

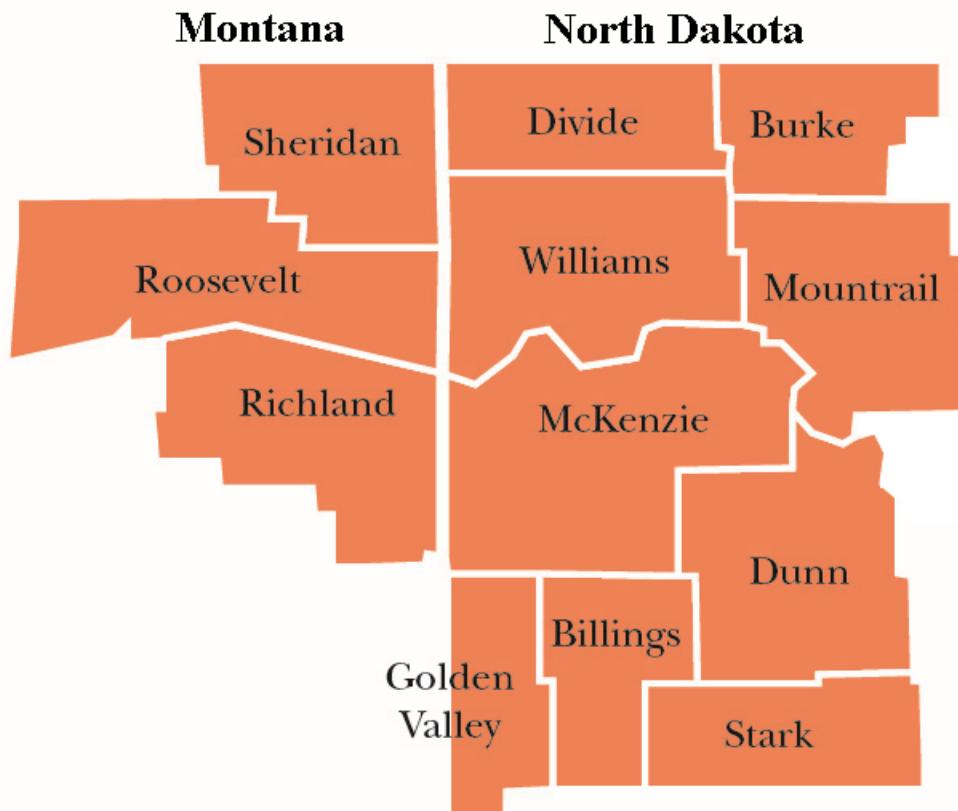


This memo reviews a range of oil production, demographic, economic and financial data for the Bakken. We compare the Bakken with the rest of Montana, the rest of North Dakota and the United States as of Dec. 20, 2012.

Executive Summary

The Bakken refers to 12 counties in Montana and North Dakota most affected by oilfield activity and closely related economic expansion.¹

Defining the Bakken



Our main conclusions are:

Oil Production

- The current Bakken oil boom is now five times larger than the Bakken oil boom in the 1980s and has contributed to the United States' recent gains in oil production. [pp. 5, 7]
- Monthly oil production in the Bakken area increased by 3.1 million barrels, or 16 percent, from May to October. During this period, the increase in Bakken oil production represented about 40 percent of the increase in the U.S. total. [7]
- The number of active drilling operations in North Dakota dropped below 200 in recent months as oil companies sought to cut costs and increase efficiency after drilling a number of initial

¹ Defining the Bakken area is a subjective process. The definition may change over time.



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producing wells to meet leasing requirements. Meanwhile, drilling in Montana picked up recently as oil companies expanded their exploration in the western part of the Bakken. [6]

- The North Dakota Department of Mineral Resources projects that the number of drilling rigs in the state will climb above 200 in 2013 and remain above 200 for about another 10 years. By 2030, there will be over 40,000 oil wells in the state. [7]

Labor Markets, Business Activity and Construction

- Over the past few months, economic activity in the Bakken has continued at a rapid pace, although the pace of growth has moderated somewhat.
 - Employment levels have continued to expand. The unemployment rate in the Bakken is now 1.8 percent, down from 2 percent in April. [9, 11]
 - Bakken online job postings increased almost fourfold since 2009; however, the pace of increase slowed in 2012. Since June, Bakken online job postings have remained at about 4,300. [11]
 - The North Dakota Department of Mineral Resources projects that the number of oil industry jobs in the state will continue to escalate over the next five years, eventually topping 60,000. The number of technicians and permanent positions related to oil production will continue to increase, while drilling and fracking jobs will eventually decrease. [10]
 - For the 4-quarter period ended in first quarter 2012, the Bakken area maintained its high pace of growth in average wages, posting a 19 percent real increase from a year earlier compared with 4 percent wage growth in the rest of North Dakota, 1.9 percent growth in the rest of Montana and practically no growth nationwide. [12]
 - In the past five years, the aggregate value of taxable sales and purchases in North Dakota more than doubled, averaging over 14 percent growth annually. Most of the increase came from the mining and oil sector. [13]
 - There is a solid inverted relationship between average growth in sales taxes for a county and distance from a Bakken county; the farther a county is away from the Bakken, the slower is average growth in sales taxes. Before 2007, this spatial relationship was relatively weak. [14]

Population Distribution

- The male-to-female ratio remains higher in the Bakken compared with the rest of Montana, North Dakota and the United States. [18]
- The increase in the male-to-female ratio, coupled with a high rate of population growth, supports the anecdotal evidence of significant in-migration, especially of working-age males. [18-19]

Income and Poverty

- Per capita household income in the Bakken has risen above that in the rest of Montana, North Dakota and the United States as a whole. [20]
- Bakken income gains stem mainly from rising wages and salaries. [21]
- The poverty rate in the Bakken is dropping relative to both the United States and the rest of Montana and North Dakota. [22]



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Housing

- Housing values and rental rates are increasing faster in the Bakken than in the rest of Montana and North Dakota. [24-25]
 - Median rents remain lower in the Bakken than in the rest of North Dakota. However, as of 2007-2011, a larger share of rents exceed \$800 in the Bakken than in the rest North Dakota. [25]
- In 2007-2011, rental vacancy rates remained relatively low in the Bakken (4 percent). [26]
- With income rising along with housing costs, the percent of households experiencing burdensome housing costs (greater than 30 percent of income) was generally low and stable in the Bakken. However, housing burdens for renters and owners with income in the \$20,000-\$35,000 range are diverging steadily as housing burden as a percentage of income for renters in this group continues to increase. [27]

Banking

- Historically, growth in construction and land development loans (loans secured by real estate to fund land improvements and construction) in the Bakken area has been similar to the rest of North Dakota. However from 3/31/2010 to 9/30/2012, construction and land development loans in the Bakken area increased 124 percent, from \$79 million to \$176 million, while decreasing 9 percent in the rest of North Dakota and 42 percent in the rest of Montana. The large increase within the Bakken is representative of growth across many Bakken banks. [30]
- Total deposits have increased substantially within the Bakken area since 2010 compared with the rest of North Dakota and Montana. However, the rate of increase for Bakken banks has fallen off its peak during the second and third quarters of 2012. [28-29]
- Residential real estate loans from Bakken banks began increasing more rapidly in 2010 compared with those banks in North Dakota and Montana outside of the Bakken area and have continued to increase. [31]
- Profitability for Bakken banks has picked up recently relative to non-Bakken banks. Other standard bank performance measures related to liquidity, asset quality and capital are generally similar among Bakken banks and those in the rest of North Dakota and Montana. [32-34]



Section 1. Oil Production, Labor Markets, Business Establishments and Construction

This section reviews data on oil production, labor markets, business establishments and construction using a wide range of data sources. We find the following:

Oil Production

- The current Bakken oil boom is now five times larger than the Bakken oil boom in the 1980s and has contributed to the United States' recent gains in oil production.
- Monthly oil production in the Bakken area increased by 3.1 million barrels, or 16 percent, from May to October. During this period, the increase in Bakken oil production represented about 40 percent of the increase in the U.S. total.
- During this period, the increase in Bakken oil production represented about 40 percent of the increase in the U.S. total.
- The number of active drilling operations in North Dakota dropped below 200 in recent months as oil companies sought to cut costs and increase efficiency after drilling a number of initial producing wells to meet leasing requirements. Meanwhile, drilling in Montana picked up recently as oil companies expanded their exploration in the western part of the Bakken.
- The North Dakota Department of Mineral Resources projects that the number of drilling rigs in the state will climb above 200 in 2013 and remain above 200 for about another 10 years. By 2030, there will be over 40,000 oil wells in the state.

Labor Markets, Business Activity and Construction

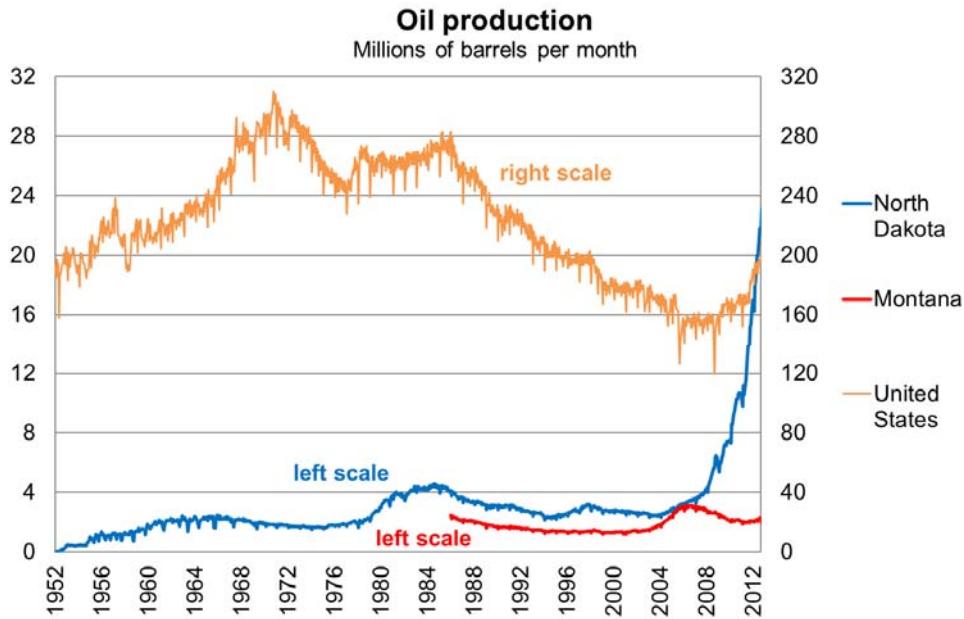
- Over the past few months, economic activity in the Bakken has continued at a rapid pace, although the pace of growth has moderated somewhat.
 - Employment levels have continued to expand. The unemployment rate in the Bakken is now 1.8 percent, down from 2 percent in April.
 - Bakken online job postings increased almost fourfold since 2009; however, the pace of increase slowed in 2012. Since June, Bakken online job postings have remained at about 4,300.
 - The North Dakota Department of Mineral Resources projects that the number of oil industry jobs in the state will continue to escalate over the next five years, eventually topping 60,000. The number of technicians and permanent positions related to oil production will continue to increase, while drilling and fracking jobs will eventually decrease.
 - For the 4-quarter period ended in first quarter 2012, the Bakken area maintained its high pace of growth in average wages, posting a 19 percent real increase from a year earlier compared with 4 percent wage growth in the rest of North Dakota, 1.9 percent growth in the rest of Montana and practically no growth nationwide.
 - In the past five years, the aggregate value of taxable sales and purchases in North Dakota more than doubled, averaging over 14 percent growth annually. Most of the increase comes from the mining and oil sector.
 - Counties closer to the Bakken have posted stronger gains in taxable sales and purchases compared with counties farther away.



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A. Oil Production²

- The current Bakken oil boom is now five times larger than the Bakken oil boom in the 1980s and has contributed to the United States' recent gains in oil production.



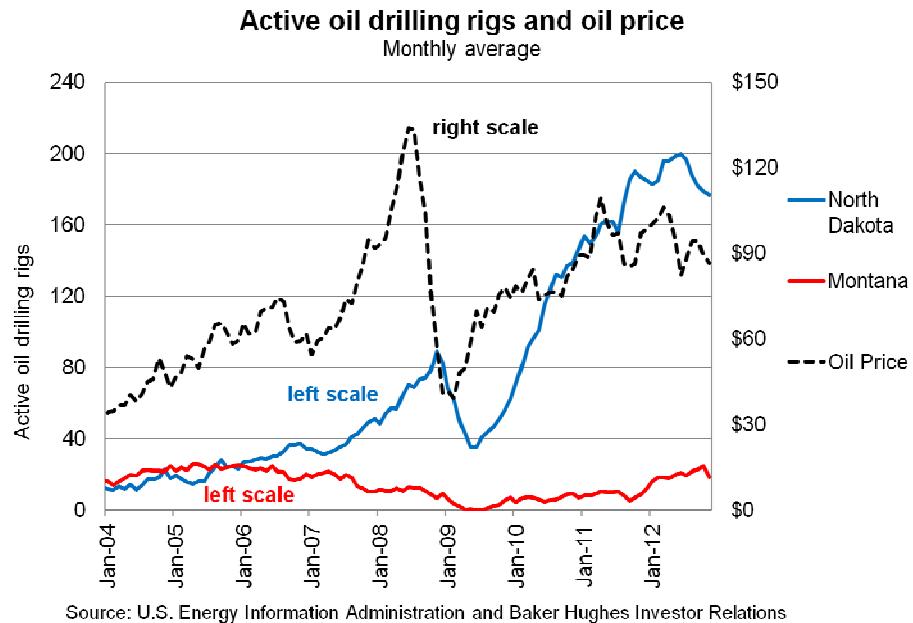
Source: U.S. Energy Information Administration, North Dakota Department of Mineral Resources, and Montana Board of Oil and Gas Conservation

² Bakken oil production data include a few counties beyond the 12 used in all other parts of this memo.

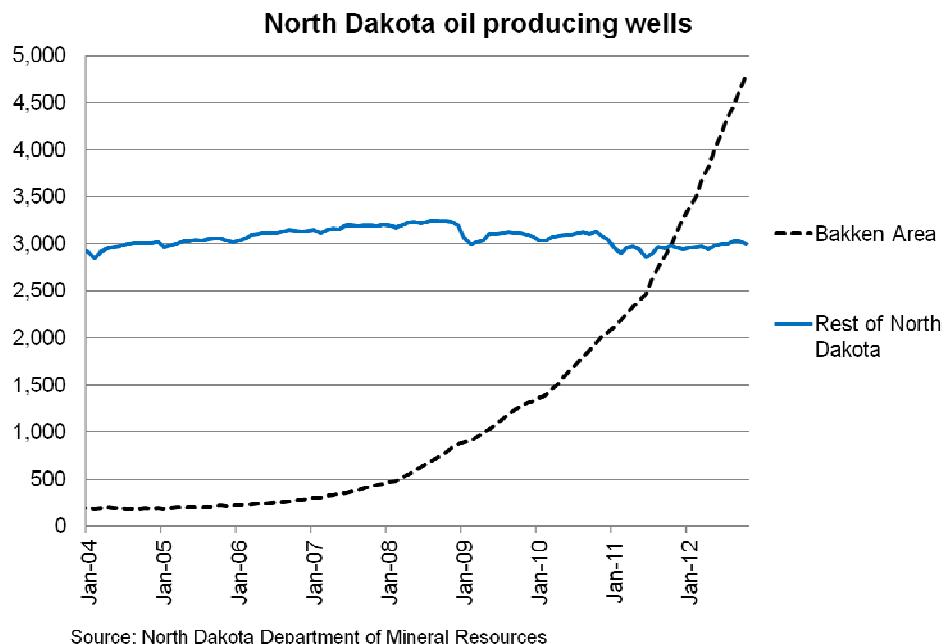


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- Oil drilling in Montana and North Dakota picked up beginning in 2004 until prices dropped below \$60 per barrel in 2008, considered the break-even price for shale drilling and oil production at the time. Drilling accelerated again once oil prices recovered.
- The number of active drilling operations in North Dakota dropped below 200 in recent months as oil companies sought to cut costs and increase efficiency after drilling a number of initial producing wells to meet leasing requirements. Meanwhile, drilling in Montana picked up recently as oil companies expanded their exploration in the western part of the Bakken.



- In October, there were 4,791 producing wells in the North Dakota Bakken area, and the number continues to grow at an average rate of 150 new wells per month.

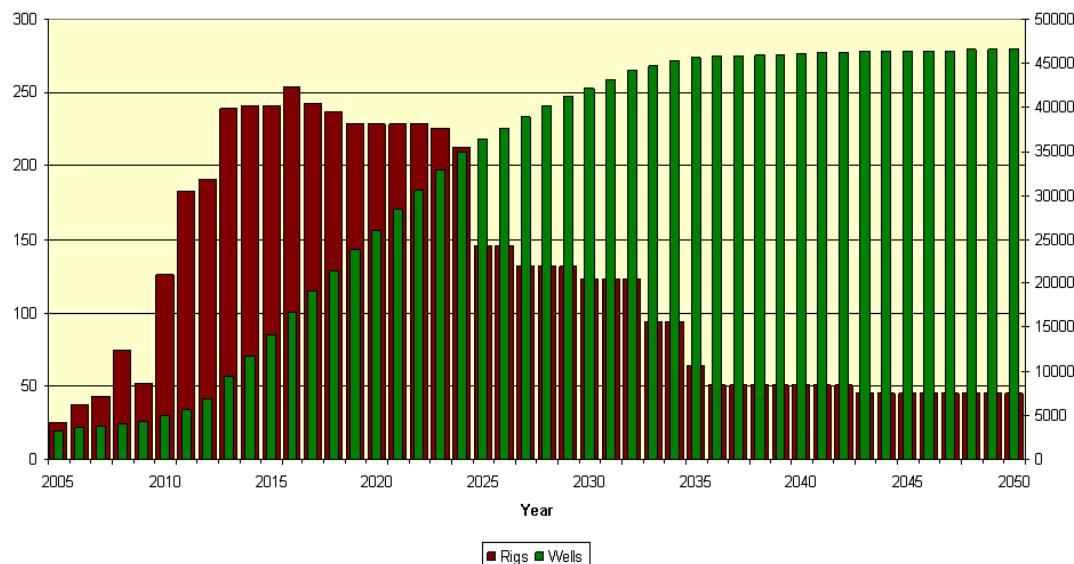




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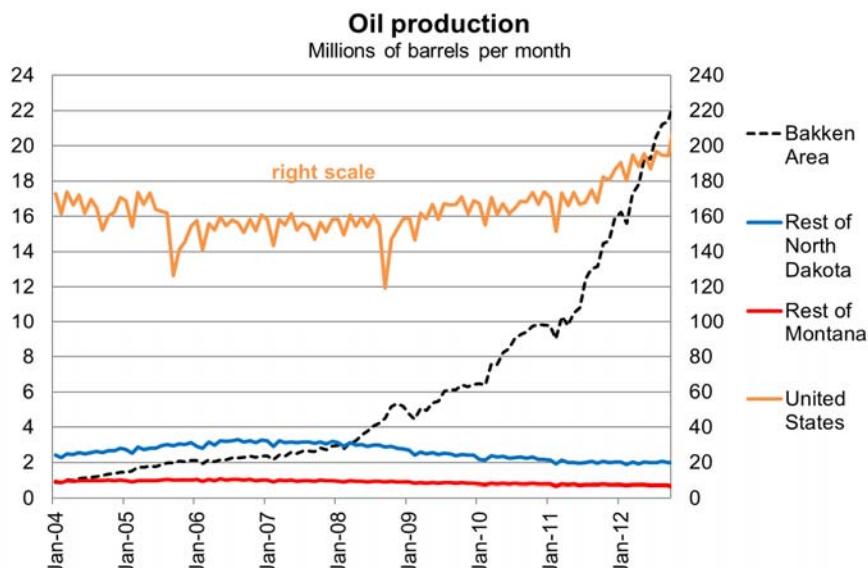
- The North Dakota Department of Mineral Resources projects that the number of drilling rigs in North Dakota will climb above 200 in 2013 and remain above 200 for about another 10 years. By 2030, there will be over 40,000 oil wells in the state.

Projections for North Dakota oil rigs and wells



Source: North Dakota Department of Mineral Resources

- The Bakken area represents most of the oil production in Montana and North Dakota, and accounts for almost 11 percent of U.S. oil output.
- Monthly oil production in the Bakken area increased by 3.1 million barrels, or 16 percent, from May to October. During this period, the increase in Bakken oil production represented about 40 percent of the increase in the U.S. total.

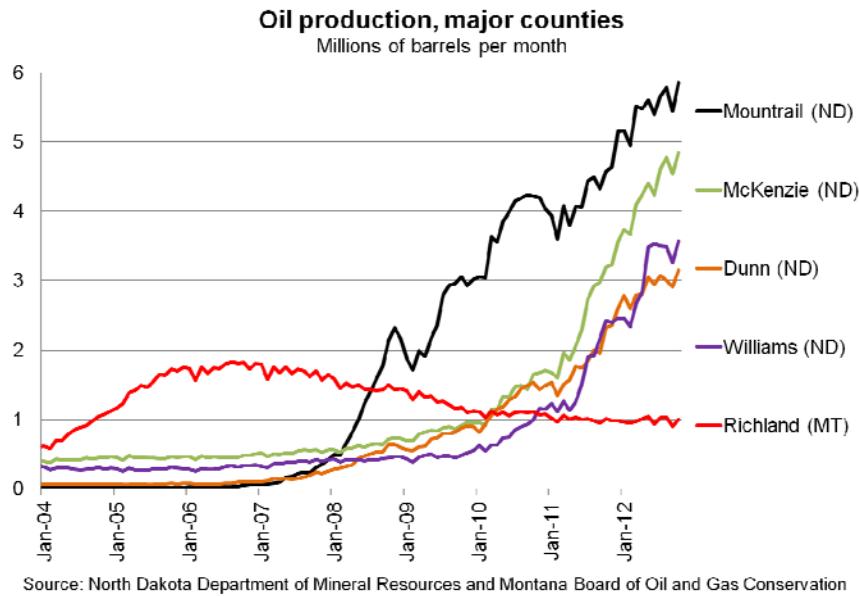


Source: U.S. Energy Information Administration, North Dakota Department of Mineral Resources, Montana Board of Oil and Gas Conservation



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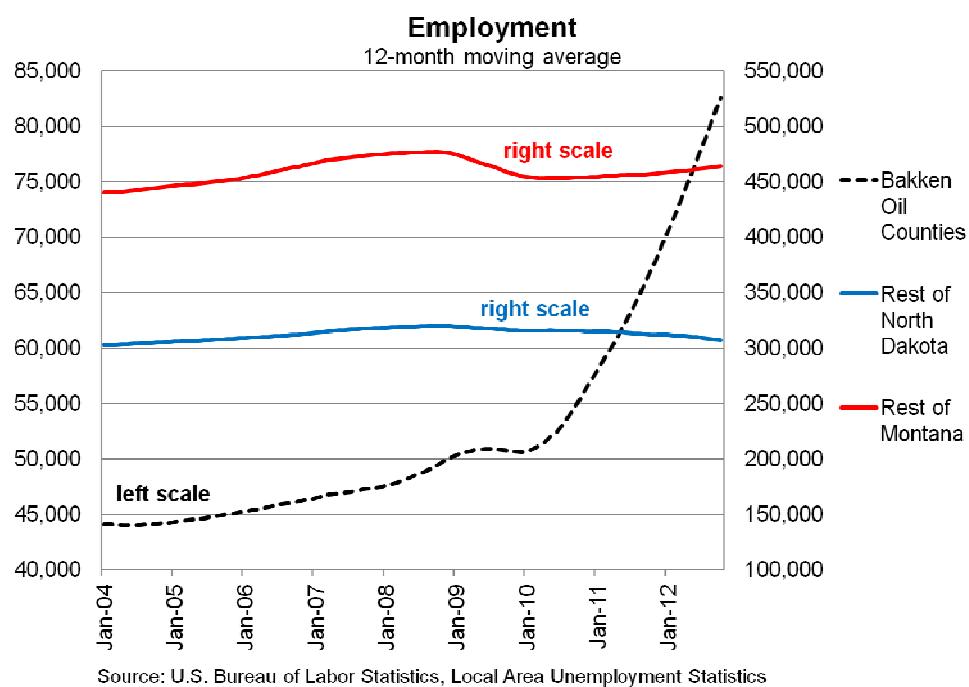
- Richland County led Bakken oil production until 2008, when production in Mountrail County accelerated.
- Since June, production has leveled somewhat in the major oil producing counties of the Bakken. Meanwhile, production is increasing in surrounding counties.





B. Employment, Wages and Firm/Housing Establishment

- Employment levels increased by over 60 percent in the Bakken area since 2009 and continue to show strong growth.
- During this time, employment in the rest of North Dakota was relatively flat, while employment in Montana dipped during the recession.³
- Since June 2012, employment in the Bakken area increased by 7 percent, while the numbers remained relatively unchanged in the rest of North Dakota and Montana.

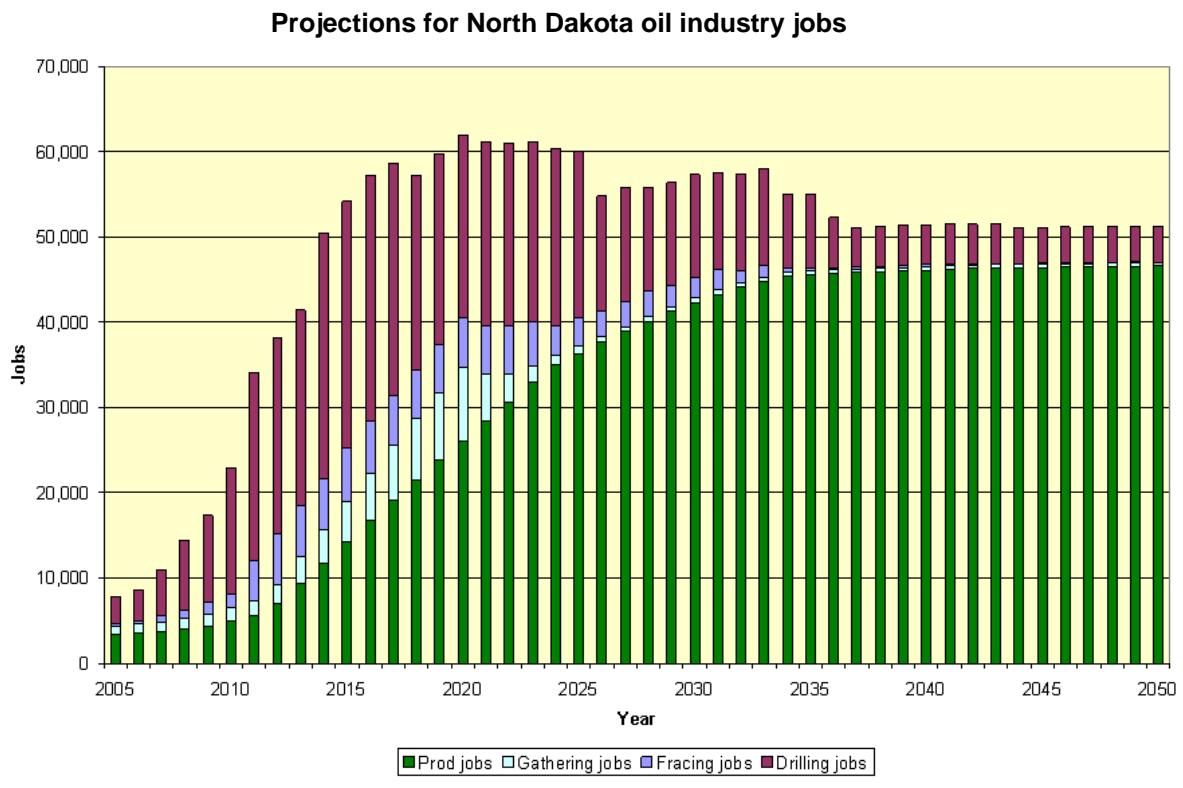


³ Employment data are based on estimates from the Bureau of Labor Statistics, Local Area Unemployment Statistics. Monthly estimates are based on data from the Current Population Survey, a monthly national survey of households. Employment growth in North Dakota as measured by employer payroll data is much stronger than employment growth measured by the household survey. For instance, employment measured by payroll data in North Dakota increased twice as much from October 2004 to October 2012 (81,200) than employment measured by the household survey (38,857). In Montana, employment growth was relatively similar for both measures—payroll increased 23,000 and household increased 23,484 during this period. Current payroll employment data are not available by county.



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- The North Dakota Department of Mineral Resources projects that the number of oil industry jobs in the state will continue to escalate over the next five years, eventually topping 60,000.
- The number of technicians and permanent positions related to oil production will continue to increase, while drilling and fracking jobs will eventually decrease.
- After 2035, oil industry jobs will reach a steady state of about 50,000 oil industry jobs. Most of these jobs will be production related, servicing over 45,000 wells in the state.



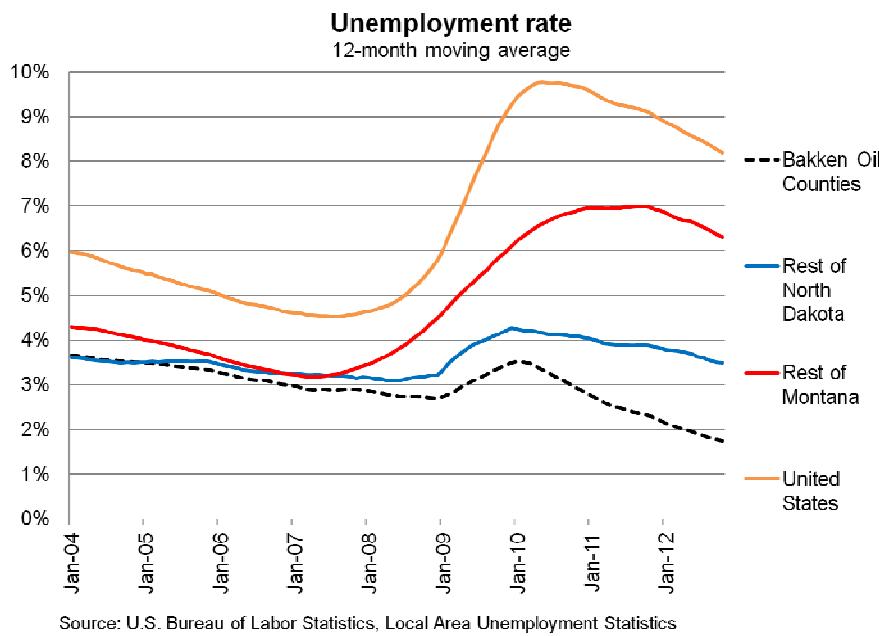
Source: North Dakota Department of Mineral Resources

- Unemployment rates in North Dakota within and outside the Bakken remained low during the recession and the oil boom.

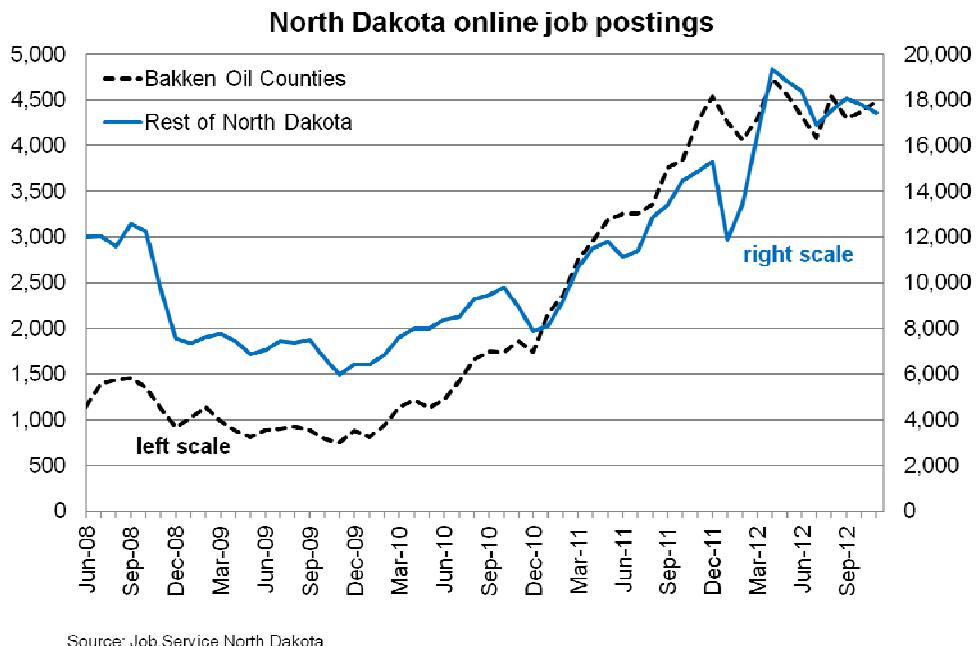


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- The decrease in unemployment in the Bakken since 2009 has been much sharper than in the rest of North Dakota. The unemployment rate in the Bakken dipped below 2 percent in May and is now 1.8 percent.



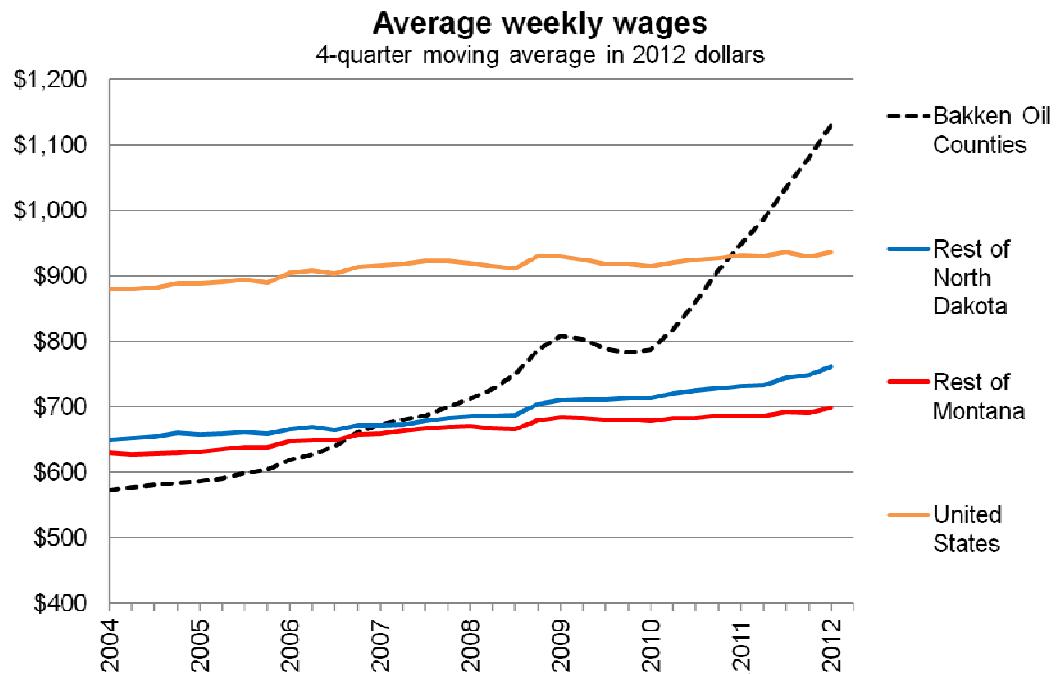
- Bakken job postings increased almost fourfold since 2009; however, the pace of increase slowed in 2012. Since June, Bakken online job postings have remained at about 4,300.





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- Demand for workers has pushed average weekly wages higher in the Bakken as highly paid oilfield-related occupations gained a larger share of employment. Wages across all sectors increased due to the strong demand for labor.
- Average weekly wages are up around 40 percent in the Bakken since 2009; wage growth is up 2.2 percent from first quarter 2009 to first quarter 2012 in the rest of Montana and 7.1 percent in the rest of North Dakota, while wages have been stagnant for the United States as a whole, barely growing at 0.8 percent.
- Average wages in the Bakken rose due to both increases in wages themselves and shifts in the types of jobs held in the Bakken. Wage increases account for close to three-quarters of the average wage increase during the oil boom, while the shift in employment to oil-related activity accounts for about one-quarter of the average wage increase.
- For the 4-quarter period ended in first quarter 2012, the Bakken area maintained its high pace of growth in average weekly wages, posting a 19 percent real increase from a year earlier compared with 4 percent wage growth in the rest of North Dakota, 1.9 percent growth in the rest of Montana and practically no growth nationwide.



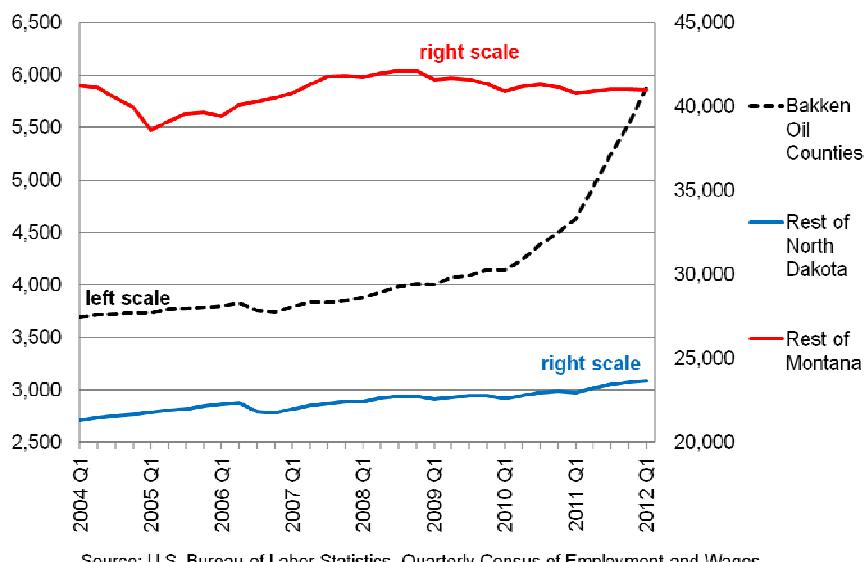
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages



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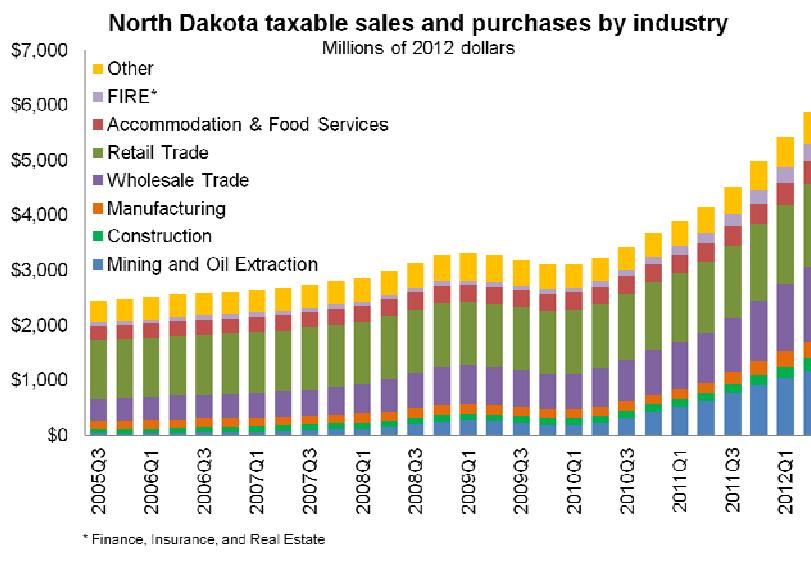
- Since 2009, new business establishments have grown by almost 50 percent in the Bakken. For comparison, during the same period, establishments grew by about 5 percent in the rest of North Dakota and by 3 percent in the United States as a whole, while decreasing slightly in the rest of Montana.
- Correspondingly, the share of North Dakota businesses established in the Bakken area has been rising, increasing from 12 percent to 17 percent of the state total during the past five years. The Bakken area represents 53 percent of the total growth in North Dakota business establishments during this time.
- For the 4-quarter period ended in first quarter 2012, the Bakken area maintained its high pace of growth in the number of business establishments, posting a 27 percent increase from a year earlier compared with 3 percent growth in the rest of North Dakota, 0.5 percent growth in the rest of Montana and 2.5 percent growth nationwide.

Total business establishments



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

- In the past five years, the aggregate value of taxable sales and purchases in North Dakota more than doubled, averaging over 14 percent growth annually. Most of the increase comes from the mining and oil sector.



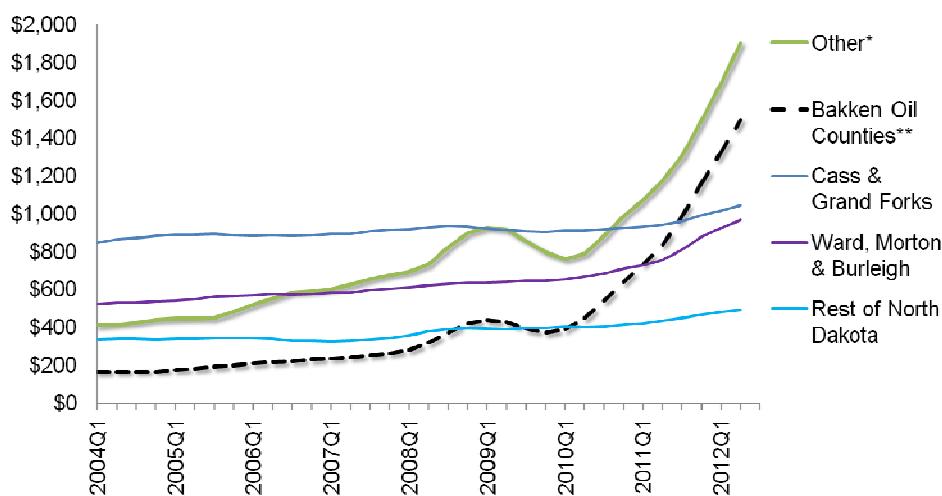
* Finance, Insurance, and Real Estate

Source: North Dakota Office of State Tax Commissioner



- Since 2007, taxable sales and purchases in the Bakken counties experienced a sixfold increase, accounting for over one-third of the total increase in North Dakota sales taxes. The next largest category driving the state trend is the “Other” category, which includes sales to businesses that operate in multiple counties or out of state. The movement of the “Other” category closely follows that of the Bakken area counties; therefore, its increase seems related to oil drilling. “Other” accounts for about 40 percent of the total increase in North Dakota taxable sales and purchases.
- Taxable sales and purchases in Ward, Morton and Burleigh counties, home of Minot and Bismarck/Mandan, increased over the past two quarters. Oil drilling in the Bakken area may be having a larger impact on sales tax growth in nearby Minot and Bismarck than in Fargo, Grand Forks and the rest of North Dakota.
- There is a solid inverted relationship between average growth in sales taxes for a county and distance from a Bakken county; the farther a county is away from the Bakken, the slower is average growth in sales taxes. Before 2007, this spatial relationship was relatively weak.

North Dakota taxable sales and purchases by location
Millions of 2012 dollars



* Data not attributable to a specific locale (out-of-state and consolidated items)

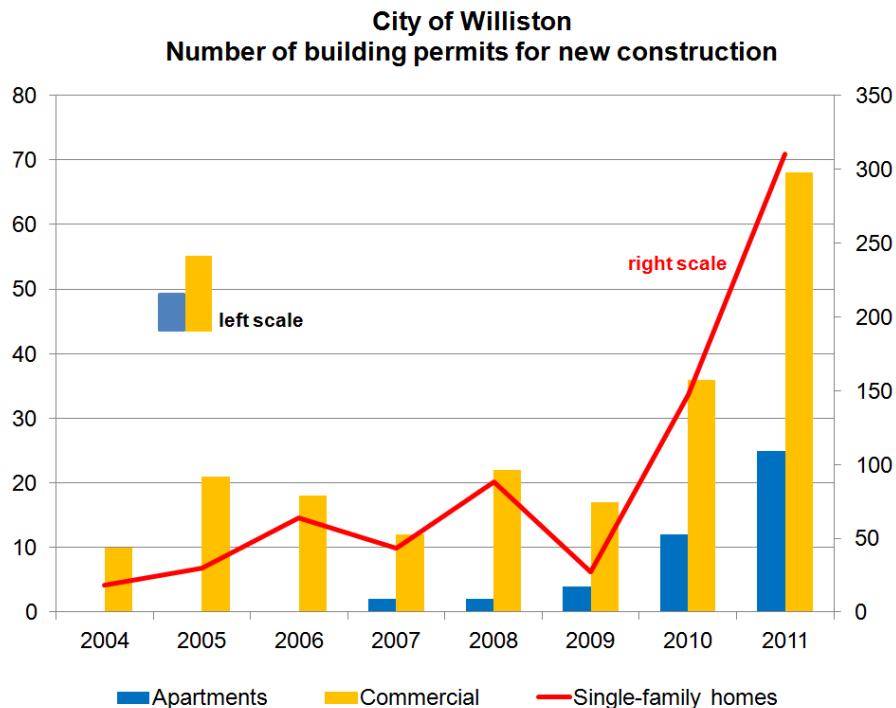
** Bakken area counties in North Dakota: Billings, Burke, Divide, Dunn, Golden Valley, McKenzie, Mountrail, Stark, and Williams

Source: North Dakota Office of State Tax Commissioner



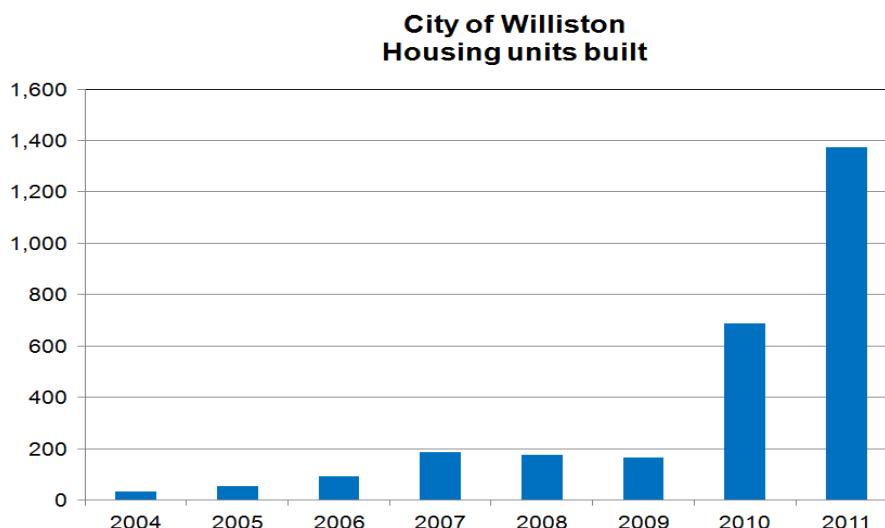
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- Construction activity for commercial buildings and residential units has risen sharply for the city of Williston and Stark County (building permit data are not readily available across the Bakken).



Source: City of Williston

- The number of housing units built in Williston and within one mile of the city, including single-family homes, duplexes, twin homes, apartments and manufactured homes, showed strong growth beginning in 2010.
- According to the 2010 census, 13,852 people lived in Williston; the city's population in 2012 is well over 20,000, according to city government officials.

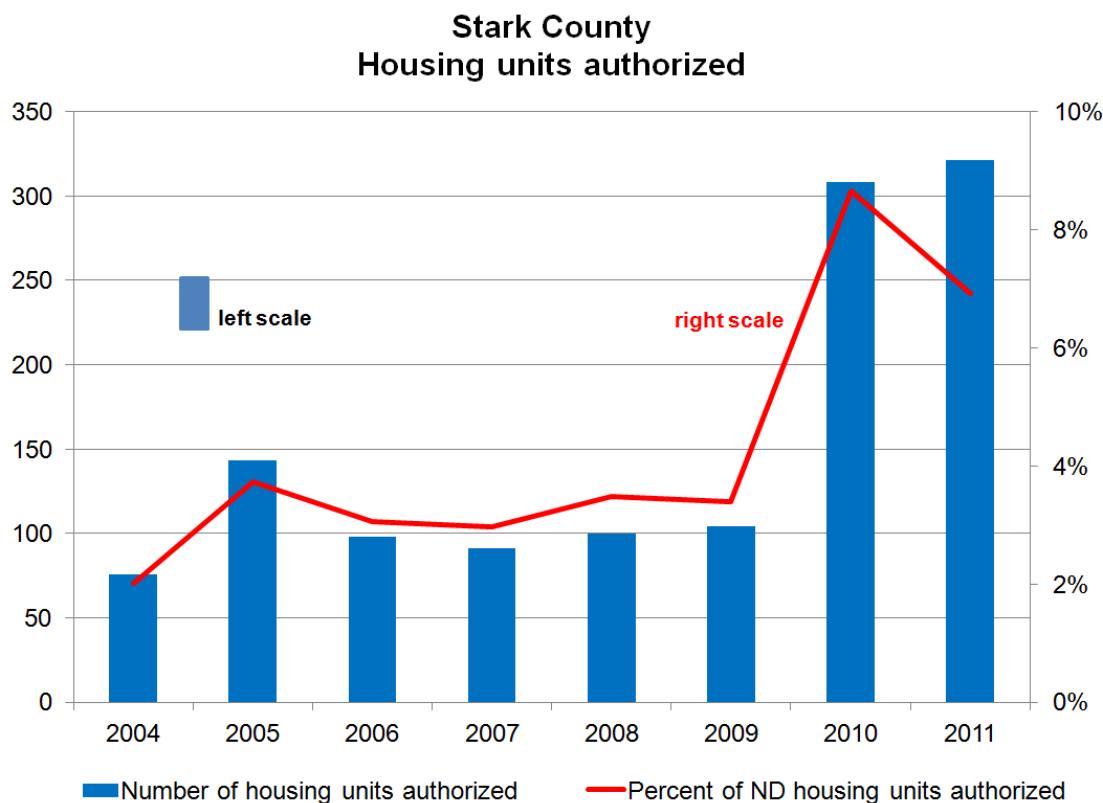


Source: City of Williston



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- Stark County, which includes the city of Dickinson, posted strong gains in housing units authorized in 2010 and 2011.
- Stark County housing units authorized made up 9 percent and 7 percent of all North Dakota units authorized in 2010 and 2011, respectively. Stark County had a population of 24,199 in 2010 (3.5 percent of the state population); almost 18,000 people lived in Dickinson.





Section 2. Demographics and Housing

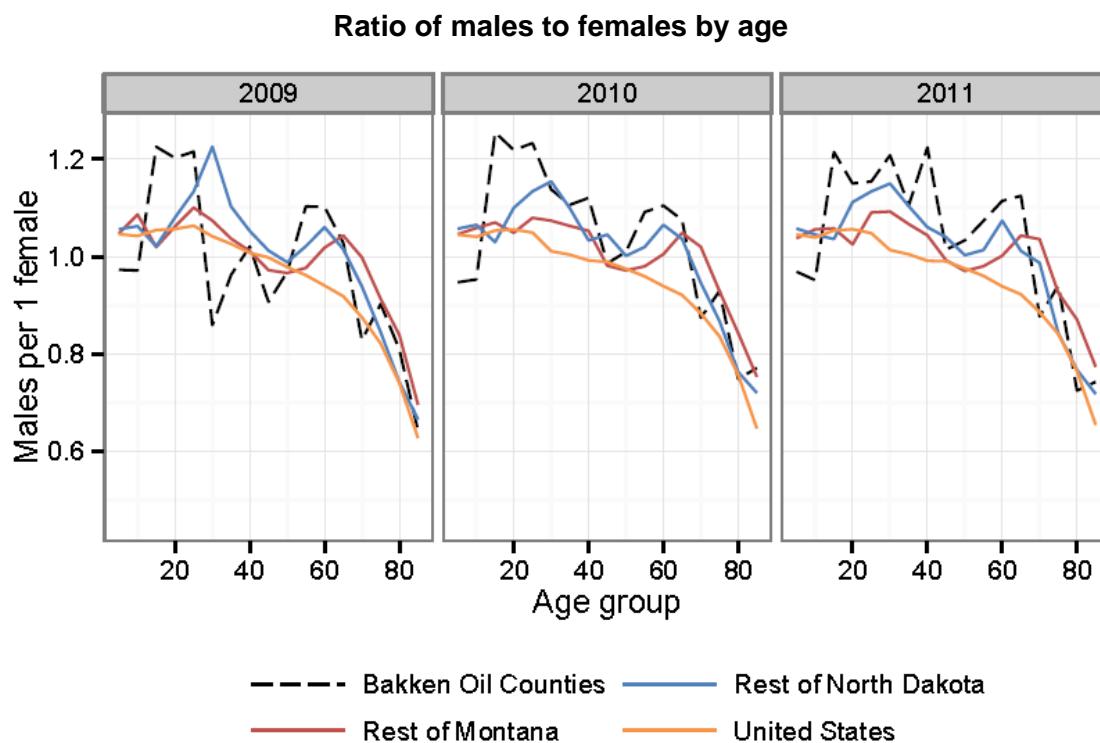
This section primarily uses Census Bureau data, captured through the American Community Survey (ACS), to summarize key demographic and housing data for the Bakken and the rest of Montana and North Dakota. The ACS data have an important limitation: They provide data on the Bakken counties only as five-year averages ending in 2011.

- The male-to-female ratio is noticeably higher now in the Bakken; this was not true a decade ago.
- The increase in the male-to-female ratio, coupled with a high rate of population growth, supports the anecdotal evidence of significant in-migration, especially of working-age males.
- Per capita household income in the Bakken has risen above that in the rest of Montana, North Dakota and the United States as a whole.
- Bakken income gains stem mainly from rising wages and salaries.
- The poverty rate in the Bakken is still dropping relative to both the United States and the rest of Montana and North Dakota, but the rate of decline has slowed somewhat.
- Housing values and rental rates are increasing faster in the Bakken than in the rest of Montana and North Dakota.
 - Median rents remain lower in the Bakken than in the rest of North Dakota. However, as of 2007-2011, a larger share of rents exceed \$800 in the Bakken than in the rest North Dakota.
- In 2007-2011, rental vacancy rates remained relatively low in the Bakken (4 percent).
- With income rising along with housing costs, the percent of households experiencing burdensome housing costs (greater than 30 percent of income) was generally low and stable in the Bakken. However, housing burdens for renters and owners with income in the \$20,000-\$35,000 range are diverging steadily as housing burden as a percentage of income for renters in this group continues to increase.



A. Population (by Age and Gender)

- The ratio of males to females typically peaks between ages 20 and 30 for all regions, but is highest in the Bakken.
- The margin of error for Bakken estimates is high, but the overall pattern is comparable to 2010 census results.

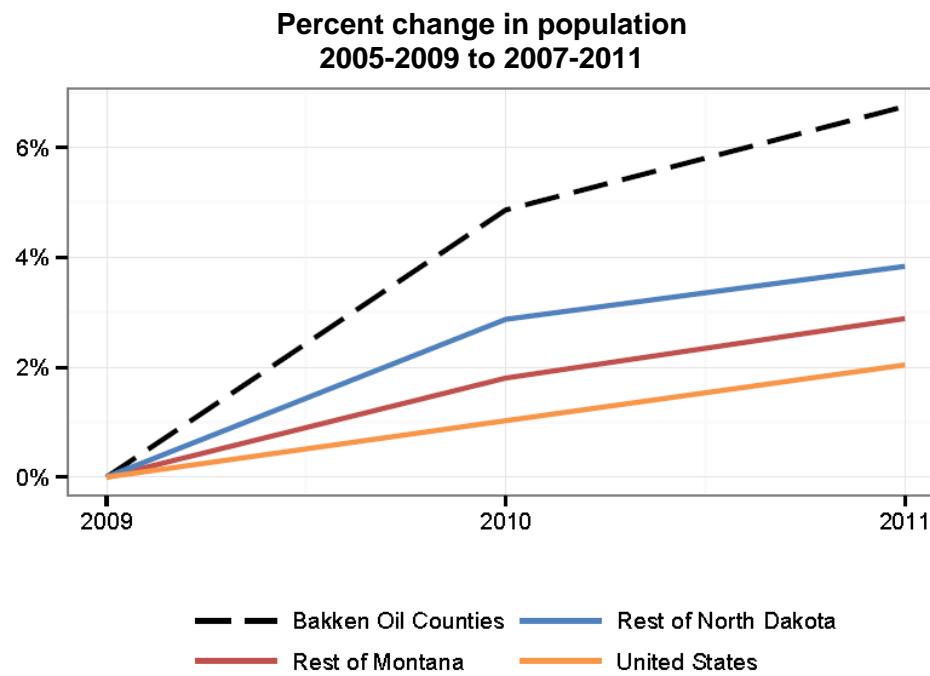


Source: 2005-2009, 2006-2010, and 2007-2011 averages, American Community Survey.



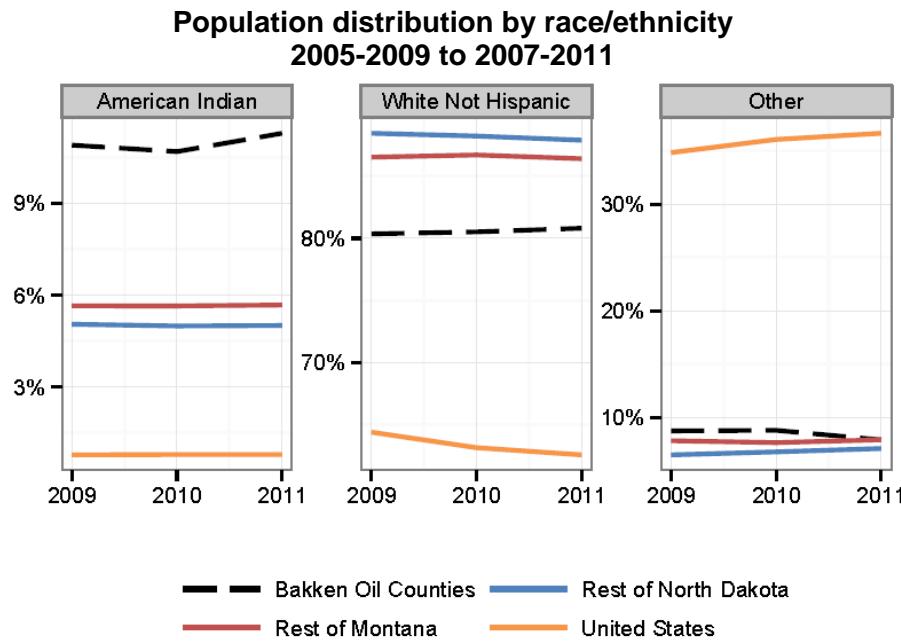
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- The rate of population change is much higher in the Bakken.



Source: 2005-2009, 2006-2010, and 2007-2011 averages, American Community Survey.

- The American Indian population share is almost twice that of the rest of Montana and North Dakota. This contributes to a somewhat lower percentage of non-Hispanic whites in the Bakken.



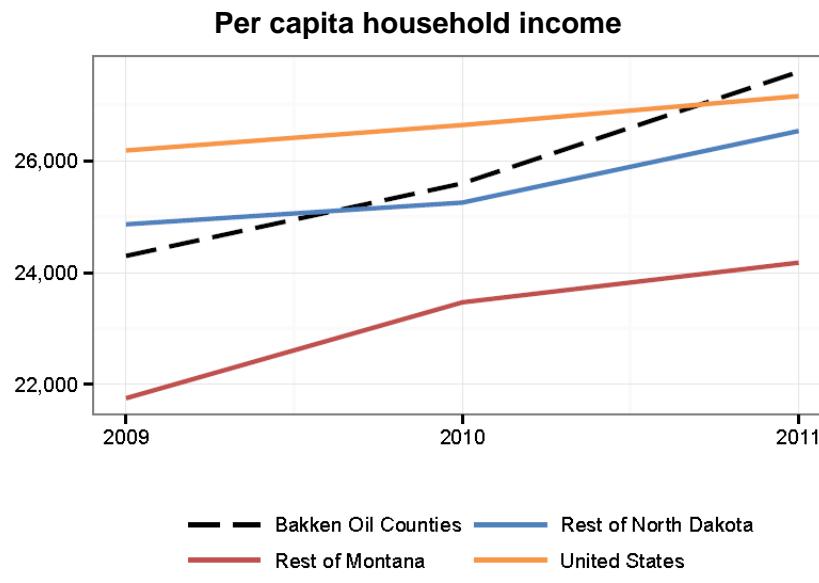
Source: 2005-2009, 2006-2010, and 2007-2011 averages, American Community Survey.



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B. Income and Poverty

- Per capita household income rose fastest in the Bakken.
- Per capita household income rose from \$24,298 to \$27,590 and now exceeds the U.S. average (\$27,157).

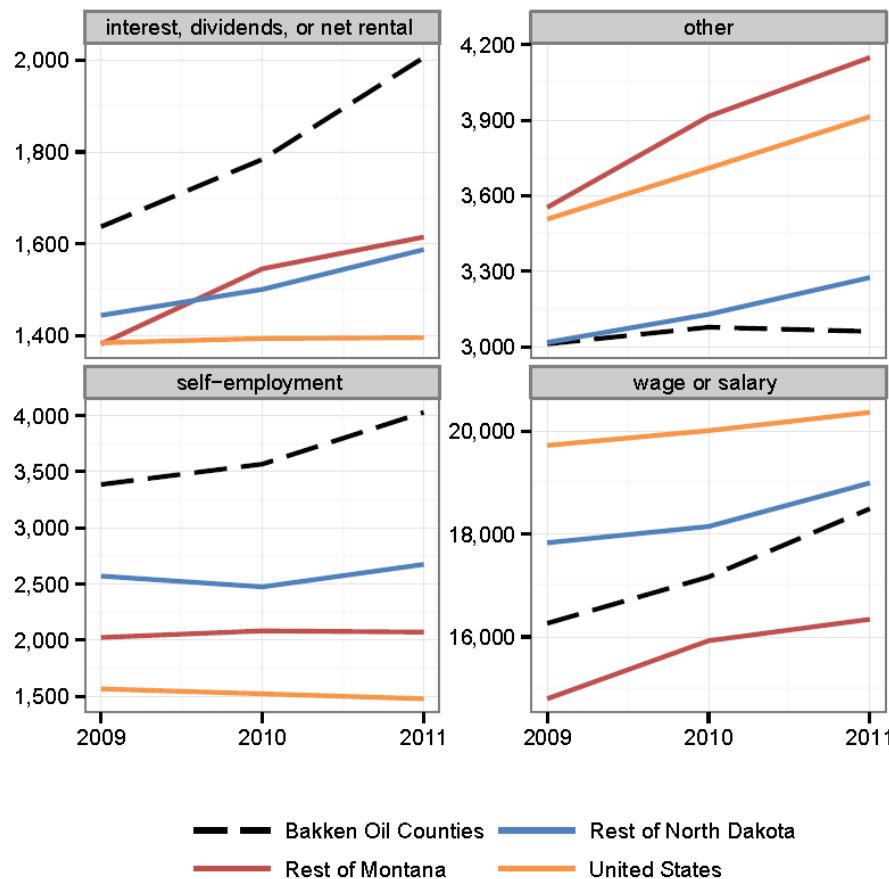


Source: 2005-2009, 2006-2010, and 2007-2011 averages, American Community Survey.



- Wage/salary, self-employment and interest-dividends-net-rental income in the Bakken increased more rapidly than in the rest of North Dakota, Montana and the United States.

Per capita household income by source

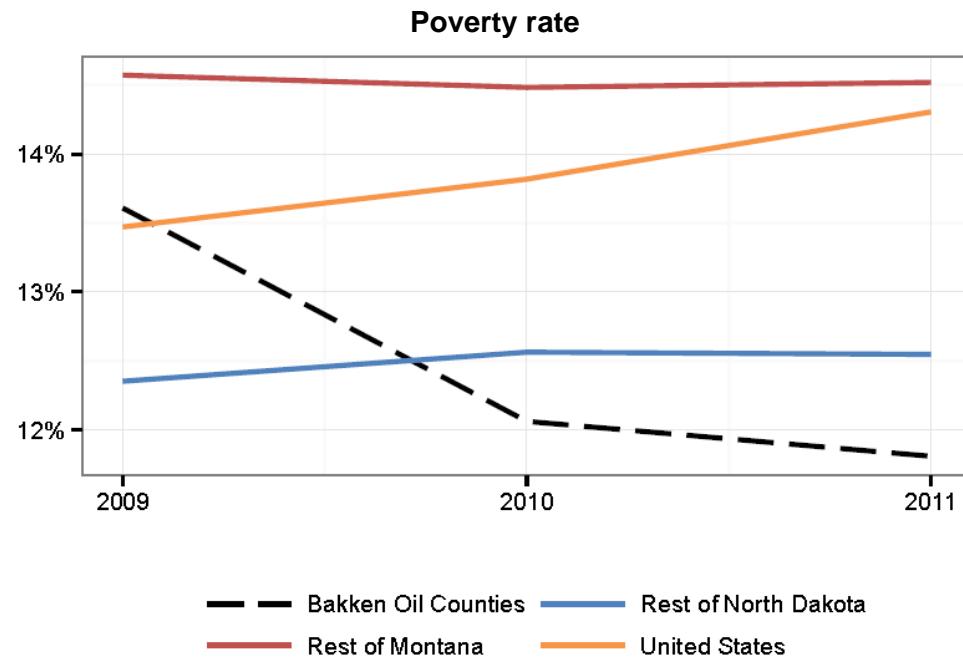


"Other" category includes Social Security, supplemental security, public assistance, retirement or miscellaneous other income.
Source: 2005-2009, 2006-2010 and 2007-2011 averages, American Community Survey



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- The poverty rate in the Bakken continued to decline.



In 2011, a family of four (two children) was considered to be living in poverty if their income was \$22,811 or less.
Source: 2005-2009, 2006-2010 and 2007-2011 averages, American Community Survey

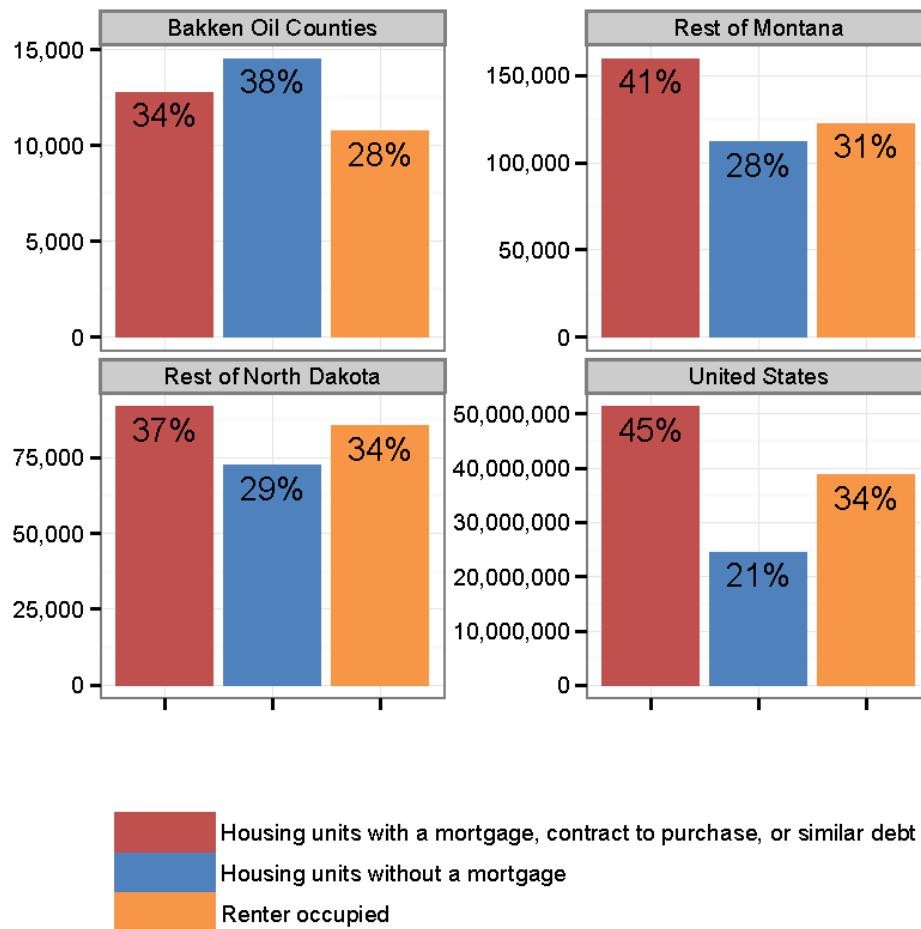


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C. Housing

- The home ownership rate in the Bakken is a bit higher than in the rest of Montana and North Dakota.
- In the Bakken, a higher percentage of owners have no mortgage.
- Ownership and rental rates have not significantly changed since previous observations.

**Home ownership status of occupied housing
2007-2011**



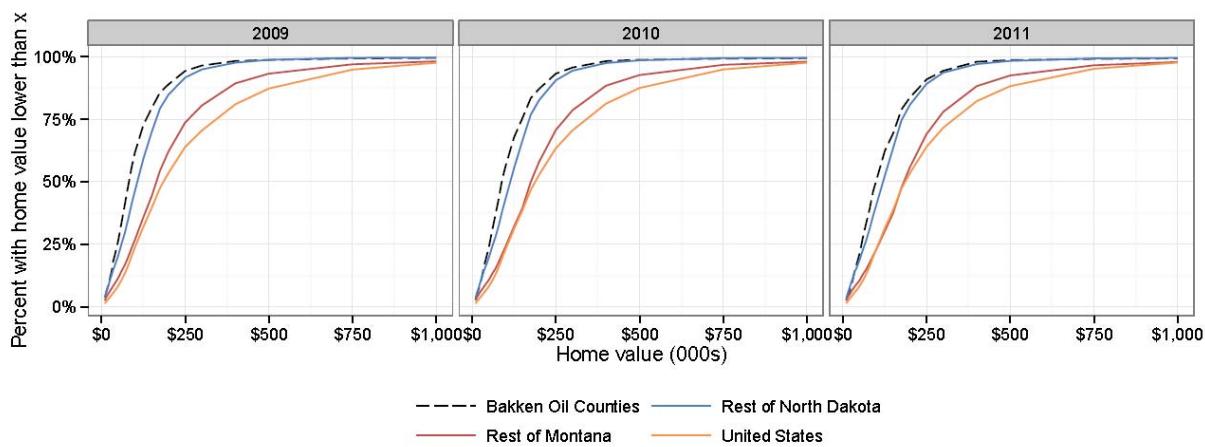
All occupied units fall into one of the three categories above. Source: 2007-2011 averages, American Community Survey



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- Home values remain lower in the Bakken than in the rest of Montana and North Dakota.

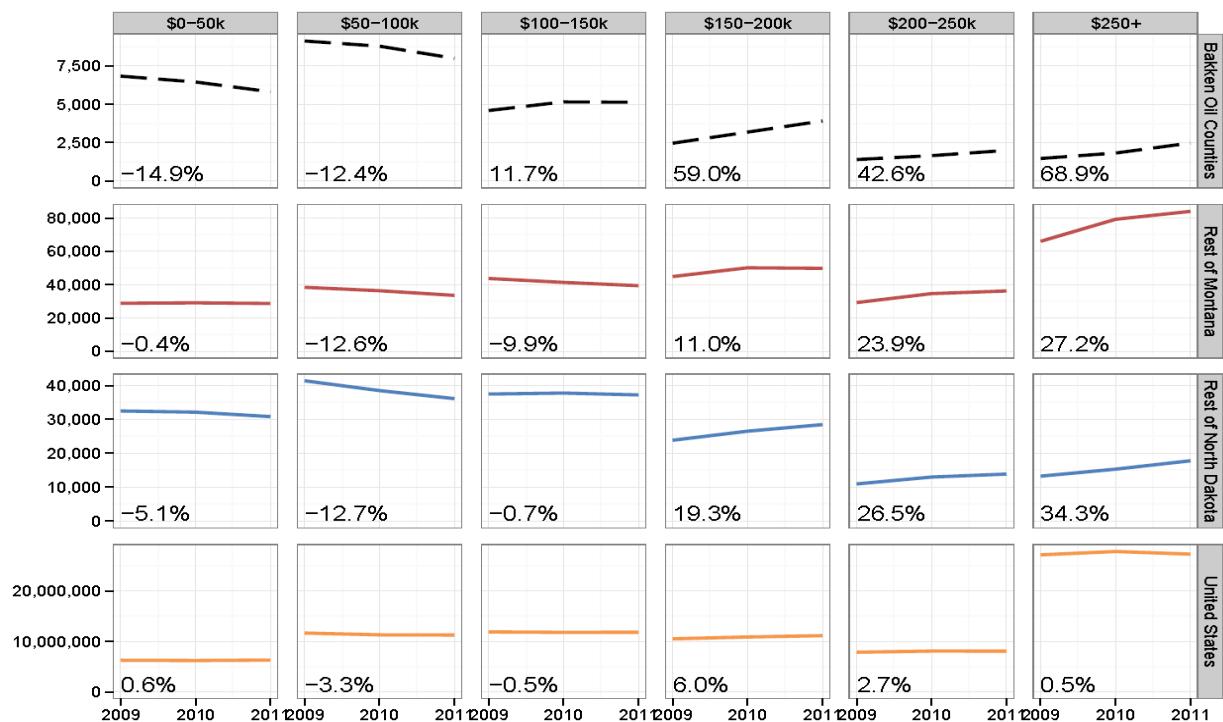
Cumulative home value distribution, 2007-2011



Source: 2007-2011 averages, American Community Survey

- However, the number of expensive homes is growing faster in the Bakken, suggesting that values are rising at a faster rate in the Bakken than elsewhere.

Home value distribution change



Panels labeled with percent change from 2005-2009 to 2007-2011.

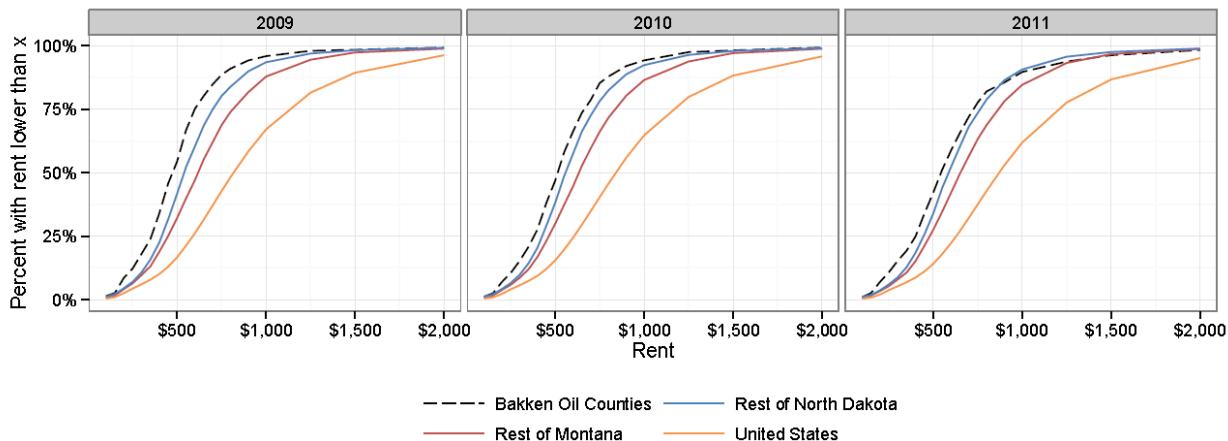
Source: 2005-2009, 2006-2010 and 2007-2011 averages, American Community Survey



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- Median rents are still lower in the Bakken than in the rest of Montana and North Dakota; however, since 2007-2011, a larger share of rents exceed \$800 in the Bakken than in the rest North Dakota

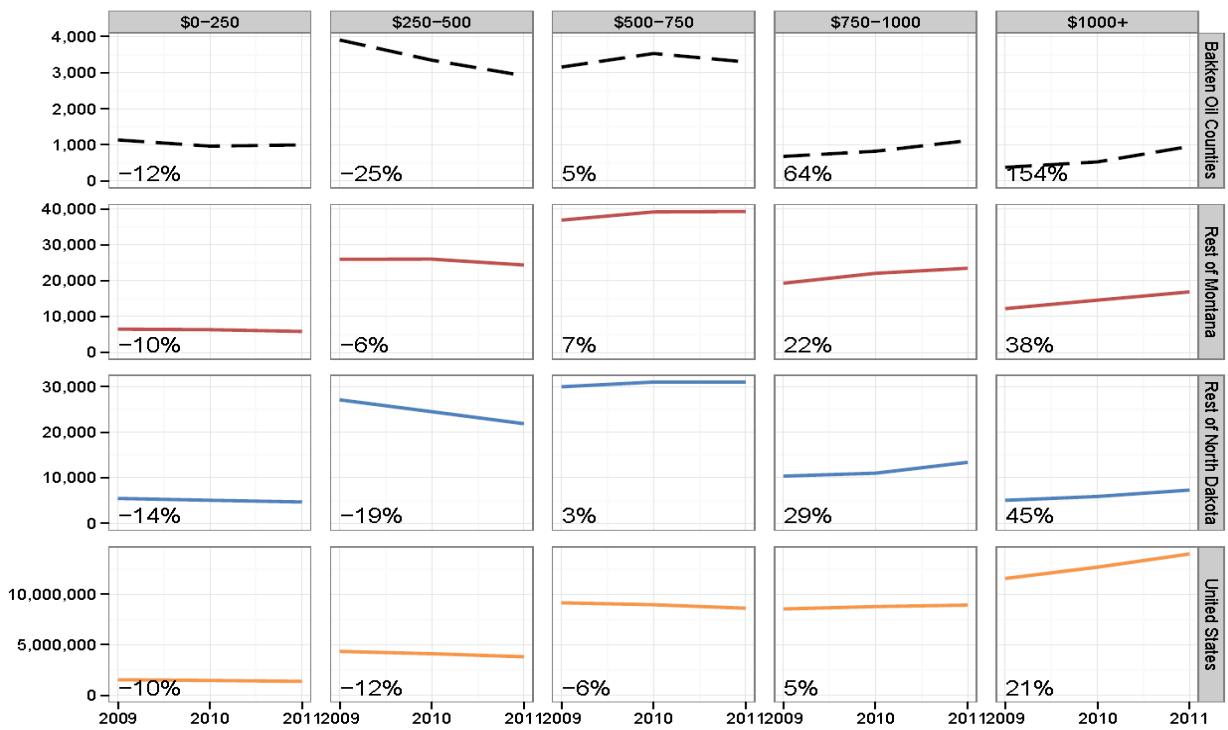
Cumulative rent distribution, 2007-2011



Source: 2005-2009, 2006-2010 and 2007-2011 averages, American Community Survey

- However, the percentage change in the number of renters in each price group is consistent with rents rising at a much faster rate in the Bakken than elsewhere.

Rent distribution change



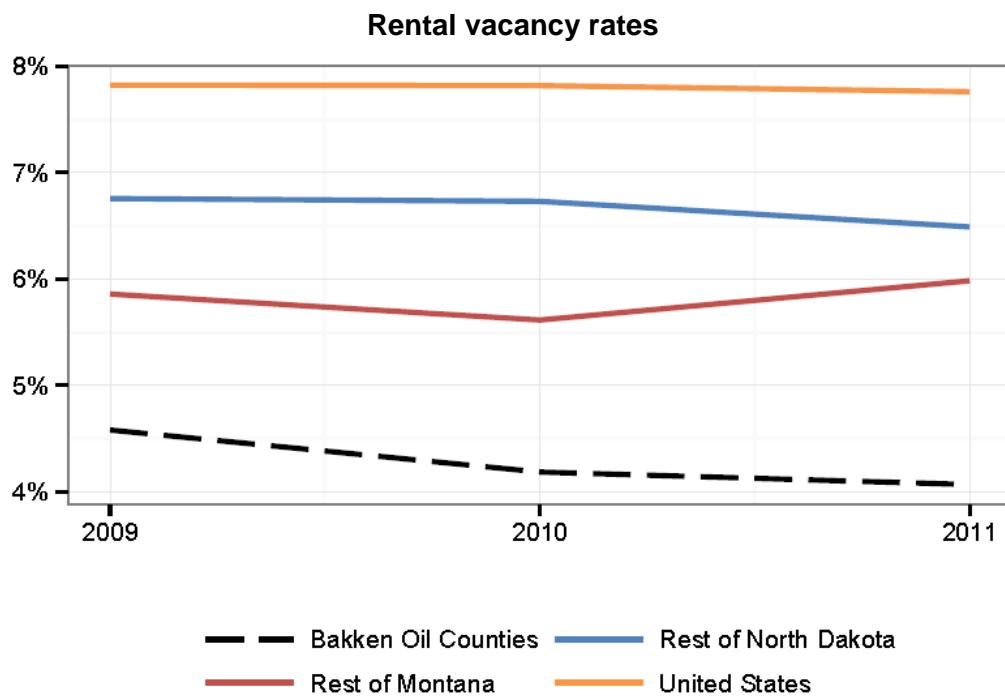
Panels labeled with percent change from 2005-2009 to 2007-2011.

Source: 2005-2009, 2006-2010 and 2007-2011 averages, American Community Survey



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- Rental vacancy rates in the Bakken have been consistently lower than in the reference regions, and the gap continues to widen.



Source: 2005-2009, 2006-2010 and 2007-2011 averages, American Community Survey

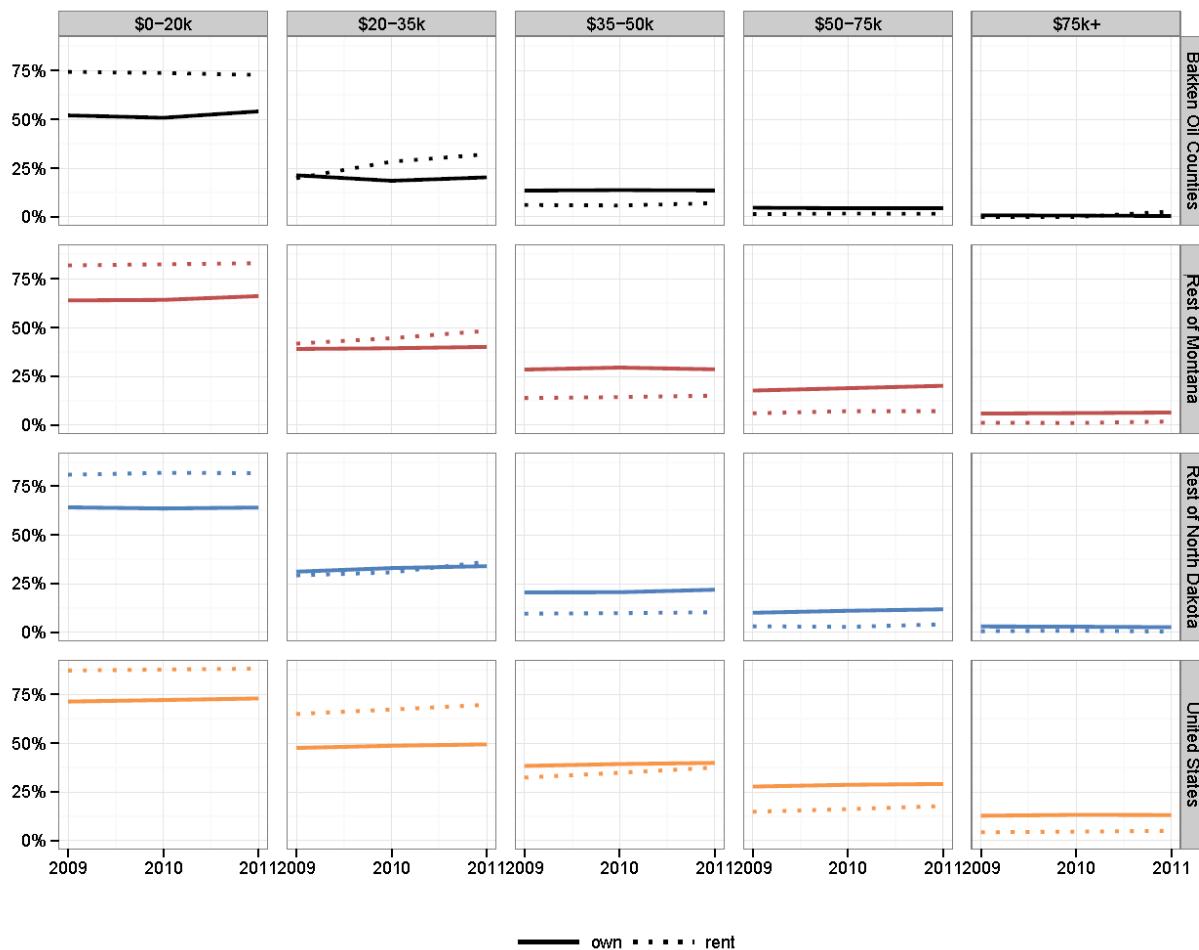


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- Overall, fewer households in the Bakken experience burdensome housing costs (with “burdensome” defined by the conventional standard of housing costs exceeding 30 percent of income).

The incidence of burdensome housing costs among Bakken-area renters with incomes between \$20,000 and \$35,000 rose 12 percent between 2005-2009 and 2007-2011.

Percent of households with burdensome housing costs by income



— own ···· rent

Source: 2005-2009, 2006-2010 and 2007-2011 averages, American Community Survey



Section 3. Banking

We review several sources of banking data and find the following:

- Historically, growth in construction and land development loans (loans secured by real estate to fund land improvements and construction) in the Bakken area has been similar to the rest of North Dakota. However, from 3/31/2010 to 9/30/2012, construction and land development loans in the Bakken area increased 124 percent, from \$79 million to \$176 million, while decreasing 9 percent in the rest of North Dakota and 42 percent in the rest of Montana. The large increase within the Bakken is representative of growth across many Bakken banks.
- Total deposits have increased substantially within the Bakken area since 2010 compared with the rest of North Dakota and Montana. However, the rate of increase for Bakken banks has fallen off its peak during the second and third quarters of 2012.
- Residential real estate loans began increasing more rapidly in 2010 compared with those banks in North Dakota and Montana outside of the Bakken area and have continued to increase.
- Profitability for Bakken banks has picked up recently relative to non-Bakken banks. Other standard bank performance measures related to liquidity, asset quality and capital are generally similar among Bakken banks and those in the rest of North Dakota and Montana.

A. Balance Sheet and Performance Metrics for Bakken Headquartered Banks

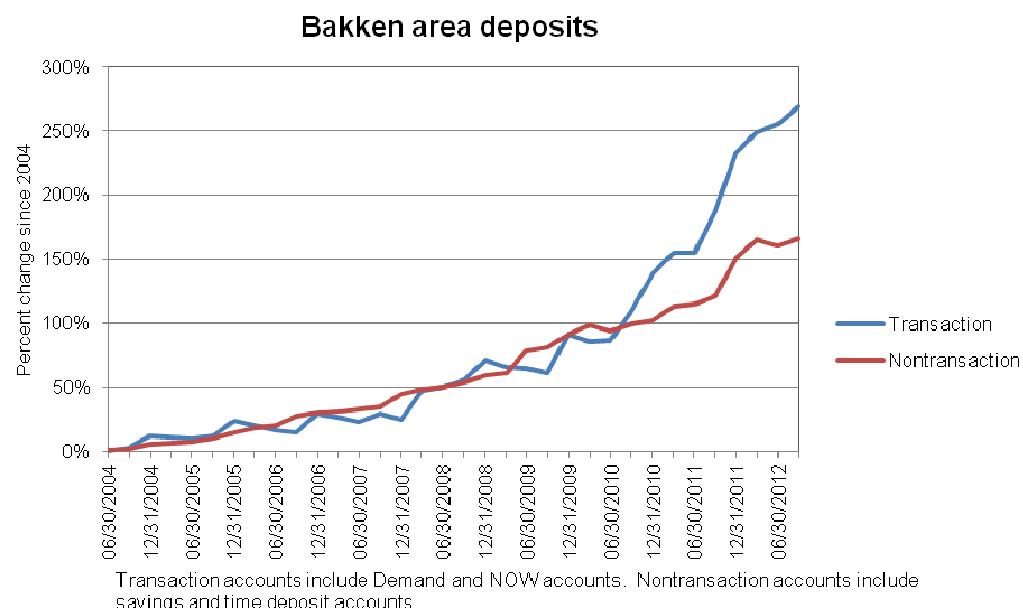
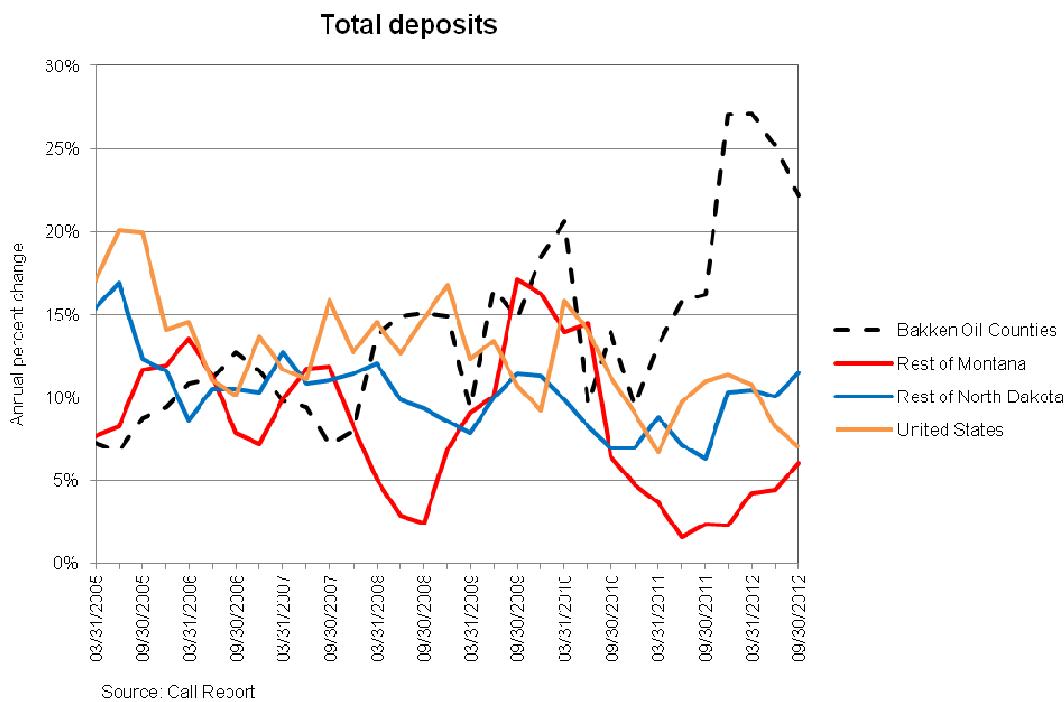
This section reviews asset and liability growth and standard measures of performance using regulatory reports for banks headquartered in the Bakken, the rest of Montana and the rest of North Dakota.⁴

- Total deposits for Bakken area banks began increasing more rapidly than other banks in North Dakota and Montana around mid-year 2010, but the growth has slowed more recently.
 - From the beginning of 6/30/2010 to 9/30/2012, deposits in the Bakken area have increased 49 percent, while deposits in the rest of North Dakota increased 21 percent.
 - The rate of deposit growth has slowed since 3/31/2012. The annual percent change in deposits has decreased to 22 percent as of 9/30/2012 versus a high of 27 percent as of 3/31/2012.
- Transaction accounts (demand and NOW accounts, including checking accounts) for Bakken banks increased faster than nontransaction accounts (savings and time accounts) since mid-year 2010, making up a slightly larger percentage of total deposits than in the past.

⁴ The data for Montana are merger-adjusted to account for the combination of Glacier Bancorp, Inc.'s subsidiaries into one Montana-based bank as of May 2012.



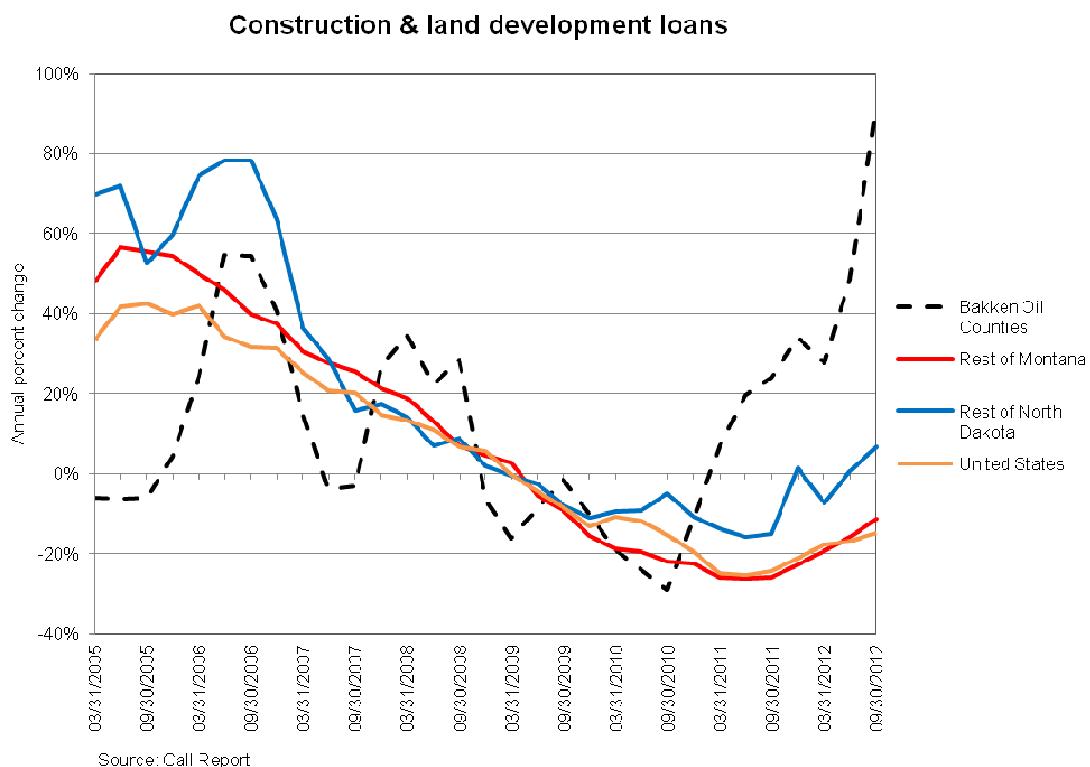
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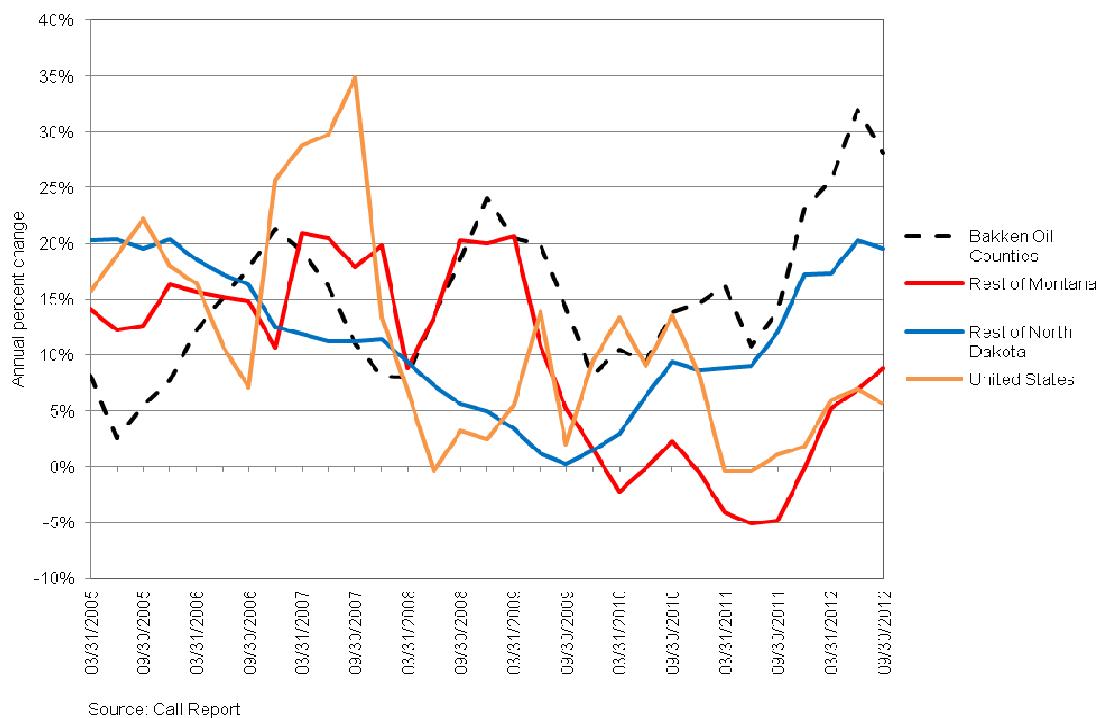
- The two most recent quarters of data, from 3/31/2012 to 9/30/2012, show construction and land development loans increasing 64 percent, from \$107 million to \$176 million, in the Bakken area, while increasing 12 percent in the rest of North Dakota and decreasing 2 percent in the rest of Montana.
- From 3/31/2009 to 9/30/2012, residential real estate loans (first and second liens secured by 1-4 family properties) increased 64 percent in the Bakken area while increasing 43 percent in the rest of North Dakota.
- The largest one-year increase in residential real estate loans in the Bakken area was from 6/30/2011 to 6/30/2012 at 32 percent.
- The increase of 28 percent in commercial and industrial loans from 3/31/2009 to 9/30/2012 in the Bakken area is slightly higher than the increase of 25 percent in the rest of the United States, more significant than the 21 percent in the rest of North Dakota and much higher than the 8 percent increase in Montana in the same period.
- The composition of assets shows that the percent of loans to assets at the Bakken banks is lower within the Bakken than in the rest of Montana and North Dakota.





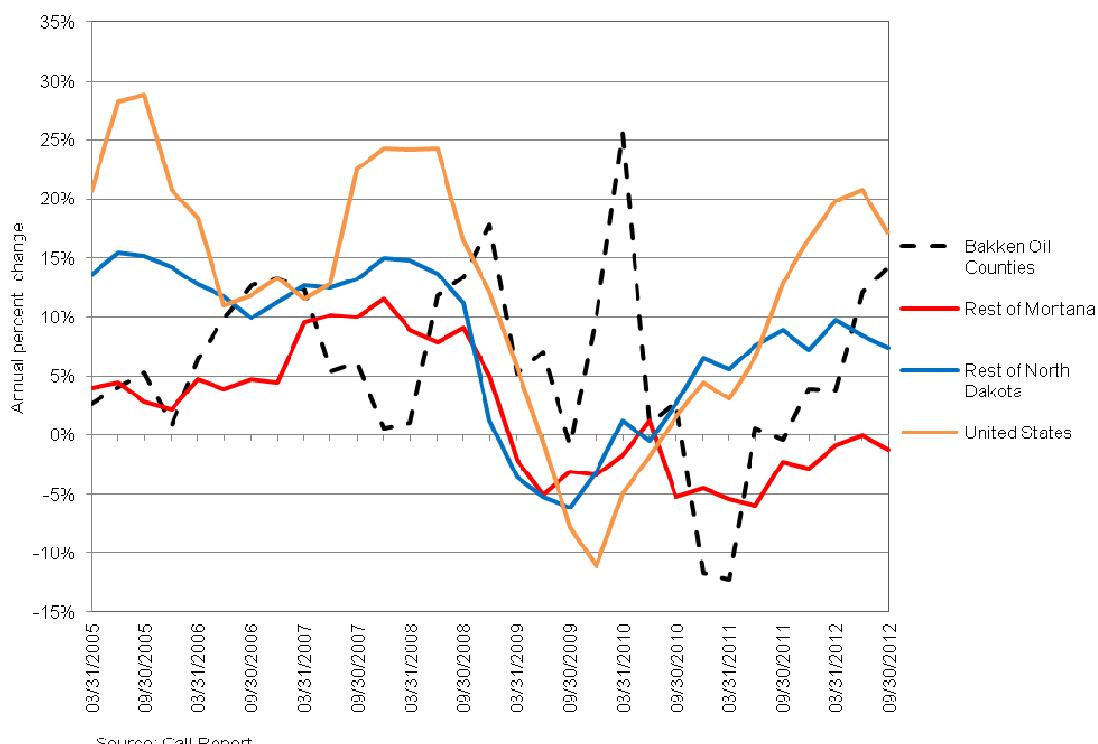
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Residential real estate loans



Source: Call Report

Commercial & industrial loans

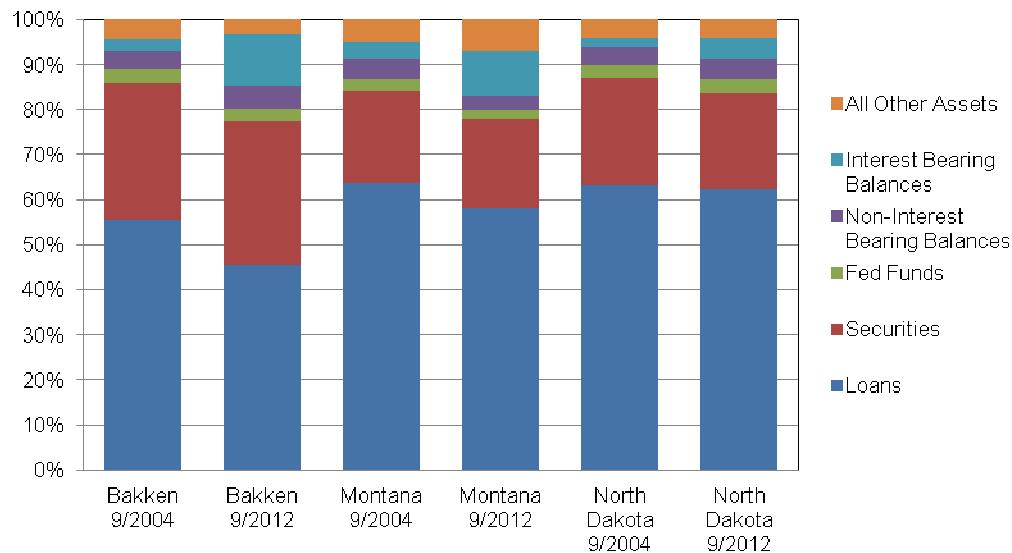


Source: Call Report



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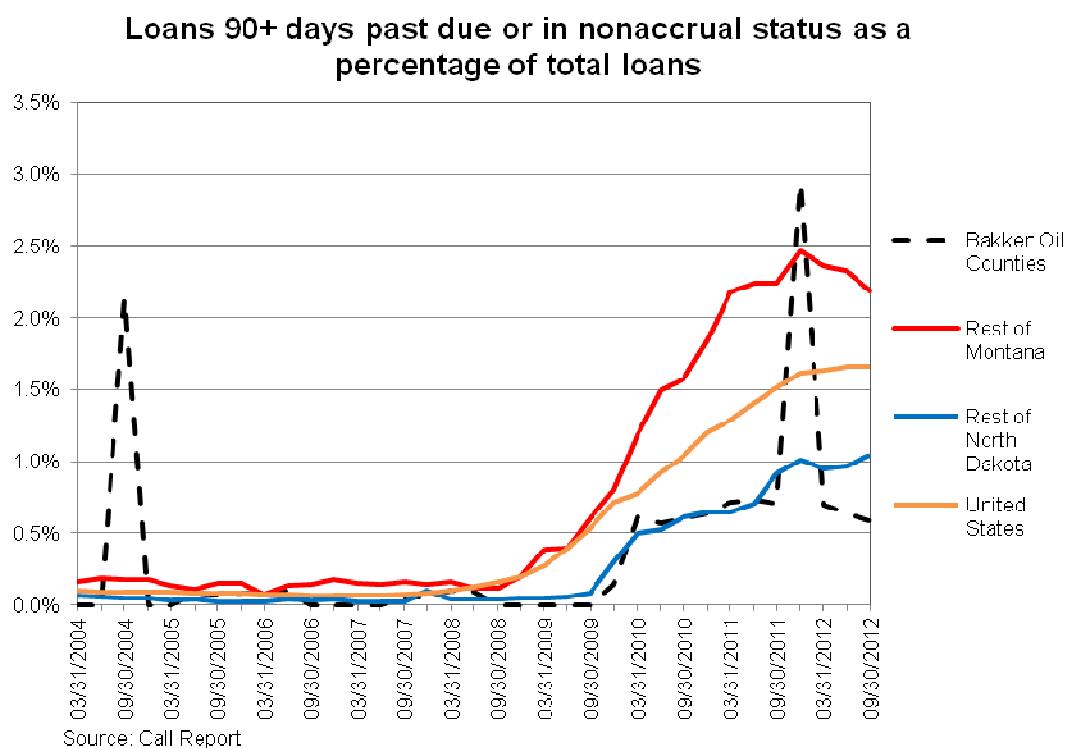
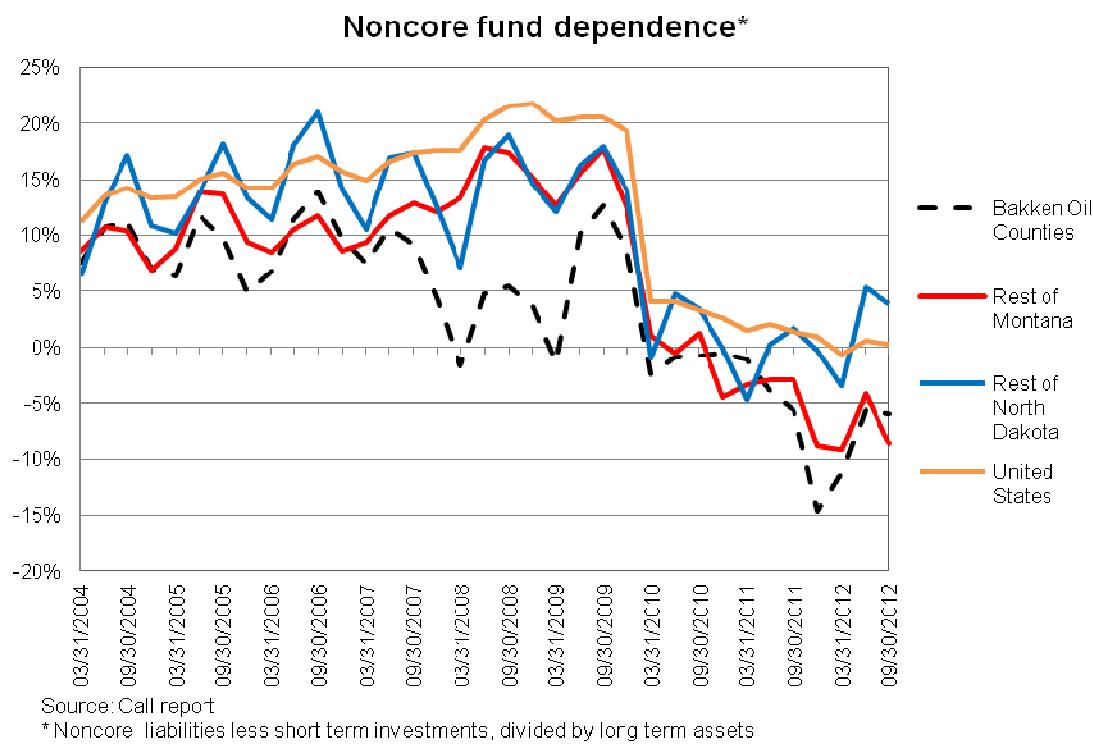
Composition of total assets



- Reliance on noncore sources of funding, such as brokered deposits and borrowings, began to decrease in 2011 in the Bakken area when deposits started increasing more rapidly and the banks did not need to look elsewhere for funding sources. The noncore ratio has begun to increase since mid-year 2012, but is still lower than in the rest of North Dakota and the United States.
- The spike in loans 90+ days past due or in nonaccrual status as of 12/31/2011 is primarily due to one bank within the Bakken area.
- Profits, as measured by return on average assets, have historically been higher in the Bakken than in the rest of North Dakota and Montana. However, they are now significantly higher, averaging 1.45 percent since 3/31/2009, while averaging 0.81 percent in the rest of North Dakota and Montana.
- Bank capital ratios within the Bakken have remained lower than in the rest of Montana and the United States since mid-year 2007, and have not risen as quickly since year-end 2008.

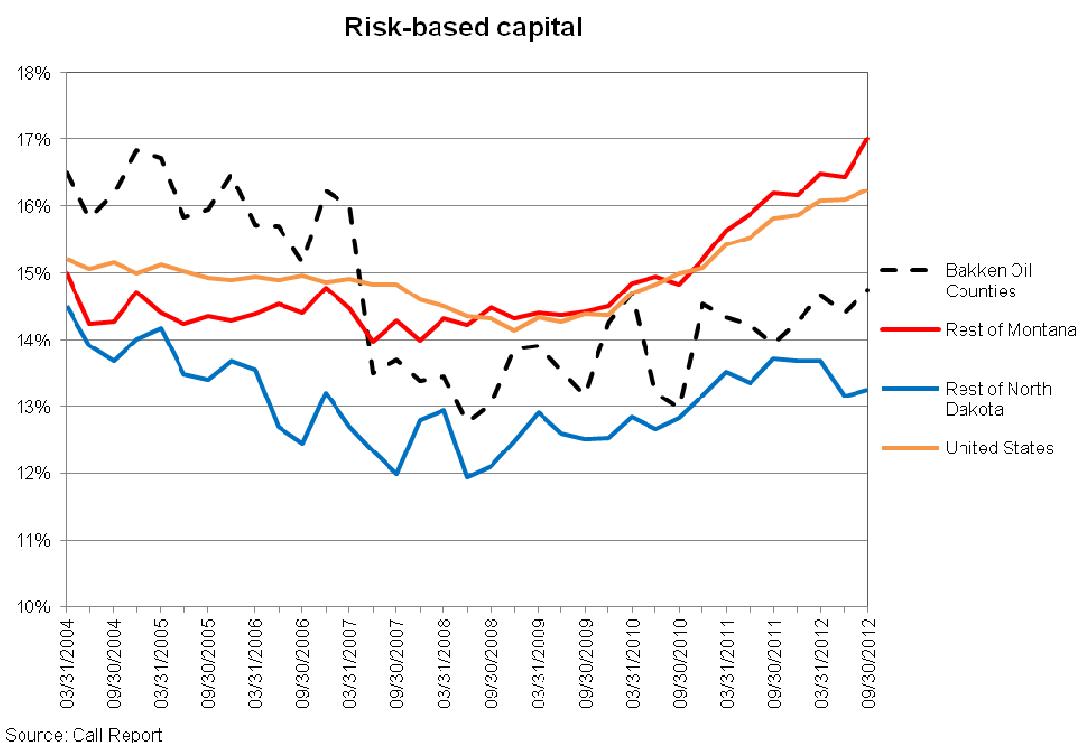
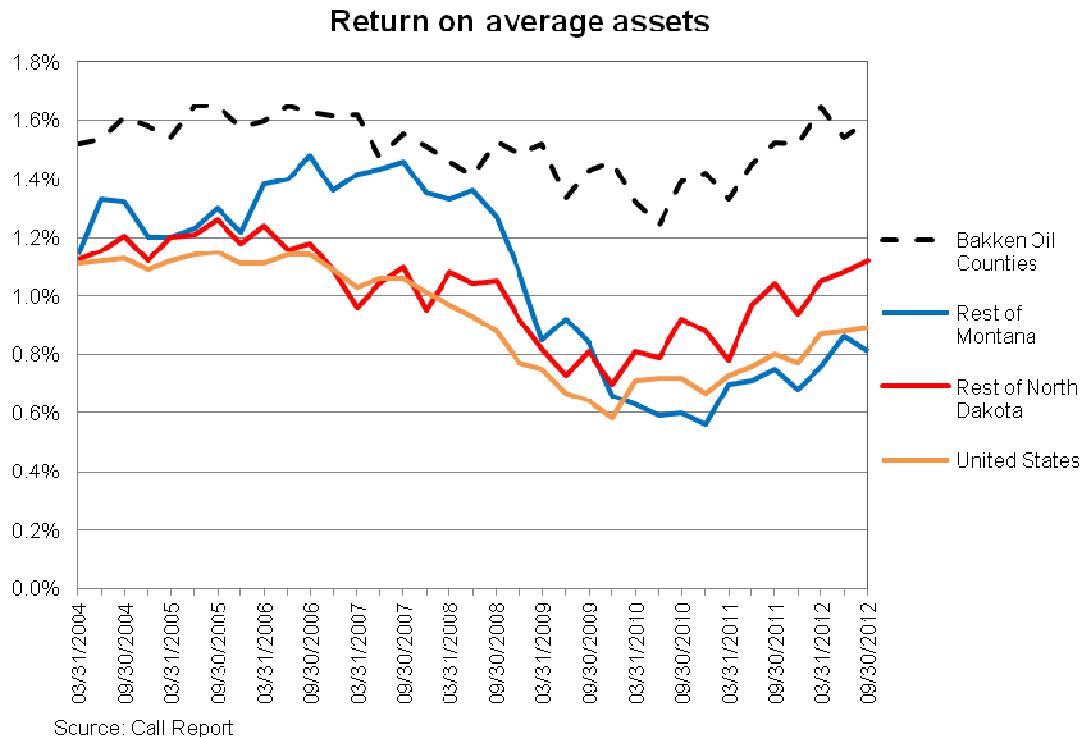


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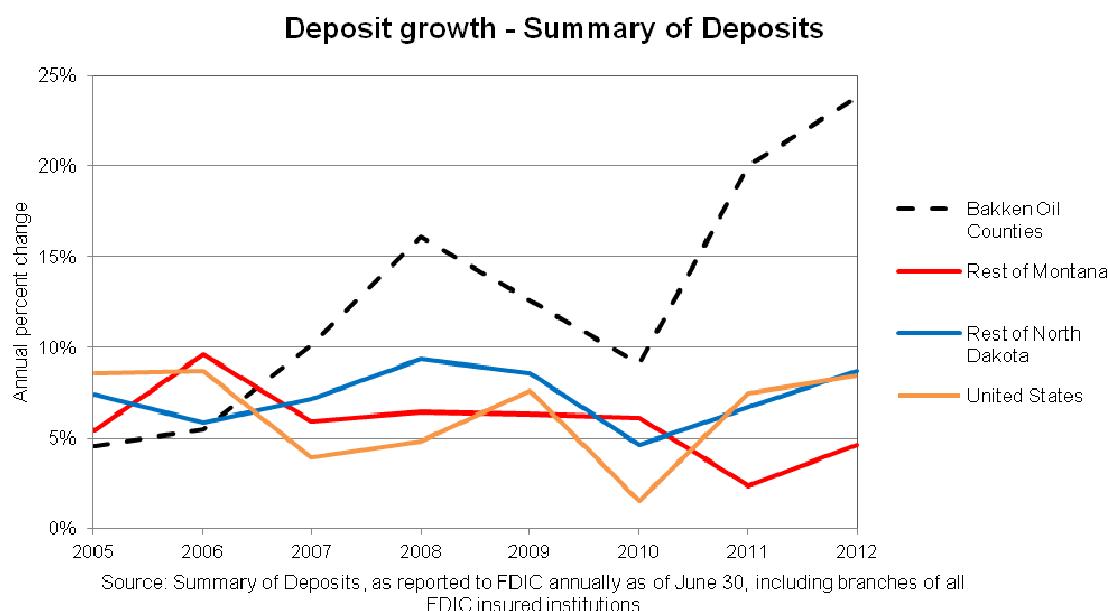




B. Deposits of and Small Business Lending by Banks Active in the Bakken

In this section, we compare a wider range of banks operating in the Bakken with other banks operating in North Dakota and Montana. This section relies on data from the Summary of Deposits and Community Reinvestment Act (CRA) Small Businesses data set. The former includes data for any bank with a physical presence in the area under review, while the latter captures data on select banks that made loans in the areas under review (even if they do not have a physical location in the areas).

- The Summary of Deposits shows total deposits in branches and headquarters in the Bakken area growing more rapidly than in other North Dakota and Montana banks beginning in 2008.
 - Deposits in Bakken area branches and headquarters grew 28 percent from 2006 to 2008, while other banks in North Dakota and Montana grew 15 percent.
 - The overall increase in Bakken area deposits from 2004 to 2012 was 157 percent, while the increase was 66 percent in the rest of North Dakota and Montana.

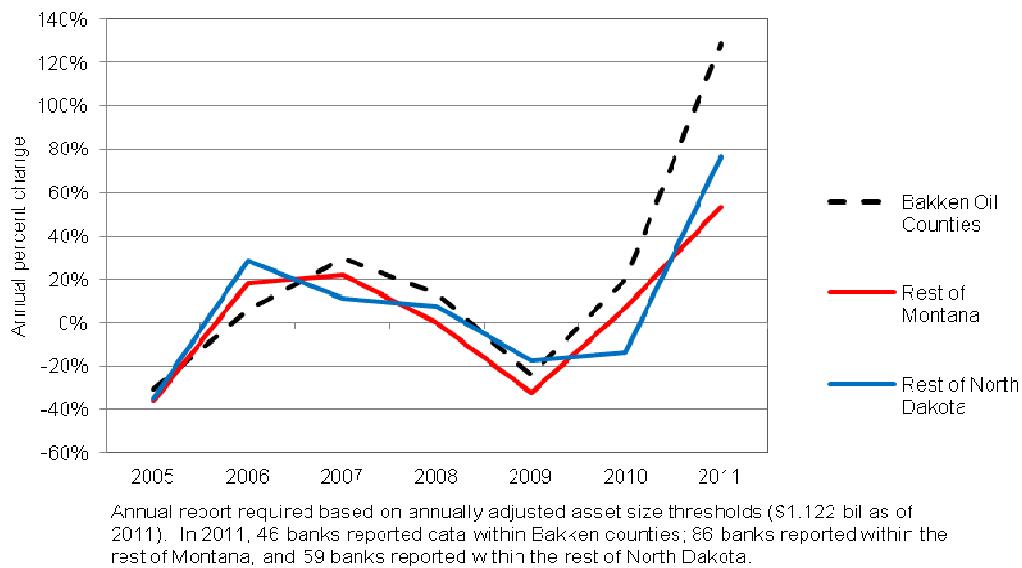




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Federal Reserve Bank of Minneapolis

- Small business and agricultural loans as reported from the CRA data made within Bakken area counties have shown faster growth than those in the rest of Montana and North Dakota. Reported loans from the CRA data set within the Bakken area increased 128 percent from 2010 to 2011, while increasing 53 percent in Montana and 76 percent in North Dakota.⁵

Total value of loans less than \$1 million to businesses



⁵ A portion of the increase from 2010 to 2011 is the result of the addition of new reporting banks due to the annually adjusted reporting threshold. The number of banks reporting within the Bakken increased by 10 from 36 in 2010; the number of banks in the rest of Montana increased by 13 from 73 in 2010; and the number of banks reporting in the rest of North Dakota increased by 12 from 47 in 2010.

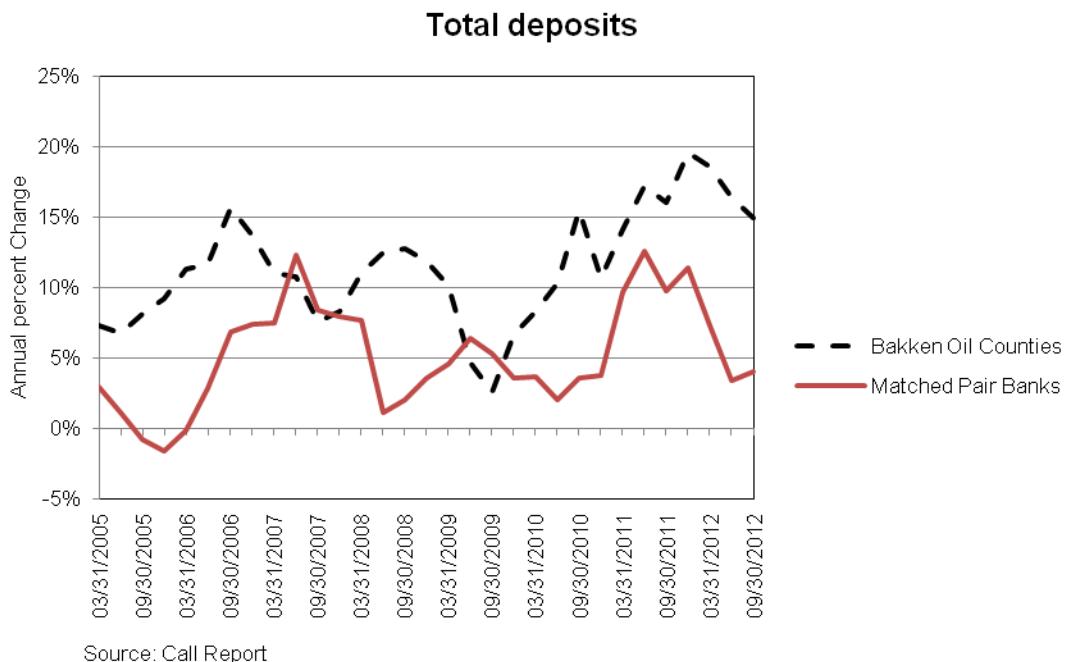


Appendix A

The analysis in this appendix (called “matched pair”) compares the operations and performance of specific Bakken area banks with specific similar banks outside the Bakken area based on 2005 data. We match banks based on factors such as asset size, loan composition and rural/urban nature of bank location.⁶

The matched pair analysis has very similar results to the prior analysis. Bakken area banks show larger and more rapid increases in deposits, residential real estate loans, and construction and land development loans than the banks outside the oil patch. More recently, both commercial and industrial loans as well as construction and land development loans have begun increasing at a much higher rate than those in banks outside the Bakken. Noncurrent loans to total loans, however, have also begun to increase more than in the matched pair banks since 2010.

- Total deposits in the Bakken area have risen at a faster pace since 2010 than in the matched pair banks. However, growth in both groups has slowed in 2012.



⁶ Two Bakken banks were excluded from this analysis due to merger activity since 2005 that affected the banks’ growth. A list of the specific matched pairs is available from the authors as is a complete list of variables used to match the banks.



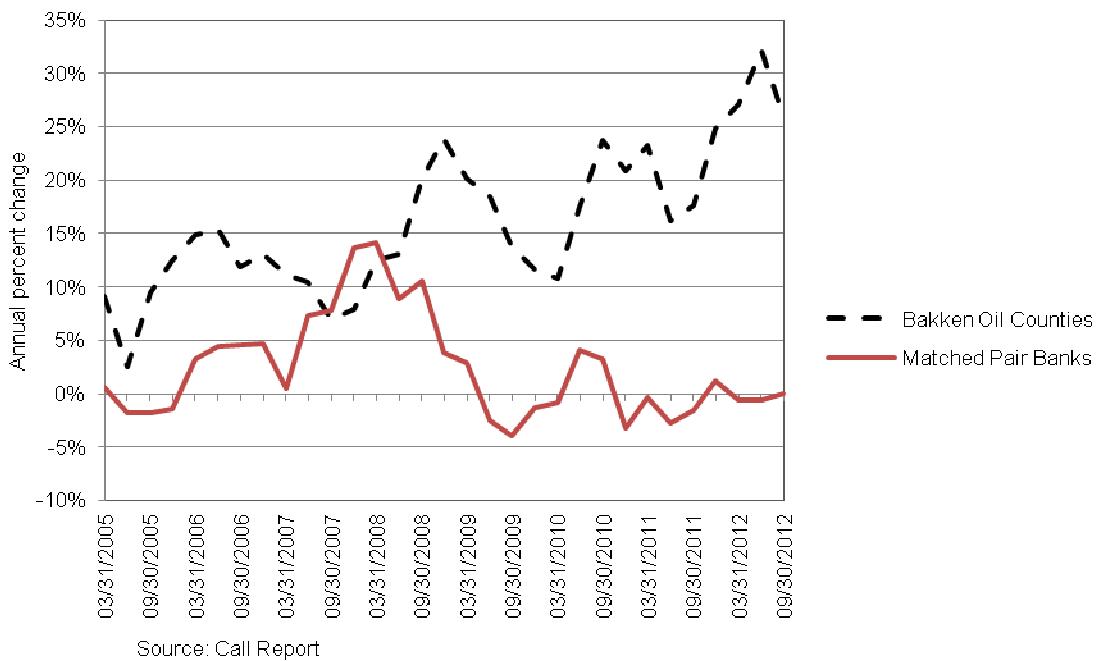
- Construction and land development loan activity within the Bakken area has been similar to the matched pair banks until the two most recent quarters beginning with 6/30/2012. From third quarter 2011 to third quarter 2012, these loans increased 99 percent in the Bakken area, while decreasing 9 percent in the matched pair banks.
- Residential real estate loans have risen at a faster pace in the Bakken since 2008 than in the matched pair banks.
- From 3/31/2009 to 9/30/2012, residential real estate loans increased 94 percent in the Bakken area, while the matched pair banks saw a decrease of 0.1 percent.
- Commercial and industrial loans increased 23 percent in the Bakken area from 9/30/2009 to 9/30/2012, while increasing 5 percent in the matched pair banks.





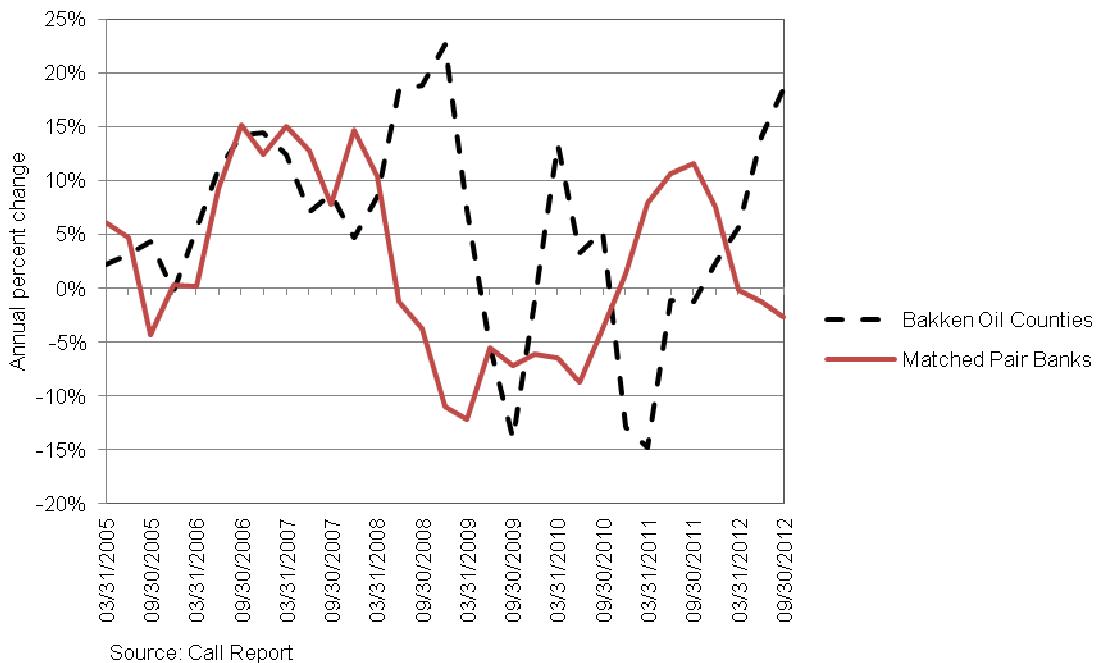
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Residential real estate loans



Source: Call Report

Commercial and industrial loans



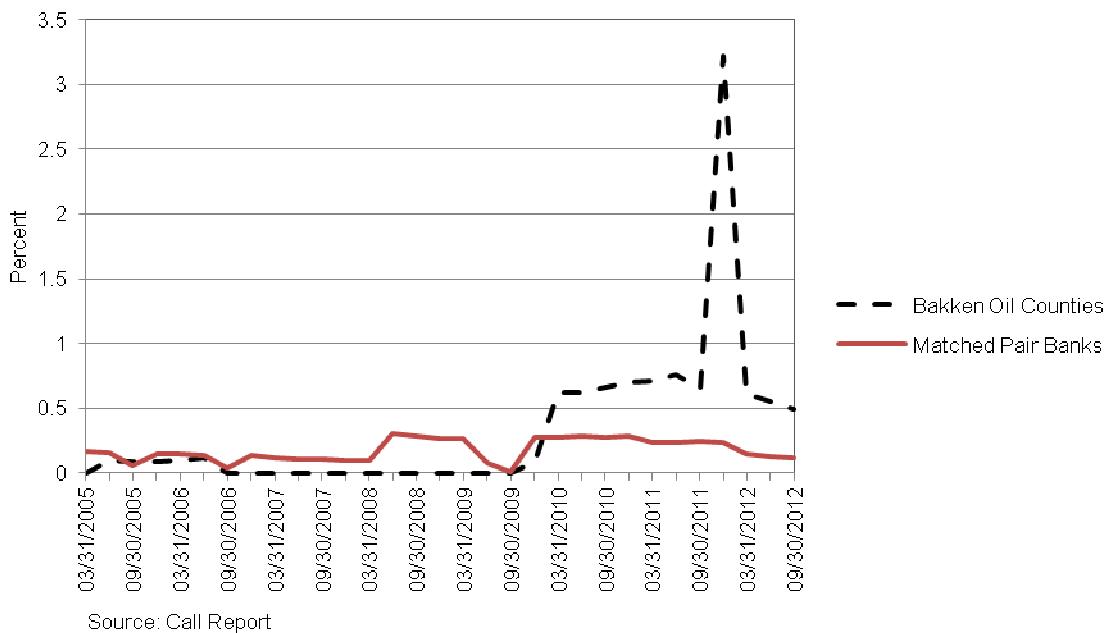
Source: Call Report



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- The spike in noncurrent loans is primarily due to one bank within the Bakken area and has otherwise remained consistent with the matched pair banks.
- Noncore fund dependence shows a steeper decline beginning in 2011 than the matched pair banks due to the faster increase in deposits. However, the Bakken area banks have begun to show an increase beginning in first quarter 2012.

Loans 90+ days past due or in nonaccrual status as a percentage of total loans

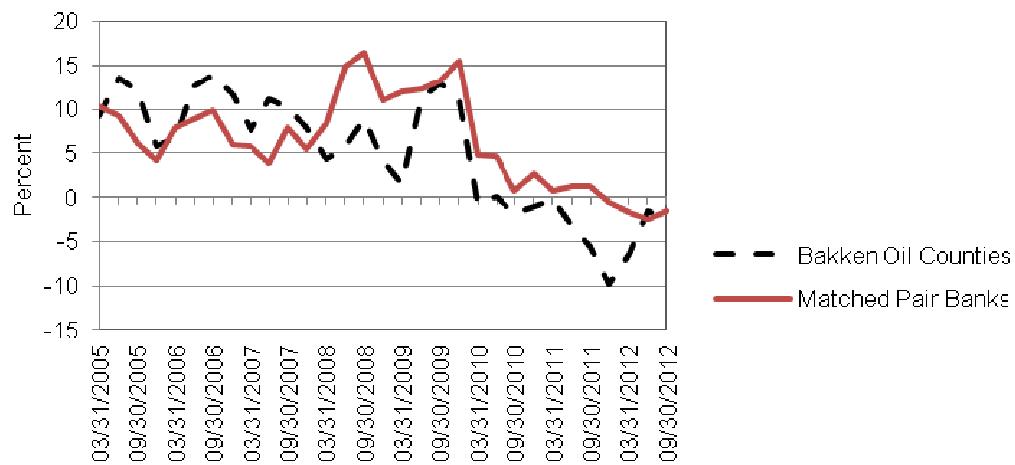


Source: Call Report



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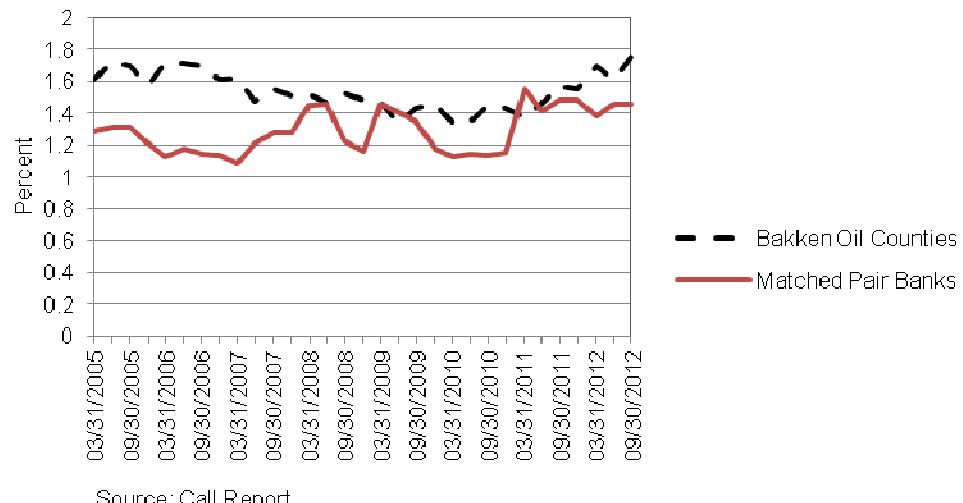
Noncore fund dependence*



Source: Call Report

* Noncore liabilities less short term investments, divided by long term assets

Return on average assets

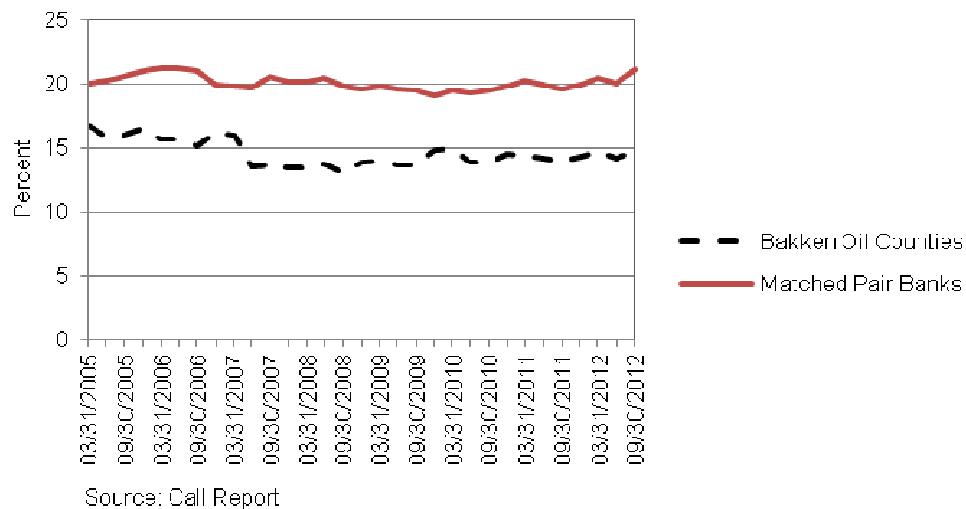


Source: Call Report



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Risk-based capital



Source: Call Report