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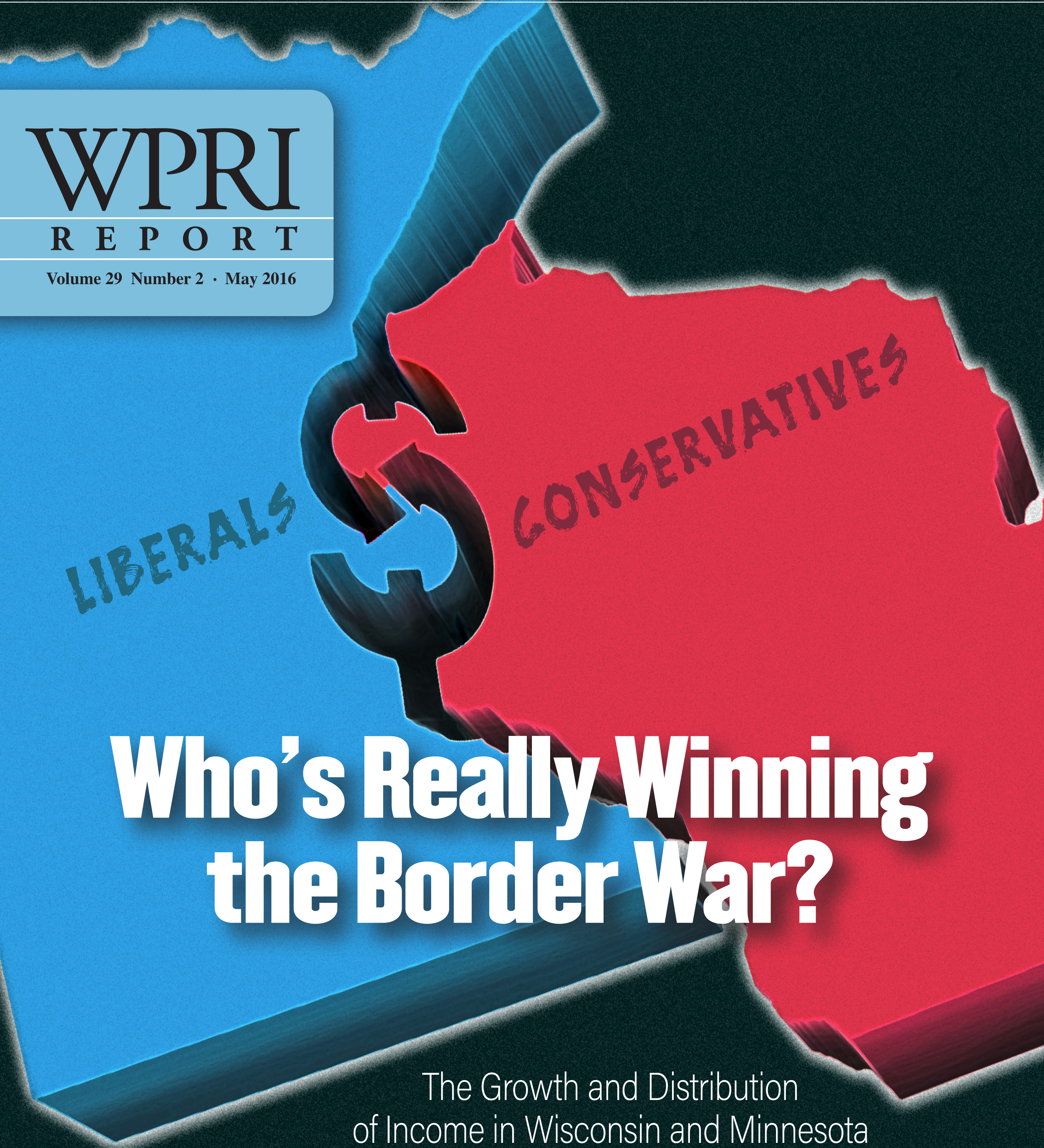

Who's Really Winning the Border War?

The Growth and Distribution of Income in Wisconsin and Minnesota after the Great Recession

By Noah Williams, Ph.D.

About the Author

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MISSION

About WPRI

The Wisconsin Policy Research Institute Inc., established in 1987, is a nonpartisan, not-for-profit institute working to engage and energize Wisconsinites and others in discussions and timely action on key public policy issues critical to the state's future, growth and prosperity. The institute's research and public education activities are directed to identify and promote public policies in Wisconsin that are fair, accountable and cost-effective.

Through original research and analysis and public opinion polling, the institute's work focuses on such issue arenas as state and local government tax policy and spending, including related program accountability, consequences and effectiveness. It also focuses on health care policy and service delivery; education; transportation and economic development; welfare and social services; and other issues that have or could have a significant impact on the quality of life and future of the state.

The institute is guided by the belief that competitive free markets, limited and efficient government, private initiative and personal responsibility are essential to our democratic way of life.

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Who's Really Winning the Border War:
Wisconsin Conservatives or Minnesota Liberals?

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Introduction

"We've seen what happens when top-down economics meets the real world. We've got proof right here in Wisconsin. … Your right to organize and bargain collectively was attacked. … Meanwhile, corporations and the most fortunate few have been on the receiving end of hundreds of millions of dollars in new tax cuts over the past four years …

"What happens when we try middle-class economics? Just across the river, it's a pretty interesting experiment. Across the river in Minnesota, they asked the top 2% to pay a little bit more. They invested in things that help everybody succeed. … They took action to raise their minimum wage. They passed an equal pay law. They protected workers' rights …

"Now, according to the Republican theory, all those steps would've been bad for the economy, but Minnesota's unemployment rate is lower than Wisconsin's. Minnesota's median income is around $9,000 higher."

— President Barack Obama, speaking in La Crosse on July 2, 2015[1]

The border war between the neighboring states of Wisconsin and Minnesota is fought on the athletic fields of the Big Ten and the NFC North, but it's also fought in the boardrooms and dinner tables where businesses and families make their economic decisions. While the Badgers and Gophers football teams battle over Paul Bunyan's Axe, political leaders in Madison and St. Paul fight to make their states more attractive destinations for employers and workers.

Of course, comparing economics with sports has its limits. In economics, one state "winning" does not mean another is "losing" — the performance of one state does not come at the cost of another. Nonetheless, the relative economic performance of Wisconsin and Minnesota has been a frequent source of discussion in recent years, driven by political debate. Since 2003, the two states have been ruled by governors of opposing parties, and the contrast in their policies has grown more marked in recent years.

In 2011, Republican Gov. Scott Walker took office in Wisconsin, while Democratic Gov. Mark Dayton took office in Minnesota, and both were re-elected in 2014. Their policy differences on taxation, spending and labor market regulation have led many, including President Obama in the speech quoted above, to compare the economies of the states.

In this report, I analyze the relative experience of Wisconsin and Minnesota from 2007 to the present, tracking how different measures of the growth and distribution of income have changed in these states since the Great Recession. I consider a broad range of both aggregate and household-level data to try to gain perspective on the differences.

While some previous reports have suggested that Minnesota has outperformed Wisconsin in recent years, my results suggest the picture is more nuanced. Each state has areas of strength, and the differences that emerge are driven by demographics and economic structure, as well as policy differences.

Summary

To describe the changes in the states since the recession and to gauge possible policy effects, I analyze differences in growth rates rather than in levels of variables. In La Crosse, President Obama mentioned that Minnesota has a higher median household income than Wisconsin, by about $9,000 in 2014. But he did not mention that Minnesota's median income has been higher than Wisconsin's since at least 1996, and the gap between the two states was larger for many of those years. Thus, it is hard to ascribe those persistent differences in income levels to policy changes of the type the president mentioned, which have only taken place over the past few years.

Overall growth in output and incomes in Minnesota has been more rapid than in Wisconsin since the recession. However, much of this has been driven by faster population growth. As measured by aggregate per capita data, income growth in Wisconsin has roughly matched Minnesota and outpaced it in after-tax income. The overall growth numbers are more widely reported, and measure the size of the respective state economies, while the per capita growth numbers are better indicators of living standards of residents of the states. Thus, while Minnesota's economy has expanded more overall since the recession, typical Wisconsin residents have seen a bigger increase in take-home pay.

Looking beyond the aggregates, micro data on household incomes show that the median household in Minnesota has seen more income growth than in Wisconsin. But at least part of this is due to changes in the composition of households, with Minnesota having more growth in households with two or more workers, while Wisconsin has a larger share of households with at most one worker.

(According to the U.S. Census Bureau, a household consists of all people who occupy a housing unit regardless of relationship. A household may consist of one person or multiple unrelated individuals or families living together. A family consists of two or more people — one of whom is the householder — related by birth, marriage or adoption living in the same housing unit.)

The survey data also show that the distribution of income has widened somewhat in both states since 2007, with a reduction in the percentage of middle-class households. The distribution of household income in Wisconsin has been roughly stable over the past few years, while it has continued to widen somewhat in Minnesota. However, in both states, most of the movement has been from the middle class toward higher incomes.

Importantly, in this report I do not attempt to measure any direct policy effects. To do so would require evaluating the counterfactual of how the states would have fared had they pursued different policies (but all other factors remained constant). Clearly, the economies of both states have been affected by a number of factors beyond policy differences, and it would require stronger assumptions or a structural model in order to hold fixed everything except the policy changes.

Nonetheless, the results do suggest that the conclusions previous commentators have drawn are misleading. For example, the decline in public-sector unionization in Wisconsin following the Act 10 reforms in 2011 has not led to a decline in the middle class, and increases in taxes on the wealthy in Minnesota have not led to a more equal (pre-tax) income distribution.[2]

Aggregate Data

In **Table 1**, I provide cumulative growth rates of different broad measures of income for Wisconsin, Minnesota and the whole United States for two separate time periods corresponding to the recession ("Recession": 2007-2010) and a four-year period after the recovery ("Post": either 2010-2014 or 2011-2015, depending on data availability), as well as the entire period since 2007 ("Total"). In particular, I report the real growth rates of GDP, per capita GDP, personal income (PI) and disposable (after-tax) personal income (DPI).[3]

These are all broad measures of income, compiled by aggregating data across firms and households drawn mostly from administrative records. The top line reports overall growth in real GDP, which is the most commonly reported aggregate income measure. This statistic supports the common depictions of growth in Minnesota outpacing the rest of the nation, with Wisconsin lagging behind. However, as discussed above, overall GDP growth combines improvements in living standards with an increase in the population size.

As the second line in Table 1 shows, population growth in Wisconsin has been significantly lower than in Minnesota or the U.S. as a whole, especially in the post-recession period. Therefore, measures of total output or income will give a distorted picture of the improvements in living standards of residents, so I focus on per capita growth rates. The third line of Table 1 reports per capita real GDP growth, while the personal income and disposable personal income statistics on the following lines are also reported in per capita terms.

Table 1

Real Growth Rates of Selected Variables

	WISCONSIN			MINNESOTA			U.S.		
	Recession	Post Recess.	Total	Recession	Post Recess.	Total	Recession	Post Recess.	Total
GDP (2010-14)	-1.3	5.3	3.9	0.2	7.7	7.9	-1.2	7.0	5.8
Population (2010-14)	1.4	1.2	2.6	2.0	2.8	4.8	2.7	3.1	5.9
Per Capita GDP (2010-14)	-2.7	4.1	1.3	-1.8	4.8	2.9	-3.7	3.9	0.0
Per Capita Personal Income (2011-15)	-1.6	6.3	4.4	-2.2	6.4	4.9	-3.4	6.9	2.9
Per Capita Disposable Personal Income (2011-15)	0.7	4.6	4.7	0.3	3.7	4.4	-0.6	4.8	3.3

Source: BEA, FRED

The recession was milder in Wisconsin and Minnesota than in the rest of the nation, at least as measured by GDP and personal income, with output falling more in Wisconsin than in Minnesota, while incomes in Wisconsin held up better during the recession. However, we also see that by all of these measures, the differences between Wisconsin, Minnesota and the rest of the nation have been relatively minor. Since the recession, Minnesota has grown slightly faster than Wisconsin, which in turn has grown slightly faster than the national average. In addition, growth in personal incomes in Wisconsin and Minnesota has been nearly identical since the recession, with both slightly lagging the national average.

Perhaps the sharpest distinction between Wisconsin and Minnesota, and one that most closely measures policy effects, is the comparison between personal income and after-tax personal income. Since 2011, pre-tax incomes in Wisconsin and Minnesota have grown at nearly identical rates, but after-tax incomes in Wisconsin have grown by nearly one percentage point more than in Minnesota. As discussed above, I cannot isolate specific policy effects in general, but this comparison clearly shows the effects of taxes. The broad reductions in tax rates in Wisconsin and increases in tax rates in Minnesota over the past few years have led to the divergence in after-tax incomes.

Survey Data: Households & Families

While the aggregate data provide a useful measure of average living standards, survey data can potentially provide a clearer picture of the experience of typical households and families, as well as changes in the distribution.[4] Rather than being measured by administrative sources, this data comes from direct responses of households to surveys, providing richer micro-data on household characteristics.

However, the survey data only includes reported money income, while the aggregate personal income measures include imputed income and benefits.[5]

Table 2 provides the growth rates of real mean and median household and family income in the recession, the post-recession period and the entire span since 2007.

Here, we see that the survey data give somewhat different results than the aggregates. In particular, by all measures, Minnesota outperforms Wisconsin and the rest of the nation in the most recent recovery, sometimes quite substantially. Households and families in Wisconsin generally fared worse in the recession than the national average, but since 2010, median incomes in Wisconsin have roughly tracked the national average, with slightly faster household and slightly slower family income growth. But Minnesota has experienced significantly more rapid growth, seeing notable increases in median household and family incomes since 2010, while these have remained roughly flat in Wisconsin and the nation as a whole. Minnesota clearly outperforms on these survey measures, in clear contrast to the aggregate output and income measures above. Later, I discuss some additional reasons for the discrepancy between the survey and aggregate income measures.

Table 2

Real Growth Rates of Selected Income Measures

	WISCONSIN			MINNESOTA			U.S.		
	Recession	Post Recess.	Total	Recession	Post Recess.	Total	Recession	Post Recess.	Total
Median Household (CPS)	-6.4	6.0	-0.8	-8.2	10.5	1.4	-8.1	1.8	-6.5
Mean Household (ACS)	-7.5	2.5	-4.2	-6.1	6.9	1.4	-6.8	3.2	-2.8
Median Household (ACS)	-8.4	0.1	-7.4	-6.1	3.3	-1.9	-6.8	-0.3	-6.0
Mean Family (ACS)	-7.0	2.9	-4.8	-6.4	8.3	2.4	-6.6	3.8	-2.0
Median Family (ACS)	-6.6	0.8	-3.7	-4.9	4.3	0.3	-6.4	1.3	-4.1

Source: CPS, Census ACS, FRED

Note as well that the data from the CPS (Current Population Survey) give a slightly different picture. These estimates are noisier, so the differences should be read with some caution, but these data suggest a sharper difference between Wisconsin and the rest of the nation. In particular, rather than remaining relatively flat since the recession, the CPS suggests that median incomes have grown much more rapidly in Wisconsin than nationally since the recession, although again not as strongly as in Minnesota.

Income inequality has become a topic of current discussion, and the trends in Wisconsin and Minnesota bear on that debate. While there are many ways of summarizing the distribution, I follow studies by the Pew Charitable Trusts and focus on the middle class, defined as income between 67% and 200% of the median, along with the high and low incomes outside this range.[6]

Table 3 provides the distributions of household income in Wisconsin and Minnesota for different years.

We see that in both states, from 2007-2014, there has been a widening of the income distributions, with declines in the percentage of middle-class households and increases in the fractions with high incomes. This is consistent with the frequent national discussions of increases in income inequality and also with the Pew studies that focused on changes from 2000-2013. In particular, there has been a reduction in the middle class in Wisconsin and Minnesota, but both states still have a significantly larger middle class than the national average (which was 45.3% in 2013).

However, there has been less evidence of an "emptying out" of the income distributions, with the mass moving from the middle class to both higher and lower incomes. While the distribution shares are a bit volatile from year to year, there does not seem to be much of an increase in the percentage of lower-income households in either state, especially in Wisconsin. Instead, most of the reduction in the middle class has happened as households have moved to higher incomes.

This is particularly true in Wisconsin, which did experience a widening of the income distribution from 2007 through 2011, then a stabilization and then, in 2014, an improvement. In the early period, the state did experience the emptying out described above. But given the sampling variation in the esti-

Table 3

Distribution of Household Income

Comparing the percentage of households that are low-, middle- and high-income.

	WISCONSIN			MINNESOTA		
HH INCOME	Low	Mid	High	Low	Mid	High
2014	32.3	50.0	17.7	32.7	49.4	17.9
2013	33.6	48.9	17.5	33.7	48.9	17.4
2011	33.6	49.1	17.3	32.7	50.0	17.2
2010	33.4	49.3	17.3	33.2	49.5	17.3
2009	32.9	50.5	16.6	32.9	50.6	16.6
2007	33.0	50.7	16.3	32.1	51.5	16.5

Source: Census PUMS

mates, it is hard to identify any significant changes in the distribution from 2010-2013. If anything, there was a slight reduction in the middle class, but this was entirely due to a shift toward higher incomes. In 2014, there was a more substantial reduction in low-income households, rebuilding the middle class.

The trends in Minnesota were largely similar, but with more of an emptying out from 2007-2014. From 2007-2013, there was a larger decline in the middle class and growth of lower incomes in Minnesota than in Wisconsin. As in Wisconsin, these trends reversed somewhat in 2014 in Minnesota, as the fraction of middle and high incomes increased. While the data are somewhat noisy, it does appear that over time Minnesota has seen a larger increase in income inequality and a larger reduction in the middle class than Wisconsin, although overall the differences are not large. Thus, although median incomes have risen faster in Minnesota, the gains have been unevenly distributed.

Discussion & Conclusion

Looking at a number of different sources of income data, we have seen that Wisconsin and Minnesota both suffered substantial declines during the recent recession and that these losses hit households and families unequally. Since 2010, both states have recovered, with Wisconsin performing better, especially when measured by after-tax income, while median households and families have fared better in Minnesota.

As discussed above, the aggregate and survey data measure different sources of income, which may account for some of the discrepancy. In addition, another important difference is in household composition. Households and families are composed of different numbers of people and workers, and clearly having more workers in a family will contribute to higher incomes and more rapid income growth. Further, higher-income individuals tend to marry others of high income, so the growth of income is even faster among married couples who both work.

Table 4

Distribution of Households

Comparing the percentage of households by the number of workers.

WORKERS	WISCONSIN 2010	WISCONSIN 2014	MINNESOTA 2010	MINNESOTA 2014
0	26.5	26.4	24.1	24.1
1	36.9	35.7	36.8	35.0
2	30.9	31.3	32.5	33.6
3+	5.7	6.5	6.5	7.3

Source: Census ACS

Table 4 shows the distribution of households by the number of workers, which suggests that there were differences and shifts in the composition of households in the two states in recent years. Minnesota has a higher fraction of families with two or more earners, and this share increased from 2010-2014, while Wisconsin has a higher fraction of families with zero earners or one earner, and this share stayed relatively stable. Thus, there are more workers per household in Minnesota than in Wisconsin, and the gap has grown. This has contributed to the higher and more rapid increase in household income in Minnesota.

While there have been important policy differences between Wisconsin and Minnesota, many of them have occurred only recently, so their full impact is not apparent in most of the data I have studied. Furthermore, as discussed above, sorting out policy impacts is more complex than comparing broad measures of economic performance. Nonetheless, we have seen that the relative tax policies appear to have affected after-tax incomes, boosting disposable income growth in Wisconsin. In addition, the fraction of households in the middle class has stabilized or grown in Wisconsin in recent years, while it has declined in Minnesota. Thus, it is difficult to see evidence for the claims that Wisconsin's policies have led to a decline in the middle class, while Minnesota has embraced policies strengthening the middle class.

While I have focused on per capita and household income measures, most headline measures of economic activity such as employment, income and output growth focus on the overall levels. As we have seen, population growth has been much slower in Wisconsin than in Minnesota and the rest of the nation, which leads it to fare more poorly along these dimensions.

In addition, lower population growth, some of it caused by out-migration, over time has led to an aging of the workforce and a reduction in innovation and the overall dynamism and vibrancy of the economy. Attracting, training and retaining a growing workforce for the future is a key challenge facing Wisconsin in particular.

Endnotes

[1] Transcribed from video: http://www.slate.com/blogs/the_slatest/2015/07/03/obama_to_wisconsin_crowd_democrat_led_minnesota_has_higher_income_and_lower.html

[2] See http://www.wpr.org/wisconsin-has-seen-largest-middle-class-decline-any-state-study-finds and http://www.huffingtonpost.com/carl-gibson/mark-dayton-minnesota-economy_b_6737786.html. Both the latter reference and President Obama's remarks mention the increase in the minimum wage in Minnesota. But the increases are being phased in and only began in August 2014, too late to have an impact on the data here.

[3] The data are annual and provided by the Bureau of Economic Analysis. Per capita GDP is provided in real terms, deflated according to its own implicit price deflator. The personal income measures are provided by the BEA in nominal terms, and I deflate them using the personal consumption expenditures (PCE) deflator obtained from the St. Louis Fed's FRED database. Most analysts prefer this measure to the consumer price index, as it better accounts for substitutions. The growth rates are the cumulative growth, simply measured by the growth of the end year value over the base year value.

[4] For this, I use the Census Bureau's American Community Survey (ACS) data, which is currently available from up to 2014, as well as the Public Use Microdata Sample (PUMS), which gives a 1% sample of the individual data records. I again convert the nominal income variables to real terms using the PCE deflator. I also report a separate survey of household income in the Current Population Survey (CPS), which has a smaller sample and gives somewhat different results. For the CPS, I use 2007-2011 as the recession period and 2011-2014 as the post-recession, which smooths out some of the volatility.

[5] Personal income includes imputed income, lump-sum payments not received as part of earnings, certain in-kind personal current transfer receipts — such as Medicaid, Medicare — and employer contributions to health and pension plans. See http://www.bea.gov/newsreleases/regional/spi/sqpi_newsrelease.htm.

[6] See: http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/3/19/the-shrinking-middle-class-mapped-state-by-state and http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/4/09/state-by-state-higher-income-class-on-the-rise. The PUMS data is top- and bottom-coded, so it is not accurate for very high or low incomes, making this split of the distribution more appropriate than focusing on other aspects of the distribution, such as the top 1%.

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