WHEN RECESSIONS LINGER

What we can learn from other states' downturns and recoveries

By DAN ROBINSON

A laska has been losing jobs for roughly a year and a half, precipitated by a drop in oil prices and a host of downstream effects. Job losses are already the worst since Alaska's deep recession of the late 1980s, and show no signs of ending soon.

The state has had three distinct recessions since 1961, with the longest period of job loss a little more than two years. Over that same period, the U.S. sustained six recessions, all of them lasting less than two years. (See the February 2016 issue of *Alaska Economic Trends* for more information on U.S. and Alaska recessions and how they're defined.)

With only that information, a casual observer might conclude recessions don't last much longer than two years and that the state will probably resume adding jobs in the next year or so. But Alaska is a young state with limited experience in the types of recessions that are considered a normal part of the business cycle of expansion, contraction, and recovery.

The U.S. economy is much more diverse than most states' economies and can weather shocks better and recover faster, making it a less useful guide on the likely duration of a state recession. Looking at other states' experiences may be more telling.

There have been 259 state recessions since 1961, defined here as at least nine consecutive months of job loss. What can they teach us?

Expansion is the default mode for state economies

It's much more common for states to be adding jobs than losing them. States added jobs 82 percent of the time between 1961 and 2016.

The Exxon Valdez spill didn't bring Alaska out of the 1980s recession

One of the enduring myths about Alaska's deep and painful 1980s recession is that it took the Exxon Valdez oil spill and the estimated \$2 billion spent on cleanup to bring the state out of its quagmire.

But the March 1989 spill came about a year after Alaska's job growth had already resumed. A month before the spill, the state's employment was growing by a robust 4.1 percent and job counts had been up by 2 to 3 percent since the summer of 1988.

The cleanup clearly stimulated the state's economy, as

job growth rose as high as 8 percent that summer when cleanup would have been at its most urgent and intense, but growth returned quickly to pre-spill levels in 1990.

It's important to understand that the spill didn't pull the state out of its recession because believing something big needs to happen to spur an economic recovery can be counterproductive if it shifts focus from the basic tasks that serve an economy well over the long term, including public safety; well-maintained roads, airports, docks, and other infrastructure; good schools, and other strong public institutions that make a state a place where people want to live.

1961 то 2016 95% Alaska 90% 89.1% U.S. avg 85% 82.1% 80% 75% 70% 65% 60% 55% 50% Ohio New York Illinois Louisiana Maine New Jersey Iowa Oregon Delaware Hampshire Kentucky Minnesota **U.S.Average** Maryland North Dakota Idaho Virginia Colorado Missouri Rhode Island Pennsylvania Indiana Alabama California Tennessee Arkansas Mexico Texas Hawaii Florida Alaska Arizona Nevada West Virginia **Aassachusetts** Visconsin Kansas Oklahoma **Vorth Carolina** Georgia South Carolina Washington Montana Dakota Connecticut Mississippi Wyoming Nebraska Utah Michigan Vermont South I New I

Percentage of Time States Were Adding Jobs

Source: U.S. Department of Labor, Bureau of Labor Statistics

At the high end, Nevada and Arizona added jobs 90 percent of that time, and Alaska was next-highest at 89 percent. At the low end, Michigan's employment grew 67 percent of the time and West Virginia was secondlowest at 72 percent. (See Exhibit 1.)

When a state isn't growing, that's

almost always attributable to a specific economic weakness or shock. Alaska and other states losing jobs right now, for example, are all heavily dependent on oil and gas and have been hit hard by a drop in oil prices. States that suffered most from 2007 to 2009 were those most afflicted by risky subprime mortgage lending and overheated housing markets (Nevada, Florida, and Arizona).

What lifts a state out of a recession, however, is seldom a specific event or development. (See the sidebar on the previous page on how the Exxon Valdez oil spill is often mistakenly credited for bringing Alaska out of its mid-'80s recession.) Rather, economies typically absorb the precipitating shock over a period of time and then resume growing.

Most last less than two years

Most state recessions tend not to linger because: 1) the

Unless there's a specific reason for a state's economy not to grow, it grows. precipitating economic shock hits just a few industries while others continue to grow, or 2) the shock is not large enough or the affected industries central enough to spread throughout the economy or cause a broad crisis of confidence.

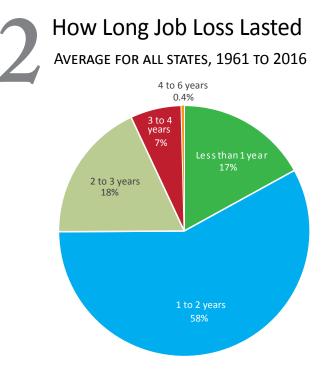
Out of the 259 state recessions, job

loss lasted two years or less 75 percent of the time, and the most common duration was one to two years. (See Exhibit 2.)

Alaska's 2009 recession, which lasted less than a year, is an example of this type of recession. Alaskans sustained significant losses in retirement and other stock market-based accounts, and weakened national and international economies hurt the state's tourism industry, but it was a mild and short recession for the state because high oil prices and a stable housing market partially compensated for the losses.

Washington's dot-com bubble burst

Another example of a short-lived recession is that of neighboring Washington during the "dot-com bubble" national recession in the early 2000s. Like most states, Washington's economy shed manufacturing and other jobs when the bubble popped, but after about a year and a half, its economy had absorbed the shock and



Source: U.S. Department of Labor, Bureau of Labor Statistics

resumed adding jobs.

Many states had similarly short-term losses during the early 1990s national recession, when about one in three savings and loan associations failed, hurting the banking industry, stock markets, and ultimately federal taxpayers.

One-fourth lasted two to four years

About a fourth of state recessions lasted more than two years but less than four. That may not sound like a long time unless you're in the middle of it and don't know when it will end. For example, if Alaska were to lose jobs for four years, we'd now be less than halfway through the current downturn and wouldn't resume adding jobs until late 2019.

Examples of this type of recession include Oregon in the early 1980s, Connecticut in the late 1980s and early 1990s, and Florida during the most recent national recession, known as the Great Recession.

Oregon's timber jobs nearly disappeared

Oregon shed jobs steadily for three-plus years in the early 1980s, eventually losing more than 100,000 jobs, or 10 percent of its pre-recession total. This wasn't due to an especially vicious business cycle but rather to the near-disappearance of Oregon's timber and wood products industry, which had long been one of its biggest economic drivers. Lumber and wood prodMost recessions haven't lingered because the shock was limited to a few industries or wasn't large enough to spread through the larger economy or cause a crisis of confidence.

ucts fell from a high of nearly 13 percent of Oregon's GDP to less than 2 percent.

In Alaska, Sitka and Ketchikan experienced something similar when their pulp mills closed in 1993 and 1997 respectively, hurting Southeast's economy for years and, to a lesser degree, the state's economy.

In Oregon, mills closed and the unemployment rate soared, especially in coastal towns. Job losses rippled through the housing and retail markets. Ultimately, the Pacific Northwest lumber industry shed nearly 50,000 jobs, most never to return.

Connecticut manufacturing took similar hit

Connecticut sustained three-plus years of similar loss from the late 1980s to the early 1990s. A University of Connecticut economist described the reasons in a *Hartford Courant* article: "We were old-line manufacturing, old-line financial services, and old-line defense, and all three of them went south at the same time."

Connecticut's financial services eventually rebounded strongly, but "old-line manufacturing," characterized largely by its high-wage and labor-intensive jobs, were mostly gone for good.

Florida's real estate bubble was huge

Florida is a final example of the quarter of all state recessions characterized by two to four years of loss. Florida surrendered nearly 900,000 jobs from its 2007 high of 8.1 million, or 11 percent of its pre-recession total, over three years.

Unlike Oregon and Connecticut, which both lost historically important industry sectors for good, Florida followed a story line that's typical when an unusually large economic bubble pops — a "bubble" being when prices for something rise well above its intrinsic value, usually the result of speculative bidding-up of prices.

From a high of 690,000 construction jobs in 2006, Florida shed more than half of that amount over the next several years, finally bottoming out at about 330,000 construction jobs in 2011.

While the problems with subprime mortgage lend-

ing, speculative buying, and a flawed financial sector cost Florida hundreds of thousands of jobs when the bubble popped and staggered the broad economy, the underlying need for more residential and commercial construction didn't go away. Though still well below pre-recession highs, Florida has added about 170,000 construction jobs over the last few years and growth rates are once again strong.

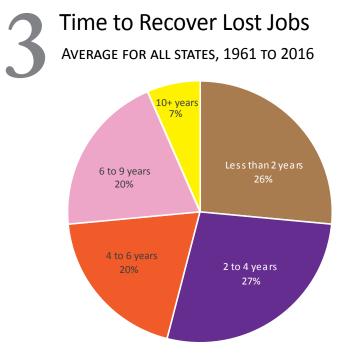
... And then there's Michigan

The granddaddy of all state recessions was Michigan, which lost more than 800,000 jobs from 2000 to 2010 — an astonishing 17 percent of its total. (For comparison, Alaska has lost less than 3 percent of its prerecession job count so far.)

As with Connecticut and Oregon, the term "recession" in Michigan's case is misleading if it suggests temporary losses resulting from an overheated segment of the economy, followed by a market correction and resumed growth. Rather, what Michigan sustained was an economic-level shift.

Michigan lost nearly 900,000 manufacturing jobs from 2000 to 2009 and was the state hardest hit by the national and international forces that cost the nation more than 5 million manufacturing jobs over that period.

In the years since, manufacturing jobs have rebounded only modestly despite strong resumed growth in manufacturing output. Although it's inaccurate to say the United States and Michigan in particular "don't make anything anymore," it is fair to say that what we make



Source: U.S. Department of Labor, Bureau of Labor Statistics

requires a lot fewer jobs than it once did, largely due to automation.

How long to recover lost ground?

The duration of job loss is particularly relevant (see the sidebar on the next page on the hard-to-measure costs of uncertainty), but another way to measure the

Alaska's economy differs from all other states in a number of key ways

No analogy or historical comparison is a perfect fit — in the words of one sage, "History doesn't repeat itself, but it rhymes" — so it's worth keeping in mind the differences between Alaska's economy and other states as we try to extract historical lessons from their recessions.

First, no other state depends so heavily on "natural resources and mining," a category that is mostly oil in Alaska. In 2014, 30 percent of Alaska's GDP — the value of all our goods and services — came from natural resources and mining. That percentage would have been noticeably higher when oil prices were at their peak.

Wyoming and North Dakota came closest at 29 and 24 percent respectively in 2014, but other oil-rich states such as Texas (15 percent) and Louisiana (9 percent) depend on natural resources and mining far less than Alaska. At the opposite extreme, states like New York, New Jersey, Massachusetts, and Maryland have less than half a percentage point of their GDP attributable to natural resources and mining.

Alaska's dependence on natural resources rises to a new level when funding for state government is considered. In 2013, before oil prices fell, 78 percent of Alaska's total tax revenue came from "severance taxes," a category that comprises most of Alaska's oil taxes. By comparison, severance taxes made up just 2 percent of tax revenue for all states combined.

Where Alaska has relied mostly on oil taxes to pay for state government since abolishing its individual income tax in 1980, the 49 other states rely mainly on individual income taxes, general sales taxes, or both. In the most recent year available, 73 percent of states' tax revenue came from a combination of income and sales taxes. Alaska is the only state doesn't have either one, and it's also the only state that distributes money to residents simply for being residents.

Finally, Alaska's Permanent Fund is a far larger rainy day account relative to the size of our economy than any other state's savings.

length and severity of a state recession is how long it took to fully recover the lost jobs.

About one-quarter of the time, states regained their lost jobs in less than two years. (See Exhibit 3.) Alaska's 2009 recession fit that category, as the state recovered all its losses in less than a year and a half.

Another quarter of state recessions needed two to four years for full recovery and an additional fifth took four to six years. Alaska's other two recessions fell into the latter category. After the massive job losses that followed completion of the Trans-Alaska Pipeline System, it took the state four and a half years to surpass its peak 1976 employment level. And after the deep recession of the 1980s, it took a little over four years to fully recover.

A fifth of all state recoveries took from six to nine years. Examples include the early-1980s Oregon recession and Florida's recent housing/financial sector meltdown discussed previously.

Seven percent of recoveries take more than 10 years. Not surprisingly, Michigan is an example. Michigan is still well below its 2001 peak of 4.7 million jobs more than 15 years later, despite steady growth for the last six years.

Wyoming recovery took 16 years

Another example of a lengthy recovery is Wyoming, which took 16 years to reach a new employment high after being hit hard by an oil bust in the 1980s.

Incidentally, Wyoming is more than eight years into another recovery period after the most recent national recession, as it hasn't yet recovered its 2009 employment peak.

Alaskans are familiar with oil's downturn, which also

hit Wyoming's economy — but coal mining jobs in Wyoming have also taken a hit, falling to 10-year lows. After only partially recovering from job losses during the Great Recession, Wyoming is again losing overall jobs due to a combination of oil and gas losses and the ongoing coal decline.

Mississippi's curious long-term slump

Mississippi represents another type of recovery that extended beyond 10 years, as the state remains below its 2000 employment level more than 16 years later. Mississippi was hit hard by long-term declines in agriculture jobs and big losses in manufacturing

The importance of confidence and stability to an economy

Though hard to quantify, one characteristic of recessions is they shake the confidence of economic decision-makers and make them reluctant to invest and spend. People unsure about their job security are less likely to buy a house or make other large purchases, and businesses unsure about their state's economic future are less likely to expand and hire more workers, which can create a downward spiral.

Normally, confidence in an economy is restored as it becomes clear the economic shock from whatever source has been absorbed. For example, it will be encouraging in Alaska's current recession when oil and gas jobs stop falling and the related industries stabilize or resume growing.

But this recession is unusual in that the initial shock created the near-certainty of a secondary shock. Alaskans will have to absorb another economic deduction in the form of new taxes or more state government job and spending cuts, and until we know how that will play out, individuals and businesses may be more likely to put financial decisions on hold.

between 2000 and 2016.

Some recessions result from an over-

heated segment of the economy and

are followed by a market correction.

Others are an economic-level shift.

Mississippi, which hit a manufacturing employment high of about 225,000 in 2000, lost more than 90,000 of those jobs over the decade that followed and has only regained about 7,000 in the six years since.

> Mississippi's job growth has been steady since about 2010, though, as the state is transitioning to a less manufacturingdependent economy. Noticeable gains have come primarily from health care, professional and business services, and the

leisure and hospitality sectors.

Mississippi's struggles raise a question we can't answer here, though, which is why its nearest neighbors fared considerably better despite also suffering major manufacturing losses.

Alabama's manufacturing jobs dipped from 350,000 to below 250,000 over the same period, but its overall 2016 job counts were well above 2000 levels. Arkansas also lost nearly 90,000 manufacturing jobs, but its total employment was up by 80,000 from 2000 to 2016.

Tennessee manufacturing dropped from above 500,000 jobs in 2000 to below 300,000 in 2010 before

recovering about 50,000 of those lost jobs over the next six years. Despite the net loss of 150,000 manufacturing jobs, Tennessee's total job count rose from 2.7 million in 2000 to 3 million in 2016.

The takeaways for Alaska

The point of looking at other states' recessions and Alaska's previous experiences is not to chart our current recession's course or predict its specific end. Similar to economic models, which are simplifications of the real world and best used as broad guides, comparisons like these are useful mainly for the patterns they reveal.

One important takeaway from comparing states' recessions is that economies are less fragile than many people think. Unless there's a specific reason for a state's economy not to grow, it grows. But economies are also more complicated than many people think, and the most knowledgeable and credible economists typically answer questions about the future with "it depends."

With that caveat, one modest conclusion is that periods of job loss don't tend to linger beyond a few years unless the state is undergoing a structural change: the timber industry shrinking for good in Oregon, for example, or manufacturing jobs drying up in Michigan.

The next logical question might be whether Alaska is in the midst of a structural change or simply absorbing the shock from a temporary downturn in oil prices and related activity.

Oil and gas likely isn't on its way out as one of the pillars of the state's economy, although it will prob-

ably play a diminished role. The Alaska Department of Revenue forecasts oil production will fall from about 500,000 barrels a day in 2017 to 340,000 in 2026, but total unrestricted petroleum revenue will rise from about \$970 million in 2017 to an unadjusted value of \$1.6 billion in 2026 (well below 2008's high of nearly \$10 billion).

The U.S. Energy Information Administration anticipates world demand for oil to rise moderately over the next 25 years, and large discoveries have been announced recently in Alaska. Much could change over that period, as it has in just the last 10 years, but Alaska's oil industry doesn't appear to be on the same path as Oregon's timber industry in the 1980s or Michigan's manufacturing industry in the 2000s.

One structural change that appears necessary, though, is the way we fund state government. The days of relying mostly on oil-related revenue to pay the state's bills are likely gone. The options going forward include some combination of using investment earnings from the state's Permanent Fund, continuing to reduce the size of state government, implementing new taxes, or reducing the size of Permanent Fund Dividends.

Each option has its own set of pros and cons, but the more important point is that the state's economy must absorb a permanent change over the next few years. All other things being equal — and of course, they never are — that means our current recession could linger for a while.

Dan Robinson is an economist for the Department of Labor and Workforce Development in Juneau. Reach him at (907) 465-6040 or dan.robinson@alaska.gov.