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#### National Association of Federal Credit Unions | www.nafcu.org

April 13, 2015

The Honorable John Thune Co-Chair Business Income Tax Working Group Committee on Finance United States Senate Washington, D.C. 20510 The Honorable Ben Cardin Co-Chair Business Income Tax Working Group Committee on Finance United States Senate Washington, D.C. 20510

Re: Importance of the Credit Union Tax Exemption to Consumers, Job Creation, and the American Economy

Dear Co-Chairs Thune and Cardin:

On behalf of the National Association of Federal Credit Unions (NAFCU), the only trade association that exclusively represents the interests of our nation's federal credit unions, I write to formally submit comments to the Finance Committee's Business Income Tax working group. NAFCU applauds the Finance Committee on efforts to ensure a simpler and fairer tax code for both corporations and individuals and the thoughtful approach the working groups are taking in this regard.

As member-owned cooperatives providing local communities with basic financial service products, credit unions are proud of their track record in serving Main Street throughout the financial crisis. While meeting the needs of over 100 million members, credit unions also provide an important source of capital to our nation's small businesses. All told, the cumulative benefit credit unions provide the greater economy totals over \$17 billion a year according to an independent study released by NAFCU in 2014. A copy of this study is enclosed for your review.

As the study also shows, altering the tax status of credit unions would have a devastating impact not only on credit union members across the country, but also on consumers and small businesses in general. Eliminating the credit union tax exemption would result in the loss of 150,000 jobs a year, a shrinking of the GDP and a net *loss* of revenue to the federal government.

Simply put, the tax exemption is an issue of survival for credit unions. In other countries where the tax exemption has been eliminated for credit unions, the number of credit unions has declined dramatically. If the tax exemption were removed, many would convert to banks or just go away. Without credit unions, which effectively provide checks and balances in the marketplace, forprofit banks would likely increase rates and fees on consumers.

While all financial institutions have grown since the passage of the Federal Credit Union Act in 1934, it should be noted that the credit union market share of household financial assets is

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roughly the same today as it was 30 years ago. The defining characteristics of credit unions remain unchanged today from when Congress passed the Federal Credit Union Act – they are not-for-profit cooperatives that serve a defined field of membership and cannot issue capital stock. These defining characteristics are the same for both the largest credit union and the smallest credit union.

Despite what some in the banking industry claim, credit unions actually pay many taxes. They pay property taxes, federal payroll taxes, and various local taxes. Credit union members also pay federal income taxes at the individual rate on the higher dividends that they receive from their credit union. Furthermore, while many in the banking industry claim that credit unions have such an unfair advantage, only two banks have converted to a credit union in recent years, while 37 credit unions have converted to a bank in the last 15 years.

Credit unions help facilitate economic growth through lower loan rates, higher interest on deposits, and lower fees. Any effort to strip credit unions of their federal tax exemption will have a drastic and immediate negative impact on credit unions and their 100 million members. Credit union members will ultimately bear the cost of any new tax imposed on credit unions. Because this issue strikes at the very core of how credit unions have operated since their inception, protecting the credit union tax exemption is the chief priority of NAFCU.

We commend the Finance Committee and the working group for your efforts. We look forward to working with you on tax reform legislation that recognizes the value and importance of credit unions. If my colleagues or I can be of assistance to you, or if you have any questions regarding this issue, please feel free to contact me or NAFCU's Vice President of Legislative Affairs Brad Thaler at (703) 842-2204.

Sincerely,

cc:

B. Dan Berger

President & CEO

Members of the Committee on Finance

Enclosure: Feinberg-Meade Study on the Economic Benefits of the Credit Union Tax

Thanks for your continued bupport of wedit unions!

Exemption to Consumers, Businesses, and the U.S. Economy



# Economic Benefits of the Credit Union Tax Exemption to Consumers, Businesses, and the U.S. Economy

February 2014

Robert M. Feinberg, Ph.D. Professor of Economics. American University Washington, DC

Douglas Meade, Ph.D. Director of Research Interindustry Economic Research Fund, Inc. College Park, MD

# Economic Benefits of the Credit Union Tax Exemption to Consumers, Businesses, and the U.S. Economy

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American University

Interindustry Economic Research Fund, Inc.

February 2014

#### **EXECUTIVE SUMMARY**

Our analysis indicates that removing the credit union tax exemption would cost the federal government \$15 billion in lost income tax revenue over the next 10 years. GDP would be reduced by \$148 billion, and 1.5 million jobs would be lost over the next decade as well.

This study quantifies the benefits to all consumers - both credit union members and bank customers - of having a credit union presence in financial markets. Statistical analysis revealed the following estimates of the interest rate differential between U.S. banks and credit unions for the period 2005-2013 (Chart 1):

- Credit union rates on new and used car loans are 28 percent lower than bank rates, on average.
- Credit card and unsecured loan rates are 12 percent lower at credit unions.
- Real estate loans are 3 percent lower at credit unions.
- Interest rates on CDs, IRAs, and KEOGH accounts were 27 percent higher at credit unions.
- Interest rates on savings, checking, and money market accounts were 32 percent higher at credit unions.

The direct benefits to credit union members of these better loan and deposit rates were estimated to range from \$4.6 to \$7.1 billion annually over the past nine years (Chart 2). Total credit union member benefits over the period were estimated to be \$51.5 billion.

The benefit of better credit union loan and deposit rates extends to bank customers as well, due to increased competition. A 50 percent reduction in the credit union market share would have cost bank customers an estimated

Chart 1: Interest rate differences, credit unions vs. banks percent difference, 2005-2013 average 40% 32% 27% 20% 0% -3% -12% -20% -28% -40% Vehicle loans Unsecured loans Real estate CDs, IRAs, Checking.

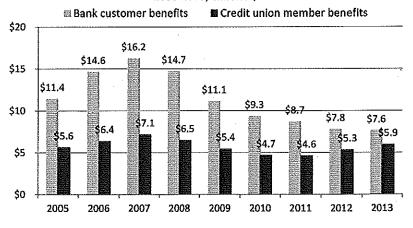
Chart 2: Credit union & bank consumer benefits by year 2005-2013, billions \$

loans

KEOGH

savings, MMF

& credit cards



\$7.6 billion to \$16.2 billion per year, over the past nine years, in higher loan rates and lower deposit rates. The total losses to bank customers due to less favorable rates would have totaled \$101.4 billion over the nine year period examined. The total benefit to U.S. consumers from the presence of credit unions in financial markets was \$153 billion over the nine-year period of the study, or \$17 billion per year.

These results match the findings from previous studies of the impact of eliminating the credit union tax exemption in Canada and Australia, where the number of credit unions was severely reduced following taxation. Reduced competition for consumer financial services led to higher interest rates on consumer loans and lower interest rates on deposits in both countries.

A very conservative estimate of \$10 billion per year reduction in personal income resulting from higher loan rates and lower deposit rates due to a diminished credit union role in the economy would lead to an annual reduction in GDP of about \$14.8 billion and a loss of 150,000 jobs per year over the next decade. These figures were estimated using Inforum's macroeconomic forecasting model, which measures the total direct and indirect losses of personal income, consumption, and GDP resulting from the elimination of the credit union tax exemption.

The reduction in personal income would lead to a loss of \$1.5 billion per year in federal income tax revenue. This lost federal tax revenue exceeds the Joint Committee on Taxation's 2013 estimate of the value of the credit union federal tax exemption by about \$1 billion per year.

#### Introduction

In recent years, several authors have provided evidence of the important role played by credit unions in local financial services markets. They have found that consumers benefit from the presence of credit unions in the financial services marketplace. These benefits are a direct result of the federal tax exemption. Consistent with basic microeconomic theory, increasing the number of firms in a market tends to lower prices offered by sellers; similarly, the increased availability of substitute goods provides competitive pressure. The presence of credit unions not only helps members get better rates, but also serves as a check on the interest rates banks offer their customers.

This report analyzes the likely impact on consumers of financial services and the wider economy if these competitive pressures were reduced significantly as a result of a change in the credit union federal income tax status. After reviewing recent academic and government literature on the importance of credit unions to the U.S. economy, this report quantifies the benefits to both credit union and bank loan and deposit consumers of having a credit union presence in local markets. These benefits spread further throughout the economy, and estimates of these larger impacts are analyzed and presented as well.

### Overview of prior credit union research

Credit unions have been tax-exempt from federal income tax since their inception. Previous studies have pointed to the consumer and societal benefits of credit unions, and this report will demonstrate these benefits empirically using the most recent data.

In 1934, Congress passed the Federal Credit Union Act (FCUA), which created the federal credit union charter. In 1935, the Commissioner of the Internal Revenue Service (IRS) ruled federal credit unions were exempt from paying federal income taxes. A 1937 amendment to the FCUA explicitly granted a federal income tax exemption for federal credit unions. Congress reaffirmed this tax exemption in 1998 as part of its "findings" for Public Law 105-219, The Credit Union Membership Access Act. As a 2001 Treasury Department study explained, the rationale for this exemption is based on the fact that credit union shares are their deposits and that they are cooperative organizations "operated entirely by and for their members" on a non-profit basis.

Burger (1991) examines how the federal income taxation of Savings & Loans in the 1950's and of Canadian credit unions in 1972 affected these institutions' operations. He notes that under federal income taxation the capital-to-asset ratios for S&Ls sharply declined. Similarly, the capital-to-asset ratio for Canadian credit unions declined from an average of 6 percent (1967-1971) to an average of 3.75 percent (1971-1976) after the change in tax policy. Reduced capital reserves severely restrict any financial institution's ability to lend. Both of these experiences are viewed by Burger as suggesting the vulnerability of U.S. credit unions to federal income tax.

More recently, Gasbarro et al. (2007) examined the effect of the 1994 imposition of federal income taxes on credit unions in Australia, in order to determine how federal income taxation might affect U.S. credit unions. There were 833 credit unions in Australia in May 1973 (beginning of tax exemption), about 400 in 1994, and only 149 remained in 2006. This reduction in the number of credit unions is believed to have been the direct result of a significant decrease in returns on equity, as returns on equity for the remaining credit unions fell dramatically after taxation.

Feinberg (2001) presents a theoretical framework for understanding the impact that credit unions have on bank loan rates, and then examines data on small local markets in the U.S. to see how unsecured and new vehicle loan rates are affected. High state-level credit union membership rates were found to put downward pressure on both unsecured and new vehicle rates. Feinberg (2003) broadened the analysis to examine large and small local markets, finding unsecured and new vehicle loan rates to be reduced in response to greater local credit union market shares (with a high rate of state-level credit union membership also putting downward pressure on bank loan rates). Both Feinberg studies support the view that competition from credit unions leads to better rates being offered by banks, producing a direct benefit to consumers.

Combining the results of the two studies on market averages and individual bank pricing suggests that a one percent change in credit union market share is associated with a -0.05 percent and -0.10 percent decline, respectively, in unsecured and new vehicle loan rates. Based on this finding, a 50 percent reduction in the credit union share would imply a 2.5 percent and 5 percent increase in unsecured and new vehicle bank loan rates. A later calculation by Feinberg using 2004 data estimated that bank loan consumers would pay an extra \$1.7 billion dollars in interest if this significant reduction in the credit union share of local financial services markets occurred.

In a similar study on the deposit side, Hannan (2002) applies three different proxy variables to determine the importance of credit unions in determining bank deposit interest rates in local geographic markets: (1) the share of total market deposits accounted for by credit unions; (2) the ratio of credit union members in a metropolitan area to the population in the area over the age of 18; and (3) the number of potential occupational credit union members in the area to the population over age 18. Hannan notes these alternative measures each have their advantages and disadvantages in measuring the influence of credit unions in a particular market.

Hannan's results indicate that credit union competition leads to banks offering better rates in all three instruments analyzed (money market deposit accounts, interest bearing checking accounts, and three-month CDs). Based on Hannan's findings, it is estimated that a 50 percent decline in the credit union market share would lead to a 4.4 percent decline in bank money-market deposit rates, a 6.9 percent decline in interest checking rates, and a 2.1 percent decline for three-month CDs,

Cooper (2003) offers a broader picture of credit union benefits. This study stresses not only the importance of a tax exemption for credit unions, but also how their basic organizational structure benefits consumers. Cooper reports that as of 2003 the benefits to credit union members due to lower loan and higher deposit rates are equivalent to a total of \$9 billion per year in consumer savings (the typical yearly average household savings was valued at \$250 per credit union member). Cooper also cites a 1997 Consumer

Federation of America survey in which 70 percent of the respondents said that credit unions offer consumers better rates than banks.

A 2005 study by the Government Accountability Office (GAO) presents arguments for and against continuing the federal tax exemption for credit unions, without drawing any policy conclusions. It notes that an important rationale for the federal tax exemption is the view of credit unions as "member-owned, democratically operated, not-for-profit organizations generally managed by volunteer boards of directors." The GAO also points out that banks, especially small banks, are provided similar forms of tax relief through Subchapter S status, which today covers nearly one-third of banks, and acknowledges concerns about the capital raising ability of credit unions in the absence of the federal income tax exemption.

Feinberg and Rahman (2006) examine a combined sample of bank and credit union loan rates, from the mid-1990s, finding credit union new vehicle loan rates to be more than 10 percent lower than bank loan rates, after controlling for other factors (such as local market characteristics, and the financial institution's market share). While suggesting significant savings to credit union members, no calculation of the magnitudes involved was performed. Jackson (2006) takes a somewhat different approach to bank/credit union comparisons. Looking at the effect of asymmetric pricing behavior by banks and credit unions on the deposit and loan rates offered, he notes that on the loan side "credit unions lower rates faster when the market rates are falling than they raise the rates when market rates are rising, resulting in lower average loan rates over the interest cycle."

Heinrich and Kashian (2008) analyze cross-sectional data for 175 depository institutions, as of June 2005. The study compared the deposit and loan interest rates offered by credit unions with (a) all banking institutions, (b) credit unions recently converted to for-profit institutions, and (c) banking institutions that have never been credit unions. The results show that credit unions consistently offer lower loan rates and higher savings rates in comparison to other banking institutions (with the exception of interest bearing checking accounts). The largest difference in rates between credit unions and former credit unions appears to be on standard savings accounts, with credit unions providing a better rate. The authors do note that it is difficult to pin-point what accounts for the variation in rate other than institutional differences. While their findings are supportive of the credit union tax exemption, they cannot rule out other factors leading to consumer benefits passed on by credit unions.

Depken, et al. (2010) examines whether the tax benefits provided to Sub-S banks are passed along to consumers in the form of more favorable interest rates. Given that Sub-S banks are not subject to corporate federal income taxes (the tax burden is passed through to shareholders) one might expect that Sub-S banks would pass these tax benefits on to consumers in the form of lower loan and higher deposit rates than traditional C-Corporation banks. As of June 2008, Sub-S chartered banks were roughly 30 percent of U.S. banking institutions. The authors use OLS regression (though similar results are obtained with more sophisticated modeling) with variables for whether the institution is a Sub-S bank or not, whether the institution is a credit union or not, a regional dummy variable, and a dummy variable for the size of the institution. The results suggest that Sub-S institutions offer the same or lower deposit rates than traditional banking institutions, with no differences in loan rates. Concomitantly, Depken found that credit unions offer lower loan rates, suggesting that although Sub-S institutions do not pass on their tax benefits to consumers, credit unions do.

The previous literature documents clear savings to both credit union and bank consumers due to the presence of credit unions in local financial services markets. While it may not be possible to determine the exact degree to which the federal tax exemption is responsible for consumer savings, it clearly plays a major role. This study provides an updated analysis of total consumer benefits and economic gains resulting from the credit union presence over the past decade.

# **Data Analysis**

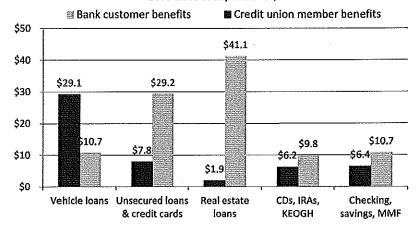
Turning to a quantification of benefits to the U.S. economy from the presence of credit unions, the most direct approach is to estimate the savings that credit union members have experienced from lower loan interest rates and higher interest on deposits, as compared to other financial institutions. In the absence of the federal tax exemption, it is likely that credit unions would be unable to offer these more attractive rates.

The difference between average mid-year (end of June) bank and credit union rates for several loan and deposit categories is used as the measure of savings to credit union customers, with the difference then expressed as a percentage of the bank rate. An alternate approach involving statistical regression analysis was employed in an earlier study but produced results quite similar in the aggregate to the approach taken here. It should be noted that the difference between bank and credit union rates is likely to be a conservative estimate of the benefits to credit union customers, since in the absence of credit unions in the market we would expect bank rates to be less favorable to customers

In the category of auto loans, utilizing data from credit unions and banks on 48- and 60-month new car loans and 36- and 48-month used car loans, credit union rates are found to average 28 percent lower than bank rates. Unsecured loans and credit card interest rates are estimated to be 12 percent lower than bank rates. Real estate loans were estimated to be 3 percent lower than equivalent bank rates. In the case of deposits, credit union CDs, IRAs, and KEOGH accounts were estimated to pay 27% higher rates than banks. Money market, savings, and interest-checking accounts were estimated to pay 32 percent higher rates at credit unions than equivalent bank products.

These credit union advantages were multiplied by each year's mid-year bank rate to obtain an annual interest rate benefit, which was then applied to the volume of credit union loans or deposits of a particular category to derive the benefit obtained from being a credit union member. The results are shown in Chart 3. Clearly auto loans represent the largest source of gains to credit union members, with benefits exceeding \$29 billion from 2005-2013. Benefits are observed for other types of loans as well. In terms of deposit accounts, credit union members gained

Chart 3: Credit union & bank consumer benefits by product 2005-2013 total, billions \$



\$6.2 billion due to more favorable rates on CDs, IRAs, and KEOGH accounts, and \$6.4 billion from better rates on savings, interest checking and money-market accounts. Across all deposit and loan products, credit union members gained a total of \$51.5 billion over the nine year period of the study, 2005-2013.

As noted above, the consumer benefits from the participation of credit unions in local financial services markets are not limited to credit union members. Several studies have shown that banks respond to credit unions (as they would to any potential substitute product) by making their loan and deposit rates more attractive. To estimate the magnitude of these effects, and especially their relation to the credit union tax exemption, this study analyzes the question: "What effect would a 50 percent reduction in the credit union market share have on bank loan and deposit rates (and the associated costs and benefits to bank consumers)?" This is a conservative approach, as eliminating the federal tax exemption might have an even more dramatic impact on the presence of credit unions. As noted above, Gasbarro et al. (2007) finds that the 1994 imposition of federal taxes on credit unions in Australia led to a dramatic decline in the number of credit

unions there, from 833 in May 1973 (at the start of their tax exemption) to only 149 remaining in 2006.

First, the estimated effects of changes in the local credit union market share on bank rates for two types of consumer loans are taken from previous research (Feinberg (2003)), and from this, the impact of a 50 percent reduction in the credit union market share on bank loan rates for all non-credit card consumer loans is determined. This leads to an estimated increase in loan rates, which is then applied to the volume of outstanding bank loans of a similar type to yield an estimate of the annual savings to bank loan consumers from 2005-2013. A similar analysis is conducted for deposit rates, based on estimates produced by Hannan (2002), who studied the impact of credit unions on bank deposit rates for interest checking, money market deposit accounts, and 3-month CDs.

Feinberg (2003) found that every 1 percent change in credit union market share led to a 0.05 percent change (in the opposite direction) in unsecured (non-credit card) bank loan rates, and to a 0.10 percent change (in the opposite direction) in new vehicle loan rates at banks. For the purpose of this report, an equivalent impact on used vehicle loan rates is assumed as well. A 50 percent reduction in the credit union share would, therefore, yield a 2.5 percent increase in unsecured loan rates at banks and a 5 percent increase in vehicle loan rates at banks. The 2.5 percent increase is also applied in this report to all other consumer bank loans.

The effect of a 50 percent reduction in credit union presence on bank automobile loan rates is estimated to range from a 27 basis point to a 41 basis point increase per year over the 2005-2013 period. These figures were derived by averaging mid-year (end of June) rates for bank 48-month new car loans and 36-month used car loans from DataTrac data, and then determining the impact of a 5 percent increase in these rates. These basis point increases were then applied to the volume of auto loans outstanding at banks. For data prior to 2013, this value was constructed based on a constant share of non-credit-card, non-real-estate loans to individuals. For all other bank loans, an increase of between 8 and 38 basis points resulted from applying the 2.5 percent estimated increase in rates to the annual mid-year bank rate, and these basis point increases were applied to the annual volumes of "other" bank loans to individuals, less auto loans. The resulting change in borrowing costs to bank consumers is interpreted as the benefit from the existing credit union presence in local markets.

As for the impact on deposit rates offered by banks, Hannan (2002) estimated the separate impact of the credit union market share (his favored measure was the credit union membership in a local market as a share of the local adult population) on bank/thrift rates on money market deposit accounts, interest checking, and 3-month CDs. Based on the average credit union market shares in his data sample and bank rates at the time, the impact of reducing these ratios by 50 percent (as was the approach above for loan rates) would imply a 12 basis point decrease in money market rates, an 11 basis point reduction in interest checking rates, and a 9 basis point reduction in 3-month CD rates. These basis point differences amounted to a 4.4 percent, 6.9 percent, and 2.1 percent change in interest rates, respectively.

Assuming these effects would apply more broadly, these percentage changes were also applied to midyear bank deposit rates from 2005 to 2013, and then the resulting interest rate changes to annual volumes of bank deposits of money market accounts, transaction accounts, and the sum of savings and time deposit accounts, respectively. The total estimated benefits received by bank customers totals roughly \$101 billion over the nine-year period of the study.

The total benefit to U.S. consumers from the presence of credit unions in local financial markets was obtained by adding together the benefits to credit union members and benefits to bank consumers. These benefits encompass both reduced loan interest expenditures and increased deposit interest received by both bank and credit union members. Consumer benefits totaled almost \$153 billion from 2005-2013, or nearly \$17 billion per year.

Table 1. Estimated benefits to credit union members and bank customers by state, 2005-2013

In order to examine these effects on a state-level basis, these gains were apportioned on the basis of each state's share of total deposits. Credit union and bank consumers from larger states received substantial gains from the presence of credit unions in their markets. The largest consumer benefits amounted to \$17.9 billion in California, \$15.6 billion in New York, \$10.9 billion in Texas, \$7.3 billion in Florida, and \$5.9 billion in North Carolina.

| Millions<br>current \$ | Total<br>consumer<br>benefits<br>2005-13 | Bank<br>customer<br>benefits<br>2005-13 | CU member<br>benefits<br>2005-13      | Bank<br>customer<br>benefits 2013 | CU member<br>benefits 2013 | State pctg of bank deposits 2013 | State pctg of<br>CU deposits<br>2013   |  |
|------------------------|--|---|---------------------------------------|-----------------------------------|----------------------------|----------------------------------|--|--|
| U.S.                   | 152,913.0                                | 101,411.4                               | 51,501.5                              | 7,581.2                           | 5,922.9                    | 100%                             |  |  |
| Alabama                | 1,876,6                                  | 931.3                                   | 945.3                                 | 69.6                              | 108.7                      | 0.9%                             | 1.8%   |  |
| Alaska                 | 372.1                                    | 109.5                                   | 262.6                                 | 8.2                               | 30.2                       | 0.1%                             | 0.5%   |  |
| Arizona                | 1,745.0                                  | 993.5                                   | 751.5                                 | 74.3                              | 86.4                       | 1.0%                             | 1.5%   |  |
| Arkansas               | 735,8                                    | 574.5                                   | 161,2                                 | 42,9                              | 18.5                       | 0.6%                             | 0.3%   |  |
| California             | 17,886.6                                 | 10,983.8                                | 6,902.8                               | 821.1                             | 793.9                      | 10.8%                            | 13.4%  |  |
| Colorado               | 2,198.8                                  | 1,143.0                                 | 1,055.8                               | 85.4                              | 121.4                      | 1.1%                             | 2.1%   |  |
| Connecticut            | 1,665.0                                  | 1,158.3                                 | 506.7                                 | 86.6                              | 58.3                       | 1.1%                             | 1.0%   |  |
| Delaware               | 4,392,9                                  | 4,285.9                                 | 107.0                                 | 320.4                             | 12.3                       | 4,2%                             | 0.2%   |  |
| Dist. of Col.          | · · · · · · · · · · · · · · · · · · ·    | 394,4                                   | 706.8                                 | 29.5                              | 81,3                       | 0.4%                             | 1,4%   |  |
|                        | 1,101.2                                  |   |                                       | 356.7                             | 296.0                      | 4,7%                             | 5.0%   |  |
| Florida                | 7,345.3                                  | 4,771.1                                 | 2,574.1                               |                                   |                            |                                  |  |  |
| Georgia                | 3,174.2                                  | 2,029.6                                 | 1,177.0                               | 151.7                             | 131.6                      | 2.0%                             | 2.2%   |  |
| Hawaii                 | 941.6                                    | 365.3                                   | 576.2                                 | 27.3                              | 66.3                       | 0.4%                             | 1.1%   |  |
| Idaho                  | 516.7                                    | 218,8                                   | 297,9                                 | 16.4                              | 34.3                       | 0.2%                             | 0.6%   |  |
| Illinois               | 5,784.3                                  | 4,418.1                                 | 1,366.2                               | 330,3                             | 157.1                      | 4.4%                             | 2.7%   |  |
| Indiana                | 2,170.8                                  | 1,137.8                                 | 1,033.1                               | 85.1                              | 118.8                      | 1,1%                             | 2.0%   |  |
| lowa                   | 1,413.2                                  | 799.1                                   | 614.1                                 | 59.7                              | 70,6                       | 0.8%                             | 1.2%   |  |
| Kansas                 | 1,040.0                                  | 698.2                                   | 341.9                                 | 52.2                              | 39,3                       | 0.7%                             | 0.7%   |  |
| Kentucky               | 1,166.0                                  | 762.8                                   | 403.2                                 | 57.0                              | 46.4                       | 0.8%                             | 0.8%   |  |
| Louislana              | 1,525.7                                  | 1,011.4                                 | 514,3                                 | 75.6                              | 59.2                       | 1.0%                             | 1.0%   |  |
| Maine                  | 704.5                                    | 408.2                                   | 296.3                                 | 30.5                              | 34.1                       | 0.4%                             | 0.6%   |  |
| Maryland               | 2,418.0                                  | 1,311.6                                 | 1,106.4                               | 98.0                              | 127.2                      | 1.3%                             | 2.1%   |  |
| Massachusetts          | 4,579.3                                  | 3,119.2                                 | 1,460.0                               | 233.2                             | 167.9                      | 3.1%                             | 2.8%   |  |
| Michigan               | 4,047.8                                  | 1,827.0                                 | 2,220.8                               | 136.6                             | 255.4                      | 1.8%                             | 4.3%   |  |
| Minnesota              | 3,156.9                                  | 2,292.2                                 | 864.7                                 | 171.4                             | 99.4                       | 2.3%                             | 1.7%   |  |
| Mississippi            | 799.2                                    | 515.5                                   | 283.7                                 | 38.5                              | 32.6                       | 0.5%                             | 0.6%   |  |
| Missouri               | 2,158,3                                  | 1,628.8                                 | 529.5                                 | 121.8                             | 60.9                       | 1.6%                             | 1.0%   |  |
| Montana                | 4241                                     | 215.1                                   | 209.0                                 | 16.1                              | 24.0                       | 0.2%                             | 0.4%   |  |
| Nebraska               | 803,4                                    | 596,3                                   | 207.1                                 | 44.6                              | 23,8                       | 0.6%                             | 0.4%   |  |
| Nevada                 | 1,740.4                                  | 1,447,3                                 | 293,1                                 | 108.2                             | 33.7                       | 1,4%                             | 0.6%   |  |
| New Hampshire          | 649.6                                    | 305.4                                   | 344.1                                 | 22.8                              | 39.6                       | 0.3%                             | 0.7%   |  |
| New Jersev             | 3,764.7                                  | 2,988.7                                 | 776,0                                 | 223,4                             | 89.2                       | 2.9%                             | 1.5%   |  |
| New Mexico             | 718,4                                    | 293.7                                   | 424.6                                 | 22,0                              | 48.8                       | 0.3%                             | 0.8%   |  |
| New York               | 15,554.2                                 | 12,415.9                                | 3,138.3                               | 928.2                             | 360.9                      | 12.2%                            | 6.1%   |  |
| North Carolina         | 5.892.3                                  | 3,764.7                                 | 2,127.7                               | 281.4                             | 244.7                      | 3.7%                             | 4.1%   |  |
| North Dakota           | 400.6                                    | 249.8                                   | 150.7                                 | 18.7                              | 17.3                       | 0.2%                             | 0.3%   |  |
| Ohio                   | 4,014.1                                  | 2,790,2                                 | 1,223.8                               | 208.6                             | 140.7                      | 2.8%                             | 2.4%   |  |
| Oklahoma               | 1,419.4                                  | 820.8                                   | 598.5                                 | 61,4                              | 68.8                       | 0.8%                             | 1,2%   |  |
|                        | 1,537.2                                  | 633.8                                   | 903.4                                 | 47.4                              | 103.9                      | 0.6%                             | 1,8%   |  |
| Oregon                 |  | 3,410.7                                 | 1,959,1                               | 255.0                             | 225.3                      | 3,4%                             | 3.8%   |  |
| Pennsylvania           | 5,369,8                                  |   | · · · · · · · · · · · · · · · · · · · |                                   |                            |                                  |  |  |
| Rhode Island           | 547.2                                    | 311.8                                   | 235.4                                 | 23.3<br>55.4                      | 27.1<br>64.2               | 0.3%<br>0.7%                     | 0.5%<br>1.1%   |  |
| South Carolina         | 1,299.3                                  | 740.8                                   | 558.5                                 |                                   |                            | <u> </u>                         | 0.3%   |  |
| South Dakota           | 4,200.8                                  | 4,069.4                                 | 131.4                                 | 304.2                             | 15.1                       | 4,0%                             | The second secon |  |
| Tennessee              | 2,166.8                                  | 1,282.3                                 | 884.5                                 | 95.9                              | 101.7                      | 1.3%                             | 1.7%   |  |
| Texas                  | 10,905.6                                 | 7,056.4                                 | 3,849.2                               | 527.5                             | 442.7                      | 7.0%                             | 7.5%   |  |
| Utah                   | 5,121.6                                  | 4,243.7                                 | 877.9                                 | 317.2                             | 101.0                      | 4.2%                             | 1.7%   |  |
| Vermont                | 287.1                                    | 127,0                                   | 160.1                                 | 9.5                               | 18,4                       | 0.1%                             | 0.3%   |  |
| Virginia               | 4,550.3                                  | 2,604.4                                 | 1,945.9                               | 194,7                             | 223.8                      | 2.6%                             | 3.8%   |  |
| Washington             | 3,258.1                                  | 1,273.9                                 | 1,984.2                               | 95.2                              | 228.2                      | 1.3%                             | 3.9%   |  |
| West Virginia          | 488,6                                    | 331.2                                   | 157.3                                 | 24.8                              | 18.1                       | 0.3%                             | 0.3%   |  |
| Wisconsin              | 2,632.5                                  | 1,403.0                                 | 1,229.5                               | 104.9                             | 141,4                      | 1.4%                             | 2,4%   |  |
| Wyoming                | 251,2                                    | 145.9                                   | 105.3                                 | 10.9                              | 12.1                       | 0.1%                             | 0.2%   |  |

Source: NCUA 5300 Call Report data and FDIC Summary of Deposits

# Economic impact from loss of the credit union tax exemption

-\$160

-\$200

Inforum's Long-term Interindustry Forecasting Tool (LIFT) model was then used to estimate the broader economic impact of these consumer benefits. The LIFT model uses a "bottom-up" approach to macroeconomic modeling that works like the actual economy, building aggregate totals from details of industry activity for 97 productive sectors. The model describes how changes in individual industries, such as increasing productivity or changing international trade patterns, affect related sectors and the economy as

Forecasted Impact from 2013-2022 (billions 2010\$) \$40 \$0 -\$40 -\$15 -\$80 -\$120

-\$141

Personal

consumption

expenditures

Chart 4: Total economic impact from loss of credit union tax exemption

-\$178

Real personal

income

Federal government

tax revenue

(current\$)

Total employment losses from 2013-2022 = 1.5 million job-years

a whole. Parameters in the behavioral equations differ among products, reflecting differences in consumer preferences, price elasticity, and industrial structure. The detailed level of disaggregation permits the modeling of prices by industry, allowing one to explore the causes and effects of relative price changes.

-\$148

**Gross domestic** 

product

The model estimates the total direct and indirect losses of personal income and consumption resulting from the elimination of the credit union federal tax exemption. A \$10 billion per year reduction in personal income would lead to a reduction in GDP of about \$14.8 billion per year and employment losses of approximately 150,000 jobs per year over the next decade (Table 2).

The reduction in personal income would lead to a loss of \$1.5 billion per year in federal income tax revenue. This lost federal tax revenue exceeds the Joint Committee on Taxation's 2013 estimate of the value of the credit union federal tax exemption by about \$1 billion per year.

**Table 2. LIFT Macroeconomic Results** 

|  | Reference Case |         |                    | Alternate Case |         |                    | Difference |        |                    |                  |
|--|----------------|---------|--------------------|----------------|---------|--------------------|------------|--------|--------------------|------------------|
| LIFT Macroeconomic Results billions 2010\$ | 2013           | 2022    | 2013-22<br>Average | 2013           | 2022    | 2013-22<br>Average | 2013       | 2022   | 2013-22<br>Average | 2013-22<br>Total |
| Gross domestic product                     | 15,529         | 19,836  | 17,777             | 15,514         | 19,822  | 17,762             | -14.7      | -14,2  | -14.8              | -147.7           |
| Personal consumption expenditures          | 10,897         | 13,427  | 12,209             | 10,883         | 13,412  | 12,195             | -14.3      | -14.2  | -14.1              | -140.9           |
| Gross private fixed investment             | 2,321          | 3,571   | 3,012              | 2,318          | 3,567   | 3,008              | -3.1       | -3.5   | -4.1               | -41.4            |
| Real national income                       | 13,336         | 16,939  | 15,271             | 13,321         | 16,925  | 15,258             | -15.6      | -14.2  | -13.5              | -134.9           |
| Real personal income                       | 13,111         | 17,180  | 15,262             | 13,094         | 17,162  | 15,244             | -17.2      | -18,2  | -17.8              | -177.7           |
| Billions of current dollars                |                |         |                    |                |         |                    |            |        |                    |                  |
| Personal income                            | 14,114         | 22,832  | 18,358             | 14,105         | 22,818  | 18,347             | -9,1       | -14.0  | -10,5              | -104.6           |
| Personal interest income                   | 1,087          | 2,438   | 1,814              | 1,081          | 2,430   | 1,807              | -6.0       | -7.8   | -7.2               | -72.2            |
| Disposable income                          | 12,502         | 19,155  | 15,714             | 12,495         | 19,143  | 15,705             | -7,4       | -11,4  | -8.6               | -86.1            |
| Federal government tax revenue             | 3,003          | 5,718   | 4,380              | 3,001          | 5,716   | 4,379              | -2.3       | -2.5   | -1.5               | -15.1            |
| Total employment (thousands of Jobs)       | 145,212        | 163,664 | 155,534            | 145,070        | 163,524 | 155,384            | -142.2     | -140.3 | -150.4             | -1503.9          |
| Unemployment rate (percent)                | 8.24           | 5.17    | 6.11               | 8.33           | 5.25    | 6.20               | 0.1        | 0.1    | 0.1                |                  |

LIFT and STEMS are products of Interindustry Economic Research Fund, Inc., College Park MD. More detail on Inforum's products and services can be found at www.inforum.umd.edu

#### **Conclusions**

Making very conservative assumptions, this report finds that in the absence of the credit union federal tax exemption, a significant reduction of the presence of credit unions in the U.S. economy would have resulted in a direct loss to consumers of \$153 billion over the nine-year period studied. These losses would be due to both increased loan interest expenditures and reduced deposit interest received by bank and credit union members alike.

It is worth nothing that the simulated 50 percent reduction in credit union market share assumed in this study is a very conservative estimate of what would likely occur as a result of the elimination of the federal tax exemption, as the Australian case demonstrates. Therefore, the effects simulated in this study also understate the true benefit of credit unions to bank loan consumers. Furthermore, the calculated benefits to credit union members presented above may underestimate their gains from the presence of credit unions in local markets, as bank rates would be less favorable (and the gap between actual credit union interest rates and bank rates would be larger).

In summary, the presence of credit unions in local consumer lending markets has a significant positive impact on both bank customers and credit union members for both loans and deposits. Consumers saved and earned approximately \$150 billion over the past nine years in direct benefits due to the presence of credit unions in financial markets. These benefits are unlikely to occur without the federal tax exemption received by the credit union industry.

There are even larger consequences to the overall economy when these credit union benefits are applied to Inforum's dynamic general equilibrium model. In the absence of the federal tax exemption, reduced purchasing power by bank and credit union members would lead to reduced consumer spending in other sectors of the economy. The reduced purchasing power in the U.S. economy resulting from a \$10 billion annual loss of personal income would reduce consumer spending by about \$14 billion per year over the next decade (in 2010 dollars). This would result in a reduction in GDP of approximately \$14.8 billion per year and employment losses of roughly 150,000 jobs per year. Model results incorporate the elimination of preferential loan and deposit rates for credit union members as well as the effect on bank consumers of reducing the market share of credit unions.

#### **Notes**

- 1. Some credit union/bank interest rate differences may not be lost without the federal income tax exemption. The volunteer nature of some credit union positions and donated office space received by some credit unions might allow slightly more attractive loan and deposit pricing to continue, but the much smaller average size of credit union institutions would likely continue to disadvantage them vis-à-vis larger banking firms.
- 2. The estimates in Feinberg's 2003 study were based on the 1992-1998 period, and Hannan's 2002 estimates were based on 1998 data. It is unlikely that the underlying relationships between a credit union presence in a local market and bank loan and deposit pricing have changed since then.
- 3. The estimated effects on bank loan rates in Feinberg's 2003 study were determined only for unsecured non-credit card loan rates and for new vehicle loans; however extrapolating these to other consumer loans is reasonable.
- 4. Statistical estimates are generally most accurate for small changes, in this case for small changes in the credit union market share; however there was substantial variation in the credit union share among the markets analyzed in the original published research, and a 50 percent change from the mean value certainly includes data points from the original sample of observations.
- 5. Hannan's (2002) estimates were expressed in terms of basis point changes due to changes in the credit union market share (rather than in percentage changes in loan rates); these basis point changes were transformed into estimated percentage changes from the 1998 bank deposit interest rates, and those percentage changes were then applied to mid-year average rates for each year.

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# Appendix: State estimates of personal income losses due to reduction of credit union presence

|                                       | F           | eference Ca | se                 |            | Difference |                    |         |              |                    |                        |
|---------------------------------------|-------------|-------------|--------------------|------------|------------|--------------------|---------|--------------|--------------------|------------------------|
| Personal Income<br>(millions 2010 \$) | 2013        | 2022        | 2013-22<br>Average | 2013       | 2022       | 2013-22<br>Average | 2013    | 2022         | 2013-22<br>Average | 2013-22<br>Total (\$b) |
| TOTAL U.S.                            | 13,110,915  | 17,180,295  | 15,261,589         | 13,093,700 | 17,162,086 | 15,243,822         | -17,215 | -18,209      | -17,767            | -177.7                 |
| Alabama                               | 167,828     | 217,822     | 194,150            | 167,612    | 217,588    | 193,923            | -217    | -233         | -227               | <b>-2</b> .3           |
| Alaska                                | 31,742      | 42,455      | 37,427             | 31,690     | 42,401     | 37,375             | -51     | -54          | -51                | -0.5                   |
| Arizona                               | 245,748     | 348,748     | 298,767            | 245,451    | 348,426    | 298,460            | -297    | -322         | -307               | -3.1                   |
| Arkansas                              | 96,808      | 126,963     | 112,461            | 96,708     | 126,852    | 112,353            | -100    | -111         | -107               | -1.1                   |
| California                            | 1,707,577   | 2,253,769   | 1,996,049          | 1,705,332  | 2,251,433  | 1,993,753          | -2,245  | -2,336       | -2,296             | -23.0                  |
| Colorado                              | 218,579     | 284,379     | 254,013            | 218,275    | 284,076    | 253,713            | -304    | -303         | -300               | -3.0                   |
| Connecticut                           | 203,608     | 258,083     | 233,103            | 203,372    | 257,833    | 232,858            | -236    | -250         | -245               | -2,4                   |
| Delaware                              | 39,201      | 51,001      | 45,445             | 39,082     | 50,873     | 45,321             | -119    | -128         | -124               | -1.2                   |
| Dist. of Col.                         | 40,827      | 50,825      | 46,333             | 40,765     | 50,758     | 46,265             | -63     | -67          | -68                | -0.7                   |
| Florida                               | 826,716     | 1,181,110   | 1,006,428          | 825,733    | 1,180,003  | 1,005,398          | -983    | -1,107       | -1,030             | -10.3                  |
| Georgia                               | 362,394     | 479,313     | 424,394            | 361,931    | 478,837    | 423,924            | -463    | -475         | -470               | -4.7                   |
| Hawaii                                | 56,738      | 72,894      | 65,550             | 56,644     | 72,800     | 65,458             | -94     | <b>-94</b>   | -93                | -0.9                   |
| Idaho                                 | 54,444      | 73,537      | 64,421             | 54,373     | 73,463     | 64,350             | -71     | -74          | -72                | -0.7                   |
| Illinois                              | 572.180     | 722,511     | 653,061            | 571,435    | 721,750    | 652,302            | -745    | -761         | -759               | -7.6                   |
| Indiana                               | 233,997     | 299,317     | 268,692            | 233,695    | 299,001    | 268,378            | -302    | -316         | -314               | -3,1                   |
| lowa                                  | 118,220     | 147,505     | 134,014            | 118,068    | 147,347    | 133,857            | -152    | -158         | -157               | -1.6                   |
| Kansas                                | 112,990     | 143,365     | 129.276            | 112,857    | 143,231    | 129,143            | -133    | -134         | -133               | -1.3                   |
| Kentucky                              | 149,747     | 190,839     | 171,338            | 149,582    | 190,663    | 171,166            | -165    | -176         | -172               | -1.7                   |
| Louisiana                             | 166,103     | 215,999     | 192,696            | 165,905    | 215,789    | 192,493            | -198    | -210         | -203               | -2.0                   |
|                                       | 100 100 100 |             | 61,414             | 52,813     | 68,820     | 61,338             | -73     | -80          | -203<br>-76        | -0,8                   |
| Maine                                 | 52,885      | 68,899      |                    |            |            |                    |         | <del> </del> | -390               | -3.9                   |
| Maryland                              | 298,296     | 396,875     | 351,324            | 297,915    | 396,475    | 350,934            | -381    | -401<br>-506 |                    | -5.9<br>-5.1           |
| Massachusetts                         | 357,856     | 463,203     | 413,872            | 357,377    | 462,678    | 413,364            | -479    | -526         | -508               |                        |
| Michigan                              | 387,370     | 488,895     | 441,175            | 386,844    | 488,342    | 440,624            | -526    | -553         | -551               | -5.5                   |
| Minnesota                             | 244,457     | 321,966     | 285,481            | 244,134    | 321,620    | 285,146            | -322    | -346         | -336               | -3.4                   |
| Mississippi                           | 95,330      | 124,524     | 110,617            | 95,229     | 124,412    | 110,509            | -101    | -112         | -107               | -1.1                   |
| Missouri                              | 230,870     | 296,706     | 265,769            | 230,588    | 296,410    | 265,477            | -282    | -296         | -292               | -2.9                   |
| Montana                               | 35,209      | 46,002      | 41,019             | 35,159     | 45,949     | 40,969             | -51     | -53          | -51                | -0.5                   |
| Nebraska                              | 73,555      | 94,916      | 84,948             | 73,466     | 94,823     | 84,858             | -89     | -93          | -90                | -0.9                   |
| Nevada                                | 117,512     | 169,669     | 144,697            | 117,304    | 169,456    | 144,493            | -207    | -213         | -204               | -2.0                   |
| New Hampshire                         | 61,773      | 79,690      | 71,442             | 61,686     | 79,599     | 71,352             | -87     | -92          | -91                | -0.9                   |
| New Jersey                            | 472 153     | 607,692     | 545,244            | 471,579    | 607,100    | 544,658            | -574    | -592         | -586               | -5.9                   |
| New Mexico                            | 72,026      | 94,670      | 84,046             | 71,936     | 94,572     | 83,951             | - 91    | -99          | -95                | -0.9                   |
| New York                              | 1,000,664   | 1,248,930   | 1,133,011          | 999,458    | 1,247,622  | 1,131,737          | -1,206  | -1,308       | -1,274             | -12.7                  |
| North Carolina                        | 357,799     | 485,143     | 423,632            | 357,296    | 484,597    | 423,106            | -502    | -546         | -526               | -5.3                   |
| North Dakota                          | 25,876      | 31,909      | 29,166             | 25,840     | 31,872     | 29,129             | -37     | -37          | -36                | -0.4                   |
| Ohio                                  | 440,255     | 544,849     | 496,331            | 439,727    | 544,307    | 495,789            | -528    | -542         | -542               | -5.4                   |
| Oklahoma                              | 136,797     | 177,922     | 158,572            | 136,632    | 177,745    | 158,402            | -165    | -177         | -170               | -1.7                   |
| Oregon                                | 149,198     | 196,696     | 173,889            | 148,998    | 196,484    | 173,683            | -200    | -212         | -207               | -2,1                   |
| Pennsylvania                          | 544,169     | 690,451     | 622,424            | 543,479    | 689,710    | 621,699            | -691    | -742         | -725               | -7,3                   |
| Rhode Island                          | 48,562      | 62,981      | 56,234             | 48,495     | 62,908     | 56,163             | -67     | -73          | -70                | -0.7                   |
| South Carolina                        | 156,379     | 209,310     | 184,083            | 156,195    | 209,111    | 183,891            | -184    | -199         | -192               | -1,9                   |
| South Dakota                          | 32,051      | 41,512      | 37,075             | 31,994     | 41,450     | 37,016             | -57     | -61          | -59                | -0.6                   |
| Tennessee                             | 235,451     | 307,897     | 273,503            | 235,147    | 307,569    | 273,181            | -304    | -328         | -322               | -3.2                   |
| Texas                                 | 981,978     | 1,326,518   | 1,164,887          | 980,651    | 1,325,122  | 1,163,535          | -1,327  | -1,395       | -1,352             | 13.5                   |
| Utah                                  | 92,788      | 125,235     | 110,071            | 92,563     | 125,001    | 109,841            | -224    | -234         | -230               | -2.3                   |
| Vermont                               | 26,376      | 34,898      | 30,893             | 26,340     | 34,858     | 30,855             | -35     | -39          | -38                | -0.4                   |
| Virginia                              | 367,202     | 480,198     | 427,274            | 366,558    | 479,537    | 426,622            | -644    | -661         | -653               | -6.5                   |
| Washington                            | 296,719     | 397,036     | 349,382            | 296,289    | 396,595    | 348,950            | -430    | -441         | -431               | -4.3                   |
| West Virginia                         | 62,151      | 79,301      | 71,348             | 62,085     | 79,226     | 71,277             | -66     | -75          | -71                | -0.7                   |
| Wisconsin                             | 226,505     | 291,631     | 261,290            | 226,189    | 291,294    | 260,959            | -316    | -337         | -331               | -3.3                   |
|                                       |             | 33,736      | 29,857             | 25,223     | 33,702     | 29,825             | -32     | -34          | -32                | -0.3                   |

# State estimates of employment losses due to reduction of credit union presence

|                     | Reference Case<br>(thousands of Jobs) |              |                    | Alternate Case<br>(thousands of jobs) |         |                    |                  | Difference          |                    |                                 |
|---------------------|---------------------------------------|--------------|--------------------|---------------------------------------|---------|--------------------|------------------|---------------------|--------------------|---------------------------------|
| Employment by state | 2013 2022                             |              | 2013-22<br>Average | 2013                                  | 2022    | 2013-22<br>Average | 2013             | umber of Jo<br>2022 | 2013-22<br>Average | (thousands)<br>2013-22<br>Total |
| TOTAL U.S.          | 145,212                               | 163,664      | 155,534            | 145,070                               | 163,524 | 155,384            | -142,179         | -140,355            | -150,379           | -1503.8                         |
| Alabama             | 2,097                                 | 2,340        | 2,233              | 2,095                                 | 2,338   | 2,231              | -1,968           | -1,967              | -2,129             | -21.3                           |
| Alaska              | 362                                   | 406          | 387                | 361                                   | 406     | 386                | -350             | +335                | -352               | -3.5                            |
| Arizona             | 2,880                                 | 3,426        | 3,177              | 2,877                                 | 3,423   | 3,174              | -2,952           | -2,806              | -2,996             | -30.0                           |
| Arkansas            | 1,280                                 | 1,428        | 1,361              | 1,279                                 | 1,427   | 1,360              | -1,023           | -1,049              | -1,124             | -11.2                           |
| California          | 16,568                                | 18,654       | 17,742             | 16,551                                | 18,638  | 17,725             | -16,136          | -15,595             | -17,002            | -170.0                          |
| Colorado            | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 2,772        | 2,639              | 2,456                                 | 2,770   | 2,637              | -2,544           | -2,357              | -2,577             | -25.8                           |
|                     | 2,459                                 | <del></del>  |                    | 1,712                                 | 1,895   | 1,816              | -2,544<br>-1,576 | -1,570              | -1,675             | -16.7                           |
| Connecticut         | 1,714                                 | 1,897<br>516 | 1,818<br>491       | 458                                   | 515     | 490                | -1,376           | -787                | -827               | -8.3                            |
| Delaware            | 459                                   | 1            | i                  | 764                                   | 816     | 794                | -636             | -638                | -687               | -6.9                            |
| Dist. of Col.       | 765                                   | 817          | 795                |                                       |         | <b></b>            |                  | <del> </del>        |                    | -92.4                           |
| Florida             | 8,805                                 | 10,527       | 9,720              | 8,796                                 | 10,518  | 9,711              | -8,961           | -8,867              | -9,242             |                                 |
| Georgia             | 4,394                                 | 4,963        | 4,714              | 4,390                                 | 4,959   | 4,710              | -4,245           | -4,049              | -4,421             | -44.2                           |
| Hawaii              | 723                                   | 804          | 771                | 722                                   | 803     | 770                | -778             | -708                |                    | -7.7                            |
| Idaho               | 716                                   | 817          | 772                | 715                                   | 816     | 772                | -715             | -665                | -722               | -7,2                            |
| Illinois            | 6,146                                 | 6,815        | 6,526              | 6,140                                 | 6,809   | 6,520              | -5,894           | -5,805              | -6,288             | -62.9                           |
| Indiana             | 3,051                                 | 3,402        | 3,248              | 3,048                                 | 3,399   | 3,245              | -2,845           | -2,934              | -3,180             | -31.8                           |
| lowa                | 1,580                                 | 1,730        | 1,667              | 1,579                                 | 1,729   | 1,665              | -1,466           | -1,440              | -1,570             | -15.7                           |
| Kansas              | 1,419                                 | 1,563        | 1,501              | 1,418                                 | 1,562   | 1,500              | -1,204           | -1,179              | -1,268             | -12.7                           |
| Kentucky            | 1,985                                 | 2,194        | 2,102              | 1,983                                 | 2,192   | 2,100              | -1,650           | -1,683              | -1,807             | -18.1                           |
| Louisiana           | 1,972                                 | 2,220        | 2,113              | 1,970                                 | 2,218   | 2,111              | -1,826           | -1,746              | -1,874             | -18.7                           |
| Maine               | 664                                   | 742          | 708                | 663                                   | 741     | 707                | -689             | -692                | -723               | -7.2                            |
| Maryland            | 2,804                                 | 3,193        | 3,026              | 2,801                                 | 3,191   | 3,023              | -2,776           | -2,641              | -2,818             | -28.2                           |
| Massachusetts       | 3,476                                 | 3,887        | 3,705              | 3,472                                 | 3,883   | 3,702              | -3,529           | -3,641              | -3,819             | -38.2                           |
| Michigan            | 4,392                                 | 4,867        | 4,656              | 4,388                                 | 4,862   | 4,651              | -4,171           | -4,381              | -4,683             | -46.8                           |
| Minnesota           | 2,902                                 | 3,267        | 3,105              | 2,899                                 | 3,265   | 3,102              | -2,832           | -2,897              | -3,063             | -30.6                           |
| Mississippi         | 1,242                                 | 1,383        | 1,321              | 1,241                                 | 1,382   | 1,320              | -1,014           | -1,020              | -1,101             | -11.0                           |
| Missouri            | 2,950                                 | 3,293        | 3,143              | 2,947                                 | 3,290   | 3,140              | -2,775           | -2,715              | -2,929             | -29.3                           |
| Montana             | 474                                   | 532          | 507                | 473                                   | 531     | 507                | -501             | -467                | -498               | -5.0                            |
| Nebraska            | 1,007                                 | 1,120        | 1,071              | 1,006                                 | 1,119   | 1,070              | -912             | -875                | -939               | -9.4                            |
| Nevada              | 1,357                                 | 1,640        | 1,514              | 1,355                                 | 1,638   | 1,513              | -1,806           | -1,634              | -1,768             | -17.7                           |
| New Hampshire       | 666                                   | 741          | 709                | 665                                   | 740     | 708                | -706             | -702                | -757               | -7.6                            |
| New Jersey          | 4,160                                 | 4,651        | 4,439              | 4,156                                 | 4,647   | 4,435              | -3,896           | -3,848              | -4,125             | -41.3                           |
| New Mexico          | 917                                   | 1,036        | 984                | 916                                   | 1,035   | 983                | -863             | -837                | -888               | -8.9                            |
| New York            | 9,126                                 | 10,030       | 9,637              | 9,117                                 | 10,021  | 9,628              | -8,539           | -8,611              | -9,149             | -91.5                           |
| North Carolina      | 4,476                                 | 5,112        | 4,824              | 4,472                                 | 5,108   | 4,819              | -4,550           | -4,547              | -4,858             | -48.6                           |
| North Dakota        | 380                                   | 412          | 399                | 379                                   | 412     | 399                | -360             | -346                | -368               | -3.7                            |
| Ohio                | 5,551                                 | 6,091        | 5,856              | 5,547                                 | 6,086   | 5,851              | -4,963           | -5,082              | -5,453             | -54,5                           |
| Oklahoma            | 1,641                                 | 1,829        | 1,746              | 1,640                                 | 1,828   | 1,744              | -1,376           | -1,408              | -1,487             | -14.9                           |
| Oregon              | 1,869                                 | 2,103        | 1,999              | 1,867                                 | 2,101   | 1,997              | -1,880           | -1,813              | -1,965             | -19.6                           |
| Pennsylvania        | 6,126                                 | 6,799        | 6,507              | 6,120                                 | 6,793   | 6,500              | -5,974           | -6,094              | -6,444             | -64.4                           |
| Rhode Island        | 524                                   | 588          | 560                | 523                                   | 587     | 559                | -532             | -554                | -573               | -5.7                            |
| South Carolina      | 2,013                                 | 2,290        | 2,166              | 2,011                                 | 2,288   | 2,164              | -1,889           | -1,817              | -1,975             | -19.7                           |
| South Dakota        | 427                                   | 475          | 454                | 426                                   | 475     | 454                | -486             | -485                | -508               | -5.1                            |
| Tennessee           | 2,946                                 | 3,324        | 3,155              | 2,943                                 | 3,321   | 3,152              | -2,838           | -2,909              | -3,116             | -31.2                           |
| Texas               | 10,930                                | 12,533       | 11,828             | 10,919                                | 12,522  | 11,817             | -10,743          | -10,614             | -11,308            | -113.1                          |
| Utah                | 1,322                                 | 1,524        | 1,437              | 1,320                                 | 1,522   | 1,434              | -1,994           | -1,906              | -2,042             | -20.4                           |
| Vermont             | 330                                   | 371          | 353                | 329                                   | 371     | 353                | -332             | -340                | -358               | -3.6                            |
| Virginia            | 4,051                                 | 4,549        | 4,334              | 4,046                                 | 4,545   | 4,329              | -4,622           | -4,378              | -4,719             | -47.2                           |
| Washington          | 3,123                                 | 3,545        | 3,360              | 3,120                                 | 3,542   | 3,357              | -3,266           | -3,056              | -3,308             | -33.1                           |
| West Virginia       | 768                                   | 853          | 816                | 767                                   | 852     | 815                | -655             | -671                | -699               | -7.0                            |
| Wisconsin           | 2,940                                 | 3,270        | 3,126              | 2,937                                 | 3,267   | 3,123              | -2,860           | -2,951              | -3,165             | -31.6                           |
| Wyoming             | 289                                   | 326          | 311                | 289                                   | 326     | 311                | -277             | -241                | -266               | -2.7                            |