Michigan has become very familiar with hard times.

A decade ago, in 2001, the United States experienced an economic downturn. Then, while the rest of the nation recovered and prospered, Michigan spent several more years in a one-state recession of its own. That was followed by an even more severe national downturn. Although that recession officially ended in June of 2009, the nation’s recovery has been slow and uncertain. Good times have not yet returned.

After a decade of almost continuous recession, many residents of Michigan have stopped expecting to hear any good economic news about their state. With the national recession over—officially, at least—it was widely expected that Michigan would revert back to its one-state recession.

But that is not what seems to be happening. Instead, we are encountering something that seems very unusual: There is good economic news for Michigan:

- Michigan was tied with Minnesota for the nation’s largest decline in unemployment from 2009 to 2010. As a result of its progress in the past year, Michigan no longer has the nation’s highest rate of unemployment. According to the latest official statistics, four states now have higher rates than Michigan: Nevada, California, Florida, and Rhode Island.

Michigan seems to be doing even better according to statistics from the U.S. Census Bureau’s Current Population Survey, which is the source from which the official unemployment statistics are derived. In the actual survey results, Michigan’s unemployment rate has been only twelfth highest in the nation, on average, over the past five months.

This talk will not go into the reasons for the discrepancy or the reasons why CPS results are sometimes more indicative of current conditions than the official figures. However, regardless whether one looks at the official statistics or the underlying CPS statistics, Michigan has made remarkable progress with respect to unemployment over the past year.

- Michigan had the nation’s sixth largest increase in per-capita personal income from 2009 to 2010. That is Michigan’s best ranking for this statistic since 1994.

- Michigan’s number of jobs per thousand residents has increased since April of 2010. That is the first sustained increase for this statistic in over a decade.

At this point, it is natural to wonder: are these improvements for real? Now that the national recession is officially over, why isn’t Michigan just slipping back into its one-state recession?

The answer, I believe, is that the one-state recession is over.
The one-state recession was often assumed to be some sort of general long-term economic malaise. However, economic statistics indicate that it was actually a particular sort of disruption to job creation that began at a particular point in time and ended at a particular point in time.

It is important to understand what the one-state recession was, when it began, and when it ended. Those are keys to understanding why it occurred, and knowing why it occurred may turn out to be an important key to ensuring that it does not occur again. Understanding this period of Michigan’s economic history can also help us have hope for the future. If the one-state recession really has ended—and the statistics in this talk indicate that it has—then we can have more confidence that the good economic news we are starting to hear is real.

In order to understand this stage of Michigan’s history, it is necessary to understand:
• how Michigan’s economy normally performs;
• how it was different during the one-state recession; and
• how it has changed again in the past few years.

The most helpful information for addressing these questions comes from the U.S. Bureau of Labor Statistics, which produces some very robust datasets that draw upon reports filed by nearly all employers that are covered by the unemployment insurance system. This talk will also include a further look at unemployment statistics from the Current Population Survey, personal income data from the U.S. Bureau of Economic Analysis, and migration data from the U.S. Census Bureau. These datasets provide important confirmation of patterns observed in the employment statistics.

What Was the One-State Recession?

The blue line in Figure 1.1 shows the number of jobs per thousand population for the United States from 1970 through 2010, and the brown line shows comparable data for Michigan. The
two vertical lines in Figure 1 through Figure 7 mark off the period from the beginning of 2003 through the end of 2007.

Based on this chart, the period through 2002 (i.e. to the left of the first vertical line) can be described as a “normal” period for Michigan. The state’s employment rate mirrors the national rate very closely during this period, but in its own characteristic way. All of the major fluctuations in the national rate correspond to major fluctuations in Michigan's rate, but Michigan’s fluctuations are considerably more pronounced. Even minor variations in the national rate correspond to variations in Michigan's rate, such as the brief pause in the recession of the early 1980’s and the two subtle inflection points in the mid-1980’s.

On the negative side, Michigan's employment rate has tended to drop earlier and farther than the national rate during recessions. That is largely because Michigan's economy is closely tied to the auto industry, and auto sales tend to be postponed when hard times are coming or when monetary authorities try to restrain the economy by tightening credit.

On the plus side, Michigan's economy has tended to rebound more strongly than the national economy during recoveries from recessions. Michigan has also tended to start recovering a little bit sooner than the nation as a whole, and its employment rate has usually rebounded to the national level between recessions. Such rebounds occurred after the two recessions of the 1970's and after the recession of the early 1990s.

Michigan’s prosperity in the late 1990’s means that it is not necessary to go back to the glory days of the domestic auto industry to find a time of prosperity in Michigan's history. As recently as the year 2000, Michigan's economy was doing a little better than the national economy in several important respects: its number of jobs per thousand population was a little bit higher; its unemployment rate was a little bit lower; and it was growing a little bit faster.

In summary, "normal" economic performance for Michigan consists of:
- deep recessions when the nation has recessions;
- strong recoveries when the nation has recoveries;
- a tendency to start recessions and recoveries a little bit sooner than the nation as a whole;
- eventual rebounds to the national employment rate.

Michigan's economy did not perform in its usual manner from the end of 2002 through 2006 (i.e. the period between the vertical lines in Figure 1.1). Instead of recovering from the 2001 recession sooner than the rest of the nation, Michigan's employment rate did not fully recover from this recession at all. For the first time, the employment rate dropped in Michigan while it increased for the nation as a whole. This was a one-state recession: no other state failed to share in the nation's prosperity during this decade.

Beginning in 2007, Michigan’s employment rate started to follow the national rate in a more normal manner once again. "Normal" usually feels better than "abnormal," but this time it involved following the nation into a deep recession. Nevertheless, despite the pain that Michigan
experienced, Figure 1.2 shows that the state's performance during this period was actually better than normal in some important respects:

- Michigan's employment rate usually drops much more than the national rate during a recession, but this time it dropped only slightly more than the national rate.
- While the nation had its worst recession since the World War II era, Michigan had just its second worst recession.
- Michigan's peak unemployment rate of 14.1% in September of 2009 fell short of the 16.8% rate that was reached in December of 1982.

That really is quite remarkable in light of the depth of the national recession, the sharp drop in auto sales, the bankruptcies of Chrysler and General Motors, and the fact that Michigan had already spent seven consecutive years in recession before the national recession even started.

Michigan's surprising resiliency during this period is even more evident from the next sets of charts.

Figure 2.1 shows the same data as the previous charts, but in a somewhat different way. Instead of showing separate lines for Michigan and the U.S., this chart shows a single line that represents the size of the gap between Michigan's employment rate and the national employment rate. Points above the dark line in Figure 2.1 represent periods where Michigan had more jobs per thousand population than the U.S. as a whole—a circumstance that has occurred only twice
since 1970. As noted previously, the most recent such period occurred just before the recession of 2001.

Michigan's employment rate has dropped away from the national rate during each recession and it has returned toward the national rate during each recovery. Most observers overlook the fact that Michigan even started to recover from the 2001 recession. The arrow in Figure 2.2 highlights the fact that Michigan seemed to be starting a normal recovery for a few months until it took a rather sudden wrong turn in 2002.

After 2002, Michigan's employment rate dropped relative to the national rate almost as rapidly as it does in a typical recession, even though the rest of the nation was experiencing recovery and prosperity. That is not the way Michigan’s economy normally performs during a national recovery. After over 30 years of following the national employment pattern in its own characteristic way, Michigan suddenly started behaving in a very uncharacteristic way.

The arrows in Figure 2.3 show how much worse Michigan performed than the nation as a whole in each recession since 1970, including the one-state recession. Michigan did fare worse than the rest of the nation in the most recent national downturn, but not by as much as usual. Only the mild recession of the early 1990s involved a smaller decline of employment relative to the rest of the nation.

Another important thing to observe in this chart is that Michigan was about as far from the national employment rate in the twelve month period ending in November of 1982 as it was in the twelve month period ending in September of 2009. The fact that Michigan was able to come back from that deep a predicament in the past provides grounds for encouragement.

An even more important basis for encouragement is that Michigan is starting to come back. Figure 2.4 highlights the fact that the current recovery is starting out just like prior recoveries in terms of reducing the gap between Michigan's employment rate and the national rate. Michigan's economy is moving in the right direction once again.
Figure 3 is based on the Business Employment Dynamics dataset, which was developed just a few years ago by the Census Bureau and the U.S. Bureau of Labor Statistics. The unique thing about this dataset is that it distinguishes jobs lost in companies that close or contract from jobs gained in companies that open or expand. The brown line in this chart shows the national trend for job losses while the blue line shows the national trend for job gains. Each line represents a twelve-month moving total of quarterly data, and the most recent datapoints represent the twelve-month period ending in the second quarter of 2010.

![Figure 3](image)

**Rate of Private Sector Job Gain and Loss per 1000 Population: United States, 1993-2010**
*(based on 12-month moving totals through 2010 Q2)*

Because this dataset goes back only to 1993, the chart does not show the recessions of the 1970s or 1980s. It starts with the final months of recovery from the 1992 recession, where job losses were declining and job gains were strengthening. That was followed by a long period in which losses and gains followed roughly parallel paths, with gains consistently higher than losses.

The nation began to move toward recession in 2000 as job losses began to rise and gains began to fall. The recession itself began at roughly the point where the two lines crossed and job losses started to exceed gains. The decrease in gains during the recession was even larger than the increase in losses.

The recovery began with an improvement in losses during 2002, but gains did not start to move upward until 2003. After that, the nation experienced another period of prosperity for about four years in which gains exceeded losses once again.

Signs of a new convergence started to appear in 2006, and that led to a very deep recession in 2008 and 2009. Gains and losses both got worse and—as was the case in the previous recession—gains deteriorated by an even greater amount than losses.
The first sign of recovery in Figure 3 is a decrease in job losses in the third quarter of 2009. Job gains began to improve about half a year later. For the last datapoint, which represents the twelve months ending in the second quarter of 2010, the level of gains was just slightly below the level of losses. So far, the improvement in gains has been much smaller than the improvement in losses.

The corresponding charts for forty-nine of the states follow the same general patterns:

- Gains and losses tend to run roughly parallel during normal economic times.
- Gains and losses both get worse leading up to a recession.
- The lines cross during a recession, with gains deteriorating even more than losses.
- The lines uncross in a recovery and eventually start running roughly parallel again.

The only state that departs dramatically from the pattern described above is Michigan. Michigan's pattern was not unusual before its one-state recession, but it has been very unusual since 2002.

As can be seen in Figure 4.1, Michigan had very strong improvements in job gain and job loss during its recovery from the 1992 recession. That is normal for Michigan. The recovery was followed by a fairly long period where job gains remained higher than losses.

![Figure 4.1](source)


There is a gray box over some of the datapoints in the late 1990s because of two "administrative events" in the Michigan data. "Administrative event" is a euphemism for “serious data problem,” and these two data problems make it hard to tell exactly what was happening to gains and losses during this period.

The data problems were resolved in time to see the pattern for the eighteen months leading up to the recession of 2001: job losses gradually increased and gains gradually decreased, as was the...
case for the U.S. as a whole. The recession was a little bit earlier and considerably deeper for Michigan, but that is consistent with the state’s normal performance during recessions.

As highlighted in Figure 4.2, this dataset makes it very clear that Michigan started to have a normal strong recovery from the 2001 recession. As is typical for Michigan, its improvements in job losses and job gains were earlier and stronger than those for the nation as a whole.

That was followed by an abrupt departure from the national pattern: job gains stalled in the second half of 2002 (i.e. the two datapoints to the left of the first vertical line), and then they started to decline when they should have kept rising. Michigan's job losses, on the other hand, followed the national pattern quite closely throughout Michigan's one-state recession. There just seemed to be something holding back the number of jobs added by new and expanding businesses. **Michigan's one-state recession was not so much an increase in job losses as a disruption of job gains that started rather abruptly in the middle of 2002.**

The first sign of good news for Michigan came at the beginning of 2007, just as the nation was starting to move toward recession. At this point—just to the right of the second vertical line—job losses started inching downward for Michigan even though they were inching upward for the U.S. as a whole. More notably, job gains roughly held steady in Michigan even though they started falling for the U.S. as a whole. Holding steady while the rest of the nation declines may not sound like a dramatic development, but it is not what Michigan's job gains are expected to do in the months leading up to a recession. After over four years of performing much worse than the nation as a whole, the period just before a recession is a surprising time for Michigan to start doing better than the rest of the country in this respect, even if that means just holding steady.

This positive development was followed by a national recession, a collapse of auto sales, and the bankruptcies of General Motors and Chrysler. This is not where one might expect to see good economic news for Michigan, but there actually were some positive signs in 2008 and 2009. Even though job loss did shoot up for Michigan, as would be expected, and job gains went down, the change in gains was quite a bit smaller than the change in losses. That is notable, since job gains changed more than losses for the nation as a whole. It was also a welcome departure from historical patterns. It seems as if whatever held job gains down from the middle of 2002 to the beginning of 2007 abruptly switched gears and softened the decline of job gains from 2007 to the present.

In the early stages of the recovery, the rate of job gain increased substantially in Michigan while increasing by a much smaller amount for the nation as a whole. For the twelve months ending in the second quarter of 2010—the latest datapoint in the series—Michigan’s private sector job gains exceeded its losses by the largest amount since the twelve months ending in the third quarter of 2000.
The improvement in job gains that began after 2007 will be even more evident when the same data is displayed in a slightly different way. The charts presented up to this point serve primarily as preparation for understanding the next set of charts.

Figure 5.1 displays the difference between Michigan and the U.S. with respect to job gain and job loss. For example, at the peak of Michigan's recession in 2001, this chart shows that the state’s annualized rate of job loss exceeded the national rate by a little more than 5 jobs per thousand population. Its rate of job gain, at that time, was lower than the national rate by about 8 jobs per thousand population. Datapoints that are close to the heavy black line, such as those just before the recession of 2001, indicate that Michigan's corresponding rates are close to the national rates.

This chart shows that Michigan did better than the U.S. as a whole during its recovery from the 1992 recession. After that, Michigan did about the same as the U.S. as a whole for over a year.

The recession of 2001 looks almost the same in this chart as it did in Figure 4.1. That is because job losses not only went up in Michigan, but they went up more than they did in the U.S. as a whole. Figure 4.1 shows how much they went up, and Figure 5.1 shows how much more they went up in Michigan than in the nation as a whole. Likewise, job gains not only went down in Michigan, but they went down more than they did nationwide.

As highlighted in Figure 5.2, these statistics provide additional evidence that Michigan's recovery looked just like it was supposed to look until the second half of 2002. Both trend lines were improving rapidly at that time. If this pattern had continued, Michigan would have started outperforming the nation and making up the ground lost during the recession, just as it normally does.
Michigan's job gains started to weaken in the second half of 2002, however, and then they declined when they should have kept rising. As highlighted in Figure 5.3, job losses actually remained at a fairly normal level relative to the rest of the country. It was just job gains that were seriously out of line, and they kept getting worse and worse relative to the rest of the nation from the beginning of 2003 until the end of 2006. None of the other 49 states has ever had that sort of disparity between job losses and job gains during the entire 17 year period covered by this dataset.

From 2003 through 2006, Michigan's rate of job loss per thousand population averaged only 1.4% percent higher than the national rate. Michigan's rate of job gain, on the other hand, averaged six percent lower than the national rate. In other words, Michigan missed out on about 6 percent of the jobs that should have been added in new and expanding firms. That may not sound like much, but over those four years it added up to about a quarter of a million jobs.

An abrupt transition occurred in 2007 when Michigan's rate of job gain and its rate of job loss both started to improve relative to the U.S. Job gains were not actually increasing at this time, but they were holding steady in Michigan while declining for the nation as a whole. That is shown as an upward sloping line in Figure 5.4 because the gap between Michigan and the U.S. was improving.

In 2008, Michigan started moving toward the Great Recession. Job losses shot up more in Michigan at this time than in the rest of the U.S. That should not be surprising, since that is what happened in the previous recession and probably in all of the other recessions since the establishment of the auto industry.

If this recession had been like the prior recession, job gains would have decreased more in Michigan than in the nation as a whole, as approximated by the V-shaped overlay on Figure 5.5. But that is not what happened this time. Instead, Michigan's rate
of job gain actually moved closer to the national rate during this recession, and then shot upward relative to the rest of the nation once the recovery started. For the last two datapoints in this chart, Michigan's rate of job gain actually exceeded that of the U.S. as a whole.

Thus, as highlighted in Figure 5.6, Michigan’s one-state recession began abruptly around the middle of 2002. Its rate of job gain stalled at that point and then started to decline relative to the rest of the nation. Another abrupt shift took place around the beginning of 2007 whereby Michigan’s rate of job gain started to improve relative to the U.S. as a whole.

The preceding charts indicate very clearly that the one-state recession was not just some sort of long-term general economic malaise. Rather, it was a disruption of job gain in new and expanding companies that started abruptly at a particular point in time and ended abruptly at a particular point in time. Moreover, the turning point for the better did not just occur in the past few months when the news media started reporting positive economic news for Michigan. The turning point actually occurred around the beginning of 2007. If the latest national recession had not coincided with Michigan’s recovery from its one-state recession, it probably would have been Michigan’s worst recession since the Great Depression instead of just its second worst recession.

These facts about the one-state recession can be confirmed from other independent datasets. For example, Figure 6 shows the number of unemployed people in Michigan as a percentage of the number of unemployed people nationwide. This chart is based on the Census Bureau’s Current Population Survey, which is totally independent of the datasets from which the previous charts were derived. The thin dark line shows Michigan’s percentage of the nation’s population, and the thick brown line shows Michigan’s percentage of the nation’s unemployment.

Michigan had a little less than its share of the nation’s unemployment before the recession of 2001, but, as would be expected, it had a little more than its share during the recession itself. Clear signs of Michigan’s brief recovery from the 2001 recession are visible just to the left of the first vertical line.

This chart also confirms the abrupt beginning and end of the one-state recession. Michigan’s share of the nation’s unemployment increased dramatically from 2003 through 2006, but it
generally decreased after 2007 despite a very deep national recession. This confirms the patterns revealed in previous charts. The major difference is that turning points in the unemployment statistics occur about six months later than the turning points in the Business Employment Dynamics data.

Figure 7 shows real per-capita personal income in Michigan and the United States. Michigan followed the national pattern very closely before its one-state recession (i.e. to the left of the first vertical line), but it diverged dramatically from the national pattern from 2003 through 2006. Since about 2007, however, Michigan has followed the national pattern again. This provides further confirmation of findings from the employment data.

Finally, Figure 8 shows Michigan’s rates of in-migration and out-migration for college graduates. The orange line indicates Michigan’s rate of migration out to other states and the blue line indicates the rate of migration from other states into Michigan.

This chart is based on the Census Bureau’s American Community Survey, and it confirms a different aspect of the one-state recession. It has frequently been observed that Michigan’s migration problem over the past decade has primarily been a matter of low in-migration rather than high out-migration. For the past few years, Michigan’s rate of out-migration to other states has been about the same as in the early years of the decade. Throughout the decade, Michigan’s rate of out-migration has actually been better than the national average. Michigan’s big problem with respect to migration has been a very low number of people moving in from other states. Ever since the one-state recession began, Michigan’s rate of in-migration from other states has been among the worst in the nation.

That is consistent with the employment patterns in previous charts. During the one-state recession, Michigan’s rate of job loss in companies that closed or contracted was not much worse than the national rate. That helps explain why Michigan’s rate of out-migration stayed at a fairly normal level. Michigan’s employment problem was primarily a low rate of job gain in new and expanding companies. In other words, there were not a lot of workers being transferred in from other states or recruited from other states. That translates into a very low rate of domestic in-migration while out-migration rates remained better than the national norm. Once again, the job data is very consistent with data from other independent sources.
Toward an Explanation for the One-State Recession

The purpose of this talk has been to increase understanding of what the one-state recession was, when it started, and when it ended. That understanding should increase hope for Michigan’s future. Without knowledge that the one-state recession is over, the good economic news of the past few months could seem like a statistical fluke that somehow came out of nowhere. With that knowledge, however, these developments can be seen as the culmination of a shift in trends that occurred about four years ago in 2007.

This understanding also points toward a very important question: Why did the one-state recession occur? What can possibly explain a disruption of job gains that began suddenly around the middle of 2002 and then ended almost as suddenly around the beginning of 2007?

It is not the purpose of this talk to propose my explanation for the one-state recession. Instead, I invite other economists to examine the data that I have presented and to consider what sort of explanation would be consistent with that data.

There are plenty of explanations for the one-state recession already. The problem with most of those explanations is that they are not very consistent with the data that you have heard today. Conventional explanations for Michigan’s economic problems include:

1. The domestic auto industry has lost market share and decreased the number of labor hours per vehicle.
2. Much of the economic activity that used to take place in the U.S. is now taking place overseas.
3. Economic paradigms that served Michigan well in the past may need to be refined or replaced.
4. The level and structure of business taxes have provided disincentives to invest in Michigan.
5. Michigan is not always perceived as offering the quality of life that individuals and businesses are looking for.

Each of these observations is valid and each of these factors has played a part in limiting Michigan's prosperity. But one thing that these explanations have in common is that they all suggest a long-standing and long-lasting decline for Michigan's economy. Every one of these factors has already been in operation for decades, so we can expect any problems they explain to be long-standing problems. Moreover, because these factors persisted throughout the period for which data are available, we can expect any problems they explain to persist throughout that period. These factors can explain those aspects of Michigan's economic situation that have developed gradually over several decades, but they cannot explain a disruption of Michigan's rate of job gain that began abruptly in the middle of 2002 and then ended almost as abruptly at the beginning of 2007.

There are at least four critical aspects of the data that need to be addressed by a satisfactory explanation for the one-state recession.
First, there needs to be an explanation for the abrupt beginning of the one-state recession around the middle of 2002. That was when Michigan made a very abrupt transition from recovery to recession.

Second, it is necessary to explain why there was a disruption of job gain in new and expanding businesses without a corresponding change in job losses for businesses that closed or contracted. Michigan is the only state with this sort of sustained inconsistency between job gains and job losses.

Third, there needs to be an explanation for the abrupt end of the one-state recession in 2007. That is when the disruption of job gains ended almost as abruptly as it began.

Finally, an explanation for the one-state recession needs to account for the apparent normalcy of Michigan’s current economic recovery.

Regardless of what explanation eventually gains acceptance, the data presented today should dispel any remaining doubt that the one-state recession is over, that Michigan’s economic recovery IS for real, and that there is hope for Michigan’s economic future.