loan Amount of Loans to Small Businesses	2004		2003		2002	
	Records Number	Excess Loans to Small Businesses	Records Number	Excess Loans to Small Businesses	Records Number	Excess Loans to Small Businesses
<15	3	1114	4	188	7	458
<14	3	1114	2	126	4	300
<13	0	0	2	126	1	123
<12			0	0	1	123
<10					1	123

Table A4 clearly shows that there is only minimal violation of the rule at $13,000 and below, but by $14,000 the violations begin to accumulate in both 2004 and 2002. Thus the size limit for very small loans of $13,000 appears to be the most adequate choice.