THE NEW PATH TO PROSPERITY:

LESSONS FOR MICHIGAN FROM TWO DECADES OF ECONOMIC CHANGE

Lou Glazer
President
Michigan Future Inc.

Don Grimes
Senior Research Specialist
Institute for Research on Labor, Employment and the Economy
University of Michigan

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MICHIGAN FUTURE INC.
A Catalyst for Prosperity

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MICHIGAN FUTURE INC.

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Contents

MICHIGAN FUTURE, INC. LEADERSHIP COUNCIL **05**

EXECUTIVE SUMMARY **06**

I. THE AMERICAN ECONOMY FROM 1990-2011 **08**

II. THE MICHIGAN ECONOMY FROM 1990-2011 **11**

III. THE MINNESOTA ECONOMY FROM 1990-2011 **15**

IV. LESSONS TO LEARN: MICHIGAN COMPARED TO MINNESOTA 1990-2011 **19**

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Introduction

Our work at Michigan Future, Inc. is focused on understanding the changes occurring in the American economy and how to be successful in that economy. Our interest is in the long term structural changes in the economy, rather than year to year, largely cyclical changes.

At the core of our work is the basic belief, since we were founded more than two decades ago, that globalization and technology are mega forces that are transforming the economy. The places that will do best are those that align with—rather than resist—these new realities. For Michigan that, first and foremost, means learning that what made us prosperous in the past, isn't working now and won't in the future.

Michigan Future started with the question "where do we want to go from here?" Our answer: a high-prosperity Michigan—a place with a per capita personal income consistently above the national average in both national economic expansions and contractions.[1] (We use per capita personal income as our metric of economic well-being because it is the most comprehensive and reliable estimate of total income (excluding capital gains) of a community's residents.)

High prosperity is different from the most often used measure for economic success, low unemployment. We believe that the goal should be to create an economy with lots of good-paying jobs, a place with a broad middle class where there is a realistic chance for families to realize the American Dream. Places with low unemployment rates, but also lower personal income, aren't successful to us.

We started with a clean sheet. We didn't start with preconceived notions of what the right answers are. Rather we identified the most successful areas in the country and tried to figure out what distinguished them from Michigan and what assets we most needed to nurture here to get to there. This "go where our findings take us approach" is the foundation of every report we do. We are driven to, first and foremost, learn what is going on in the American and Michigan economy. Every time we do research for a report we learn something that we didn't know or expect. And those new findings shape what we report.

In 2004 we published *A New Path To Prosperity? Manufacturing and Knowledge-based Industries as Drivers of Economic Growth*. It presented data showing that states over concentrated in knowledge-based sectors compared to the nation were the most prosperous states, not those relatively over concentrated in manufacturing. At its core, this report is an update on that work.

The focus of this report is the long term, looking at what has happened to the American and Michigan economies over the last two decades, from 1990 to 2011. In doing so, we have grouped together two very different decades: the boom times from 1990-2001 and the, at best, anemic growth from 2001-2011.

The differences between the two periods are stark:

- Employment growth of 27.2 million in 1990-2001 compare to 10.3 million in the next decade.[2]
- Per capita income growth adjusted for inflation of $6,300 compared to $2,000
- Private sector employment earnings per capita adjusted for inflation growing by $5,000 in the first period, compared to a loss of $700 in the second.
- Transfer payments per capita adjusted for inflation accelerating, growing by $1,200 from 1990-2001 compared to growth of $2,100 from 2001-2011

1.Since we set this goal years ago Michigan has fallen so far below the national average in per capita personal income, a more realistic goal is probably consistently at the national average.

2 Employment includes both the Bureau of Economic Affairs measured wage and salary employment plus self-employment

The defining characteristic of those places with the most prosperous economies today—and almost certainly even more so in the future—is their concentration in the knowledge-based sectors of the economy.

Despite these differences we are comfortable combining the two periods because the underlining structural trends are the same. We do not know if the coming decade or two will be more like 1990-2001 or 2001-2011 or someplace in between. What we are confident of is that, primarily due to the ongoing force of globalization and technology, the American economy will become more and more service, rather than goods producing, based. And in that economy, knowledge-based services are almost certain to be where job growth is the strongest and average wages are the highest.

Notwithstanding the current auto-recovery-driven factory jobs rebound here in Michigan, the long term trends are clear: The defining characteristic of those places with the most prosperous economies today—and almost certainly even more so in the future—is their concentration in the knowledge-based sectors of the economy. The only exceptions have been and likely will be those few states with lots of oil and natural gas.

The report is divided into four sections:

I. The American economy

II. The Michigan economy

III. The Minnesota economy

IV. The Michigan economy compared to Minnesota

In each section we detail changes in employment by sector, per capita income by component and private sector employment earnings per capita by sector from 1990-2011. (All income data are adjusted for inflation: reported in 2011 dollars.) Taken together they tell a powerful story of the transformation of the American, Michigan and Minnesota (the Great Lakes' most prosperous state) economies.

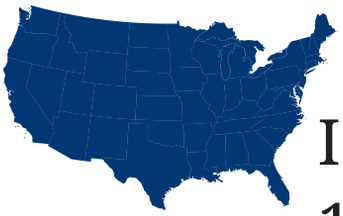
We divide the economy into five sectors:

- Manufacturing
- Other goods producing (construction and natural resources)
- Knowledge-based services (private health care and social services; finance and insurance; information; professional services; and management of companies).[3]
- Other private services
- Government

And we deconstruct per capita income into five components:

- Employment earnings (wages and benefits) from private sector employers.
- Employment earnings from government (local, state, federal, public schools, and public universities and colleges) employers.
- Dividends, interest, and rent.
- Transfer payments. These are payments made by government to or on behalf of individuals. They include Social Security, Medicare, Medicaid, Temporary Assistance for Needy Families, cash benefits, food stamps, veterans' benefits, tuition support like Pell grants and subsidies for college loans, the Earned Income Tax Credit, etc. The one change we made to the official statistics is that we include farm subsidies in transfer payments (not private sector earnings).
- Social insurance taxes and residential adjustments. These are subtractions from income for taxes paid by both individuals and employers for items like Social Security, Medicare, and unemployment insurance, as well as adjustments for people who live in one state or region and work in another. The category is needed to balance income totals, but has little or no analytical value.

3 Private education services and parts of wholesale trade and transportation are sometimes considered knowledge-based service industries, but are excluded from this analysis because of data limitations and to numerically balance the inclusion of some health and social services industries that are usually not included as knowledge-based services.



I: The American Economy from 1990-2011

Jobs

Table 1 and Figure 1 display the changes in employment by sector over the two decades. Clearly the predominant trends are the decline in manufacturing employment along with the rise in service sector employment—both knowledge-based and other private services.

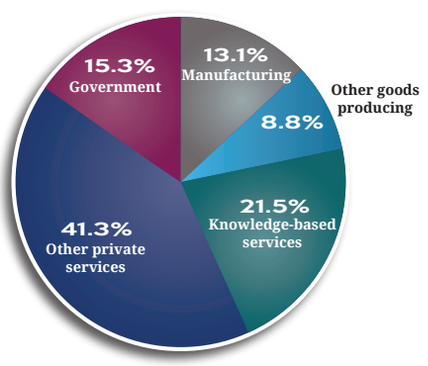
Manufacturing is defined as work done in factories. Given its importance to the Michigan economy, it's worth noting that the pre- and post-production work of manufacturing enterprises (engineering, design, logistics, marketing, management, etc.) are part of knowledge-based services.

Employment by Sector

Table 1

United States	1990	2011	Change, 1990-2011
Total Employment	138,330,900	175,834,700	37,503,800
Manufacturing	18,123,100	12,344,600	-5,778,500
Other goods producing	12,131,000	13,659,600	1,528,600
Knowledge-based services	29,723,600	46,207,400	16,483,800
Other Private services	57,121,200	79,322,100	22,200,900
Government	21,232,000	24,301,000	3,069,000

SHARE OF U.S. EMPLOYMENT BY SECTOR, 1990



SHARE OF U.S. EMPLOYMENT BY SECTOR, 2011

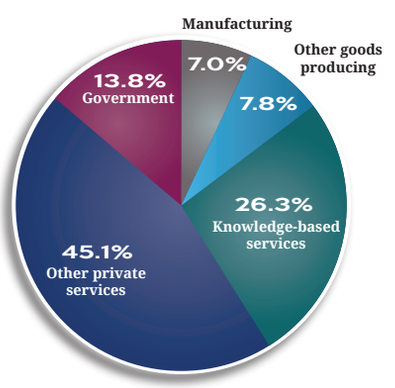


Figure 1

The highlights:

- From 1990 to 2011 manufacturing employment fell by 5,778,500, a decline of 32 percent.
- Nationally the share of workers in manufacturing fell from 13 to 7 percent.
- The absolute and relative decline of manufacturing occurred during the nineties boom as well as the anemic American economy of the last decade. From 1990-2001 manufacturing employment fell by 1,209,500, a decline of 7 percent.
- From 1990 to 2011 employment growth in services accounted for all the job growth in the country and then some, growing by 38,684,700 out of total employment growth of 37,503,800.
- Employment in services grew by 45 percent.
- Employment in knowledge-based services grew by 16,483,800 from 1990 to 2011, an increase of 55 percent.
- Knowledge-based services share of American employment grew from 21 to 26 percent.
- Employment in other private services grew by 22,200,900 from 1990 to 2011, an increase of 39 percent.
- Other private services share of American employment grew from 41 to 45 percent.

Personal Income

Table 2 displays the changes in per capita income by component over the two decades.

Per Capita Income by Component

Table 2

United States	1990	2011	Change, 1990-2011
Personal Income Per Capita	$ 33,309	$ 41,560	$ 8,251
Private Earnings	$ 20,710	$ 24,969	$ 4,259
Government Earnings	$ 4,562	$ 5,339	$ 777
Investment Earnings	$ 6,684	$ 6,719	$ 35
Transfer Payments	$ 4,168	$ 7,477	$ 3,309
Social Insurance and Residence Adjustment	$ (2,815)	$ (2,942)	$ (127)

Table 3 shows how those components changed as a share of personal income over the last two decades.

Per Capita Income by Component Share of Personal Income

Table 3

United States	1990	2011
Private Earnings	62%	60%
Government Earnings	14%	13%
Investment Earnings	20%	16%
Transfer Payments	13%	18%
Social Insurance and Residence Adjustment	-8%	-7%

What stands out is the rise in transfer payments as a share of how Americans earn their living. Transfer payments per capita, adjusted for inflation, grew by 79 percent from 1990 to 2011 and its share of total per capita income increased from 13 to 18 percent.

Contrast that to private sector employment earnings per capita—the predominant engine of long term, sustainable growth in the standard of living—which grew only 21 percent from 1990 to 2011. Its share of total per capita income fell from 62 to 60 percent.

Maybe most worrisome, as we noted above, is the acceleration of the growth in transfer payments per capita between the two decades, combined with a collapse of private sector employment earnings per capita from 2001 to 2011.

Transfer payments per capita increased by $2,100 from 2001 to 2011, while private sector employment earnings per capita actually declined by $700. In comparison, between 1990 and 2001, transfer payments per capita increased by $1,200 while private sector employment earning per capita increased by $5,000. This is a stunning reversal.

For the country to do well—to become more prosperous—those trends will have to be reversed. Slow, let alone declining, private sector employment earnings growth, combined with rapid growth in transfer payment income, is not a sustainable path to a rising standard of living.

Private sector employment earnings per capita

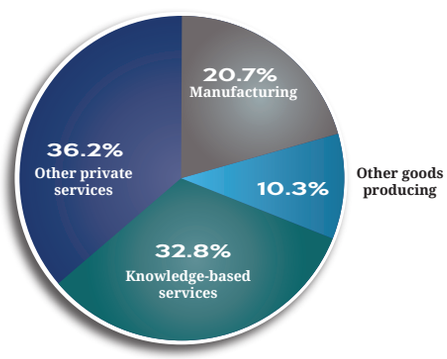
Table 4 and Figure 2 break down the change in private sector employment earnings per capita over the two decades by major industry categories. Here we see even more clearly the pattern of manufacturing decline, the rise of knowledge-based services, and why knowledge-based services are so important to an American rising standard of living in the future. Although job growth was strong in both knowledge-based services and other private services from 1990 to 2011, employment earnings growth per capita grew far more in knowledge-based services.

Private Sector Earnings Per Capita

Table 4

United States	1990	2011	Change, 1990-2011
Private Earnings Per Capita	$ 20,710	$ 24,969	$ 4,259
Manufacturing Earnings	$ 4,277	$ 3,029	$ (1,248)
Other Goods Producing Earnings	$ 2,138	$ 2,357	$ 219
Knowledge-based Services Earnings	$ 6,794	$ 10,351	$ 3,557
Other Private Service Earnings	$ 7,501	$ 9,232	$ 1,731

SHARE OF U.S. PRIVATE EARNINGS PER CAPITA, 1990



SHARE OF U.S. PRIVATE EARNINGS PER CAPITA, 2011

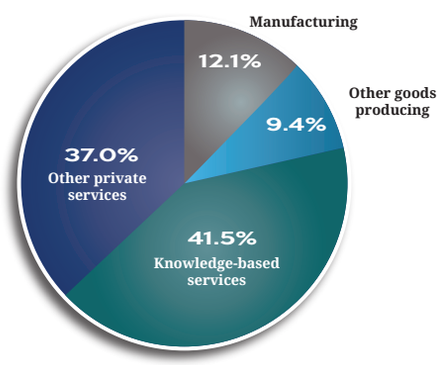


Figure 2

Specifically:

- Employment earnings per capita from manufacturing, adjusted for inflation, declined 29 percent over the two decades.
- The share of private sector employment earnings per capita from manufacturing fell from 21 percent to 12 percent.
- The relative decline of manufacturing occurred during the nineties boom as well as the anemic American economy of the last decade. The sector's share of private sector employment earnings per capita fell from 21 percent in 1990 to 16 percent in 2001, then to 12 percent in 2011.
- Employment earnings per capita in knowledge-based service grew by 52 percent, compared to 23 percent in other private services.
- The share of private sector employment earnings per capita from knowledge-based services grew from 33 percent to 41 percent, almost completely offsetting the decline in manufacturing's share.

II. The Michigan economy 1990-2011

Jobs and income in the American economy over the last two decades have transitioned from a factory-based to a knowledge-based economy. Manufacturing employment declined by 32 percent and employment earnings per capita fell by 29 percent, while knowledge-based services saw employment growth of 32 percent and employment earning growth per capita of 52 percent.

In 2011 manufacturing accounted for only 7 percent of the jobs in the United States workforce; knowledge based services 26 percent. The gap is even greater for private employment earnings per capita: knowledge-based services share is 41 percent, compared to 16 percent for manufacturing.

So how has Michigan fared?

Jobs

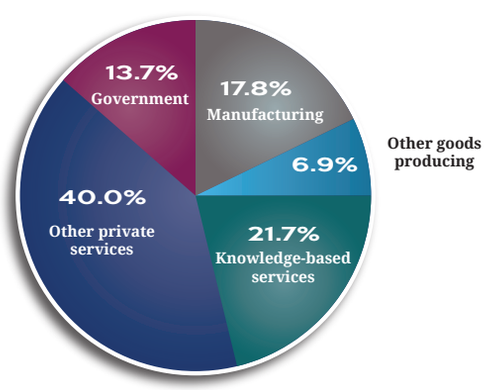
Table 5 and Figure 3 display the changes in Michigan employment by sector over the two decades. Just as for the country, the predominant trends are the decline in manufacturing employment along with the rise in service sector employment—both knowledge-based and other private services.

Employment by Sector

Table 5

Michigan	1990	2011	Change 1990-2011
Total Employment	4,790,620	5,143,146	352,526
Manufacturing	851,953	534,146	-317,807
Other goods producing	328,565	328,582	17
Knowledge-based services	1,037,962	1,351,693	313,731
Other Private services	1,916,369	2,296,656	380,287
Government	655,771	632,069	-23,702

SHARE OF MICHIGAN EMPLOYMENT BY SECTOR, 1990



SHARE OF MICHIGAN EMPLOYMENT BY SECTOR, 2011

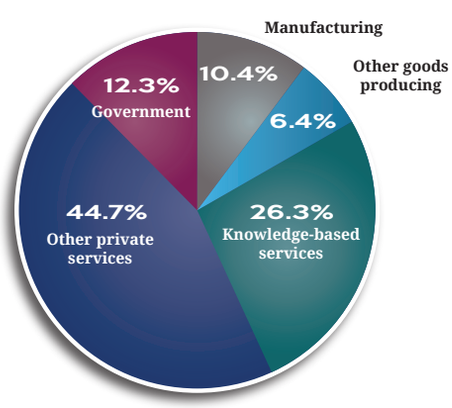


Figure 3

- Total Michigan employment rose 352,500, an increase of 7 percent, compared to 27 percent nationally.[4] Michigan manufacturing employment fell by 318,000 from 1990-2011, a decline of 37 percent, compared to 32 percent nationally.
- Manufacturing's share of Michigan jobs fell from 18 percent to 10 percent. Nationally the fall was from 13 percent to 7 percent.
- Knowledge-based services saw Michigan employment growth of 313,700, an increase of 30 percent very similar to the 32 percent growth nationally.
- Knowledge-based services share of Michigan jobs grew from 22 to 26 percent, nearly identical to that of the nation.
- Where Michigan most diverged from the nation is in other private services. In that sector employment grew in Michigan by 380,300, up only 20 percent compared to 39 percent nationally.

Unlike the nation, manufacturing job loss in Michigan was concentrated in the 2001-2011 period. Nationally, as we saw above, manufacturing saw substantial job loss between 1990 and 2001; that decline accelerated rapidly from 2001 to 2011. Manufacturing employment in Michigan from 1990 to 2011 was virtually unchanged, down only 8,400. But manufacturing employment in Michigan collapsed from 2001-2011, declining by 309,400. One of the reasons for Michigan's so-called lost decade is that the domestic auto industry was hit by the gale force of globalization and technology later than most of the nation's manufacturers. But over the two decades the result is quite similar in the United States and in Michigan: a loss of about one third of manufacturing jobs from 1990 to 2011.

Personal Income

Tables 6 and 7 display the change in per capita income by component in Michigan over the two decades.

Per Capita Income by Component

Table 6

Michigan	1990	2011	Change, 1990-2011
Personal Income Per Capita	$ 31,552	$ 36,264	$ 4,712
Private Earnings	$ 20,509	$ 21,491	$ 982
Government Earnings	$ 3,680	$ 4,057	$ 377
Investment Earnings	$ 5,867	$ 4,998	$ (869)
Transfer Payments	$ 4,328	$ 8,289	$ 3,961
Social Insurance and Residence Adjustment	$ -2,832	$ -2,570	$ 262

Per Capita Income by Component Share of Personal Income

Table 7

Michigan	1990	2011
Private Earnings	65%	59%
Government Earnings	12%	11%
Investment Earnings	19%	14%
Transfer Payments	14%	23%
Social Insurance and Residence Adjustment	-9%	-7%

4This measure of employment is much stronger, because it counts the self-employed, than the more widely distributed Bureau of Labor Statistics Wage and Salary only measure, which shows growth of only 5,400 jobs (0.1 percent).

This is the era where Michigan became one of America's low prosperity states, falling from per capita income equal to 95 percent of the nation's in 1990 to only 87 percent in 2011. In 2011 Michigan ranked 36th in per capita income among the 50 states, compared to 20th in 1990.

In addition to the overall decline, what stands out is the rise in transfer payments per capita— even more so than the nation. Transfer payments grew by 92 percent from 1990 to 2011, increasing its share of total income from 14 percent to 23 percent. Most worrisome is that transfer payments account for 84 percent of Michigan's growth in per capita income from 1990 to 2011.

Contrast that to private sector employment earnings per capita adjusted for inflation, which grew by only 5 percent from 1990 to 2011 and saw its share of total per capita income falling from 65 to 59 percent.

The growth in transfer payments per capita accelerated over the two decades, and combined with a collapse of private sector employment earnings per capita from 2001 to 2011 to create a very troublesome pattern.

Transfer payments per capita in Michigan grew $2,900 from 2001 to 2011 while private sector employment earning per capita fell by $3,600. In contrast, between 1990 and 2001 transfer payments per capita increased by $1,100 while private sector employment per capita increased by $4,600.

For the state to do well—to become more prosperous—those trends will have to be reversed. Private sector employment earnings per capita must grow substantially faster than transfer payments per capita. An economy where transfer payments per capita are growing faster than private earnings per capita is not sustainable.

> "One of the reasons for Michigan's so-called lost decade is that the domestic auto industry was hit by the gale force of globalization and technology later than most of the nation's manufacturers. But over the two decades the result is quite similar in the United States and in Michigan: a loss of about one third of manufacturing jobs from 1990 to 2011."

Private sector employment earnings per capita

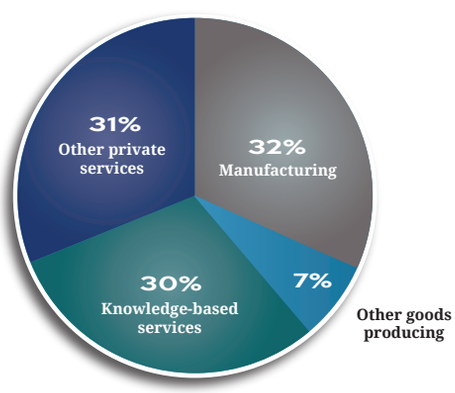
Table 8 and Figure 4 detail the change in Michigan private sector employment earnings per capita over the two decades. Here we see even more clearly the pattern of manufacturing decline and the rise of knowledge-based services, demonstrating why knowledge-based services are so important if we are to see a rising standard of living in Michigan.

Private Sector Earnings Per Capita

Table 8

Michigan	1990	2011	Change 1990-2011
Private Earnings Per Capita	$ 20,509	$ 21,490	$ 981
Manufacturing Earnings	$ 6,490	$ 4,226	$ (2,264)
Other Goods Producing Earnings	$ 1,473	$ 1,509	$ 36
Knowledge-based Services Earnings	$ 6,181	$ 8,188	$ 2,007
Other Private Service Earnings	$ 6,365	$ 7,567	$ 1,202

SHARE OF MICHIGAN PRIVATE SECTOR EARNINGS PER CAPITA, 1990



SHARE OF MICHIGAN PRIVATE SECTOR EARNINGS PER CAPITA, 2011

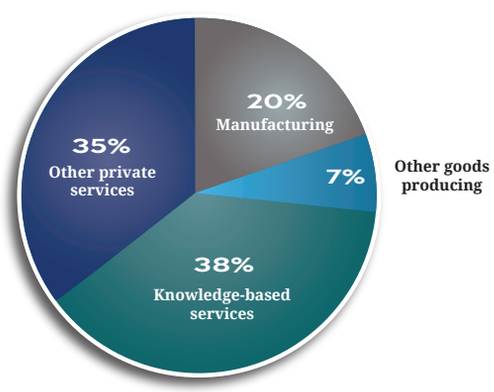


Figure 4

As we saw earlier, when it comes to changes in employment by sector over the last two decades Michigan follows the national trends quite closely, with big losses in manufacturing and big gains in knowledge-based services, although diverging from the national pattern with much slower employment growth in other private services.

When it comes to private sector employment earnings per capita corrected for inflation you see more dramatically why Michigan is now lagging the nation on most economic well-being metrics. Michigan's private sector employment earnings per capita were on par with the nation in 1990. We had a substantial advantage in manufacturing balanced by an under performance in the other sectors.

But from 1990 to 2011 Michigan private sector earnings per capita only grew by $1,000 compared to $4,300 for the nation. The underperformance occurred mainly in the two sectors we have discussed.

Michigan's real employment earnings per capita decrease in manufacturing was $1,000 greater than the national average. And our real employment earnings per capita increase in knowledge-based services was $1,600 less than that of the nation. The two sectors account for 78 percent of Michigan's two decade underperformance in real employment earnings per capita change compared to the country.

The specifics:

- Employment earnings per capita from manufacturing declined 35 percent in Michigan compared to 29 percent nationally.
- The share of Michigan private sector employment earnings per capita from manufacturing fell from 32 percent to 20 percent.
- Employment earnings per capita in knowledge-based service grew by 32 percent compared to 53 percent nationally.
- The share of Michigan private sector employment earnings per capita from knowledge-based services grew from 30 percent to 38.

III. The Minnesota economy 1990-2011

Let's complete our exploration of the changing structure of the American economy with a look at the Great Lakes State that is doing best on employment, per capita income and private sector employment earnings per capita and has for some time.

We have used Minnesota as a comparison state for years. It is an obvious choice becuase it is a Great Lakes State (taking weather and the excuse that Michigan can't be like the coasts off the table) and it has enjoyed the best economic outcomes in the Great Lakes.

Minnesota is more than a Great Lakes success story. On most economic measures it is a national leader. And what makes it a national leader is characteristic of the most prosperous states around the country, except for the few states with energy-driven economies.

Jobs

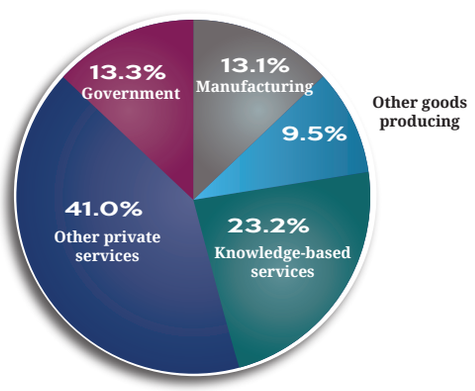
Table 9 and Figure 5 display the changes in Minnesota employment by sector over the past two decades. Just as for the nation, the predominant trends are the decline in manufacturing employment along with the rise in service sector employment—both knowledge-based and other private services.

Employment by Sector

Table 9

Minnesota	1990	2011	Change, 1990-2011
Total Employment	2,691,896	3,461,421	769,525
Manufacturing	352,840	314,847	-37,993
Other goods producing	254,623	258,056	3,433
Knowledge-based services	624,097	1,001,157	377,060
Other Private services	1,102,635	1,473,811	371,176
Government	357,701	413,550	55,849

SHARE OF MINNESOTA EMPLOYMENT BY SECTOR, 1990



SHARE OF MINNESOTA EMPLOYMENT BY SECTOR, 2011

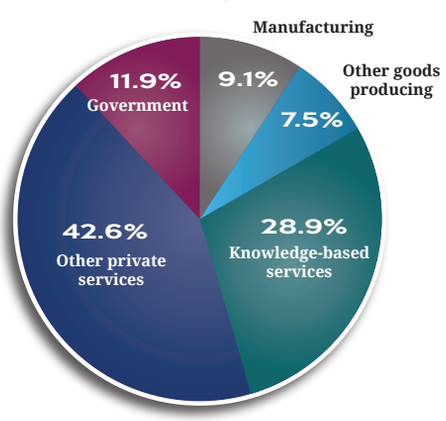


Figure 5

More specifically:

- From 1990 to 2011 manufacturing employment fell by 38,000 a decline of 11 percent much less than either the country or Michigan.
- The share of workers in manufacturing fell from 13 percent to 9 percent.
- Like Michigan, Minnesota's manufacturing job loss occurred after the nineties boom. Manufacturing employment grew by 36,200 from 1990–2001 (compared to a loss of 8,000 in Michigan over that period), but then fell by 74,000 from 2001-2011.
- From 1990 to 2011 employment growth in services accounted for nearly all the job growth in the state. That sector saw a growth of 748,200 jobs out of total employment growth of 769,500.
- Employment in services grew by 43 percent.
- Employment in knowledge-based services grew by 377,100 from 1990 to 2011, an increase of 60 percent.
- Knowledge-based services share of Minnesota employment grew from 23 percent to 29 percent.
- Employment in other private services grew by 371,200 from 1990 to 2011, an increase of 34 percent.
- Other private services share of Minnesota employment grew from 41 percent to 43 percent.

Personal Income

Tables 10 and 11 display the changes in per capita income by component over the two decades.

Per Capita Income by Component

Table 10

Minnesota	1990	2011	Change, 1990-2011
Personal Income Per Capita	$ 33,223	$ 44,560	$11,337
Private Earnings	$ 21,691	$ 29,043	$ 7,352
Government Earnings	$ 3,995	$ 4,661	$ 666
Investment Earnings	$ 6,709	$ 7,284	$ 575
Transfer Payments	$ 4,042	$ 7,323	$ 3,281
Social Insurance and Residence Adjustment	$ (3,213)	$ (3,751)	$ (538)

Per Capita Income by Component Share of Personal Income

Table 11

Minnesota	1990	2011
Private Earnings	65%	65%
Government Earnings	12%	10%
Investment Earnings	20%	16%
Transfer Payments	12%	16%
Social Insurance and Residence Adjustment	-10%	-8%

Like the country, what stands out is the rise in transfer payments as a share of income. Transfer payments in Minnesota were up 81 percent from 1990 to 2011, with its share of total per capita income increasing from 12 percent to 16 percent.

Contrast that to private sector employment earnings per capita, which grew by 34 percent from 1990 to 2011. Private sector employment earnings' share of total per capita income held constant at 65 percent.

Minnesota also suffered from the same trends as the nation and Michigan, with an acceleration of the growth in transfer payments per capita adjusted for inflation between the two decades. Transfer payments increased by $2,200 from 2001 to 2011, substantially exceeding the $800 increase in private sector earnings per capita. In contrast, between 1990 and 2001, private sector employment earning per capita increased by $6,500, while transfer payments per capita grew a much more modest $1,000.

But because private sector employment earnings grew far faster in Minnesota than the country—34 percent compared to 21 percent for the U.S.—its share of personal income from transfer payments grew slower than in the country and the private sector employment earnings share stayed constant as opposed to falling two percentage points nationally and six percentage points in Michigan.

Private sector employment earnings per capita

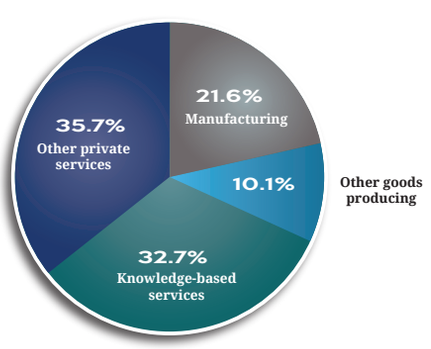
Table 12 and Figure 6 detail the change in private sector employment earnings per capita over the two decades. Here you see clearly why Minnesota is out-performing the nation and far out performing Michigan on most economic well-being metrics.

Private Sector Earnings Per Capita

Table 12

Minnesota	1990	2011	Change, 1990-2011
Private Earnings Per Capita	$ 21,691	$ 29,043	$ 7,352
Manufacturing Earnings	$ 4,682	$ 4,384	$ (298)
Other Goods Producing Earnings	$ 2,190	$ 2,674	$ 484
Knowledge-based Services Earnings	$ 7,085	$ 12,344	$ 5,259
Other Private Service Earnings	$ 7,734	$ 9,641	$ 1,907

SHARE OF MINNESOTA PRIVATE EARNINGS PER CAPITA, 1990



SHARE OF MINNESOTA PRIVATE EARNINGS PER CAPITA, 2011

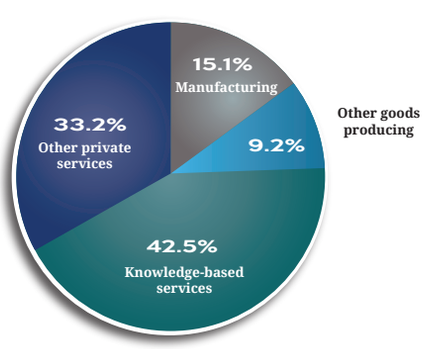


Figure 6

Minnesota's private sector employment earnings per capita were slightly ahead of the nation and Michigan in 1990. But from 1990 to 2011 Minnesota private sector earnings per capita grew by $7,400 compared to $1,000 for Michigan and $4,300 for the nation.

Part of the out-performance comes from a far smaller decline in Minnesota's inflation-adjusted employment earnings per capita decline in manufacturing: a $300 reduction, compared to a $1,300 decrease nationally and a $2,300 reduction in Michigan. But the main driver of Minnesota's superior performance was an increase in knowledge-based services income of $5,300, compared to $3,600 for the U.S. and $2,000 for Michigan.

Specifically in Minnesota:

- Employment earnings per capita from manufacturing declined 6 percent.
- The share of private sector employment earnings per capita from manufacturing fell from 22 percent to 15 percent.
- Employment earnings per capita in knowledge-based service grew by 74 percent, compared to 25 percent in other private services.
- The share of private sector employment earnings per capita from knowledge-based services grew from 33 percent to 43 percent.

IV. Lessons to learn: Michigan compared to Minnesota 1990 - 2011

Obviously Minnesota far out-performed Michigan in growth in employment, personal income and private sector employment earnings per capita over the two decades.

- From 1990-2011 employment grew in Minnesota by 29 percent compared to 7 percent in Michigan.
- Minnesota in the latest month of statistics (August 2013) has a far lower unemployment rate: 5.1 percent compared to 9.0 percent in Michigan. More importantly, Minnesota boasts a far higher employment to population ratio. In 2011, 79 percent of Minnesotans between the ages of 25-64 year old were working; in Michigan, 67 percent of residents in that age range were working.
- In 1990, per capita income in Minnesota and Michigan was close: $33,200 in Minnesota compared to $31,600 in Michigan. No more! Per capita income corrected for inflation grew by $11,300 in Minnesota over the two decades, compared to $4,712 in Michigan.
- Real private sector employment earnings per capita grew over those two decades in Minnesota by $7,400, accounting for 65 percent of the state's per capita income growth. In Michigan, those earnings grew by only $1,000, 21 percent of the state's per capita income growth.
- Figure 7 contrasts job growth by sector in Minnesota and Michigan. Figure 8 does the same for private sector employment earnings by sector.

Change in employment, 1990-2011

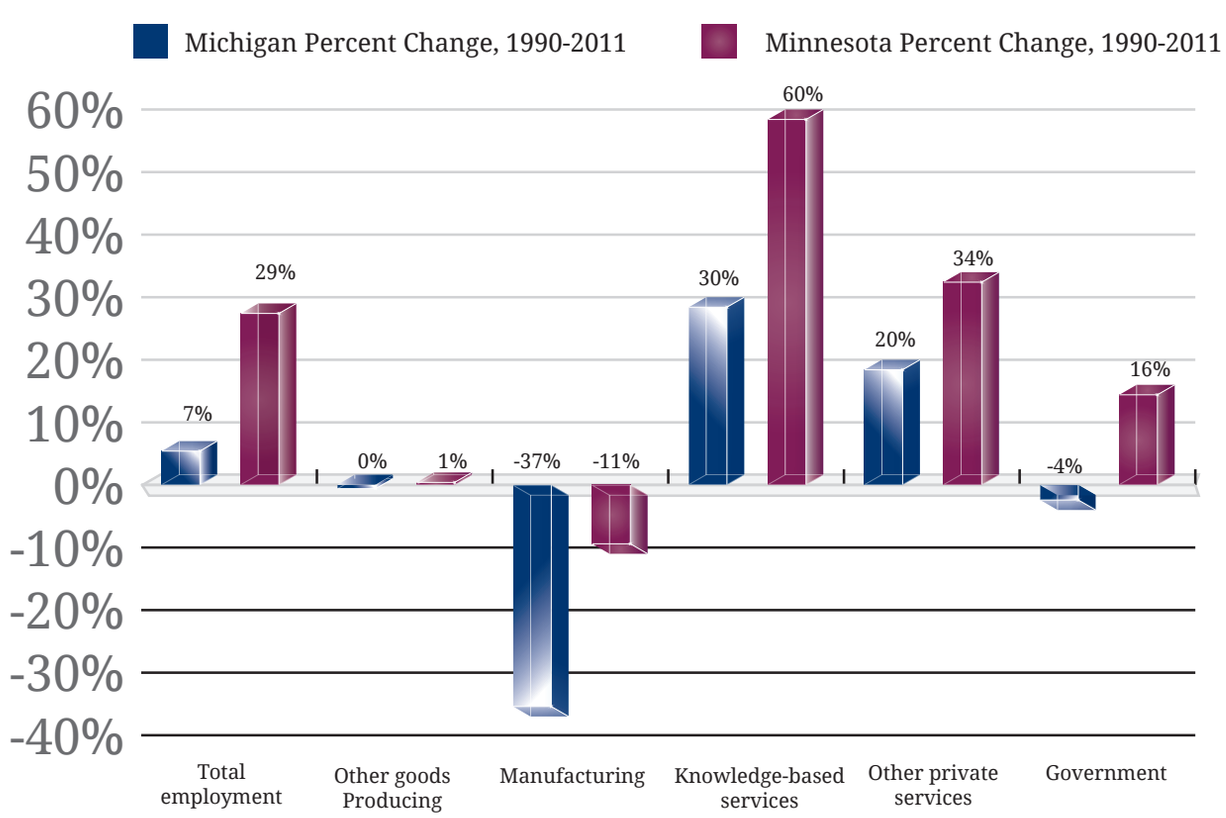


Figure 7

Change in private sector employment earnings by sector, 1990-2011

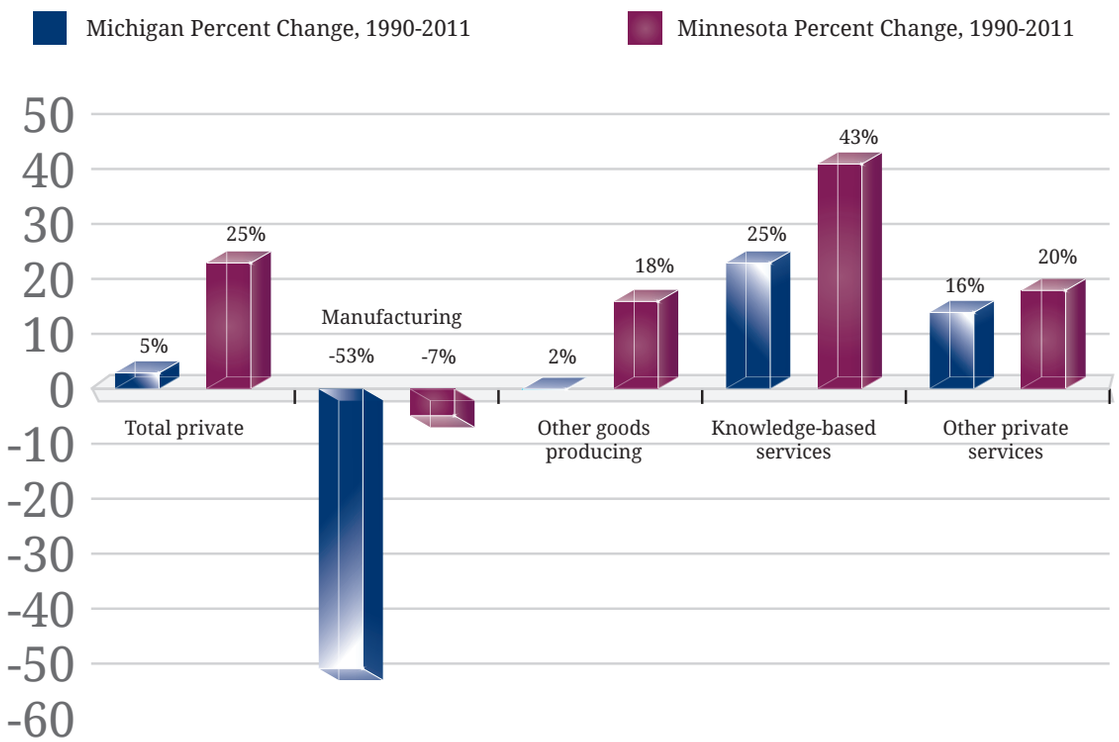


Figure 8

The different path Minnesota and Michigan have traveled the last two decades clearly demonstrates the path to prosperity in a flattening world, one driven by the mega forces of globalization and technology.

Clearly Michiganders would be far better off today if the state had traveled the same path as Minnesota the past two decades. To some degree Michigan couldn't have traveled that same path.

For a century we enjoyed the benefits of being the center of the auto industry. And its near collapse the past decade is something no other state suffered through. It was a major part of what mired Michigan—and no other state—in a decade long recession.

There was nothing Michigan could have done to avoid the severe downturn of the domestic auto industry. But we can learn some clear lessons from states like Minnesota on how to return to prosperity and become a place with a broad middle class.

The answer lies in growing private sector employment earnings. Growing the private sector is the only sustainable path of long-term improvement in economic well being. The metric reflects both the number of folks working in the private sector (more jobs) and their compensation—both wages and benefits (better jobs).

The underlying story is the decline of a factory-based economy. Manufacturing nationally is employing a much smaller percentage of the American workforce, causing steep declines in real employment earnings per capita. At the same time, knowledge-based services are growing—both in employment and real employment earnings. That basic story clearly holds true in Michigan and Minnesota the past two decades.

Manufacturing employment earnings held up much better in Minnesota than the nation and Michigan. But it still is the only sector in the state that saw a real employment earnings decline.

Clearly the driver of Minnesota's outperformance compared to Michigan (and the country) in real private sector employment earnings per capita came from knowledge-based services. Knowledge-based services account for 72 percent of Minnesota's real private sector employment earnings growth and nearly half (46 percent) the state's per capita income growth from 1990-2011.

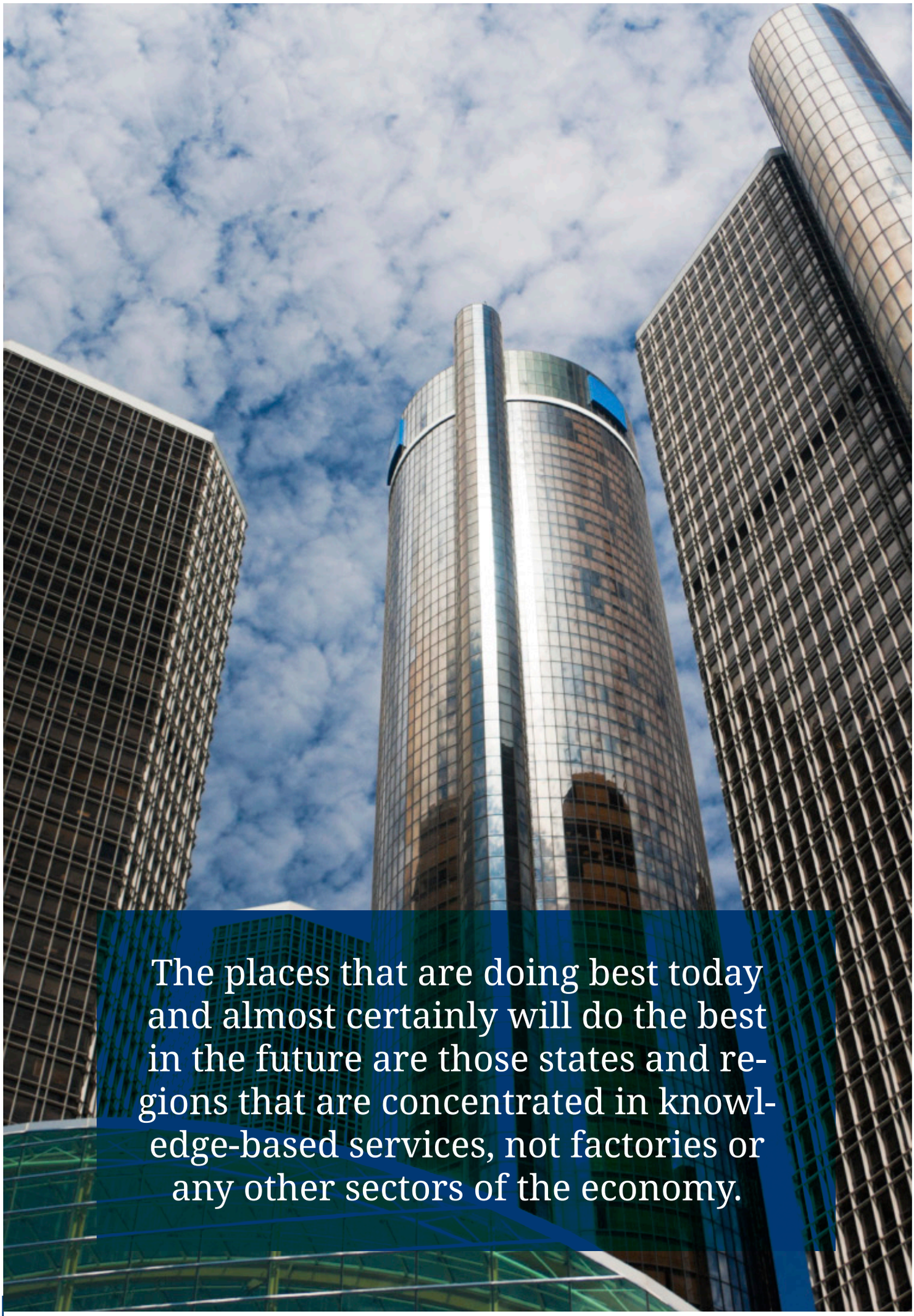
The data are clear: The absolute and relative increase in employment earnings per capita in knowledge-based services is a combination of strong job growth and the fact is this sector is now the high wage sector of the American economy. Knowledge-based services now are the center of mass middle class American jobs.

The lesson Michigan needs to learn is also clear: The places that are doing best today and almost certainly will do the best in the future are those states and regions that are concentrated in knowledge-based services, not factories or any other sectors of the economy. The only exception, as noted before, is those who benefit from high energy prices.

Jobs in manufacturing are experiencing a long-term structural decline that almost certainly is irreversible. The sector no longer is the source of mass middle class jobs—because manufacturing wages and benefits no longer carry the premium they did decades ago compared to the rest of the economy, and because the sector will continue to employ a far smaller proportion of the American economy, despite temporary business cycle-related employment gains.

As work done in factories has declined what has grown are services, both in absolute and relative terms. This is particularly true in what we call knowledge-based services: health care and social assistance; information; finance and insurance; professional services, and management of companies.

It is almost certain that—predominantly because of globalization and technology—the path back to a prosperous Michigan depends on growth in knowledge-based services. Those sectors are now, and are likely to be even more so in the future, the core of realizing the more and better jobs Governor Rick Snyder has rightly identified as the state's economic goal.



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About Michigan Future

Michigan Future's mission is to be a source of new ideas on how Michigan can succeed as a world class community in a knowledge-driven economy. Its work is funded by Michigan foundations.

www.michiganfuture.org

THE NEW PATH TO PROSPERITY:
LESSONS FOR MICHIGAN FROM TWO DECADES OF ECONOMIC CHANGE

Michigan Future, Inc.

P.O. Box 130416
Ann Arbor, MI 48813
Phone: 734.747.8120
www.michiganfuture.org