

Idaho Economic Forecast

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DIVISION OF FINANCIAL MANAGEMENT
Executive Office of the Governor

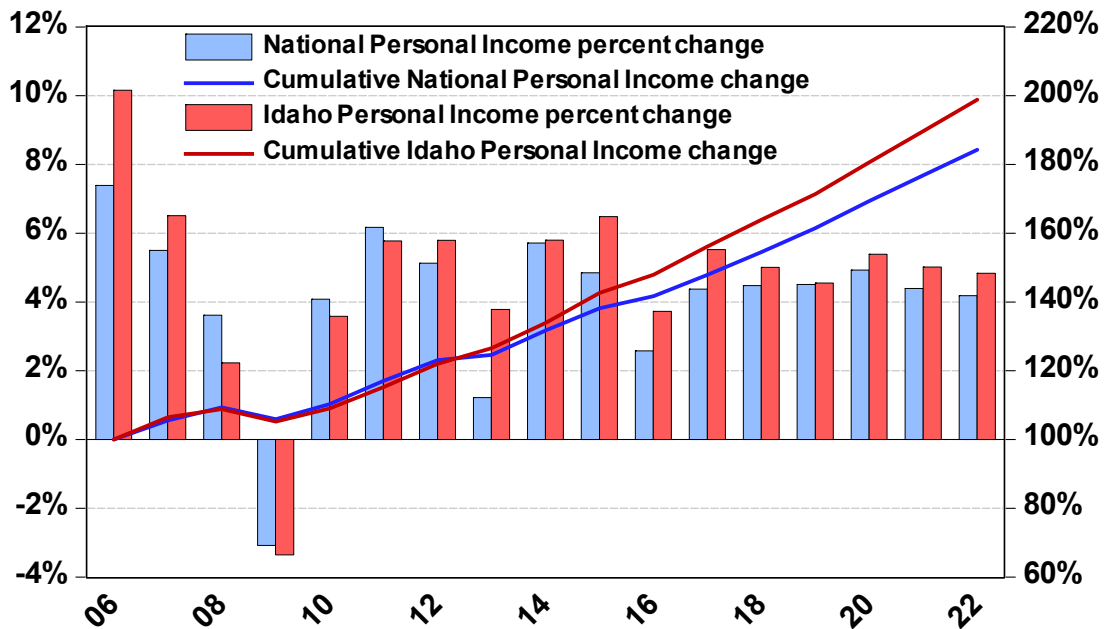
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- Forecast 2018–2022
- The Slope of the Yield Curve and the Near-Term Outlook
- Alternative Forecasts

Personal Income Growth



**IDAHO
ECONOMIC
FORECAST
2018–2022**

State of Idaho
BRAD LITTLE
Governor

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INTRODUCTION

The national forecast presented in this publication is the November 2018 IHS Markit (IHS) baseline forecast of the US economy. The previous *Idaho Economic Forecast* was based on the October 2018 IHS baseline national forecast.

COVER

Per tradition, the January *Idaho Economic Forecast* shows personal income growth on the cover. This metric is a gauge for overall economic change in the state, and it also is a good indicator for general fund revenue for the state. This economic forecast shows personal income in the state has recently grown more quickly than its national counterpart. This is partly due to increased migration into Idaho, but it is also partly due to a robust local jobs market. Through 2022, Idaho is expected to see slightly stronger personal income growth than at the national level. Both sets of figures represent projections for stable economic growth.

FEATURE

The bond market is in many ways more influential than the stock market, but learning from the bond market can be difficult. A few phrases often dominate discussions surrounding it. One of those is inversion of the yield curve. The curve in question is a plot of bond yields at various maturities, with yields typically on the vertical axis and bond duration demarcating the horizontal axis. Most often this curve slopes up to the right. An inversion occurs when some part of this curve begins to slope down to the right. This is notable because it represents a situation in which a short-term investment is guaranteed a greater return than a long-term investment. History has shown that inversions are common precursors to recessions. In “The Slope of the Yield Curve and the Near-Term Outlook”, Jens H.E. Christensen of the Federal Reserve Bank of San Francisco examines what an inversion might mean for today’s economy. While the bond market is influential within the economy, it does not encapsulate every important metric. Christensen’s discussion is all the more salient as there has been a slight inversion of the yield curve between the two-, three-, and five-year treasury securities this December.

FORECAST

Alternative assumptions concerning future movements of key economic variables can lead to major variations in national and/or regional outlooks. IHS examines the effects of different economic scenarios, including the potential impacts of global economic conditions, higher inflation, and future Federal Reserve Board decisions. Alternative Idaho economic forecasts were developed under different policy and growth scenarios at the national level. Three of these forecasts are included in this report.

Historical and forecast data for Idaho and the United States are presented in the tables in the middle section of this report. Details are provided for every year from 2005 through 2022 and for every quarter from 2016 through 2021. The solution of the Idaho Economic Model (IEM) for this forecast begins with the third quarter of 2018.

CHANGES

The Idaho Department of Labor provides monthly historical employment data that are seasonally adjusted and converted to quarterly frequencies by the Idaho Division of Financial Management. The historical data

through the fourth quarter of 2017 have been benchmarked by the Department of Labor, but the data set also contains nonfarm employment estimates through the second quarter of 2018.

Personal income estimates in this report were released by the US Bureau of Economic Analysis (BEA) on September 25, 2018. It includes the BEA's revisions for the past *decade*. These were the most current data available. The Idaho personal income figures for third quarter of 2018 were released on December 20, 2018, which was too late for this *Idaho Economic Forecast* publication.

Descriptions of IHS's US Macroeconomic Model and the IEM are provided in the appendix. Equations of the IEM and variable definitions are listed in the last pages of this publication.

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EXECUTIVE SUMMARY

Recent growth of Idaho's economy has been steady and substantial, certainly aided by recent trends. Idaho consumers have benefitted from stable prices, and this is true nationally as well. Inflation has been subdued broadly. Deflationary pressures have been largely confined to food prices, primarily at the grocery store. Inflationary pressures have recently grown within real estate, which could be worrying if they persist. Consumer Price Index (CPI) inflation has run slightly above, but close to the Federal Reserve's inflationary target of 2% per year.

Population growth is an expansionary force for the Idaho economy. Estimates from the US Census Bureau placed Idaho as the fastest growing state by population in 2017, and just barely second in 2018. These estimates rest upon IRS and Medicare/Medicaid data, and from them, Idaho's growth has been above 2% in those two years. The nation, too, has a growing population. The most recent estimate is for 0.6% population growth at the national level. Population growth sustains needs for new goods and services, the trade of which keeps the economy humming.

Idaho's population growth rate is above the national rate, as well as Idaho's own natural rate of population increase due to births minus deaths. People are migrating to the state. The strong local jobs market is a large part of the story. Diversity of employment within the state is an advantage in this. Plant, mill, or factory closures can dramatically adversely affect a locale. Idaho has been relatively free of these in the past few years. Two notable exceptions involve a strike at Hecla's Lucky Friday mine, and the recently announced impending closure of the Advanced Mixed Waste Treatment Project at the Idaho National Laboratory. However, in many instances, when a retailer closes, another Idaho business finds an opportunity to expand. Some Sears closures have been opportunities for local U-Haul affiliates. When a dairy automates, local food processing plants have another opportunity to find employees.

This report is based upon IHS Markit's (IHS) November *US Economic Outlook*. It projects that price stability will persist, and US population growth will continue. However, two other recent assists for the economy should wane. The fiscal stimulus provided by the tax reform of 2017 and the budget act of 2018 are expected to continue to add to GDP growth for the first half of 2019, but to have very small effect thereafter. Monetary stimulus from lower interest rates is beginning to fade. Interest rates have risen from nearly zero for a decade to above two and one-quarter percent, with the rise becoming persistent in late 2016. Effects from interest rate hikes tend to be felt a year or two after the fact.

Unemployment is low across the nation at 3.7%, and particularly low within Idaho at 2.6%. IHS sees national unemployment dipping to 3.4% in 2019–2020, but no further decline. Low unemployment across the nation may keep workers near their current homes. The distribution of ages in the workforce will alter the employment market. Retirement of the baby-boomers will accelerate. Job gains will slow. Nationally, payrolls will decelerate from the 1.6% growth in 2018 to 1.5% in 2019, then to 1.1% in 2020, and dramatically to 0.6% to 0.4% across 2021 to 2022. Idaho nonfarm jobs growth decelerates from 3.1% in both 2017 and 2018 to 1.9–2.2% across the forecast horizon, 2019–2022.

US housing starts regained 1 million units going into 2015, surpassed 1.2 million units entering 2017, and are expected to crest 1.4 million units by 2020. Idaho housing starts surpassed 10,000 in 2015, then achieved 14,000 in 2017, and should cross 16,700 by 2020.

Personal income growth for the nation and Idaho is projected at 4.5% in 2019, then the nation remains under 5.0% according to IHS, but Idaho is projected at or above that pace for the next two years.

IDAHO ECONOMIC FORECAST
EXECUTIVE SUMMARY
JANUARY 2019

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U.S. GDP (BILLIONS)											
Current \$	16,197	16,785	17,522	18,219	18,707	19,485	20,504	21,555	22,537	23,472	24,420
% Ch	4.2%	3.6%	4.4%	4.0%	2.7%	4.2%	5.2%	5.1%	4.6%	4.1%	4.0%
2009 Chain-Weighted	16,197	16,495	16,900	17,387	17,659	18,051	18,575	19,082	19,480	19,789	20,086
% Ch	2.2%	1.8%	2.5%	2.9%	1.6%	2.2%	2.9%	2.7%	2.1%	1.6%	1.5%
PERSONAL INCOME - CURR \$											
Idaho (Millions)	56,112	58,236	61,616	65,611	68,055	71,813	75,409	78,838	83,086	87,258	91,479
% Ch	5.8%	3.8%	5.8%	6.5%	3.7%	5.5%	5.0%	4.5%	5.4%	5.0%	4.8%
Idaho Nonfarm (Millions)	54,107	55,951	59,244	63,385	66,110	69,836	73,667	77,039	81,122	85,152	89,273
% Ch	6.0%	3.4%	5.9%	7.0%	4.3%	5.6%	5.5%	4.6%	5.3%	5.0%	4.8%
U.S. (Billions)	14,010	14,181	14,992	15,720	16,125	16,831	17,585	18,378	19,284	20,131	20,974
% Ch	5.1%	1.2%	5.7%	4.9%	2.6%	4.4%	4.5%	4.5%	4.9%	4.4%	4.2%
PERSONAL INCOME - 2009 \$											
Idaho (Millions)	56,108	57,461	59,896	63,620	65,288	67,698	69,630	71,178	73,572	75,662	77,637
% Ch	3.8%	2.4%	4.2%	6.2%	2.6%	3.7%	2.9%	2.2%	3.4%	2.8%	2.6%
Idaho Nonfarm (Millions)	54,103	55,206	57,590	61,462	63,422	65,833	68,022	69,554	71,833	73,837	75,764
% Ch	4.0%	2.0%	4.3%	6.7%	3.2%	3.8%	3.3%	2.3%	3.3%	2.8%	2.6%
U.S. (Billions)	14,009	13,992	14,573	15,243	15,470	15,867	16,237	16,592	17,076	17,456	17,800
% Ch	3.2%	-0.1%	4.2%	4.6%	1.5%	2.6%	2.3%	2.2%	2.9%	2.2%	2.0%
HOUSING STARTS											
Idaho	7,124	9,056	9,812	10,276	12,415	14,068	15,838	15,634	16,701	17,737	18,396
% Ch	56.2%	27.1%	8.3%	4.7%	20.8%	13.3%	12.6%	-1.3%	6.8%	6.2%	3.7%
U.S. (Millions)	0.784	0.928	0.999	1.107	1.177	1.208	1.263	1.318	1.424	1.435	1.437
% Ch	28.1%	18.4%	7.7%	10.7%	6.4%	2.6%	4.6%	4.3%	8.0%	0.8%	0.1%
TOTAL NONFARM EMPLOYMENT											
Idaho	621,234	637,023	653,285	671,389	693,900	715,176	737,511	751,275	767,981	784,296	799,825
% Ch	1.9%	2.5%	2.6%	2.8%	3.4%	3.1%	3.1%	1.9%	2.2%	2.1%	2.0%
U.S. (Thousands)	134,172	136,369	138,937	141,819	144,349	146,624	149,011	151,292	152,990	153,849	154,516
% Ch	1.7%	1.6%	1.9%	2.1%	1.8%	1.6%	1.6%	1.5%	1.1%	0.6%	0.4%
SELECTED INTEREST RATES											
Federal Funds	0.1%	0.1%	0.1%	0.1%	0.4%	1.0%	1.8%	2.8%	3.4%	3.4%	3.4%
Bank Prime	3.3%	3.3%	3.3%	3.3%	3.5%	4.1%	4.9%	5.9%	6.4%	6.5%	6.5%
Existing Home Mortgage	3.8%	4.0%	4.3%	4.0%	3.9%	4.2%	4.7%	5.2%	5.3%	5.3%	5.3%
INFLATION											
GDP Price Deflator	1.9%	1.8%	1.9%	1.0%	1.1%	1.9%	2.2%	2.4%	2.4%	2.5%	2.5%
Personal Cons Deflator	1.9%	1.3%	1.5%	0.3%	1.1%	1.8%	2.1%	2.3%	2.0%	2.1%	2.2%
Consumer Price Index	2.1%	1.5%	1.6%	0.1%	1.3%	2.1%	2.5%	2.5%	1.9%	2.2%	2.3%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

IDAHO ECONOMIC FORECAST
EXECUTIVE SUMMARY
JANUARY 2019

	2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
U.S. GDP (BILLIONS)												
Current \$	20,041	20,412	20,659	20,904	21,178	21,427	21,681	21,935	22,179	22,426	22,659	22,886
% Ch	4.3%	7.6%	4.9%	4.8%	5.3%	4.8%	4.8%	4.8%	4.5%	4.5%	4.2%	4.1%
2009 Chain-Weighted	18,324	18,512	18,671	18,792	18,910	19,029	19,142	19,249	19,344	19,447	19,524	19,603
% Ch	2.2%	4.2%	3.5%	2.6%	2.5%	2.5%	2.4%	2.3%	2.0%	2.1%	1.6%	1.6%
PERSONAL INCOME - CURR \$												
Idaho (Millions)	74,301	75,124	75,773	76,437	77,308	78,300	79,329	80,414	81,441	82,533	83,640	84,731
% Ch	4.0%	4.5%	3.5%	3.5%	4.6%	5.2%	5.4%	5.6%	5.2%	5.5%	5.5%	5.3%
Idaho Nonfarm (Millions)	72,571	73,267	74,059	74,772	75,612	76,544	77,495	78,503	79,622	80,634	81,628	82,602
% Ch	5.1%	3.9%	4.4%	3.9%	4.6%	5.0%	5.1%	5.3%	5.8%	5.2%	5.0%	4.9%
U.S. (Billions)	17,319	17,500	17,680	17,840	18,038	18,265	18,491	18,718	18,961	19,186	19,392	19,597
% Ch	5.2%	4.2%	4.2%	3.7%	4.5%	5.1%	5.0%	5.0%	5.3%	4.8%	4.4%	4.3%
PERSONAL INCOME - 2009 \$												
Idaho (Millions)	69,102	69,526	69,853	70,039	70,368	70,874	71,426	72,043	72,614	73,295	73,867	74,512
% Ch	1.5%	2.5%	1.9%	1.1%	1.9%	2.9%	3.2%	3.5%	3.2%	3.8%	3.2%	3.5%
Idaho Nonfarm (Millions)	67,493	67,808	68,273	68,513	68,825	69,284	69,775	70,330	70,993	71,608	72,089	72,640
% Ch	2.6%	1.9%	2.8%	1.4%	1.8%	2.7%	2.9%	3.2%	3.8%	3.5%	2.7%	3.1%
U.S. (Billions)	16,107	16,196	16,299	16,347	16,418	16,533	16,649	16,769	16,906	17,038	17,126	17,234
% Ch	2.6%	2.2%	2.6%	1.2%	1.8%	2.8%	2.8%	2.9%	3.3%	3.2%	2.1%	2.5%
HOUSING STARTS												
Idaho	17,835	14,816	15,256	15,446	15,477	15,521	15,645	15,893	16,200	16,536	16,884	17,183
% Ch	37.7%	-52.4%	12.4%	5.1%	0.8%	1.1%	3.2%	6.5%	8.0%	8.6%	8.7%	7.3%
U.S. (Millions)	1.317	1.261	1.218	1.258	1.264	1.308	1.336	1.364	1.392	1.420	1.439	1.443
% Ch	19.6%	-16.0%	-13.0%	13.9%	1.9%	14.7%	8.8%	8.6%	8.4%	8.3%	5.7%	1.1%
TOTAL NONFARM EMPLOYMENT												
Idaho	731,427	735,590	739,694	743,333	746,295	749,084	752,791	756,930	761,333	766,090	770,181	774,321
% Ch	5.4%	2.3%	2.3%	2.0%	1.6%	1.5%	2.0%	2.2%	2.3%	2.5%	2.2%	2.2%
U.S. (Thousands)	148,069	148,703	149,326	149,947	150,526	151,066	151,561	152,015	152,431	153,060	153,149	153,321
% Ch	1.7%	1.7%	1.7%	1.7%	1.6%	1.4%	1.3%	1.2%	1.1%	1.7%	0.2%	0.4%
SELECTED INTEREST RATES												
Federal Funds	1.4%	1.7%	1.9%	2.2%	2.4%	2.7%	2.9%	3.2%	3.2%	3.4%	3.4%	3.4%
Bank Prime	4.5%	4.8%	5.0%	5.3%	5.5%	5.8%	6.0%	6.2%	6.3%	6.5%	6.5%	6.5%
Existing Home Mortgage	4.4%	4.7%	4.8%	5.0%	5.1%	5.2%	5.2%	5.3%	5.3%	5.3%	5.3%	5.3%
INFLATION												
GDP Price Deflator	2.0%	3.0%	1.7%	2.2%	2.7%	2.2%	2.4%	2.5%	2.5%	2.4%	2.6%	2.4%
Personal Cons Deflator	2.5%	2.0%	1.6%	2.5%	2.7%	2.3%	2.1%	2.0%	1.9%	1.6%	2.2%	1.7%
Consumer Price Index	3.5%	1.7%	2.0%	2.9%	2.9%	2.6%	2.3%	2.0%	1.9%	1.1%	2.5%	1.3%

NATIONAL FORECAST DESCRIPTION

The Forecast Period is the Third Quarter of 2018 through the Fourth Quarter of 2022

This economic forecast provides the nonfarm jobs forecast and the personal income forecast, which are the basis for January's General Fund revenue forecast. At the time of this writing, the most current state-level personal income data available from the Bureau of Economic Analysis is through the first half of 2018. In this case, that coincides with the employment figures available from the Bureau of Labor Statistics, which are matched to the Quarterly Census of Employment and Wages. More recent indications of employment are available from the Current Employment Survey, which is released monthly. A census provides more reliable information than a survey, so the latter primarily serves as an input to some of the value judgements which are part of, but far from the entirety of, forecasting.

IHS Markit (IHS) provides the national forecast for the *Idaho Economic Forecast*. The firm's forecast sits well within the mainstream of economic forecasts. The firm's forecasts are often heavily influenced by forecasts from governmental and nongovernmental organization, both at the national and international levels. Some of these influencing forecasts are discussed alongside IHS's forecast within this publication to provide extra context for the figures. Typically, forecasts from the Federal Reserve and the Congressional Budget Office are discussed within IHS's publications. The International Energy Agency, the International Monetary Fund, and the Organization for Economic Cooperation and Development certainly produce reports which inform IHS economists. There are many others followed by IHS.

Turning now to that national forecast, IHS's own summary for the US economy is that there will be slowing through 2020, "making 2018 as good as it gets for now." Several events make this likely. Fiscal policy will be tightening compared with the stimulus of 2018. Monetary policy is also expected to be tightening, both as the Federal Reserve raises short-term interest rates (also as it unwinds its accumulation of treasury securities obtained through Quantitative Easing (QE)) and through foreign monetary tightening. The European Central Bank just announced the end of its own QE program. Tariffs will be a drag on the economy. This forecast includes the threatened raise of tariffs from 10% to 25% on \$200 billion of Chinese goods as occurring in January. Implementation of that is now pushed back to March, giving a small reprieve.

Foreign growth is also projected to be less robust and less widely spread, when compared with 2017 and 2018. Several large economies have already experienced hiccups (Germany and Japan) or are likely to do so (Great Britain), and Chinese growth, while still above 6%, has been slowing. China has been a driver of world growth, responsible for some of the most dramatic changes in wealth (the drop in worldwide poverty is primarily due to raising Chinese workers' incomes) and resources (China has used as much concrete in 3 years as the US did in 100).

The forecast for US real GDP growth is at 2.5% through the end of 2019, with a slowing to 1.6% across 2020–2023. The initial figure is 0.5 percentage points above the long-term sustainable growth trend, and the latter figure is below that trend. Several measures currently near to or beyond sustainable capacity influence this. The participation rate in the US labor force is expected to peak at 63.1% in 2020. For 2018 it is 62.8%, a value it is expected to return to by 2022. The current monthly reading is at 62.9%. Each 0.1 percentage point change in this statistic represents over a quarter of a million people entering or exiting the labor force; the denominator of the participation rate is the size of the non-institutional population over 16 years of age in the US (roughly 258.7 million), while the numerator is the count of those employed or actively looking for work (162.8 million). At the moment, unemployment is

remarkably low, at 3.7%. This means that of the 162.8 million people in the labor force, 6 million are unemployed, and 156.8 million are employed. IHS estimates the full-employment labor force at 161.8–162 million, or 800,000–1 million below the current reading, meaning that the US economy is beyond its full-employment. This is one capacity constraint which influences the real GDP outlook.

The spending increase through mid-2019 due to the Bipartisan Budget Act of 2018 contributes 0.4 percentage points towards real GDP growth. There will be a deceleration in spending in the latter part of 2019, which means that by the end of the year, the fiscal policy contribution to GDP growth shrinks to zero. That covers most of the GDP slowing in 2019. IHS forecasts that legislation will be drafted and passed to avoid a \$100 billion spending cut in FY 2020, and that the debt ceiling will either be suspended or raised in March 2019. Were these two fiscal hurdles not to be overcome, another 0.5 percentage points would be removed from real GDP growth in 2020. The Tax Cuts and Jobs Act (TCJA) of 2017 lowered individual income tax rates. The effects of those cuts began appearing within workers' paychecks in the spring of 2018, increasing disposable income by lowering the portion of earnings directed to the US Treasury. Consumer activity relies upon disposable income, so this provides a boost to GDP growth. However, several quarters of this extra disposable income are now in the books, so measurements of quarterly GDP growth no longer find newly expanding disposable income due to the TCJA.

While IHS's November forecast is now up to two months early on the engrossing of Chinese tariffs, its projections on oil prices are probably the furthest from what may be projected today. Brent crude oil, the international standard for oil pricing, was projected to increase from \$75 to \$84 per barrel across mid-2018 to mid-2019, with prices falling to \$70 per barrel by 2020 as a flood of oil from the Permian Basin in Texas and New Mexico would become available at lower prices due to newly established pipeline capacity. A renewed demand for low-sulfur fuel for marine use is expected in 2020 as the International Maritime Organization has new emissions regulations coming into effect then, requiring either newer equipment (to scrub the exhaust) or better burning fuels. Near-term supports for the oil price were to come from Iranian export sanctions and Venezuela's economic collapse. The US administration's granting of waivers to those sanctions as well as less robust world demand has led to price declines in the past month, which have led Organization of the Petroleum Exporting Countries (OPEC) and Russia to agree to cut production by 1.2 million barrels per day. Qatar, in diplomatic disputes with Saudi Arabia, the de facto leader of OPEC, has decided to leave the pact. US production is now at 11.6 million barrels per day, having risen from around 9 million barrels per day in early 2017. Brent oil prices reached above \$80 per barrel in mid-October, and they have fallen to \$60–61 per barrel in early December. Falling oil prices, which help consumers through lower gasoline and diesel prices, can also curb investment in the US oil sector, principally in oil-field exploration and development.

Consumer Price Index (CPI) inflation is projected to hold at 2.5% in 2018 and 2019. Core CPI inflation, which excludes food and fuel, is expected at 2.1–2.4% and core Personal Consumption Expenditures inflation is seen registering 2.2% in 2019–2020, up from 1.9% in 2018. The latter is the inflation measure that the Federal Reserve (Fed) watches most closely as the Fed targets it for 2%. For most of the recovery from the recession, that measure has been below the 2% target. Recently the Fed has described its target as symmetric. While it is tolerable that it will be above 2%, just as when it was below 2%, the Fed will be conducting monetary policy to aim it towards 2%. The IHS forecast includes another increase in the federal funds rate (band), to a range of 2.25–2.5%. This was achieved December 19. Following Fed guidance available in November, the firm anticipated three such quarter-point increases in 2019. These views were reiterated in a conference call on December 17. On December 19, the Fed indicated that two increases in its short-term rate are most likely in 2019.

Two drivers in the US economy are housing and autos. Sales figures for automobiles are expected to fall. Early 2018 started at a mid-17 million vehicle annual rate. A mid-16 million annual rate is expected by the middle of 2020. Housing starts are expected to rise from near 1.25 million housing units per year to around 1.4 million units per year by early 2020, a rate expected to be sustained through 2023. There is a demographic headwind pushing against both figures. Household formation is expected to slip from 2018's rate of 1.40 million per year to 1.34 million by 2022. A shortage of housing available now in many US locations mitigates the headwind somewhat in that market. The working-age population is expected to slow from 0.9% growth per year to 0.8% growth per year by 2022.

While quarterly real GDP growth is set to be 2.6% at an annual rate in the final quarter of 2018, 2.5% in each of the next two quarters, then slow to 2.4% in the third quarter and 2.3% in the final quarter of 2019, the full-year real GDP growth rate is seen, perhaps surprisingly, at 2.7% for 2019. Quarterly figures for annual growth show what would be the annual growth should the quarterly growth rate persist for an entire year. Behind this numeric incongruity in 2019 is that growth in 2018 was rather uneven, with the first quarter significantly behind the middle two quarters. This leaves the full-year real GDP figure for 2018, which is an average, suppressed. The full-year annual figure for 2019 shows more substantial growth than the quarterly readings of growth would indicate primarily because it is piggybacking on the 4.2% annual growth rate recorded in the second quarter of 2018.

Without any further great GDP spikes anticipated in the short-term, the quarterly and annual readings are more in line. Across 2020, the projected values for real GDP growth are 2.0%, 2.1%, 1.6%, and 1.6%, for a final yearly reading of 2.1%. For 2021, those figures are 1.6%, 1.5%, 1.4%, and 1.5%, with a full-year reading of 1.6%. In 2022 the value is 1.5%, and in 2023 the value is 1.4%. The last quarter of 2018 is expected to register unemployment at 3.7%, with 2019 starting at a 3.5% quarterly reading, before five quarters of sustained 3.4% unemployment. By mid-2021, unemployment is expected to have climbed modestly to 3.6%. That small climb, though, represents around 300,000 additional people looking for, but not yet having, work.

US Unemployment Rates



Employment: The employment change during November registered 155,000 additional jobs, and the headline unemployment rate remained at 3.7. The figure for October was revised down from 250,000 jobs to 237,000 jobs, and the figure for September was revised up from 118,000 to 119,000 jobs. Jobs gains thus average 170,000 over the past three months. Since the beginning of 2011, monthly nonfarm jobs gains as measured by the Bureau of Labor Statistics have averaged 201,000 positions, with the median just slightly higher at 204,000. Since 2011, the bulk of the monthly jobs gains fall between 150,000 and 250,000 for each month's

measurement. This has been remarkably stable. Indeed, the simplest model describing the job growth trend since then suggests an extra 265-jobs-gain per month across that timeframe over-and-above a base monthly jobs gain of almost 190,000 jobs per month. In total, the 18.9 million jobs added to the marketplace since 2011 started compares favorably with the roughly 18.3 million persons increase in the US population. Despite the proximity of these last two figures, the unemployment rate has plummeted from just over 9% at the beginning of 2011 to 3.7% in the November 2018 reading. This is possible because of the shifting demographics of the US population, particularly its aging. Taking just one slice

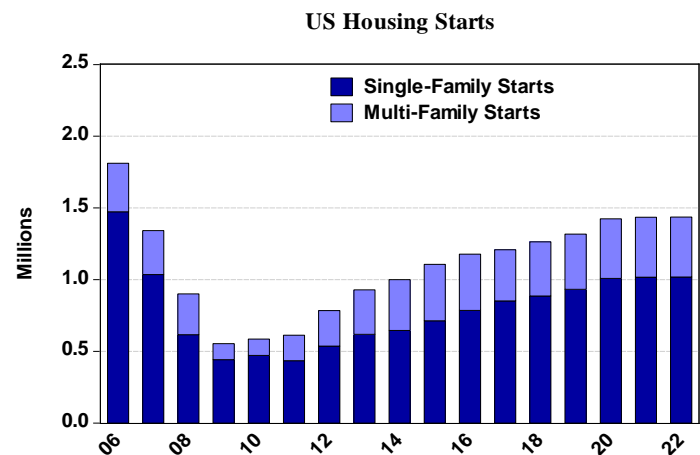
of the data, 1.1% of the population was 65 in 2017 whereas just under 0.9% was in 2011. The difference amounts to over three-quarters of a million people today, roughly the nonfarm jobs total for the whole state of Idaho. The age (65) is the conventional age of retirement in the US, and it was chosen to further illustrate the demographic headwind which is at the base of the IHS forecast for employment gains in the US economy. According to the November IHS forecast, near-200,000 job gains each month are likely to continue into 2019 for 6–9 months. One interesting figure within the November data is the U-6 unemployment rate. The U-6 calculation includes those unemployed, underemployed, and discouraged job seekers who have looked for work within the past year. It rose from 7.4% to 7.6%. IHS comments that the U-6 unemployment rate, the broadest rate tracked by the Bureau of Labor Statistics, is slightly elevated compared to the standard U-3 unemployment rate. Those workers who are part-time for noneconomic reasons (people in school, for instance) amounted to 21 million people, and the part-time for economic reasons (those who could only find part-time work but wanted full-time work) registered 4.8 million. Both numbers are roughly in line with November 2017 figures, so the U-6 number's drop from 8.0% a year ago to 7.6% now is partly because the working-age population is 2.8 million larger. Overall, the employment outlook according to IHS falls into several phases over the next few years. Currently the phase is characterized by the tax cut and fiscal stimulus. Next year brings the wind-down phase transitioning into a stressed demographic phase. Then the labor force growth will stop outpacing the overall population growth as the participation rate stops rising. Afterwards, the unemployment rate will begin to slowly return to the long-term sustainable rate. IHS believes this to be in the 4–5% range.

Consumers: IHS notes that food service growth has just had the strongest two quarters since 1992. A common view is that the tax cuts for individuals were often spent on extra dining in restaurants. As the impact of the tax cuts recedes, that boost will subside. Food service growth is expected to slow. Holiday season sales are expected to be up 4.7% compared with those of the past year. Holiday sales growth in 2017 reached 5.3%, the best year since 2005. Stock market sell-downs may mute sales for luxury goods, but higher gasoline prices were expected to be a broader hindrance on holiday shopping. With actual prices falling at the pump, there may be some upside to the holiday forecast. Consumer confidence is at higher levels than 2016 and, arguably, over 2017 as well. Spending is expected to exceed disposable income in the near term. Growth in disposable income is projected to finish 2018 at 2.8%, slowing to 2.2% in 2019, before climbing higher to 2.9% in 2020. Overall, the financial obligations ratio, which is the percentage of disposable income needed to make ongoing payments, is expected to increase from 15.4% in 2018 to 15.9% by 2020. This Federal Reserve statistic includes primary and secondary mortgages, consumer debt, rent payments on tenant-occupied properties, auto lease payments, homeowner's insurance, and property taxes, comparing the total of these to overall disposable personal income. That ratio has been between 15% and 16% since 2013; while still within that band, it has drifted downward since late 2016. This ratio has been just above 18% in early 2008 and just below 15% in 2014. For the past few years the obligation ratio has been similar to what was observed in the early 1980s. Rising interest rates will be part of the return towards 16%. Interest rate rises come both from market conditions, but also via the composition of loans issued. Mortgage debt is a bit more than a fourth of the consumer financial obligation ratio. Student loans are a quickly expanding part of consumer debt. The total has crossed \$1.46 trillion. Some students have accumulated student debt totals which are large: nearly 2 million US student borrowers owe between \$100,000 and \$200,000 in such debt; an additional 700,000 borrowers owe over \$200,000 each. Debt persists well beyond the typical college age: \$489 billion is owed by 25–34-year-olds; \$530 billion is owed by those 35–49 of age; \$62.5 billion is owed by those over 62 years old. The most recent figures for disposable personal income have the total for US at the \$15.5 trillion annual level, with personal consumption expenditures just over \$14 trillion, leaving personal savings near the \$1 trillion level; the remaining \$500 billion includes personal transfer payments, for example, remittances. Savings occurs when spending (excluding investments, so largely on nondurables) is exceeded by normal income. Paying down debt is a form of savings. Research

from the Federal Reserve’s Survey of Consumer Finances indicates that the share of families saving is roughly in line with expectations across families stratified by age of family head. This share rises above 40% by age 30 and peaks just over 50% for those in their early 70s. Families headed by someone born between 1960 and 1980 have debt to income ratios which are 20% above predicted debt to income ratios. Real consumer spending is expected by IHS to grow 2.8% in 2019 and gradually slow to 1.6% growth in 2023. Corresponding nominal figures are 5.1% in 2019, drifting down to 3.9% in 2023.

Business Investment: IHS cited firming oil prices as boosting nonresidential construction spending. November and December have reoriented the view on oil prices, likely diminishing the growth expected in structures, as “virtually all the growth of structures” was pinned on energy-related ventures. Such structures grew 41.8% in 2017 and were projected to grow 29.8% in 2018, with a further growth of 9.7% in 2019. Should oil prices remain depressed, the slowdown in these structures could be steeper. More broadly, though, nonfarm business output grew 2.7% in 2017, is expected to finish 2018 up 3.5%, and is expected to register 3.0% in 2019, spurring investment growth to follow a similar, though elevated, pattern: 5.3% more investment in 2017, an additional 6.8% in 2018, and then 4.6% in 2019 before slowing to 2.4% in 2022. Manufacturing’s expansion is slowing, with effects from the tax cut and stimulus already waning. Trade difficulties are present, but too lean domestic inventories can absorb some output. Inventory build should be at a consistent 1.3%. Late 2019 and early 2020 could be a time of slowing, depending upon the value of the dollar. Orders and shipments of core capital goods, the items business use for longer than a year in order to produce the goods and services they sell, have stalled. The “core” in core capital goods exclude aircraft—Boeing sales can dwarf the information in the remainder of the market—and goods for the Defense Department. Equipment spending is expected to expand by 4.4% in 2019, slower than the 7.1% in 2017 or the 6.1% in 2016. That growth slows further each of the next few years, tapering to 2.3% in 2023. A similar trajectory applies to intellectual property. Growth in that investment is expected to close 2018 at 7.7%, slowing to 6.5% in 2019, then dwindling to 2.2% in 2023. Nonresidential construction is likely to be 4.8% for 2018, slow to 2.5% in 2019, then pick up to 3.5% in 2020, and eventually settle towards 2.2% in 2023. Within the news, Amazon’s new offices in Queens, NY and in Crystal City, D.C., as well as Apple’s expansion in Austin, TX and Google’s expansion in Manhattan, NY are all substantial investments, and are actually accompanied by smaller expansions in other cities, such as Nashville, TN and Culver City, CA. Analysis of the information provided indicates that these are long-term investments, sometimes taking a decade to reach maturity. GM is intending to pare its workforce and has little work for five of its North American auto plants. The oil-and-gas sector has pipeline capacity coming on-line in 2019, which could renew expansion within the Permian Basin.

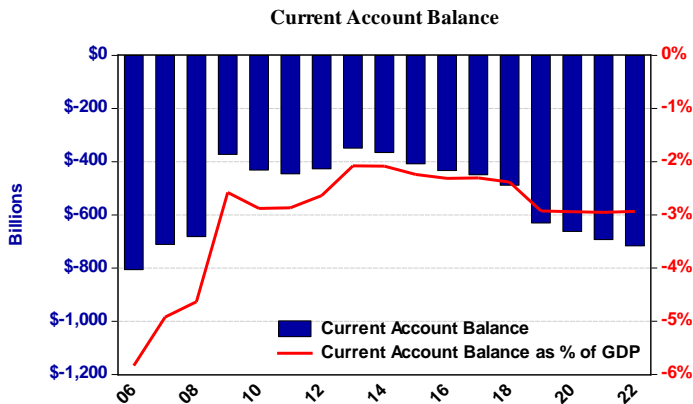
Housing: The latest outlook from Freddie Mac on the US housing sector projects average 30-year mortgage rates at 5.1% in 2019 rising to 5.6% in 2020. As of mid-December, the rate is near 4.9%. The firm’s view on housing starts is for 1.3 million in 2019 and 1.4 million in 2020. Freddie Mac research suggests that nationwide annual needs for housing are: 1.1 million units to accommodate household formation; 300,000 units for replacement of what is demolished; 100,000 for second homes; and 120,000 as buffer so that moving can be accomplished efficiently. The latter is akin to the natural rate of unemployment. Home prices are expected to



be up 5.1% across 2018, with that growth moderating to 4.3% in 2019 and 2.9% in 2020. Mortgage originations should finish 2018 near \$1.63 trillion. They are projected for \$1.62 trillion in 2019 and \$1.60 trillion in 2020. Refinancing is expected to fall as mortgage rates increase. While home prices are elevated, equity is only lightly accessed through cash-out refinancing, below \$20 billion per quarter, which is much less than the just over \$100 billion per quarter in mid-2006. The Federal Reserve Bank of St. Louis, in following US housing trends, indicates that several important indicators related to housing are following patterns similar to those which preceded the past three recessions (preceded by four quarters). In the analysis, the trends are revealed through deviations of the indicator from the 12-quarter average. For example, the change in the 30-year fixed mortgage rate is calculated, not the absolute 30-year fixed mortgage rate. In this manner, the recent 0.8 percentage point rise in the average mortgage rate is seen in appropriate context. While four such measurements—deviations in mortgage rates, contribution to real GDP, four-quarter real home-price change, and four-quarter existing-home sales rates—all align with the trends of the past three recessions, employment growth in construction is much stronger than was occurring in the comparable periods prior to earlier recessions. Saving for down payments, particularly when handling other debts, is a large hurdle towards home ownership. Families headed by someone born in the 1960s and 1970s are about 10% less likely to own a home than predicted. IHS says US housing is in a slump, and it predicts that the 30-year mortgage will average 5.15% in the third quarter of 2019. IHS cites a National Association of Realtors (NAR) affordability index when discussing the slump. According to NAR data, the median starter home has increased from \$190,000 in 2015 to \$227,000 in 2018, an increase of 22%. Correspondingly, similar percentage down payments have increased by 22% as well. Effective interest rates plus private mortgage insurance (needed if less than 20% is used as a down payment) have risen from 4.28% to 5.02%. Monthly payments have consequently increased from \$846 to \$1,099, a nearly 30% increase. The qualifying income for such a house has increased from \$40,600 to \$52,800, just over 30%. Median household income is likely above median income for first-time house buying households, as many households have already purchased a home in prior years, but median household income has increased only 12% in the past three years, again according to NAR. In terms of employment, the gyrations both within the housing sector have damped effects: construction employment increases in every quarter going forward, with job growth typically in the mid-3% vicinity.

Energy: In its *World Energy Outlook*, the International Energy Agency predicts photovoltaic (solar) power capacity to surpass wind before 2025. Both electricity generation options have falling costs per unit of power, benefiting from increasing technology as well as efficiencies of scale. Oil, the price of which has moved widely in the latter half of 2018, is expected to see diminishing demand from automobiles by the mid-2020s, with much of that due to improved efficiencies in traditional automobile design rather than in electrification of the automotive fleet. Recent, but existing, car models continue to replace older vehicles within the fleet, and more recent models have better fuel economy in general. However, oil demand is expected to increase within the petrochemical industry as well as for heavy transportation (planes, trains, trucks, and ships), and these demands are expected to keep overall oil use rising. The IEA does point out that there is room for improvement in emissions even within the oil and gas industry: “switching from the highest emissions oil to the lowest would reduce emissions by 25% and doing the same for gas would reduce emissions by 30%.” One of the most visible of these switches can be performed at many wells, by capturing hydrocarbons which are flared (burnt) at the site. With greater infrastructure, these can be captured and transported for processing. As of mid-December, the IHS forecast for energy seems to be more than \$20 per barrel too high (Brent was forecast to average \$81 per barrel for the third quarter, and it is trading just below \$59 per barrel) in terms of oil, though low for natural gas (forecast at \$3.17 per million Btu, but trading at \$3.57). While natural gas production is increasing within the US, primarily as a by-product of oil extraction, exports of liquified natural gas have also increased. Notably, domestic storage of natural gas has been behind the 5-year average

throughout 2018. Gasoline prices get the headlines, but natural gas provides more electricity than coal does for the US, and natural gas heats many homes and businesses. Should natural gas prices remain elevated, consumers would likely face rate increases through their utility bills next year. Still, with gasoline prices below \$2.50 per gallon in many parts of the US, and perhaps dipping below \$2.00 per gallon in some places in the central US, the immediate energy market is likely to reinforce consumers' recent good mood.



International: Andres Manuel Lopes Obrador became Mexico's president at the beginning of December. The Mexican budget was delivered mid-month. Initial reaction to that budget was cautious optimism, as the spending was constrained compared with campaign rhetoric, and the assumptions going into the budget "appear reasonable." The average budget deficit since 2009 for the country has been -0.3% of GDP, and the initial estimate of expenditures in this budget is for 0.2% less than the 2018 budget. Markets expect the Mexican central bank to hold rates steady (at 8%) in its meeting

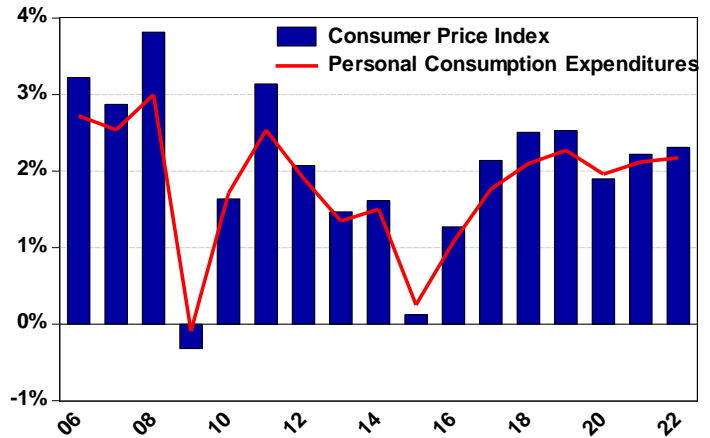
just before Christmas. Canada's central bank sees global trade risks as the greatest threat in that economy. The Bank of Canada has tightened monetary policy five times in the past 18-months, but market expectations of another rise in January are meager (under 10%). The bank last raised rates in November, electing to hold rates steady during its meeting in early December. Alberta tar sands oil trades at significant discounts to both Brent crude oil and even West Texas Intermediate. Comparing WTI to Western Canadian Select, the price discount has been as high as \$40 per barrel this year. In early December, a production cut of 325,000 barrels per day was announced, stoking a 70% gain in the spot price, and closing that discount by a bit over half. Beyond the NAFTA countries, among the largest developments has been a temporary cease-fire between the US and China in the trade war; new tariffs are to remain at 10% for an additional two months over previous announcements. Great Britain obtained a Brexit deal with the European Union, but difficulty with the British Parliament is undermining the likelihood of a smooth transition. Prime Minister May successfully deflected a no-confidence vote, which means that she will remain unchallenged in that leadership role for a full year. While Parliament was to vote on the Brexit deal in mid-December, that has been postponed until mid-January. Financial institutions, though, are facing binding business deadlines 90-days in advance of the March 29 exit date. Italy is making progress on its budget negotiations with the EU. Its economy is barely changing at the moment, having risen by 0.2% and shrunk by 0.1% in the past two quarterly readings. The Italian economy amounts to roughly one-tenth of the US economy's size. After growing 8.8% in 2018, the US current account balance, a deficit, is expected to dramatically widen by 29.0% this year. IHS projections do not see a contraction in the current account balance until 2023.

Inflation: Inflationary pressures can be sporadic or ongoing. Two sporadic impulses are coming from tariffs and from oil prices, and these impulses had appeared to be in the same direction, towards higher prices, but after oil prices dropped considerably in November, that is no longer the case. Further, the 90-day tariff armistice between China and the US has muffled some of the expected inflationary pressure from heightened tariffs. The IHS forecast includes the expected run-up in the tariff rate from 10% to 25% on \$200 billion of Chinese exports to the US beginning in January. According to the current

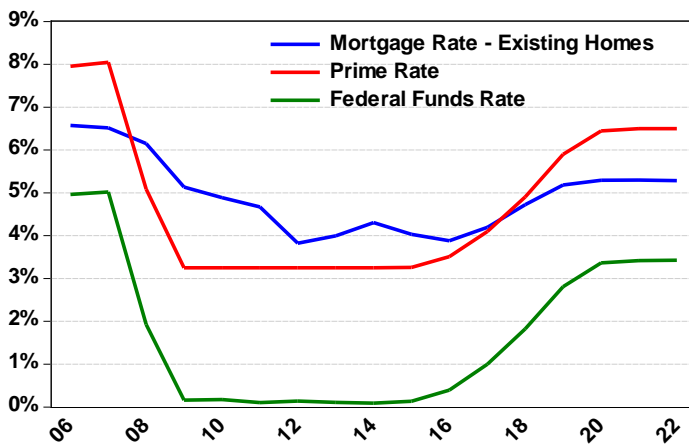
détente, this is premature by two months. Further, oil is trading in the low-\$60s per barrel, far from the above \$85 per barrel in early October, as well as the mid-\$70s per barrel in early November, when the IHS forecast was finalized. Oil broke below \$60 per barrel in late November. In IHS's forecast, personal consumption expenditures (PCE) inflation is expected to reach 2.2% in 2019. This is the core measurement excluding food and energy. Core PCE met the Fed's 2.0% target beginning in September of 2018, and it is expected to remain at 2.2% range for a few years. The firm does note that inflation

expectations have generally risen this year. Wage growth has been above inflation. Signing bonuses are one of the perks employers are using to lure workers in the tight labor market. Overall employment costs, which include benefits, are expected to have risen 2.9% in 2018. In 2019, the rise is projected to be 3.2%, with 3.5% and 3.6% to follow in 2020–2021.

US Inflation Rates



Select US Interest Rates

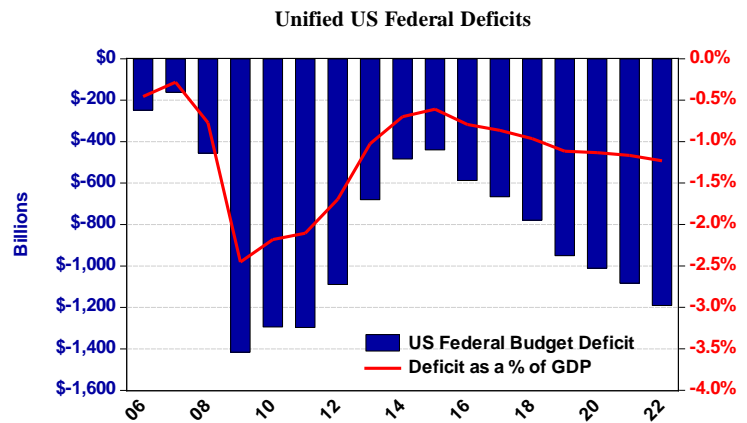


Monetary Policy: In the November IHS forecast for the US economy, the basis for this publication, the federal funds rate sat between 2 and 2 and 1/4 percent with a hike by a quarter of a percentage point for this range expected on December 19. That hike was delivered by the Federal Open Market Committee (FOMC). This represents the fourth such rise in 2018, with three projected by IHS in 2019 and one for 2020. The timing of these rate increases could be less certain as Jay Powell, the chair of the Federal Reserve (Fed), will hold press briefings following each FOMC meeting, not just following every other one as has been the case

in 2018. Increases in the funds rates have been occurring only at meetings with press briefings. Ongoing in the background is the Fed's unwinding of its holdings of treasuries and other securities acquired through the quantitative easing programs in the wake of the past recession. Running for just over a year, this has reduced those holdings from \$4.2 trillion to \$3.9 trillion. The Fed does not currently sell its treasury securities on the market. Rather, as securities mature, it returns the face-value to the US Treasury, whereas it previously traded maturing treasuries for newly issued notes. Currently \$30 billion per month is turned in this way. In effect, this lowers demand at Treasury auctions from recent experience. Lower demand typically leads to higher interest rates, so this part of the monetary policy normalization by the Fed can affect long-term interest rates, which in turn affects mortgage rates. The 30-year mortgage rate is most closely keyed to 10-year Treasury notes. For any given day or even month, though, demand can materialize from elsewhere in the world. After touching 3.24% in early November, the 10-year yield has retreated to 2.86% in mid-December as financial markets both in the US and abroad have faltered from the buoyancy of earlier in the year. Mortgage rates, too, have drifted down from 4.94% to 4.63% for conventional 30-year mortgages according to Freddie Mac. This still marks a 70-basis point increase from a year ago. For intermediate duration treasury securities, an inversion of part of the yield curve began in early December. As of mid-December, the 2-year yield

surpasses both the 3-year yield and the 5-year yield; typically, the reverse holds, with longer dated yields higher than shorter dated yields. IHS predicts a 2–10-year inversion by 2020.

Government: On the federal level, IHS projects that several changes will occur soon. The elevated spending levels on discretionary spending through FY 2019 are expected to be raised. This prevents a \$100 billion “sequestration” under the Budget Control Act of 2011. Legislation will need to be created and passed for this to occur. The debt ceiling is suspended only until March 2019. Current debt is \$1 trillion above that allowed by the soon-to-be-reinstated debt ceiling. IHS does not delineate which of two options will occur for dealing with the debt limit—it could be suspended, or it could be lifted to a higher level—but a solution to the problem is assumed in the forecast. Again, this will require crafting and passing of legislation. Also assumed in the November IHS forecast, and which is unresolved by the time this publication, is the funding for the final slice of the federal government still operating on a continuing resolution budget. A partial shutdown results from a budget impasse. For fiscal year 2017, the federal government’s receipts totaled \$3.3 trillion, and its spending was \$4.0 trillion. Receipts for 2018 are projected to remain at \$3.3 trillion, but expenses are \$4.2 trillion, leading to nine-tenths of a trillion dollars in deficit. This situation deteriorates in 2019 when receipts lag expenses by \$1 trillion, a situation which repeats in 2020. As a percentage of GDP, federal deficits are 3.5% in 2017 and 3.4% in 2018, and on to 4.3% in both 2019 and 2020. By 2023, the federal deficit will approach \$1.2 trillion, representing 4.8% of GDP.



IDAHO FORECAST DESCRIPTION

The Forecast Period is the Third Quarter of 2018 through the Fourth Quarter of 2022

Across 2016 there were an average of 693,900 nonfarm jobs within the state, having grown 3.4% from the previous year. In 2017 that figure had grown to 715,200, a 3.1% increase. In the year just finished, the average climbed further to 737,500, another 3.1% average annual increase. Farm jobs and others not tracked by the nonfarm count add another 80,000–100,000 jobs to the total. Across this time, the unemployment rate has fallen from 4.0% in January of 2016 to 2.7% in September and October in 2018, then on to 2.6% in November. Around 23,000 people in Idaho were unemployed and seeking work at the end of 2018. For 2019, the forecast is for nonfarm jobs to increase by almost 14,000 jobs, which is a 1.9% increase. This is similar to the growth in the typical working-age population of the state.

The US Census just announced population projections for the states. After being the most rapidly growing state in 2017, Idaho again has experienced a lot of growth. By these projections, Idaho and Nevada both grew 2.1% (when rounded to the first decimal) between the July estimate dates. Recently, migration into the state, both domestic as well as international, has added more to the population than the natural growth due to births. In fact, when births and deaths are counted, migration has recently been over three times as effective in growing the state's population. Going back a handful of years, though, the ratio was roughly one-to-one between natural increase and net migration. The forecast for migration into the state is at roughly 2–2.5 times the net natural increase.

This past year, the Bureau of Economic Analysis performed a recalculation of statistics for the nation. One aspect of this was a dramatic increase in the level of personal income within Idaho going back a decade. However, the year-to-year growth rates of that personal income were stable when comparing the previous values with the current ones. On a per capita level, Idaho tends to slightly lag the nation in terms of income growth. This has been occurring for some time, and as a result, in current dollars, there is a roughly \$10,000 gap between per capita personal income in Idaho and the corresponding measure in the nation. This value is projected to persist, and perhaps widen a little, across the forecast. When inflation is taken into account, the difference of \$9,500 in 2018 grows to \$10,800 by 2022.

Proprietors' incomes in Idaho do not track as reliably with the corresponding national figures. Looking at recent history, Idaho farm proprietors' income is less likely to drop as dramatically as the national figures when conditions are tough. Idaho nonfarm proprietors, for instance, real estate agents, have less dramatic swings in their aggregate income compared with farm proprietors, partly due to the totals being four to seven times as large as for farm proprietors. Income growth for nonfarm proprietors in Idaho is expected to be over 6% this year and above 4% next year. Both growth rates are substantially above the national figures these two years. Thereafter, the two groups, the Idahoans and the national counterparts, are expected to have similar, modest increases in incomes. At the national level, IHS pens a near doubling of farm proprietors' income in 2020 over the 2019 figure. Idaho agriculture is not the same as the nation's. Corn, soybeans, hogs, tobacco, cotton, and chicken are all prominent national crops but are not among Idaho's top crops. In 2020, growth for Idaho farm proprietors' income is expected to be 13%. By 2022, this is expected to cool to 6% growth.

Idaho jobs are split within the Idaho Economic Model, between goods-producing jobs and nongoods-producing jobs. The latter are often thought of as service jobs, which are the bulk of the nongoods-producing jobs. However, trade jobs including wholesale and retail trade, as well as governmental jobs are also included in nongoods-producing jobs. Typical examples of service jobs are those in healthcare or insurance. Goods-producing jobs include construction jobs as well as food processing jobs. For every

goods-producing job in the state, there are over five nongoods-producing jobs. This ratio is smaller than at the national level, where every goods-producing job is matched by almost six and a half jobs in the nongoods sector. Within the horizon of this forecast, there does not appear to be any tendency for Idaho to more closely emulate the nation as measured by these ratios.

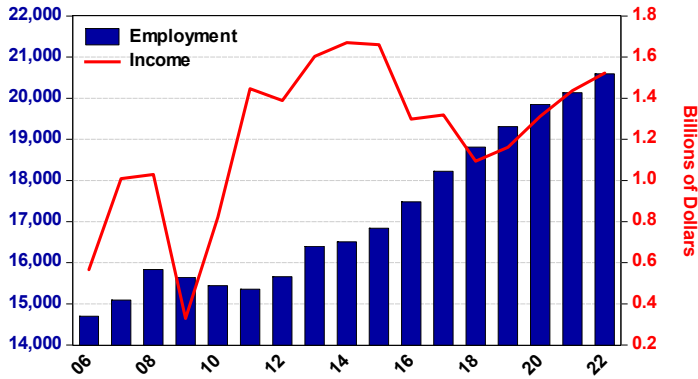
The national forecast is a bit pessimistic for retail trade, with mild optimism for its wholesale counterpart. In Idaho, the forecast is for continued growth in both subsectors, a little slower than what has been experienced since 2014 but certainly not atypical for the recent past. Retail trade is expected to employ almost 95,000 in 2022, growing from just under 87,000 this year. Adding in wholesale trade's stronger growth outlook, the trade sector is expected to average 1.9% growth across the forecast horizon.

Personal income in the state is expected to finish 2018 at \$75.4 billion. Growth for 2019 is projected at 4.5%, with 5.4% to follow in 2020. By 2022, total personal income is expected to be \$91.5 billion. These figures are not adjusted for inflation. Total nonfarm jobs should count 737,500 for 2018. Growth in 2019 is projected at 1.9%, with 2.2% to follow in 2020. By 2022, total nonfarm jobs are expected to be 799,900.

Agriculture: Idaho agriculture centers on a few commodities. Even with sometimes dominant positions, the state's agriculture operates within broad commodities markets. Prices and costs determined nationally and internationally reverberate here. The dairy market continues its fourth year of lower milk prices. After the Dairy Price Support Program ended in the 1990s, a three-year dairy cycle emerged, but that cycle may be lengthening. Some of this may be due to the extra insulation that large dairies offer. Farms with 1,000 or more cows are now common. Nationally, the number of dairy cattle is falling, by 30,000 from October 2017. Idaho farms have increased cow numbers by 7,000 even as the average annual milk production per cow in the state is up by 20 pounds. With 600,000 dairy cattle at the start 2018, an additional 12 million pounds of milk would come from Idaho dairies due simply to productivity increases in the herd. Overall production is around 14.6 billion pounds of milk per year. A sixth of US milk production is exported when measured by milk solids, so trade developments are important for this industry. The Idaho industry is concentrated in Twin Falls, Gooding, Jerome, Lincoln, Minidoka, and Cassia counties. Potatoes count for around 310,000 acres of harvest, with production around 134 million hundred-weight (13.4 billion pounds of potatoes). Hay and haylage (a wetter, slightly fermented hay product) production is above 5.5 million tons. Loans through Idaho's Farm Service Agency to newer farmers are up 14% in the past year, topping \$59 million. Total indebtedness for the US farm sector is up 46% since 2000, rising to \$407 billion. Adjusted for inflation, farm debt is not far from peak levels in the late 1970s. Real estate is 61% of the debt. Interest rates on farm loans have been rising with the prime rate as well as with the 10-year treasury rate. However, at the moment, labor shortage is a more acute concern than interest rates for many farms in the region. Wheat exports could be at a disadvantage going into 2019. Japan is a large market for Idaho wheat. It signed onto the Comprehensive and Progressive Trans-Pacific Partnership. That agreement favors wheat from Australia and from Canada, and it is set to go into effect by the first of the year. So far, wheat prices have been hit by strong crops in the plains. Pricing is below competitor countries' prices, including Russia, Australia, and Canada.

Food processing: Productivity increases will be common for Idaho food processing, much coming from plant expansions, but some coming from better crops entering the factory. As for dairy, there is

Food Processing Employment and Farm Proprietors' Income

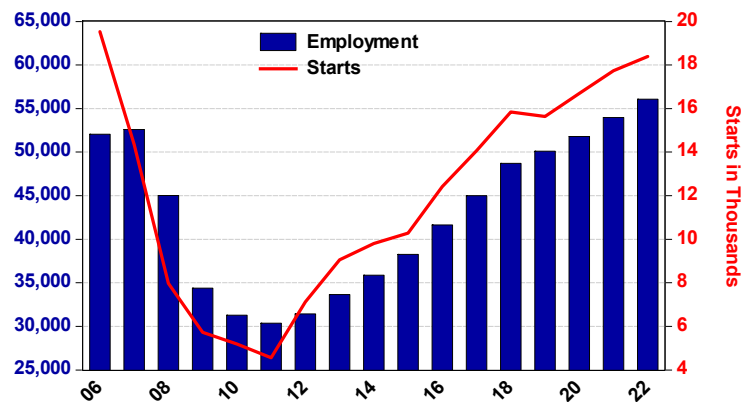


increased productivity in the beef industry. The average weight increase per carcass has been 5 pounds per year. Expanding cattle herds may dampen prices for beef. Cull cattle from the dairy industry are also leading to lower prices. Nationwide, beef cattle expansion is expected to hit 180,000 head in 2019 per USDA figures. Around 12% of beef production is destined for export. Idaho has two new cull-cow processing plants. CS Beef Packers has a plant in Kuna, processing up to 1,700 head per day. Ida-Beef has a plant in Burley, and it will eventually

handle 350–400 cows per day. The latter focuses on cull-cows, primarily from the dairy industry. Dairy cattle lifespans are typically around five years, with milk production occurring during the last three years. That milk production can run to 75 pounds per day, with lactation occurring over 300 days per year. With 420,000 dairy cows in South-Central Idaho, the cheese and yogurt industries are concentrated in and around Jerome and Twin Falls, though a few are in other locales. Salmon has a small cheese making venture called 45 North Farm specializing in raw-milk cheeses including feta, gouda, and gruyere. Its 650 pounds of yearly cheese production from six cows' milk are dwarfed by the extra milk processed just due to the expansion at Idaho Milk Products in Jerome. An additional one million pounds of milk per day will be processed into milk protein concentrate and into cream when the expansion comes online in late summer of 2019. Four expansions were announced in 2018 within Jerome's dairy processing industry, and these should bring 60 new jobs. These may take up some of the excess in local milk production over local processing capacity, as Chobani was able to do in 2012. Chobani released a new product for children called Gimmies, which includes yogurt milkshakes and tubes of yogurt. These are marketed towards inclusion in sack lunches. These products were developed partly at the Twin Falls research and development arm of the company. Food processing employment crossed 18,500 in 2018 and it is projected to surpass 20,500 by 2022. The employment growth rate averages 2.3% across that time.

Construction: Housing is a large part of the construction industry, but there are a variety of sources of work in the industry. Large projects are not at all uncommon, and the funds involved are substantial. McAlvain Companies, a Boise construction company since 1980, is being bought by Big-D Construction of Salt Lake City. Annual revenue at the new parent is over \$1 billion per year. Projects for the Boise company have included hotels and multi-family housing projects. About 40 hotels have been constructed in Idaho in the past three years.

Housing Starts and Construction Employment

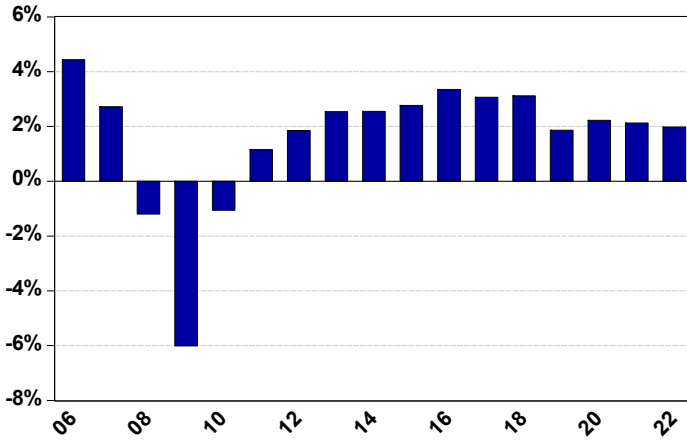


The largest is Residence Inn in Boise, at 185 rooms. It was just refinanced at \$30.5 million, moving from floating-rate loans to a fixed-rate loan. New large projects are also in the works. A 10-story tower is proposed at 11th and Idaho streets. Idaho Central Credit Union (ICCU) is building five stories of office space on the southeast corner of I-84 and Eagle Road, with construction to begin in spring 2019. Other plans near there are for a hotel, medical offices, retail, as well as some apartments. ICCU has also committed to opening a branch in Moscow, just opened a branch on South Vista Ave. in Boise, and is

expanding with a data center in Chubbuck and an office building in Coeur d'Alene. Pocatello's Northgate project is starting construction on the freeway interchange, with completion possible by August 2019. The roadwork in this Pocatello and Chubbuck project is just the beginning of what is likely to be a decade-long build. Between Lenore and Myrtle in Nez Perce County is a single-lane bridge dating from 1919 crossing the Clearwater from US 12. Its current weight limit is below what cement trucks carry per axel. Federal funds will replace this bridge with construction beginning by 2020. Without the bridge, emergency vehicles face a 20-mile detour to reach residences. The current span is over 780 feet with a timber deck. The new construction, 70 feet upriver, will be concrete with two lanes for traffic. Post Falls upgraded part of its wastewater treatment plant last year; the second phase of that plan could cost around three times the amount already spent. The city received a grant from the Idaho Department of Environmental Quality as part of its funding. Overall, the cost is likely to be above \$50 million. Lewiston is also facing bills to update its water system. Intake, distribution, and treatment upgrades are all planned, with the total cost reaching \$42 million. City councilors raised rates 40% to begin saving funds for the costs; bonding will be part of the funding as well. Construction jobs climbed from 45,000 in 2017 to 48,700 in 2018, and they should reach 56,100 by 2022. Growth going forward is projected to average 3.6% per year.

Housing: Equity in housing fell in the latest quarter. Equity can be removed from the market through sales. New buyers typically only have the equity of their down payment within the property, whereas previous owners have that in addition to their pay-down through mortgage payments as well as what occurs through appreciation. Nationally, this decline amounted to \$140 billion in the third quarter. Declines were concentrated along the West Coast. The third quarter is traditionally relatively flat for home prices. Tight supply is a factor in local house price appreciation. Only 870 existing homes were for sale in Ada County in October, down 14% from 2017, and down almost 49% from 2014. Ada County had median prices at \$334,400 in August, \$319,000 in September, and \$321,400 in October. The median sales price was \$324,300 in November, confirming locally the national trend for the third quarter, but prices are up around 20% since October 2017. Over the year price increases are spread statewide. Home prices are up around 12% in Kootenai County over a year ago; median prices are just below \$250,000. Post Falls issued over 400 single-family building permits from January through the end of October, surpassing the full-year totals for both 2017 and 2016. Canyon County had median prices of \$220,000 in October. Caldwell issued around 40 new residential building permits in October, a monthly level typical of the past half year for that city. Bonneville County average sales prices are up 11% near \$218,700. Pocatello housing is also appreciating, rising over 17% in the past year. Average selling prices have climbed above \$190,000. Kuna could see a major housing development on its eastern edge. Falcon Crest, a golf course development, is planning on a 20-year project to add 2,000 homes. Price increases from demand may reach limits imposed by incomes. According to comments from Windemere Realty, each percentage point increase in interest rates typically lowers by 10% the loan total that a household can support. Calculation with the payment formula verifies that rule of thumb is applicable for mortgage rates within 4–7%. Rental housing is thus attracting interest. The Cottonwood Apartments in east Boise changed hands at \$24 million. The new owners, Kennedy Wilson, plan a \$6 million renovation of the apartment complex. The firm already controls over 1,100 units in Boise, and it is aiming for 2,000 units in the short-term. It intends to build over 400 multifamily units in Boise. There are areas and market segments which could benefit from more housing availability. Since 2014, downtown Boise has seen the addition of 390 units, with another 340 still under construction, and 250 in the review process. Veterans housing is going to be constructed at State and Fargo streets. The building will be for 26 one-bedroom units by 2020. Vouchers will be provided by both city and county housing authorities. Housing starts in the state crossed 15,000 in 2018. By 2022 they are projected to cross 18,000. The stock of housing units in the state expands by 2.2–2.5% per year of the forecast.

Nonfarm Employment Percentage Change

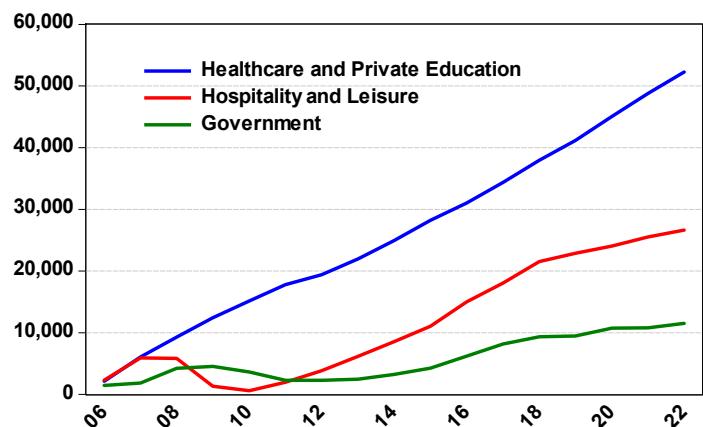


Employment: Most employment changes in Idaho in 2018 have either been fulfillments of large pledges and capital investments announced earlier (in 2017) or they have been quiet affairs, with employers adding or subtracting a handful of employees at a time or location. Here are three pieces of the employment changes Idaho faces. Amazon plans to hire around 1,500 workers for its West Plains fulfillment center near Spokane, WA in 2019. Such a large expansion will likely challenge the Spokane-Coeur d’Alene combined area’s workforce. On the Washington side of the border, unemployment is near 4.6%, and the

unemployment count is around 12,000 people. In Coeur d’Alene, across the border, unemployment is near 2.6%, with the unemployment count around 2,000. When workers commute across state borders, their earnings are recognized by the Bureau of Economic Analysis’s (BEA) statistic called residence adjustment, which is included in the Idaho Economic Model. This adjusts income from place of earning to place of residence. The Advanced Mixed Waste Treatment Project, which employs 650 at the Idaho Engineering Laboratory (INL) will shut down in 2019. Other contracts at the site will likely become employers of some of those affected workers. The plant is a \$500 million operation. Guest agricultural workers on H-2A visas were a growing force (up 17%) in Canyon County this past year. At the national level, H-2A usage was up 21%. Over 400 Idaho employers used H-2A workers this year. Previous years have had nearly 3,000 people employed via the visa in Idaho. The minimum wage for the workers is \$11.63 per hour in the state. Housing is part of the agreement, as are transportation and daily meals. Obendorf Farms in Wilder is planning on building housing for 256 guest workers by 2022. It currently rents accommodations for its guest workers. While population within the state is projected to grow by 1.6% on average each year, total employment is expected to grow over 2.0% per year on average over the forecast.

Hospitality and Leisure: Idaho regularly makes lists of places that people enjoy visiting and living due to its recreational opportunities, both indoors and outdoors. Here are a few witnesses to these opportunities: Yellowstone National Park surpassed 4 million visitors this year. There is work being done to rebuild a suspension bridge over the Salmon River that was originally built by the Civilian Conservation Corp during the Great Depression. It was located about 30 miles from Cobalt, west of Salmon, in the Frank Church Wilderness. Argyros Performing Arts Center opened in Ketchum, with seating for 460. It will be used by the symphony, ballet, and opera. The Idaho Center in Nampa was busy with over 180 events, covering three quarters of the year. It has been in operation since 1997, hosting the Idaho Stampede basketball team until 2005. This year the center turned its first profit. Winter brings extra life to several resorts, and here are a few developments associated with those. Bogus Basin opened its mountain coaster this summer and road up the mountain was repaved. Extra handicapped parking spaces were also

Cumulative Job Growth in Select Idaho Sectors



added. Snow making equipment brought forward the opening day this year. Brundage redid its icebox corner and repaved the road from McCall. Next year, Tamarack is intending to reinstall the Wildwood chairlift which was removed in the resort's initial bankruptcy filing. Tamarack had 85,000 visitors last year. It is planning on beginning construction of its Village Plaza, a retail and restaurant area, in 2019 with the aim of opening in 2020. After a fire claimed its mid-mountain building last season, Sun Valley reopened the Warm Springs day lodge, and it is expanding with more snowmaking guns for the next season. Grand Targhee (in Wyoming, but 12 miles from Driggs, ID, its only point of access) turns 50 years old this year and has had snowboarding at the resort for 30 years. The resort is at the forefront of other winter activities, including fat biking—riding bicycles with extra-wide tires over groomed snow. Schweitzer ski resort is going to replace its Snow Ghost double chairlift by a detachable quad chairlift and a fixed triple lift in 2019. This past year it improved its internet service and bus service (from Selkirk Pend Oreille Transit). These resorts employ workers in restaurant positions, but they also employ electricians, drivers, property managers, and, of course, ski instructors. With the expansion of off-season recreation offerings at these destinations, the seasonality of job openings and employment is changing. While seasonal industries were discussed in this paragraph, the broader hospitality and leisure sector has 78,900 filled jobs in the state, and it is expected to just top 84,000 jobs in 2022. Growth is expected at a more muted 1.6% average going forward compared with annual growth over 4% in 2016–2018. Nationally, IHS predicts slower growth as well.

Healthcare and Private Education: BYU-Idaho dominates the private educational component of this sector, but private education includes Montessori schools, for-profit colleges, and many others. A new addition is coming. Ketchum will have a culinary school, occupying the restaurant space at Washington Avenue, between First and Second streets. Healthcare, though, is a much larger employer in the state than private education. Camp Rainbow Gold is purchasing Soldier Mountain Ranch and Resort. The nonprofit helps families deal with pediatric cancer. St. Luke's is expanding its McCall Medical Center, doubling the size and updating the structure, as well as expanding its capabilities for telemedicine. A hospital near Eagle and Overland in southwest Boise has been gutted and remodeled for Cottonwood Creek Behavioral Hospital. It is scheduled to open in mid-January. Total employment is expected to be 150–180 for the hospital, with around one-third being nurses. It has 72 beds. Safe Haven Health Care, which has nursing facilities in Bellevue and Wendell, is selling its 16-bed Boise psychiatric facility to Lifeways of Ontario, Oregon. The sale is part of a restructuring at Safe Haven Health Care, and it could affect the 50 employees at the Boise facility. Care delivery around the clock requires several shifts, so hospital staffing needs are great. Madison Memorial Hospital in Rexburg has about 150 nurses, and Idaho Falls Community Hospital has around 200. Hospitals in the state are competing for employees in a tough job market for employers. Some hospitals in eastern Idaho and western Wyoming are entering a regional cooperative, creating a pool of traveling nurses who are more closely tied to the region than the national pools of traveling nurses that many Idaho hospitals currently must access. St. Luke's placed its sky bridge, linking the new Idaho Elks Children's Pavilion with the existing Children's Hospital. This is part of the \$42 million expansion, which will include 100,000 square-feet for clinical space in the hospital. Education and healthcare surpassed 100,000 jobs in the state in 2017. It is expected to top 120,000 jobs in 2022.

Government: Occasionally governmental projects end, but most governmental work is ongoing. It can encompass recurring projects to far-sighted planning for the state. Capital City Development Corporation (CCDC), the urban renewal district for Boise, has closed out its downtown operation, and is moving towards two new urban renewal districts. The industrial one will be near Gowen Road, southeast of Boise. Much of the intended development is infrastructure, including water and sewer improvements, sidewalks, and fiber optic upgrades. For recurring work, the Ada County Highway District (ACHD) has 141 maintenance workers and added 11 snowplows. The Nampa Highway District has a corresponding

staff of 15 with eight snowplows. Caldwell has seven snowplows on dump trucks and three road graders for plowing. Medium-term projects include ones like this: the Idaho Transportation Department (ITD) just finished a \$17 million project along the Lochsa and Middle Fork of the Clearwater River. Fifty-five miles of roadway on US 12 were repaved, with bridge replacements over both Maggie Creek and Fish Creek. In four to five years, ITD will seal coat the roadway to extend the life of the underlying pavement. Idaho Transportation Department also addresses long-term needs beyond bridge replacement. It is using funds, which were freed by the federal government's award of \$90.2 million for I-84 expansion in Canyon County, to buy right-of-way for the planned Central Valley Expressway, which will connect Star to I-84, cutting travel time to six minutes at freeway speeds. Another roadway improvement in that area is the extension of Chinden into a six-lane road between Caldwell and eventually Eagle Road. Just over \$34 million will be directed towards achieving that goal as far as Middleton Road. The full project timeframe goes until 2024. By 2065 the Idaho Water Resource Board says that 1.6 million people could be living in the Treasure Valley, and to accommodate the water needs of that population, the board is looking at the system of three reservoirs feeding the valley. Arrowrock, Anderson Ranch, and Lucky Peak collectively have 1 million acre-feet of water storage capacity. Nearly four-fifths of this water is contracted for agriculture. Improvements at the dams could increase storage capacity, with the total increase being almost 3%. That is for the most cost-effective option, which involves raising the top of Anderson Ranch Dam by six feet. Total employment across federal, state, and local governments, including tribal employment, is expected to close 2018 at 111,300. Jobs gains are expected to lag most industries in the state, with growth averaging just 0.5% on average across the forecast.

Wood: Woodgrain Millwork from Fruitland has bought more Boise Cascade sawmills, having acquired the Emmett mill in 2016. This year it bought the eastern Oregon plants in La Grande, Pilot Rock, and Island City. Currently, logs from southwest Idaho are transported to La Grande for sawing. The firm employs about 750 in southwestern Idaho—in Fruitland, Emmett, and Nampa. The new mills add 250 employees. Boise Cascade's earnings in the third quarter met Wall Street analysts' expectations. The company focuses on engineered wood products, including plywood, joists, and glue-laminated timbers. Revenue was \$1.34 billion. The new trade agreement between the US, Canada, and Mexico does not address softwood lumber. Currently there are 20% tariffs on Canadian lumber, dating from 2017. Some of the competition that northwestern US lumber has with Canadian lumber has been shifting to competition with southern US lumber. This is partly due to quicker growing times in that region coupled with incentives going back 40 years to private land owners to grow timber. These are resulting in harvestable trees now. Trees in northern Idaho grow more slowly, but the wood can result in lumber with higher grades and greater prices. Idaho has brought timber sales forward through the Good Neighbor Authority, a joint program between the US Forest Service and state forestry programs, and Idaho just signed an agreement to extend that partnership. Logging and wood products employment counts just over 8,000 in the state, and this employment is expected to expand just a bit to above 8,400 by the end of 2022.

FORECAST COMPARISON

Idaho's economy is influenced by local, national, and international factors. Changes in the projected values of statistics such as oil prices, interest rates, and national housing starts can affect the state. To account for the effects of such changes on the state's economy, this issue of the *Idaho Economic Forecast* uses the November 2018 IHS forecast of the US economy. Specific expansions or contractions in Idaho operations are also considered and incorporated.

The comparison table shows how several Idaho and national economic series have changed since the October 2018 *Idaho Economic Forecast*. The October publication was based on that month's IHS baseline US macroeconomic forecast.

With only one month's time between the publication of the two IHS national forecasts, there is little change within some of the larger macroeconomic variables. Population projections remain steady as do GDP and personal income figures. The largest revision at the GDP level was a consistent lowering by 0.2% from 2019 to 2022. Similar changes occur within personal income at the national level. On more narrow measurements of the economy there is greater swing between the forecasts. Proprietors' income is raised among owners of businesses other than farms, up to 3.3% by 2022, whereas farm proprietors' income is lowered nationally by 5.0% in 2020 compared with the earlier forecast.

Within the Idaho forecast, another quarter's worth of data became available for housing starts. This updates not only the housing figures, but also closely allied employment sectors, notably construction and retail. Housing starts are viewed as a bit slower in this forecast, as much as 1.1% below the earlier forecast for 2020. Single-family construction dominates housing starts in the state, so numerically much of the drop is concentrated there. With a much smaller base, the multi-family housing unit difference is wider as a percentage, at 1.6% in 2020–2021. Construction jobs for the full year 2018 are lower by around 250. However, IHS revised upwards its assessment of construction employment, so the dip within Idaho's projection for construction employment is erased in 2019. Jobs gains then reach 400 by 2020 over the previous forecast.

Retail trade employment is expected to continue to show growth within the state. At the national level, IHS sees very little expansion to close 2018 before a flat 2019 and a contracting 2020. Idaho's retail forecast adopts more of this view, and consequently growth in the retail sector is slower in this forecast than in the last. Over 1,500 fewer jobs are envisioned within the sector in 2020, representing a 2.1% decline over the previous forecast. This widens by half in 2020, when 2,250 fewer jobs are expected. Again, overall retail employment is still projected to be up within the state, but not as high as previously projected.

**IDAHO ECONOMIC FORECAST
FORECASTS COMPARISON
DIFFERENCES BETWEEN
JANUARY 2019 vs. OCTOBER 2018 FORECASTS**

	2015	2016	2017	2018	2019	2020	2021	2022
U.S. GDP (BILLIONS)								
Current \$	0	0	0	-4	-39	-49	-50	-49
% Difference	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.2%	-0.2%	-0.2%
2009 Chain-Weighted	0	0	0	1	-2	8	13	11
% Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
PERSONAL INCOME - CURR \$								
Idaho (Millions)	0	0	0	21	-226	-101	-39	-140
% Difference	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.1%	0.0%	-0.2%
U.S. (Billions)	0	0	0	3	-22	-6	1	7
% Difference	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
PERSONAL INCOME - 2009 \$								
Idaho (Millions)	0	0	0	29	-265	56	180	98
% Difference	0.0%	0.0%	0.0%	0.0%	-0.4%	0.1%	0.2%	0.1%
U.S. (Billions)	0	0	0	5	-34	28	50	55
% Difference	0.0%	0.0%	0.0%	0.0%	-0.2%	0.2%	0.3%	0.3%
TOTAL NONFARM EMPLOYMENT								
Idaho	0	0	0	-460	-1,612	-2,166	-2,333	-2,709
% Difference	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.3%	-0.3%	-0.3%
U.S. (Thousands)	0	0	0	23	171	243	396	706
% Difference	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.3%	0.5%
GOODS PRODUCING SECTOR								
Idaho	0	0	0	-186	631	568	217	183
% Difference	0.0%	0.0%	0.0%	-0.2%	0.5%	0.5%	0.2%	0.1%
U.S. (Thousands)	0	0	0	24	133	87	109	155
% Difference	0.0%	0.0%	0.0%	0.1%	0.6%	0.4%	0.5%	0.7%
NONGOODS PRODUCING SECTOR								
Idaho	0	0	0	-274	-2,243	-2,735	-2,550	-2,891
% Difference	0.0%	0.0%	0.0%	0.0%	-0.4%	-0.4%	-0.4%	-0.4%
U.S. (Thousands)	0	0	0	-2	38	156	287	551
% Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.4%
SELECTED INTEREST RATES								
Federal Funds Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank Prime Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Existing Home Mortgage Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
INFLATION								
GDP Price Deflator	0.000	0.000	0.000	-0.032	-0.191	-0.300	-0.333	-0.311
Personal Cons Deflator	0.000	0.000	0.000	-0.015	0.094	-0.223	-0.327	-0.328
Consumer Price Index	0.000	0.000	0.000	-0.001	0.002	-0.013	-0.016	-0.016

**National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018**

ALTERNATIVE FORECAST

IHS places the likelihood of its November 2018 *Optimistic Scenario* at 15% and its *Pessimistic Scenario* at 25%. This leaves the baseline forecast at 60% likely. These were the same probabilities in October.

A snapshot of the *Baseline Scenario* across 2018–2022 is:

- Real GDP growth is forecast at 2.9%, 2.7%, 2.1%, 1.6% and 1.5%.
- Nonfarm payrolls grow registers 1.6%, 1.5%, 1.1%, 0.6%, and 0.4%.
- Headline (U-3) unemployment runs 3.9%, 3.4%, 3.4%, 3.6%, and 3.8%.
- CPI inflation is forecast at 2.5%, 2.5%, 1.9%, 2.2%, and 2.3%.
- The US governmental deficit rounds to \$1 trillion in federal fiscal years 2019 through 2020, \$1.1 trillion in 2021, and \$1.2 trillion in 2022.

PESSIMISTIC SCENARIO

Economic growth falls below the baseline forecast in 2019 and the economy contracts 0.4% in 2020 in this scenario. A recession runs from the first quarter of 2020 through its third quarter. Housing starts drop below those in the baseline by the end of 2019, and they never reach above 1.3 million across the forecast horizon. In the baseline, there is a gradual improvement in housing starts to just over 1.4 million. As may be expected of a recession, consumer spending stalls in 2020, and the Federal Reserve responds by dropping its short-term borrowing rate. The federal government is not assumed to offer any fiscal stimulus different from that in the baseline, though, and banks are expected to maintain high lending standards throughout the recession.

The recession knocks stocks (S&P500) back by 3.8%, and the rest of the world also experiences slower growth. The rebound overseas is only back to the baseline growth rate. Due to lower interest rates, the dollar depreciates in this scenario.

IHS again foresees that the current expansion does reach record length at 123 months before this slow-down occurs. A catalyst for it is a correction within commercial real estate. That is part of what brings about a broader loss of confidence which eventually slows consumer spending. Notable among the metrics adversely affected in this scenario is a rise in the unemployment rate to just under 4% by the end of 2019, then a further rise to 5.5% by the end of 2020. Almost unaffected in this scenario is the price of oil.

Within Idaho, personal income holds up through 2019 in this scenario, but drops behind the baseline by \$1.2 billion dollars in 2020 (out of more than \$80 billion dollars). That drop then expands to \$3.9 billion by 2022. Compared with the baseline, nonfarm jobs are also reduced in the state, by around 2,200 in 2020 and by 20,100 by 2022. The bulk of that loss would occur in the nongoods-producing sector, where a change of 18,000 would be accumulating. The baseline forecast for nonfarm jobs has 799,900 jobs in the state by 2022, so the change in outlook between the pessimistic and baseline forecasts for nonfarm jobs amounts to 2.5% of the total.

**IDAHO ECONOMIC FORECAST
BASELINE AND ALTERNATIVE FORECASTS
JANUARY 2019**

	BASELINE					OPTIMISTIC					PESSIMISTIC				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
U.S. GDP (BILLIONS)															
Current \$	20,504	21,555	22,537	23,472	24,420	20,504	21,635	22,772	23,906	25,096	20,498	21,470	21,783	22,526	23,517
% Ch	5.2%	5.1%	4.6%	4.1%	4.0%	5.2%	5.5%	5.3%	5.0%	5.0%	5.2%	4.7%	1.5%	3.4%	4.4%
2009 Chain-Weighted	18,575	19,082	19,480	19,789	20,086	18,575	19,159	19,711	20,211	20,718	18,573	19,078	19,006	19,201	19,565
% Ch	2.9%	2.7%	2.1%	1.6%	1.5%	2.9%	3.1%	2.9%	2.5%	2.5%	2.9%	2.7%	-0.4%	1.0%	1.9%
PERSONAL INCOME - CURR \$															
Idaho (Millions)	75,409	78,838	83,086	87,258	91,479	75,346	78,846	83,257	87,493	91,728	75,347	78,755	81,846	84,245	87,593
% Ch	5.0%	4.5%	5.4%	5.0%	4.8%	4.9%	4.6%	5.6%	5.1%	4.8%	4.9%	4.5%	3.9%	2.9%	4.0%
U.S. (Billions)	17,585	18,378	19,284	20,131	20,974	17,585	18,427	19,445	20,423	21,410	17,584	18,311	18,777	19,255	20,060
% Ch	4.5%	4.5%	4.9%	4.4%	4.2%	4.5%	4.8%	5.5%	5.0%	4.8%	4.5%	4.1%	2.5%	2.5%	4.2%
PERSONAL INCOME - 2009 \$															
Idaho (Millions)	69,630	71,178	73,572	75,662	77,637	69,572	71,206	73,842	76,105	78,151	69,580	71,264	72,887	73,531	74,848
% Ch	2.9%	2.2%	3.4%	2.8%	2.6%	2.8%	2.3%	3.7%	3.1%	2.7%	2.8%	2.4%	2.3%	0.9%	1.8%
U.S. (Billions)	16,237	16,592	17,076	17,456	17,800	16,237	16,641	17,247	17,765	18,241	16,237	16,569	16,722	16,806	17,141
% Ch	2.3%	2.2%	2.9%	2.2%	2.0%	2.3%	2.5%	3.6%	3.0%	2.7%	2.3%	2.0%	0.9%	0.5%	2.0%
TOTAL NONFARM EMPLOYMENT															
Idaho	737,511	751,275	767,981	784,296	799,825	737,334	751,170	769,437	787,456	804,104	737,300	751,210	765,769	771,769	779,760
% Ch	3.1%	1.9%	2.2%	2.1%	2.0%	3.1%	1.9%	2.4%	2.3%	2.1%	3.1%	1.9%	1.9%	0.8%	1.0%
U.S. (Thousands)	149,011	151,292	152,990	153,849	154,516	149,011	151,246	152,861	153,859	154,845	149,005	150,995	150,441	150,103	151,208
% Ch	1.6%	1.5%	1.1%	0.6%	0.4%	1.6%	1.5%	1.1%	0.7%	0.6%	1.6%	1.3%	-0.4%	-0.2%	0.7%
GOODS-PRODUCING SECTOR															
Idaho	120,587	123,427	126,556	129,746	132,991	120,583	123,513	126,740	130,065	133,514	120,539	123,304	126,029	128,250	130,920
% Ch	5.0%	2.4%	2.5%	2.5%	2.5%	5.0%	2.4%	2.6%	2.6%	2.7%	4.9%	2.3%	2.2%	1.8%	2.1%
U.S. (Thousands)	20,684	21,164	21,391	21,550	21,683	20,681	21,137	21,319	21,491	21,731	20,667	21,055	20,878	20,468	20,863
% Ch	3.0%	2.3%	1.1%	0.7%	0.6%	3.0%	2.2%	0.9%	0.8%	1.1%	2.9%	1.9%	-0.8%	-2.0%	1.9%
NONGOODS-PRODUCING SECTOR															
Idaho	616,924	627,848	641,426	654,550	666,835	616,750	627,658	642,698	657,392	670,590	616,761	627,906	639,740	643,519	648,841
% Ch	2.8%	1.8%	2.2%	2.0%	1.9%	2.7%	1.8%	2.4%	2.3%	2.0%	2.7%	1.8%	1.9%	0.6%	0.8%
U.S. (Thousands)	128,328	130,128	131,599	132,299	132,833	128,330	130,108	131,542	132,368	133,114	128,338	129,940	129,564	129,635	130,344
% Ch	1.4%	1.4%	1.1%	0.5%	0.4%	1.4%	1.4%	1.1%	0.6%	0.6%	1.4%	1.2%	-0.3%	0.1%	0.5%
SELECTED INTEREST RATES															
Federal Funds	1.8%	2.8%	3.4%	3.4%	3.4%	1.8%	2.4%	2.7%	3.0%	3.4%	1.8%	2.6%	0.8%	0.2%	1.0%
Bank Prime	4.9%	5.9%	6.4%	6.5%	6.5%	4.9%	5.7%	5.7%	6.0%	6.4%	4.9%	5.7%	3.9%	3.3%	4.1%
Existing Home Mortgage	4.7%	5.2%	5.3%	5.3%	5.3%	4.7%	5.2%	5.2%	5.3%	5.3%	4.7%	4.7%	3.9%	3.1%	3.6%
INFLATION															
GDP Price Deflator	2.2%	2.4%	2.4%	2.5%	2.5%	2.2%	2.3%	2.3%	2.4%	2.4%	2.2%	2.0%	1.8%	2.4%	2.5%
Personal Cons Deflator	2.1%	2.3%	2.0%	2.1%	2.2%	2.1%	2.2%	1.8%	2.0%	2.1%	2.1%	2.1%	1.6%	2.0%	2.1%
Consumer Price Index	2.5%	2.5%	1.9%	2.2%	2.3%	2.5%	2.5%	1.8%	2.1%	2.2%	2.5%	2.3%	1.5%	2.0%	2.3%

OPTIMISTIC SCENARIO

Real GDP growth bests its baseline reading for 2019 at 3.1% versus 2.7%, and over the 2.9% of 2018, in this scenario. Further into the forecast, real GDP advances around 1.0 percentage point higher than in the baseline forecast. Housing starts climb above 1.5 million by 2021, higher than reached by the end of the baseline forecast. IHS maintains the same fiscal assumptions for this forecast as for the baseline, so the growth is from the private economy. Partly that is due to better productivity growth, 0.9 percentage points above the baseline. Also contributing is the assumption of a lower natural rate of unemployment than in the baseline: near 4.0% rather than 4.8% as in the baseline. This last assumption means that the economy is currently running beyond its long-range ability to a lesser extent than in the baseline. The drift back (up) towards a normal unemployment rate is thus less sudden. A lower natural rate of unemployment also slows inflation a bit more than in the baseline.

No particular narrative accompanies this scenario within IHS's narrative. Productivity growth and the lower natural unemployment rate largely explain the extra gains under the scenario. Notably, payroll growth, the unemployment rate, and oil prices are nearly indistinguishable from the baseline forecast.

Overall, the baseline and the optimistic forecasts for Idaho are quite close. Much like in the national forecast, employment gains in Idaho in this scenario are quite similar to those in the baseline forecast. In 2020, there are about 1,500 more nonfarm jobs within the state. This gain is just two-tenths of a percent of the total for the state. By 2022, the gain has increased over the baseline to 4,300 jobs, which is a half of a percent improvement over the baseline. Personal income would be up by \$170 million in 2020 over the base forecast, and up \$250 million by 2022. The totals for those years would be near \$83 billion and \$91 billion, respectively.

The Slope of the Yield Curve and the Near-Term Outlook

Jens H.E. Christensen¹

An inverted Treasury yield curve—a negative term spread in which long-term securities earn a lower rate of return than short-term securities—has been well established as a reliable real-time predictor of future recessions (Bauer and Mertens 2018). What a positive but declining slope of the yield curve might imply for the economic outlook has garnered less attention. Nevertheless, answering this question has become increasingly important given the ongoing gradual normalization of U.S. monetary policy, which has raised short-term interest rates almost 2 percentage points since December 2015. Because long-term yields have increased much less, the Treasury yield curve has flattened, raising speculation about whether these changes may signal a rising risk of recession.

In this *Letter*, I describe the connection between investors' expectations about changes in the stance of monetary policy and Treasury yields and offer a possible explanation why an inverted yield curve precedes and hence predicts recessions. I use both a simple descriptive approach and a more sophisticated analysis based on a dynamic model of the Treasury yield curve to shed light on the connection between the current yield curve slope, expectations about its future movements, and the risk of a recession. Both of these exercises suggest that, although the yield curve has flattened notably in recent years, the risk of a recession occurring within the next year is only slightly higher than the risk of being in a recession in any given month. Furthermore, unique structural factors may be weighing down long-term yields, pushing down the slope of the yield curve and hence overstating the risk of a recession.

Monetary policy and the yield curve

Due to its dual mandate of maximum employment and price stability, the Fed has a long history of responding to recessions by lowering its primary policy interest rate, the overnight federal funds rate, to ease financial conditions. Rational investors in financial markets anticipate such routine changes in the stance of monetary policy and build them into their trading strategies, thereby affecting the slope of the Treasury yield curve. Specifically, long-term Treasury yields start to level off or even drop in anticipation of a looming recession and associated monetary policy easing, which causes the yield curve to flatten. As the risk of recession grows, the Treasury yield curve turns negative in the months before the actual onset, which explains the enduring power of an inverted yield curve as a real-time predictor of future recessions. Moreover, even if a recession were not looming, downbeat investors seeking safe investments could buy up long-term securities, causing long-term rates to lower and thus contributing to tighter financial conditions and an economic downturn.

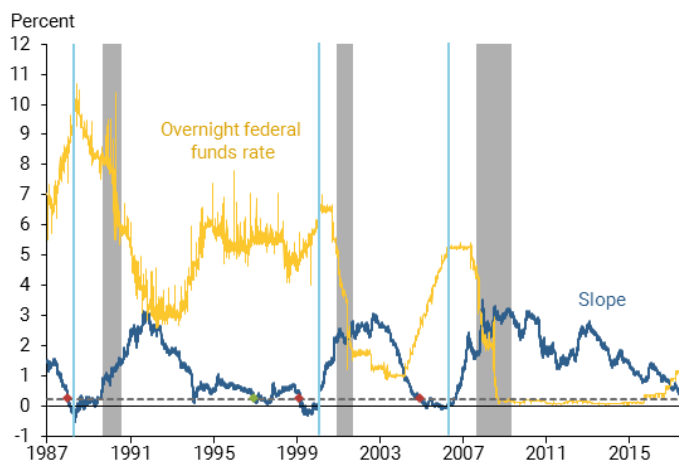
If history is a guide to the future, the question is, what does the current slope of the Treasury yield curve imply regarding investors' views about the current risk and timing of a recession, assuming that they believe the Fed would lower interest rates as usual in response to an economic downturn?

Simple calculations based on interest rate movements over the past three decades can provide an initial rough answer. Figure 1 shows the daily overnight federal funds rate targeted by the Fed (gold line) and the daily yield difference between the ten-year and two-year Treasury yields (blue line) taken from Gürkaynak, Sack, and Wright (2007), which I use as the slope measure. As of August 31, 2018, this

¹This article originally appeared in the Number 2018-23; October 15, 2018 *FRBSF Economic Letter*. Opinions expressed in this article are those of the authors and do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco or of the Board of Governors of the Federal Reserve System.

yield spread was 0.24% (horizontal dashed line), well below its unconditional mean of 1.35% based on the daily data since December 1, 1987. The figure also highlights four times the slope of the yield curve had a similarly low value in the later stages of an ongoing monetary policy tightening cycle. Three of these led to a yield curve inversion shortly thereafter (red dots), while one was a false positive with no immediate subsequent inversion (green dot). Note that I don't include the brief yield curve flattening in the fall of 1994 because it was quickly reversed, unlike the other four episodes. Finally, gray bars indicate the three recessions during this period as determined by the National Bureau of Economic Research (NBER), while light blue vertical lines indicate the days when U.S. monetary policy reached its peak ahead of those recessions.

Figure 1
Fed policy rate and the slope of the Treasury yield curve



Scrutinizing the key event dates around the three most recent recessions reveals that it took between 96 and 227 days from the day the slope of the Treasury yield curve reached its current level (0.24%) until monetary policy peaked. November 19, 1997, is the sole false positive; during that episode, monetary policy did not peak but rather the policy rate was eased such that the yield curve never inverted.

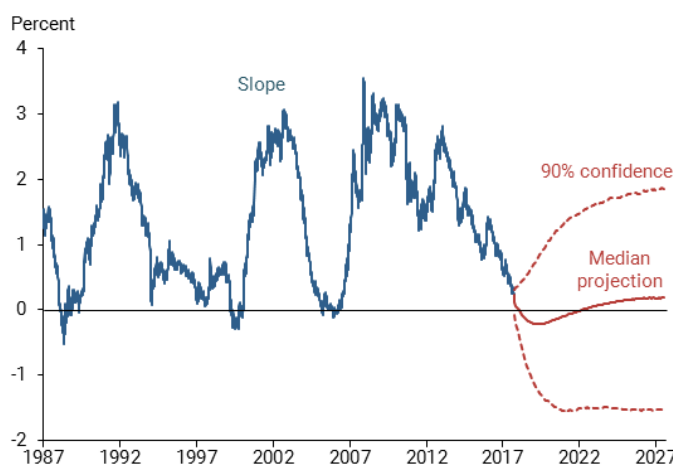
The second phase between the peak of monetary policy tightening and the beginning of a recession lasted between 287 and 516 days. This back-of-the-envelope analysis suggests that there is a one-in-four chance that the current low slope will have no negative implications for future economic growth, as in November 1997. Data from the remaining three outcomes when a similarly flat yield curve ended with an inversion and subsequent recession suggest that this result could take from a little over a year to about two years to occur. Hence, this analysis suggests only a modest risk of a recession within the next year despite the relatively flat yield curve.

Evidence from a yield curve model

To complement the descriptive analysis, I use a model that describes the relationship between bond yields of different maturities, known as a term structure model, specifically one identified by Christensen and Rudebusch (2012). The model's three factors represent the general level of interest rates, the slope of the yield curve, and any humps in the shape of the yield curve. The factors only indirectly reflect the connection between the state of the economy and the stance of monetary policy. Instead, the constellation of these three factors implied by the current Treasury yield curve and their historical dynamic relationship determine the chance of observing a given shape of the yield curve in the future.

Based on the estimated factor values and model dynamics as of August 31, 2018—which reflect the shape of the Treasury yield curve and investors’ embedded expectations as of that day—I project 10,000 possible paths for the yield curve up to ten years ahead. Along each ten-year path, I convert the projected yields at monthly intervals into forecasts of the yield curve slope, defined as the difference between the ten-year and two-year yields. Figure 2 shows the median projection and the values within a 90% confidence band for the simulated slope over the ten-year forecast.

Figure 2
Projections of the slope of the Treasury yield curve



The median slope projection turns negative by year-end 2018 and reaches a low of -0.22% during the first quarter of 2020 before gradually reversing to a stable longer-run level near 0.2% . The upper confidence band implies a reversal to a fairly steep yield curve normally seen in the early stages of economic recoveries that reaches 1% in the fall of 2020 and approaches 2% by mid-2027. In contrast, the lower band represents an unusual, persistently negative slope that dips below -1% in the fall of 2019. Thus, a wide range of outcomes is possible within the 90% confidence band, which underscores the inherent uncertainty in making economic projections, even in the near term.

It is important to emphasize that the projections in Figure 2 do not represent paths from a single simulation over the forecast horizon; instead, they reflect the distribution of all simulation outcomes at each point in time. Hence, an individual simulation varies over time and generally is not as smooth as the median projection, seesawing and often turning negative for limited periods. Therefore, as an alternative, I track individual simulated paths and define a yield curve inversion as one lasting at least three months to exclude short-lived near-zero gyrations like in the fall of 1994. Among the individual simulations, 16% have no inversions over the ten-year projection horizon. The remaining 84% project an inversion at some point over the next ten years. The median time before the first yield curve inversion in the conditional probability distribution is seven months; there is a 61% chance of an inversion within the first year and an 8% chance between the first and second year.

Combining these results with the fact that over the past three decades the subsequent recessions have started 9 to 18 months *after* the initial inversion of the Treasury yield curve, the risk of a recession happening within the next year is slightly elevated—with around a one-in-three chance of a yield curve inversion within the next three months. Still, this leaves a high chance that the current economic

expansion will continue beyond June 2019 and become the longest in U.S. history. For perspective, in the post-World War II era from October 1945 to August 2018 (875 months), the U.S. economy has been in recession 123 months according to the NBER. From these numbers, the risk of being in a recession in any given month is 14%, thus not entirely negligible.

One important caveat is that long-term Treasury yields have been unusually low for many years (Bauer and Rudebusch 2016), which is reflected in the estimated model dynamics. This could be caused by declines in the risk-free or natural real rate from low productivity or an aging population (Christensen and Rudebusch 2017), or by the massive long-term asset purchases by major central banks in the aftermath of the global financial crisis (Bonis, Ihrig, and Wei 2017). In either case, U.S. long-term yields may react less to increases in U.S. short-term interest rates than past experience would suggest. All else being equal, such factors would make it more likely that an inverted yield curve may *not* signal expectations among investors of a looming recession, unlike the assumption in this *Letter*. Therefore, these results should be viewed as upper bound estimates of the actual risk of a recession.

Conclusion

In this *Letter*, I analyze what the recent flattening of the U.S. Treasury yield curve may imply for the timing of a yield curve inversion and the economic outlook. Using both a descriptive approach and evidence from a dynamic model of Treasury yields, I find that the risk of a recession within the next year is only slightly higher than the risk of being in a recession in any random month. Hence, at this time, it may be warranted to not put too much weight on the signal from the yield curve flattening, particularly in light of structural factors that may be weighing down long-term yields and causing the signal to be less reliable than in the past.

References

- Bauer, Michael D., and Thomas M. Mertens. 2018. [“Economic Forecasts with the Yield Curve.”](https://www.frbsf.org/economic-research/publications/economic-letter/2018/march/economic-forecasts-with-yield-curve/) *FRBSF Economic Letter* 2018-07 (March 5). <https://www.frbsf.org/economic-research/publications/economic-letter/2018/march/economic-forecasts-with-yield-curve/>
- Bauer, Michael D., and Glenn D. Rudebusch. 2016. [“Why Are Long-Term Interest Rates So Low?”](https://www.frbsf.org/economic-research/publications/economic-letter/2016/december/why-are-long-term-interest-rates-so-low/) *FRBSF Economic Letter* 2016-36 (December 5). <https://www.frbsf.org/economic-research/publications/economic-letter/2016/december/why-are-long-term-interest-rates-so-low/>
- Bonis, Brian, Jane Ihrig, and Min Wei. 2017. [“The Effect of the Federal Reserve’s Securities Holdings on Longer-Term Interest Rates.”](https://www.federalreserve.gov/econres/notes/feds-notes/effect-of-the-federal-reserves-securities-holdings-on-longer-term-interest-rates-20170420.htm) Board of Governors FEDS Notes, April 20. <https://www.federalreserve.gov/econres/notes/feds-notes/effect-of-the-federal-reserves-securities-holdings-on-longer-term-interest-rates-20170420.htm>
- Christensen, Jens H.E., and Glenn D. Rudebusch. 2012. “The Response of Interest Rates to U.S. and U.K. Quantitative Easing.” *Economic Journal* 122, pp. F385–F414.
- Christensen, Jens H.E., and Glenn D. Rudebusch. 2017. [“New Evidence for a Lower New Normal in Interest Rates.”](https://www.frbsf.org/economic-research/publications/economic-letter/2017/june/financial-market-evidence-for-lower-natural-interest-rate-r-star/) *FRBSF Economic Letter* 2017-17 (June 19). <https://www.frbsf.org/economic-research/publications/economic-letter/2017/june/financial-market-evidence-for-lower-natural-interest-rate-r-star/>
- Gürkaynak, Refet S., Brian Sack, and Jonathan H. Wright. 2007. “The U.S. Treasury Yield Curve: 1961 to the Present.” *Journal of Monetary Economics* 54(8), pp. 2,291–2,304.

IDAHO ECONOMIC FORECAST

January 2019

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Reporting Conventions

Units of measurement are presented in the individual reports.

The percentage change numbers given in the annual reports are simple period-to-period percent changes. Since the periods are years, they are thus simple annual changes. The percentage changes given in the quarterly report are period-to-period changes at compounded annual rates, following standard practice. A large change in a given quarter can seem to be exaggerated since the calculation assumes the change is compounded over an entire year.

Data Sources

National forecast data is provided by IHS Economics, as well as the Food and Agricultural Policy Research Institute (FAPRI). Historical data for the models are obtained from the following agencies: Bureau of the Census (demographic and housing), Bureau of Economic Analysis (income), Bureau of Labor Statistics (employment), Federal Reserve Board of Governors (production), and US Department of Agriculture (farm).

Idaho historical data is obtained from the Department of Labor (employment and hourly earnings), Bureau of Vital Statistics (births and deaths), Division of Financial Management (migration), and the Bureau of Economic Analysis (income).

The Idaho average annual wage is calculated by the Division of Financial Management from Bureau of Economic Analysis and Idaho Department of Labor data. Because of the different methodology used and data available, this figure may not match those published by other sources.

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JANUARY 2019**

DEMOGRAPHICS

	2005	2006	2007	2008	2009	2010	2011	2012	2013
POPULATION									
Idaho (Thousands)	1,428.2	1,468.7	1,505.1	1,534.3	1,554.4	1,570.9	1,583.2	1,594.7	1,610.2
% Ch	2.6%	2.8%	2.5%	1.9%	1.3%	1.1%	0.8%	0.7%	1.0%
National (Millions)	296.460	299.282	302.227	304.948	307.580	310.091	312.386	314.657	316.882
% Ch	0.9%	1.0%	1.0%	0.9%	0.9%	0.8%	0.7%	0.7%	0.7%
BIRTHS									
Idaho (Thousands)	23,064	24,185	25,023	25,156	23,726	23,202	22,311	22,941	22,348
% Ch	2.4%	4.9%	3.5%	0.5%	-5.7%	-2.2%	-3.8%	2.8%	-2.6%
National (Thousands)	4,150	4,280	4,322	4,269	4,152	4,031	3,967	3,965	3,929
% Ch	0.9%	3.1%	1.0%	-1.2%	-2.7%	-2.9%	-1.6%	-0.1%	-0.9%
DEATHS									
Idaho (Thousands)	10,513	10,556	10,742	10,927	11,065	11,411	11,990	11,993	12,426
% Ch	5.0%	0.4%	1.8%	1.7%	1.3%	3.1%	5.1%	0.0%	3.6%
National (Thousands)	2,456	2,433	2,432	2,479	2,444	2,479	2,522	2,549	2,603
% Ch	2.1%	-0.9%	-0.1%	1.9%	-1.4%	1.5%	1.7%	1.1%	2.1%
NET MIGRATION									
Idaho (Thousands)	23,888	26,799	22,155	14,986	7,458	4,682	1,947	0,546	5,592
HOUSING									
HOUSING STARTS									
Idaho	23,408	19,533	14,345	7,979	5,733	5,186	4,561	7,124	9,056
% Ch	25.3%	-16.6%	-26.6%	-44.4%	-28.2%	-9.5%	-12.1%	56.2%	27.1%
National (Millions)	2,073	1,812	1,342	0,900	0,554	0,586	0,612	0,784	0,928
% Ch	6.3%	-12.6%	-25.9%	-32.9%	-38.4%	5.7%	4.5%	28.1%	18.4%
SINGLE UNITS									
Idaho	20,939	17,521	12,014	7,132	4,951	4,648	3,956	6,021	7,718
% Ch	29.5%	-16.3%	-31.4%	-40.6%	-30.6%	-6.1%	-14.9%	52.2%	28.2%
National (Millions)	1,719	1,474	1,036	0,616	0,442	0,471	0,434	0,537	0,619
% Ch	7.1%	-14.3%	-29.7%	-40.5%	-28.2%	6.6%	-7.9%	23.6%	15.3%
MULTIPLE UNITS									
Idaho	2,470	2,012	2,331	847	782	538	605	1,103	1,338
% Ch	-1.6%	-18.5%	15.9%	-63.7%	-7.6%	-31.2%	12.3%	82.4%	21.3%
National (Millions)	0.354	0.338	0.306	0.284	0.112	0.114	0.178	0.247	0.309
% Ch	2.6%	-4.5%	-9.5%	-7.3%	-60.7%	2.2%	55.7%	38.9%	25.2%
HOUSING STOCK									
Idaho (Thousands)	494.4	514.8	529.3	537.9	542.3	546.4	549.2	553.7	560.3
% Ch	4.3%	4.1%	2.8%	1.6%	0.8%	0.8%	0.5%	0.8%	1.2%

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JANUARY 2019**

DEMOGRAPHICS

	2014	2015	2016	2017	2018	2019	2020	2021	2022
POPULATION									
Idaho (Thousands)	1,630.4	1,649.3	1,680.0	1,716.9	1,743.0	1,771.7	1,798.9	1,826.5	1,853.7
% Ch	1.3%	1.2%	1.9%	2.2%	1.5%	1.6%	1.5%	1.5%	1.5%
National (Millions)	319.252	321.622	323.961	326.275	328.592	330.987	333.336	335.673	337.996
% Ch	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
BIRTHS									
Idaho (Thousands)	22,888	22,832	22,463	22,159	22,112	22,302	22,626	22,962	23,288
% Ch	2.4%	-0.2%	-1.6%	-1.4%	-0.2%	0.9%	1.5%	1.5%	1.4%
National (Thousands)	3,991	4,002	4,027	4,051	4,072	4,093	4,111	4,124	4,134
% Ch	1.6%	0.3%	0.6%	0.6%	0.5%	0.5%	0.4%	0.3%	0.2%
DEATHS									
Idaho (Thousands)	12,610	13,031	13,370	14,007	14,387	14,571	14,886	15,207	15,534
% Ch	1.5%	3.3%	2.6%	4.8%	2.7%	1.3%	2.2%	2.2%	2.1%
National (Thousands)	2,612	2,621	2,650	2,678	2,707	2,736	2,767	2,799	2,834
% Ch	0.3%	0.3%	1.1%	1.1%	1.1%	1.1%	1.2%	1.1%	1.2%
NET MIGRATION									
Idaho (Thousands)	9,926	9,132	21,609	28,765	18,363	20,937	19,436	19,843	19,472
HOUSING									
HOUSING STARTS									
Idaho	9,812	10,276	12,415	14,068	15,838	15,634	16,701	17,737	18,396
% Ch	8.3%	4.7%	20.8%	13.3%	12.6%	-1.3%	6.8%	6.2%	3.7%
National (Millions)	0.999	1.107	1.177	1.208	1.263	1.318	1.424	1.435	1.437
% Ch	7.7%	10.7%	6.4%	2.6%	4.6%	4.3%	8.0%	0.8%	0.1%
SINGLE UNITS									
Idaho	7,332	8,243	10,019	11,296	12,813	13,117	14,306	15,435	16,133
% Ch	-5.0%	12.4%	21.5%	12.7%	13.4%	2.4%	9.1%	7.9%	4.5%
National (Millions)	0.645	0.713	0.785	0.852	0.886	0.932	1.009	1.017	1.018
% Ch	4.2%	10.4%	10.1%	8.5%	4.0%	5.2%	8.2%	0.8%	0.1%
MULTIPLE UNITS									
Idaho	2,479	2,033	2,396	2,772	3,025	2,517	2,394	2,302	2,264
% Ch	85.2%	-18.0%	17.9%	15.7%	9.1%	-16.8%	-4.9%	-3.8%	-1.7%
National (Millions)	0.354	0.394	0.393	0.356	0.377	0.385	0.415	0.418	0.418
% Ch	14.5%	11.3%	-0.4%	-9.2%	5.8%	2.3%	7.6%	0.8%	0.1%
HOUSING STOCK									
Idaho (Thousands)	568.3	576.7	586.6	597.8	611.8	625.4	639.8	655.2	671.4
% Ch	1.4%	1.5%	1.7%	1.9%	2.4%	2.2%	2.3%	2.4%	2.5%

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JANUARY 2019**

OUTPUT, INCOME, & WAGES

	2005	2006	2007	2008	2009	2010	2011	2012	2013
U.S. GROSS DOM. PRODUCT (Billions)									
Current Dollars	13,037	13,815	14,452	14,713	14,449	14,992	15,543	16,197	16,785
% Ch	6.7%	6.0%	4.6%	1.8%	-1.8%	3.8%	3.7%	4.2%	3.6%
2009 Chain-Weighted	14,913	15,338	15,626	15,605	15,209	15,599	15,841	16,197	16,495
% Ch	3.5%	2.9%	1.9%	-0.1%	-2.5%	2.6%	1.6%	2.2%	1.8%
PERSONAL INCOME - CURR \$									
Idaho (Millions)	41,761	46,002	48,997	50,089	48,409	50,144	53,041	56,112	58,236
% Ch	6.4%	10.2%	6.5%	2.2%	-3.4%	3.6%	5.8%	5.8%	3.8%
Idaho Nonfarm (Millions)	40,608	44,943	47,397	48,511	47,467	48,786	51,055	54,107	55,951
% Ch	7.1%	10.7%	5.5%	2.3%	-2.2%	2.8%	4.7%	6.0%	3.4%
National (Billions)	10,598	11,382	12,008	12,442	12,059	12,552	13,327	14,010	14,181
% Ch	5.6%	7.4%	5.5%	3.6%	-3.1%	4.1%	6.2%	5.1%	1.2%
PERSONAL INCOME - 2009 \$									
Idaho (Millions)	48,099	51,584	53,586	53,185	51,450	52,393	54,051	56,108	57,461
% Ch	3.4%	7.2%	3.9%	-0.7%	-3.3%	1.8%	3.2%	3.8%	2.4%
Idaho Nonfarm (Millions)	46,770	50,396	51,836	51,509	50,450	50,973	52,026	54,103	55,206
% Ch	4.1%	7.8%	2.9%	-0.6%	-2.1%	1.0%	2.1%	4.0%	2.0%
National (Billions)	12,207	12,763	13,132	13,211	12,816	13,114	13,580	14,009	13,992
% Ch	2.7%	4.6%	2.9%	0.6%	-3.0%	2.3%	3.6%	3.2%	-0.1%
PER CAPITA PERS INC - CURR \$									
Idaho	29,236	31,320	32,554	32,647	31,143	31,919	33,503	35,186	36,166
% Ch	3.7%	7.1%	3.9%	0.3%	-4.6%	2.5%	5.0%	5.0%	2.8%
National	35,748	38,029	39,730	40,801	39,206	40,476	42,661	44,524	44,751
% Ch	4.6%	6.4%	4.5%	2.7%	-3.9%	3.2%	5.4%	4.4%	0.5%
PER CAPITA PERS INC - 2009 \$									
Idaho	33,676	35,122	35,604	34,666	33,100	33,351	34,141	35,184	35,685
% Ch	0.8%	4.3%	1.4%	-2.6%	-4.5%	0.8%	2.4%	3.1%	1.4%
National	41,176	42,645	43,451	43,324	41,669	42,291	43,473	44,522	44,156
% Ch	1.8%	3.6%	1.9%	-0.3%	-3.8%	1.5%	2.8%	2.4%	-0.8%
AVERAGE ANNUAL WAGE									
Idaho	32,466	34,326	35,256	35,615	35,861	36,614	37,078	37,406	38,111
% Ch	3.0%	5.7%	2.7%	1.0%	0.7%	2.1%	1.3%	0.9%	1.9%
National	42,460	44,386	46,355	47,614	47,595	48,882	50,218	51,629	52,160
% Ch	3.2%	4.5%	4.4%	2.7%	0.0%	2.7%	2.7%	2.8%	1.0%

**IDAHO ECONOMIC FORECAST
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OUTPUT, INCOME, & WAGES

	2014	2015	2016	2017	2018	2019	2020	2021	2022
U.S. GROSS DOM. PRODUCT (Billions)									
Current Dollars	17,522	18,219	18,707	19,485	20,504	21,555	22,537	23,472	24,420
% Ch	4.4%	4.0%	2.7%	4.2%	5.2%	5.1%	4.6%	4.1%	4.0%
2009 Chain-Weighted	16,900	17,387	17,659	18,051	18,575	19,082	19,480	19,789	20,086
% Ch	2.5%	2.9%	1.6%	2.2%	2.9%	2.7%	2.1%	1.6%	1.5%
PERSONAL INCOME - CURR \$									
Idaho (Millions)	61,616	65,611	68,055	71,813	75,409	78,838	83,086	87,258	91,479
% Ch	5.8%	6.5%	3.7%	5.5%	5.0%	4.5%	5.4%	5.0%	4.8%
Idaho Nonfarm (Millions)	59,244	63,385	66,110	69,836	73,667	77,039	81,122	85,152	89,273
% Ch	5.9%	7.0%	4.3%	5.6%	5.5%	4.6%	5.3%	5.0%	4.8%
National (Billions)	14,992	15,720	16,125	16,831	17,585	18,378	19,284	20,131	20,974
% Ch	5.7%	4.9%	2.6%	4.4%	4.5%	4.5%	4.9%	4.4%	4.2%
PERSONAL INCOME - 2009 \$									
Idaho (Millions)	59,896	63,620	65,288	67,698	69,630	71,178	73,572	75,662	77,637
% Ch	4.2%	6.2%	2.6%	3.7%	2.9%	2.2%	3.4%	2.8%	2.6%
Idaho Nonfarm (Millions)	57,590	61,462	63,422	65,833	68,022	69,554	71,833	73,837	75,764
% Ch	4.3%	6.7%	3.2%	3.8%	3.3%	2.3%	3.3%	2.8%	2.6%
National (Billions)	14,573	15,243	15,470	15,867	16,237	16,592	17,076	17,456	17,800
% Ch	4.2%	4.6%	1.5%	2.6%	2.3%	2.2%	2.9%	2.2%	2.0%
PER CAPITA PERS INC - CURR \$									
Idaho	37,790	39,779	40,507	41,824	43,262	44,496	46,186	47,772	49,348
% Ch	4.5%	5.3%	1.8%	3.2%	3.4%	2.9%	3.8%	3.4%	3.3%
National	46,958	48,875	49,774	51,584	53,515	55,523	57,850	59,971	62,053
% Ch	4.9%	4.1%	1.8%	3.6%	3.7%	3.8%	4.2%	3.7%	3.5%
PER CAPITA PERS INC - 2009 \$									
Idaho	36,735	38,573	38,862	39,428	39,947	40,174	40,898	41,425	41,882
% Ch	2.9%	5.0%	0.7%	1.5%	1.3%	0.6%	1.8%	1.3%	1.1%
National	45,647	47,393	47,752	48,630	49,414	50,129	51,227	52,003	52,664
% Ch	3.4%	3.8%	0.8%	1.8%	1.6%	1.4%	2.2%	1.5%	1.3%
AVERAGE ANNUAL WAGE									
Idaho	39,289	40,273	41,055	42,651	44,012	45,315	46,846	48,332	49,922
% Ch	3.1%	2.5%	1.9%	3.9%	3.2%	3.0%	3.4%	3.2%	3.3%
National	53,787	55,382	55,979	57,655	59,421	61,197	63,334	65,694	68,299
% Ch	3.1%	3.0%	1.1%	3.0%	3.1%	3.0%	3.5%	3.7%	4.0%

**IDAHO ECONOMIC FORECAST
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PERSONAL INCOME--CURRENT \$\$

	2005	2006	2007	2008	2009	2010	2011	2012	2013
WAGE AND SALARY PAYMENTS									
Idaho (Millions)	20,654	22,715	24,023	23,953	22,800	22,945	23,461	24,151	25,254
% Ch	7.3%	10.0%	5.8%	-0.3%	-4.8%	0.6%	2.2%	2.9%	4.6%
National (Billions)	5,692	6,057	6,397	6,534	6,249	6,372	6,626	6,927	7,113
% Ch	5.0%	6.4%	5.6%	2.1%	-4.4%	2.0%	4.0%	4.6%	2.7%
FARM PROPRIETORS INCOME									
Idaho (Millions)	655	567	1,010	1,029	329	822	1,447	1,389	1,603
% Ch	-28.2%	-13.5%	78.2%	2.0%	-68.0%	149.8%	76.1%	-4.0%	15.4%
National (Billions)	47	33	40	40	28	39	65	61	88
% Ch	-9.2%	-29.3%	21.7%	-0.1%	-30.2%	38.8%	66.5%	-6.1%	45.0%
NONFARM PROPRIETORS INCOME									
Idaho (Millions)	3,752	4,147	3,938	3,687	4,224	4,291	4,404	4,909	5,573
% Ch	2.7%	10.5%	-5.0%	-6.4%	14.6%	1.6%	2.6%	11.5%	13.5%
National (Billions)	931	1,017	954	921	910	1,070	1,164	1,286	1,315
% Ch	2.3%	9.2%	-6.2%	-3.5%	-1.1%	17.5%	8.8%	10.5%	2.2%
DIVIDENDS, RENT & INTEREST									
Idaho (Millions)	8,508	9,691	10,463	10,608	9,399	9,450	10,656	12,246	12,043
% Ch	9.0%	13.9%	8.0%	1.4%	-11.4%	0.5%	12.8%	14.9%	-1.7%
National (Billions)	1,910	2,161	2,368	2,458	2,180	2,177	2,430	2,684	2,623
% Ch	8.5%	13.1%	9.6%	3.8%	-11.3%	-0.1%	11.6%	10.5%	-2.2%
OTHER LABOR INCOME									
Idaho (Millions)	5,090	5,685	5,965	5,998	5,812	5,980	5,855	5,933	6,527
% Ch	8.0%	11.7%	4.9%	0.5%	-3.1%	2.9%	-2.1%	1.3%	10.0%
National (Billions)	947	976	1,020	1,051	1,052	1,084	1,107	1,126	1,195
% Ch	6.4%	3.1%	4.6%	3.0%	0.0%	3.0%	2.2%	1.7%	6.1%
GOVT. TRANSFERS TO INDIV.									
Idaho (Millions)	6,178	6,706	7,282	8,477	9,324	10,249	10,294	10,430	10,774
% Ch	8.0%	8.6%	8.6%	16.4%	10.0%	9.9%	0.4%	1.3%	3.3%
National (Billions)	1,517	1,614	1,728	1,955	2,147	2,325	2,359	2,363	2,424
% Ch	6.7%	6.4%	7.1%	13.1%	9.8%	8.3%	1.4%	0.2%	2.6%
CONTRIB. FOR SOCIAL INSUR.									
Idaho (Millions)	3,589	3,997	4,194	4,225	4,135	4,317	3,945	4,045	4,668
% Ch	8.4%	11.4%	4.9%	0.8%	-2.2%	4.4%	-8.6%	2.5%	15.4%
National (Billions)	873	923	961	988	964	984	917	951	1,104
% Ch	5.3%	5.6%	4.2%	2.8%	-2.4%	2.0%	-6.8%	3.7%	16.2%
RESIDENCE ADJUSTMENT									
Idaho (Millions)	513	489	510	562	655	724	870	1,098	1,131
% Ch	-1.3%	-4.7%	4.4%	10.1%	16.6%	10.6%	20.1%	26.2%	2.9%

**National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018**

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
JANUARY 2019**

PERSONAL INCOME--CURRENT \$\$

	2014	2015	2016	2017	2018	2019	2020	2021	2022
WAGE AND SALARY PAYMENTS									
Idaho (Millions)	26,648	27,869	29,413	31,444	33,420	35,036	36,988	38,929	40,958
% Ch	5.5%	4.6%	5.5%	6.9%	6.3%	4.8%	5.6%	5.2%	5.2%
National (Billions)	7,473	7,854	8,081	8,454	8,855	9,259	9,690	10,107	10,553
% Ch	5.1%	5.1%	2.9%	4.6%	4.7%	4.6%	4.7%	4.3%	4.4%
FARM PROPRIETORS INCOME									
Idaho (Millions)	1,671	1,660	1,299	1,319	1,094	1,162	1,312	1,437	1,522
% Ch	4.2%	-0.6%	-21.8%	1.6%	-17.0%	6.2%	13.0%	9.5%	6.0%
National (Billions)	70	56	37	39	32	31	62	80	72
% Ch	-20.7%	-19.6%	-33.5%	3.8%	-18.6%	-1.1%	99.6%	28.6%	-10.2%
NONFARM PROPRIETORS INCOME									
Idaho (Millions)	6,157	6,585	6,450	6,617	7,057	7,366	7,392	7,401	7,414
% Ch	10.5%	6.9%	-2.0%	2.6%	6.6%	4.4%	0.4%	0.1%	0.2%
National (Billions)	1,378	1,365	1,382	1,462	1,540	1,594	1,602	1,604	1,607
% Ch	4.7%	-0.9%	1.2%	5.8%	5.3%	3.5%	0.5%	0.1%	0.2%
DIVIDENDS, RENT & INTEREST									
Idaho (Millions)	13,138	14,499	15,072	15,887	16,588	17,262	18,346	19,410	20,421
% Ch	9.1%	10.4%	4.0%	5.4%	4.4%	4.1%	6.3%	5.8%	5.2%
National (Billions)	2,910	3,123	3,211	3,362	3,519	3,693	3,927	4,137	4,331
% Ch	10.9%	7.3%	2.8%	4.7%	4.7%	4.9%	6.3%	5.4%	4.7%
OTHER LABOR INCOME									
Idaho (Millions)	6,380	7,012	7,516	7,935	8,377	8,748	9,209	9,667	10,147
% Ch	-2.2%	9.9%	7.2%	5.6%	5.6%	4.4%	5.3%	5.0%	5.0%
National (Billions)	1,228	1,273	1,294	1,348	1,390	1,436	1,503	1,567	1,637
% Ch	2.8%	3.6%	1.7%	4.2%	3.1%	3.3%	4.7%	4.3%	4.4%
GOVT. TRANSFERS TO INDIV.									
Idaho (Millions)	11,243	11,860	12,373	12,932	13,471	14,072	14,875	15,688	16,544
% Ch	4.4%	5.5%	4.3%	4.5%	4.2%	4.5%	5.7%	5.5%	5.5%
National (Billions)	2,540	2,683	2,778	2,860	2,982	3,127	3,294	3,461	3,635
% Ch	4.8%	5.6%	3.5%	2.9%	4.3%	4.9%	5.3%	5.1%	5.0%
CONTRIB. FOR SOCIAL INSUR.									
Idaho (Millions)	4,857	5,072	5,319	5,646	6,018	6,322	6,647	6,981	7,334
% Ch	4.0%	4.4%	4.9%	6.1%	6.6%	5.1%	5.1%	5.0%	5.1%
National (Billions)	1,154	1,205	1,240	1,299	1,364	1,420	1,480	1,540	1,605
% Ch	4.5%	4.5%	2.9%	4.7%	5.1%	4.1%	4.2%	4.1%	4.2%
RESIDENCE ADJUSTMENT									
Idaho (Millions)	1,236	1,198	1,251	1,325	1,421	1,515	1,611	1,706	1,806
% Ch	9.3%	-3.1%	4.4%	5.9%	7.2%	6.6%	6.3%	5.9%	5.8%

**National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018**

**IDAHO ECONOMIC FORECAST
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EMPLOYMENT

	2005	2006	2007	2008	2009	2010	2011	2012	2013
TOTAL NONFARM EMPLOYMENT									
Idaho	611,686	638,844	656,233	648,357	609,395	602,952	609,936	621,234	637,023
% Ch	4.0%	4.4%	2.7%	-1.2%	-6.0%	-1.1%	1.2%	1.9%	2.5%
National (Thousands)	134,044	136,455	137,996	137,241	131,301	130,353	131,943	134,172	136,369
% Ch	1.7%	1.8%	1.1%	-0.5%	-4.3%	-0.7%	1.2%	1.7%	1.6%
GOODS PRODUCING SECTOR									
Idaho	112,319	122,256	123,325	112,123	92,349	87,963	88,940	92,341	97,290
% Ch	6.5%	8.8%	0.9%	-9.1%	-17.6%	-4.8%	1.1%	3.8%	5.4%
National (Thousands)	22,186	22,530	22,229	21,331	18,559	17,752	18,045	18,420	18,739
% Ch	1.4%	1.6%	-1.3%	-4.0%	-13.0%	-4.3%	1.7%	2.1%	1.7%
MANUFACTURING									
Idaho	65,032	67,840	68,067	64,362	55,806	54,371	55,956	58,131	61,017
% Ch	2.1%	4.3%	0.3%	-5.4%	-13.3%	-2.6%	2.9%	3.9%	5.0%
National (Thousands)	14,291	14,221	13,938	13,460	11,898	11,579	11,776	11,978	12,071
% Ch	-0.6%	-0.5%	-2.0%	-3.4%	-11.6%	-2.7%	1.7%	1.7%	0.8%
DURABLE MANUFACTURING									
Idaho	42,106	44,606	44,206	39,779	32,172	31,111	32,592	34,112	35,762
% Ch	3.8%	5.9%	-0.9%	-10.0%	-19.1%	-3.3%	4.8%	4.7%	4.8%
National (Thousands)	9,020	9,046	8,868	8,519	7,335	7,114	7,322	7,520	7,598
% Ch	0.3%	0.3%	-2.0%	-3.9%	-13.9%	-3.0%	2.9%	2.7%	1.0%
LOGGING & WOOD PRODUCTS									
Idaho	9,620	10,038	9,589	7,975	5,867	5,732	6,120	6,408	7,034
% Ch	3.5%	4.4%	-4.5%	-16.8%	-26.4%	-2.3%	6.8%	4.7%	9.8%
National (Thousands)	626	625	577	514	411	392	386	390	405
% Ch	1.1%	-0.2%	-7.7%	-10.9%	-20.1%	-4.6%	-1.6%	1.1%	3.9%
METAL FABRICATION									
Idaho	3,905	4,376	4,659	4,676	4,376	4,443	4,593	4,859	5,417
% Ch	7.4%	12.1%	6.5%	0.4%	-6.4%	1.5%	3.4%	5.8%	11.5%
National (Thousands)	1,522	1,553	1,562	1,527	1,312	1,282	1,348	1,410	1,432
% Ch	1.7%	2.0%	0.6%	-2.2%	-14.1%	-2.3%	5.2%	4.5%	1.6%
MACHINERY									
Idaho	2,606	2,864	2,992	3,133	2,717	2,501	2,567	2,717	2,934
% Ch	1.4%	9.9%	4.5%	4.7%	-13.3%	-8.0%	2.7%	5.8%	8.0%
National (Thousands)	1,164	1,183	1,187	1,187	1,029	996	1,056	1,098	1,105
% Ch	1.7%	1.6%	0.3%	0.0%	-13.3%	-3.2%	6.0%	4.1%	0.6%
COMPUTER & ELECTRONICS									
Idaho	16,181	16,663	16,216	14,305	11,098	10,574	11,191	11,625	11,266
% Ch	-0.6%	3.0%	-2.7%	-11.8%	-22.4%	-4.7%	5.8%	3.9%	-3.1%
National (Thousands)	1,316	1,308	1,272	1,244	1,137	1,094	1,103	1,089	1,066
% Ch	-0.5%	-0.7%	-2.7%	-2.2%	-8.6%	-3.7%	0.8%	-1.3%	-2.1%
OTHER DURABLES									
Idaho	9,794	10,664	10,749	9,689	8,113	7,861	8,120	8,503	9,110
% Ch	11.8%	8.9%	0.8%	-9.9%	-16.3%	-3.1%	3.3%	4.7%	7.1%
National (Thousands)	4,391	4,378	4,269	4,046	3,446	3,349	3,430	3,533	3,592
% Ch	-0.4%	-0.3%	-2.5%	-5.2%	-14.8%	-2.8%	2.4%	3.0%	1.6%

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EMPLOYMENT

	2014	2015	2016	2017	2018	2019	2020	2021	2022
TOTAL NONFARM EMPLOYMENT									
Idaho	653,285	671,389	693,900	715,176	737,511	751,275	767,981	784,296	799,825
% Ch	2.6%	2.8%	3.4%	3.1%	3.1%	1.9%	2.2%	2.1%	2.0%
National (Thousands)	138,937	141,819	144,349	146,624	149,011	151,292	152,990	153,849	154,516
% Ch	1.9%	2.1%	1.8%	1.6%	1.6%	1.5%	1.1%	0.6%	0.4%
GOODS PRODUCING SECTOR									
Idaho	99,972	104,324	109,880	114,895	120,587	123,427	126,556	129,746	132,991
% Ch	2.8%	4.4%	5.3%	4.6%	5.0%	2.4%	2.5%	2.5%	2.5%
National (Thousands)	19,223	19,607	19,746	20,077	20,684	21,164	21,391	21,550	21,683
% Ch	2.6%	2.0%	0.7%	1.7%	3.0%	2.3%	1.1%	0.7%	0.6%
MANUFACTURING									
Idaho	61,590	63,610	65,778	67,687	69,752	71,275	72,764	73,794	74,933
% Ch	0.9%	3.3%	3.4%	2.9%	3.1%	2.2%	2.1%	1.4%	1.5%
National (Thousands)	12,236	12,388	12,404	12,494	12,756	12,969	12,913	12,766	12,682
% Ch	1.4%	1.2%	0.1%	0.7%	2.1%	1.7%	-0.4%	-1.1%	-0.7%
DURABLE MANUFACTURING									
Idaho	36,059	37,489	38,672	39,577	41,109	41,922	42,689	43,310	43,899
% Ch	0.8%	4.0%	3.2%	2.3%	3.9%	2.0%	1.8%	1.5%	1.4%
National (Thousands)	7,725	7,818	7,764	7,789	7,991	8,160	8,133	8,009	7,929
% Ch	1.7%	1.2%	-0.7%	0.3%	2.6%	2.1%	-0.3%	-1.5%	-1.0%
LOGGING & WOOD PRODUCTS									
Idaho	7,048	7,330	7,697	7,852	8,111	8,219	8,287	8,421	8,437
% Ch	0.2%	4.0%	5.0%	2.0%	3.3%	1.3%	0.8%	1.6%	0.2%
National (Thousands)	424	435	444	447	455	463	472	479	491
% Ch	4.6%	2.7%	2.1%	0.6%	1.8%	1.8%	2.0%	1.5%	2.5%
METAL FABRICATION									
Idaho	5,500	5,649	5,895	5,939	5,931	6,028	6,139	6,229	6,338
% Ch	1.5%	2.7%	4.4%	0.7%	-0.1%	1.6%	1.8%	1.5%	1.7%
National (Thousands)	1,454	1,458	1,421	1,431	1,485	1,518	1,521	1,491	1,493
% Ch	1.6%	0.2%	-2.5%	0.6%	3.8%	2.2%	0.2%	-1.9%	0.1%
MACHINERY									
Idaho	2,993	3,033	3,093	3,185	3,338	3,473	3,548	3,630	3,727
% Ch	2.0%	1.4%	1.9%	3.0%	4.8%	4.0%	2.1%	2.3%	2.7%
National (Thousands)	1,127	1,121	1,076	1,080	1,123	1,153	1,159	1,147	1,154
% Ch	2.0%	-0.6%	-4.0%	0.3%	4.0%	2.7%	0.5%	-1.1%	0.6%
COMPUTER & ELECTRONICS									
Idaho	11,425	11,900	12,125	12,233	12,760	12,887	13,056	13,243	13,410
% Ch	1.4%	4.2%	1.9%	0.9%	4.3%	1.0%	1.3%	1.4%	1.3%
National (Thousands)	1,049	1,053	1,048	1,043	1,066	1,081	1,069	1,068	1,078
% Ch	-1.6%	0.4%	-0.5%	-0.5%	2.3%	1.3%	-1.0%	-0.2%	1.0%
OTHER DURABLES									
Idaho	9,093	9,576	9,863	10,369	10,969	11,315	11,660	11,788	11,986
% Ch	-0.2%	5.3%	3.0%	5.1%	5.8%	3.2%	3.0%	1.1%	1.7%
National (Thousands)	3,671	3,751	3,774	3,789	3,862	3,946	3,912	3,824	3,713
% Ch	2.2%	2.2%	0.6%	0.4%	1.9%	2.2%	-0.9%	-2.3%	-2.9%

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EMPLOYMENT

MANUFACTURING (continued)	2005	2006	2007	2008	2009	2010	2011	2012	2013
NONDURABLE MANUFACTURING									
Idaho	22,927	23,234	23,861	24,583	23,634	23,261	23,364	24,019	25,256
% Ch	-0.9%	1.3%	2.7%	3.0%	-3.9%	-1.6%	0.4%	2.8%	5.2%
National (Thousands)	5,271	5,175	5,070	4,941	4,563	4,465	4,454	4,458	4,473
% Ch	-2.2%	-1.8%	-2.0%	-2.6%	-7.6%	-2.2%	-0.2%	0.1%	0.3%
FOOD PROCESSING									
Idaho	14,714	14,700	15,094	15,835	15,642	15,443	15,355	15,661	16,397
% Ch	-1.9%	-0.1%	2.7%	4.9%	-1.2%	-1.3%	-0.6%	2.0%	4.7%
National (Thousands)	1,478	1,479	1,484	1,480	1,457	1,451	1,459	1,469	1,474
% Ch	-1.1%	0.1%	0.3%	-0.2%	-1.6%	-0.4%	0.6%	0.7%	0.3%
PRINTING									
Idaho	1,899	1,907	1,891	1,807	1,433	1,283	1,233	1,209	1,217
% Ch	-1.2%	0.4%	-0.8%	-4.4%	-20.7%	-10.5%	-3.9%	-1.9%	0.7%
National (Thousands)	646	634	622	594	522	488	472	462	452
% Ch	-2.5%	-1.9%	-1.9%	-4.5%	-12.2%	-6.5%	-3.3%	-2.1%	-2.1%
CHEMICALS									
Idaho	1,938	2,117	2,267	2,367	2,275	2,200	2,375	2,541	2,599
% Ch	3.2%	9.2%	7.1%	4.4%	-3.9%	-3.3%	8.0%	7.0%	2.3%
National (Thousands)	872	866	861	847	804	786	783	784	793
% Ch	-1.7%	-0.7%	-0.6%	-1.7%	-5.1%	-2.2%	-0.4%	0.0%	1.2%
OTHER NONDURABLES									
Idaho	4,376	4,511	4,610	4,573	4,284	4,336	4,402	4,609	5,043
% Ch	1.0%	3.1%	2.2%	-0.8%	-6.3%	1.2%	1.5%	4.7%	9.4%
National (Thousands)	2,275	2,195	2,104	2,020	1,781	1,740	1,739	1,743	1,754
% Ch	-3.0%	-3.5%	-4.2%	-4.0%	-11.8%	-2.3%	0.0%	0.2%	0.6%
MINING									
Idaho	2,160	2,373	2,666	2,751	2,139	2,294	2,623	2,779	2,629
% Ch	11.8%	9.9%	12.4%	3.2%	-22.2%	7.2%	14.3%	5.9%	-5.4%
National (Thousands)	562	620	663	709	643	655	739	797	811
% Ch	7.5%	10.3%	7.0%	6.9%	-9.3%	1.8%	12.9%	7.7%	1.8%
CONSTRUCTION									
Idaho	45,127	52,043	52,591	45,010	34,404	31,297	30,361	31,431	33,644
% Ch	13.3%	15.3%	1.1%	-14.4%	-23.6%	-9.0%	-3.0%	3.5%	7.0%
National (Thousands)	7,333	7,690	7,627	7,162	6,017	5,518	5,530	5,646	5,857
% Ch	5.2%	4.9%	-0.8%	-6.1%	-16.0%	-8.3%	0.2%	2.1%	3.7%
NONGOODS PRODUCING									
Idaho	499,367	516,589	532,908	536,234	517,046	514,990	520,996	528,893	539,732
% Ch	3.5%	3.4%	3.2%	0.6%	-3.6%	-0.4%	1.2%	1.5%	2.0%
National (Thousands)	111,857	113,924	115,767	115,909	112,742	112,601	113,897	115,752	117,630
% Ch	1.8%	1.8%	1.6%	0.1%	-2.7%	-0.1%	1.2%	1.6%	1.6%
SERVICES									
Idaho	280,744	292,716	304,463	307,960	296,471	296,759	303,156	308,055	316,176
% Ch	4.4%	4.3%	4.0%	1.1%	-3.7%	0.1%	2.2%	1.6%	2.6%
National (Thousands)	69,010	70,691	72,016	72,179	70,080	70,214	71,592	73,328	74,979
% Ch	2.2%	2.4%	1.9%	0.2%	-2.9%	0.2%	2.0%	2.4%	2.3%
INFORMATION									
Idaho	11,072	10,592	10,913	11,028	10,012	9,626	9,465	9,364	9,288
% Ch	11.4%	-4.3%	3.0%	1.1%	-9.2%	-3.9%	-1.7%	-1.1%	-0.8%
National (Thousands)	3,061	3,038	3,031	2,983	2,804	2,707	2,673	2,675	2,705
% Ch	-1.8%	-0.8%	-0.2%	-1.6%	-6.0%	-3.4%	-1.3%	0.1%	1.1%
FINANCIAL ACTIVITIES									
Idaho	29,653	31,744	32,529	31,659	29,622	29,169	29,871	30,330	31,180
% Ch	6.1%	7.1%	2.5%	-2.7%	-6.4%	-1.5%	2.4%	1.5%	2.8%
National (Thousands)	8,197	8,366	8,347	8,204	7,838	7,695	7,696	7,783	7,886
% Ch	1.1%	2.1%	-0.2%	-1.7%	-4.5%	-1.8%	0.0%	1.1%	1.3%

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EMPLOYMENT

MANUFACTURING (continued)	2014	2015	2016	2017	2018	2019	2020	2021	2022
NONDURABLE MANUFACTURING									
Idaho	25,531	26,121	27,106	28,109	28,644	29,353	30,075	30,484	31,034
% Ch	1.7%	2.3%	3.8%	3.7%	1.9%	2.5%	2.5%	1.4%	1.8%
National (Thousands)	4,511	4,570	4,640	4,705	4,765	4,809	4,780	4,757	4,753
% Ch	0.9%	1.3%	1.5%	1.4%	1.3%	0.9%	-0.6%	-0.5%	-0.1%
FOOD PROCESSING									
Idaho	16,506	16,838	17,482	18,223	18,813	19,310	19,850	20,135	20,593
% Ch	0.7%	2.0%	3.8%	4.2%	3.2%	2.6%	2.8%	1.4%	2.3%
National (Thousands)	1,485	1,512	1,557	1,603	1,639	1,681	1,691	1,706	1,732
% Ch	0.7%	1.8%	3.0%	3.0%	2.2%	2.5%	0.6%	0.9%	1.5%
PRINTING									
Idaho	1,175	1,125	1,230	1,300	1,240	1,247	1,238	1,215	1,209
% Ch	-3.4%	-4.3%	9.4%	5.7%	-4.6%	0.5%	-0.7%	-1.9%	-0.5%
National (Thousands)	454	450	447	441	434	431	425	423	423
% Ch	0.3%	-0.7%	-0.6%	-1.5%	-1.6%	-0.6%	-1.3%	-0.6%	0.2%
CHEMICALS									
Idaho	2,533	2,551	2,711	2,943	3,052	3,108	3,127	3,139	3,138
% Ch	-2.6%	0.7%	6.3%	8.6%	3.7%	1.8%	0.6%	0.4%	0.0%
National (Thousands)	803	807	812	822	832	839	834	823	811
% Ch	1.2%	0.6%	0.6%	1.3%	1.2%	0.8%	-0.6%	-1.3%	-1.4%
OTHER NONDURABLES									
Idaho	5,316	5,608	5,683	5,643	5,538	5,689	5,859	5,995	6,094
% Ch	5.4%	5.5%	1.3%	-0.7%	-1.9%	2.7%	3.0%	2.3%	1.7%
National (Thousands)	1,770	1,801	1,824	1,838	1,859	1,858	1,829	1,805	1,786
% Ch	0.9%	1.7%	1.3%	0.8%	1.1%	-0.1%	-1.5%	-1.4%	-1.0%
MINING									
Idaho	2,519	2,451	2,468	2,217	2,128	2,048	1,997	1,974	1,976
% Ch	-4.2%	-2.7%	0.7%	-10.2%	-4.0%	-3.8%	-2.5%	-1.1%	0.1%
National (Thousands)	838	761	617	628	690	714	732	747	753
% Ch	3.4%	-9.3%	-18.9%	1.9%	9.8%	3.5%	2.5%	2.0%	0.9%
CONSTRUCTION									
Idaho	35,862	38,263	41,634	44,992	48,707	50,104	51,796	53,978	56,082
% Ch	6.6%	6.7%	8.8%	8.1%	8.3%	2.9%	3.4%	4.2%	3.9%
National (Thousands)	6,149	6,459	6,726	6,954	7,238	7,481	7,746	8,038	8,247
% Ch	5.0%	5.0%	4.1%	3.4%	4.1%	3.4%	3.5%	3.8%	2.6%
NONGOODS PRODUCING									
Idaho	553,314	567,065	584,020	600,281	616,924	627,848	641,426	654,550	666,835
% Ch	2.5%	2.5%	3.0%	2.8%	2.8%	1.8%	2.2%	2.0%	1.9%
National (Thousands)	119,714	122,212	124,603	126,548	128,327	130,128	131,599	132,299	132,833
% Ch	1.8%	2.1%	2.0%	1.6%	1.4%	1.4%	1.1%	0.5%	0.4%
SERVICES									
Idaho	326,712	336,138	348,736	361,463	375,374	384,484	394,393	404,793	414,070
% Ch	3.3%	2.9%	3.7%	3.6%	3.8%	2.4%	2.6%	2.6%	2.3%
National (Thousands)	76,667	78,726	80,681	82,457	84,067	85,692	86,943	87,648	88,140
% Ch	2.3%	2.7%	2.5%	2.2%	2.0%	1.9%	1.5%	0.8%	0.6%
INFORMATION									
Idaho	9,321	9,256	9,049	9,012	8,977	8,727	8,807	8,866	8,915
% Ch	0.4%	-0.7%	-2.2%	-0.4%	-0.4%	-2.8%	0.9%	0.7%	0.6%
National (Thousands)	2,727	2,751	2,794	2,794	2,767	2,800	2,788	2,836	2,859
% Ch	0.8%	0.9%	1.6%	0.0%	-1.0%	1.2%	-0.4%	1.7%	0.8%
FINANCIAL ACTIVITIES									
Idaho	32,678	33,301	33,957	35,222	36,566	37,220	38,138	39,127	40,018
% Ch	4.8%	1.9%	2.0%	3.7%	3.8%	1.8%	2.5%	2.6%	2.3%
National (Thousands)	7,977	8,123	8,286	8,454	8,575	8,725	8,880	8,919	8,910
% Ch	1.1%	1.8%	2.0%	2.0%	1.4%	1.7%	1.8%	0.4%	-0.1%

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EMPLOYMENT

SERVICES (Continued)	2005	2006	2007	2008	2009	2010	2011	2012	2013
TRANS., WAREHOUSING, UTILITIES									
Idaho	19,294	20,242	21,032	21,723	20,690	20,689	21,184	21,510	21,509
% Ch	1.8%	4.9%	3.9%	3.3%	-4.8%	0.0%	2.4%	1.5%	0.0%
National (Thousands)	4,917	5,017	5,095	5,067	4,797	4,744	4,857	4,968	5,049
% Ch	2.1%	2.0%	1.5%	-0.6%	-5.3%	-1.1%	2.4%	2.3%	1.6%
PROFESSIONAL & BUSINESS									
Idaho	76,904	81,350	83,193	81,907	75,879	75,146	76,391	76,744	78,759
% Ch	5.1%	5.8%	2.3%	-1.5%	-7.4%	-1.0%	1.7%	0.5%	2.6%
National (Thousands)	16,953	17,571	17,946	17,740	16,574	16,721	17,331	17,932	18,516
% Ch	3.4%	3.6%	2.1%	-1.1%	-6.6%	0.9%	3.6%	3.5%	3.3%
EDUCATION & HEALTH									
Idaho	67,995	70,117	74,071	77,287	80,429	83,133	85,769	87,409	89,952
% Ch	4.3%	3.1%	5.6%	4.3%	4.1%	3.4%	3.2%	1.9%	2.9%
National (Thousands)	17,674	18,152	18,676	19,228	19,628	19,973	20,322	20,769	21,085
% Ch	2.6%	2.7%	2.9%	3.0%	2.1%	1.8%	1.7%	2.2%	1.5%
LEISURE & HOSPITALITY									
Idaho	57,347	59,650	63,257	63,201	58,666	57,949	59,299	61,178	63,511
% Ch	3.2%	4.0%	6.0%	-0.1%	-7.2%	-1.2%	2.3%	3.2%	3.8%
National (Thousands)	12,813	13,109	13,428	13,441	13,074	13,042	13,352	13,770	14,255
% Ch	2.6%	2.3%	2.4%	0.1%	-2.7%	-0.2%	2.4%	3.1%	3.5%
OTHER SERVICES									
Idaho	18,479	19,021	19,469	21,155	21,174	21,047	21,177	21,519	21,978
% Ch	1.1%	2.9%	2.4%	8.7%	0.1%	-0.6%	0.6%	1.6%	2.1%
National (Thousands)	5,395	5,438	5,493	5,515	5,366	5,331	5,361	5,430	5,483
% Ch	-0.3%	0.8%	1.0%	0.4%	-2.7%	-0.7%	0.6%	1.3%	1.0%
TRADE									
Idaho	103,672	107,463	111,650	109,087	101,080	99,639	100,623	103,622	106,153
% Ch	4.6%	3.7%	3.9%	-2.3%	-7.3%	-1.4%	1.0%	3.0%	2.4%
National (Thousands)	21,043	21,258	21,531	21,228	20,110	19,898	20,213	20,505	20,804
% Ch	1.5%	1.0%	1.3%	-1.4%	-5.3%	-1.1%	1.6%	1.4%	1.5%
RETAIL TRADE									
Idaho	76,801	80,514	83,552	82,614	76,283	74,836	75,202	77,125	78,740
% Ch	4.2%	4.8%	3.8%	-1.1%	-7.7%	-1.9%	0.5%	2.6%	2.1%
National (Thousands)	15,281	15,355	15,516	15,285	14,524	14,445	14,670	14,838	15,071
% Ch	1.5%	0.5%	1.0%	-1.5%	-5.0%	-0.5%	1.6%	1.1%	1.6%
WHOLESALE TRADE									
Idaho	26,872	26,949	28,098	26,473	24,797	24,803	25,421	26,496	27,413
% Ch	5.8%	0.3%	4.3%	-5.8%	-6.3%	0.0%	2.5%	4.2%	3.5%
National (Thousands)	5,762	5,904	6,016	5,943	5,586	5,452	5,543	5,667	5,734
% Ch	1.8%	2.5%	1.9%	-1.2%	-6.0%	-2.4%	1.7%	2.2%	1.2%
STATE & LOCAL GOVERNMENT									
Idaho	101,867	103,531	103,975	105,986	105,999	104,901	104,564	104,576	104,992
% Ch	0.7%	1.6%	0.4%	1.9%	0.0%	-1.0%	-0.3%	0.0%	0.4%
National (Thousands)	18,820	18,887	19,073	19,742	19,484	19,742	19,722	19,513	19,233
% Ch	0.4%	0.4%	1.0%	1.3%	-1.3%	1.3%	-0.1%	-1.1%	-1.4%
EDUCATION									
Idaho	51,306	52,652	53,021	53,609	54,615	53,925	54,006	53,967	54,355
% Ch	1.0%	2.6%	0.7%	1.1%	1.9%	-1.3%	0.1%	-0.1%	0.7%
NONEDUCATION									
Idaho	50,560	50,878	50,954	52,376	51,384	50,976	50,558	50,609	50,636
% Ch	0.5%	0.6%	0.1%	2.8%	-1.9%	-0.8%	-0.8%	0.1%	0.1%
FEDERAL GOVERNMENT									
Idaho	13,084	12,879	12,820	13,200	13,496	13,691	12,654	12,640	12,411
% Ch	-1.7%	-1.6%	-0.5%	3.0%	2.2%	1.4%	-7.6%	-0.1%	-1.8%
National (Thousands)	2,732	2,733	2,735	2,761	2,831	2,976	2,860	2,822	2,770
% Ch	0.0%	0.0%	0.1%	0.9%	2.5%	5.1%	-3.9%	-1.3%	-1.8%

**IDAHO ECONOMIC FORECAST
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EMPLOYMENT

SERVICES (Continued)	2014	2015	2016	2017	2018	2019	2020	2021	2022
TRANS., WAREHOUSING, UTILITIES									
Idaho	22,422	23,627	23,664	24,188	25,317	25,594	26,000	26,544	27,052
% Ch	4.2%	5.4%	0.2%	2.2%	4.7%	1.1%	1.6%	2.1%	1.9%
National (Thousands)	5,209	5,425	5,569	5,723	5,890	6,004	5,983	5,950	5,900
% Ch	3.2%	4.2%	2.7%	2.8%	2.9%	1.9%	-0.3%	-0.6%	-0.8%
PROFESSIONAL & BUSINESS									
Idaho	80,792	81,883	86,471	90,453	94,175	97,162	99,870	102,828	105,448
% Ch	2.6%	1.4%	5.6%	4.6%	4.1%	3.2%	2.8%	3.0%	2.5%
National (Thousands)	19,063	19,629	20,047	20,466	20,984	21,734	22,672	23,025	23,335
% Ch	3.0%	3.0%	2.1%	2.1%	2.5%	3.6%	4.3%	1.6%	1.3%
EDUCATION & HEALTH									
Idaho	92,978	96,226	99,031	102,366	105,928	109,167	113,060	116,791	120,276
% Ch	3.4%	3.5%	2.9%	3.4%	3.5%	3.1%	3.6%	3.3%	3.0%
National (Thousands)	21,436	22,025	22,639	23,188	23,652	24,031	24,111	24,263	24,394
% Ch	1.7%	2.7%	2.8%	2.4%	2.0%	1.6%	0.3%	0.6%	0.5%
LEISURE & HOSPITALITY									
Idaho	65,899	68,403	72,349	75,393	78,880	80,224	81,416	82,869	84,001
% Ch	3.8%	3.8%	5.8%	4.2%	4.6%	1.7%	1.5%	1.8%	1.4%
National (Thousands)	14,690	15,153	15,656	16,056	16,334	16,522	16,721	16,922	17,060
% Ch	3.0%	3.2%	3.3%	2.6%	1.7%	1.2%	1.2%	1.2%	0.8%
OTHER SERVICES									
Idaho	22,622	23,442	24,215	24,830	25,532	26,389	27,102	27,768	28,360
% Ch	2.9%	3.6%	3.3%	2.5%	2.8%	3.4%	2.7%	2.5%	2.1%
National (Thousands)	5,566	5,621	5,690	5,776	5,864	5,877	5,789	5,734	5,682
% Ch	1.5%	1.0%	1.2%	1.5%	1.5%	0.2%	-1.5%	-1.0%	-0.9%
TRADE									
Idaho	108,412	111,721	114,148	115,711	117,248	118,947	121,364	124,021	126,284
% Ch	2.1%	3.1%	2.2%	1.4%	1.3%	1.4%	2.0%	2.2%	1.8%
National (Thousands)	21,170	21,460	21,692	21,768	21,899	21,986	21,923	21,877	21,754
% Ch	1.8%	1.4%	1.1%	0.4%	0.6%	0.4%	-0.3%	-0.2%	-0.6%
RETAIL TRADE									
Idaho	80,576	83,636	85,440	86,633	87,789	89,145	91,079	93,146	94,893
% Ch	2.3%	3.8%	2.2%	1.4%	1.3%	1.5%	2.2%	2.3%	1.9%
National (Thousands)	15,357	15,607	15,832	15,864	15,914	15,909	15,821	15,768	15,655
% Ch	1.9%	1.6%	1.4%	0.2%	0.3%	0.0%	-0.6%	-0.3%	-0.7%
WHOLESALE TRADE									
Idaho	27,837	28,084	28,708	29,078	29,459	29,803	30,285	30,875	31,390
% Ch	1.5%	0.9%	2.2%	1.3%	1.3%	1.2%	1.6%	1.9%	1.7%
National (Thousands)	5,813	5,854	5,860	5,904	5,985	6,077	6,102	6,109	6,098
% Ch	1.4%	0.7%	0.1%	0.7%	1.4%	1.5%	0.4%	0.1%	-0.2%
STATE & LOCAL GOVERNMENT									
Idaho	105,853	106,623	108,304	110,132	111,321	111,515	112,072	112,662	113,326
% Ch	0.8%	0.7%	1.6%	1.7%	1.1%	0.2%	0.5%	0.5%	0.6%
National (Thousands)	19,143	19,269	19,436	19,518	19,566	19,650	19,808	19,974	20,139
% Ch	0.3%	0.7%	0.9%	0.4%	0.2%	0.4%	0.8%	0.8%	0.8%
EDUCATION									
Idaho	54,898	55,674	56,652	57,502	57,729	57,875	58,253	58,639	59,008
% Ch	1.0%	1.4%	1.8%	1.5%	0.4%	0.3%	0.7%	0.7%	0.6%
NONEDUCATION									
Idaho	50,955	50,949	51,652	52,630	53,592	53,640	53,819	54,023	54,318
% Ch	0.6%	0.0%	1.4%	1.9%	1.8%	0.1%	0.3%	0.4%	0.5%
FEDERAL GOVERNMENT									
Idaho	12,337	12,583	12,832	12,975	12,981	12,902	13,597	13,074	13,156
% Ch	-0.6%	2.0%	2.0%	1.1%	0.0%	-0.6%	5.4%	-3.8%	0.6%
National (Thousands)	2,734	2,757	2,794	2,805	2,796	2,800	2,925	2,800	2,800
% Ch	-1.3%	0.8%	1.4%	0.4%	-0.3%	0.1%	4.5%	-4.3%	0.0%

**IDAHO ECONOMIC FORECAST
ANNUAL DETAIL
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MISCELLANEOUS

	2005	2006	2007	2008	2009	2010	2011	2012	2013
SELECTED CHAIN-WEIGHTED DEFL.									
Gross Domestic Product	87.407	90.074	92.498	94.264	94.999	96.109	98.112	100.000	101.773
% Ch	3.1%	3.1%	2.7%	1.9%	0.8%	1.2%	2.1%	1.9%	1.8%
Consumption Expenditures	86.813	89.175	91.438	94.180	94.094	95.705	98.131	100.000	101.346
% Ch	2.8%	2.7%	2.5%	3.0%	-0.1%	1.7%	2.5%	1.9%	1.3%
Durable Goods	112.309	110.388	108.038	106.012	104.020	102.107	101.280	100.000	97.968
% Ch	-1.0%	-1.7%	-2.1%	-1.9%	-1.9%	-1.8%	-0.8%	-1.3%	-2.0%
Nondurable Goods	81.998	84.553	87.041	91.904	89.467	92.182	97.653	100.000	100.082
% Ch	3.8%	3.1%	2.9%	5.6%	-2.7%	3.0%	5.9%	2.4%	0.1%
Services	84.674	87.616	90.517	93.235	94.231	95.957	97.815	100.000	102.316
% Ch	3.3%	3.5%	3.3%	3.0%	1.1%	1.8%	1.9%	2.2%	2.3%
Consumer Price Index (1982-84=1.000)	1.953	2.016	2.073	2.153	2.146	2.181	2.249	2.296	2.330
% Ch	3.4%	3.2%	2.9%	3.8%	-0.3%	1.6%	3.1%	2.1%	1.5%
SELECTED INTEREST RATES									
Federal Funds	3.2%	5.0%	5.0%	1.9%	0.2%	0.2%	0.1%	0.1%	0.1%
NY Fed Discount	4.2%	6.0%	5.9%	2.4%	0.5%	0.7%	0.8%	0.8%	0.8%
Prime	6.2%	8.0%	8.1%	5.1%	3.3%	3.3%	3.3%	3.3%	3.3%
Existing Home Mortgage	5.9%	6.6%	6.5%	6.2%	5.1%	4.9%	4.7%	3.8%	4.0%
U.S. Govt. 3-Month Bills	3.1%	4.7%	4.4%	1.4%	0.2%	0.1%	0.1%	0.1%	0.1%
U.S. Govt. 6-Month Bills	3.4%	4.8%	4.4%	1.6%	0.3%	0.2%	0.1%	0.1%	0.1%
U.S. Govt. 5-Year Notes	4.0%	4.7%	4.4%	2.8%	2.2%	1.9%	1.5%	0.8%	1.2%
U.S. Govt. 10-Year Notes	4.3%	4.8%	4.6%	3.7%	3.3%	3.2%	2.8%	1.8%	2.4%
EXCHANGE RATES (2009=1.000)									
Major Currency Trading Partners	1.128	1.099	1.029	0.975	1.052	1.047	0.964	1.000	1.044
% Ch	-2.2%	-2.5%	-6.4%	-5.3%	7.9%	-0.5%	-7.9%	3.8%	4.4%
Other Important Trading Partners	1.369	1.299	1.203	1.089	1.157	1.097	1.006	1.000	0.988
% Ch	-6.1%	-5.1%	-7.4%	-9.5%	6.3%	-5.2%	-8.3%	-0.6%	-1.2%
SELECTED US PRODUCTION INDICES									
Wood Products	147.7	148.9	139.2	118.9	90.9	94.1	94.3	100.0	105.8
% Ch	6.7%	0.8%	-6.5%	-14.6%	-23.6%	3.6%	0.2%	6.0%	5.8%
Computers & Electronic Products	59.7	68.0	78.4	84.8	75.6	85.6	92.6	100.0	103.2
% Ch	13.7%	14.0%	15.3%	8.1%	-10.8%	13.3%	8.1%	8.0%	3.2%
Food	100.4	101.3	101.9	100.6	99.9	100.4	100.2	100.0	102.0
% Ch	3.1%	0.9%	0.5%	-1.3%	-0.6%	0.5%	-0.2%	-0.2%	2.0%
Agricultural Chemicals	102.6	107.0	98.5	85.2	89.7	93.5	88.4	100.0	116.1
% Ch	3.8%	4.2%	-7.9%	-13.5%	5.2%	4.3%	-5.4%	13.1%	16.1%
Metal Ore Mining	102.0	103.8	101.2	104.4	91.3	97.2	98.9	100.0	101.7
% Ch	7.2%	1.7%	-2.5%	3.2%	-12.6%	6.4%	1.8%	1.1%	1.7%

**IDAHO ECONOMIC FORECAST
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MISCELLANEOUS

	2014	2015	2016	2017	2018	2019	2020	2021	2022
SELECTED CHAIN-WEIGHTED DEFL.									
Gross Domestic Product	103.688	104.757	105.899	107.932	110.348	112.953	115.693	118.610	121.571
% Ch	1.9%	1.0%	1.1%	1.9%	2.2%	2.4%	2.4%	2.5%	2.5%
Consumption Expenditures	102.868	103.126	104.235	106.073	108.297	110.756	112.926	115.320	117.826
% Ch	1.5%	0.3%	1.1%	1.8%	2.1%	2.3%	2.0%	2.1%	2.2%
Durable Goods	95.496	93.365	91.184	89.136	87.606	86.734	85.659	84.759	84.027
% Ch	-2.5%	-2.2%	-2.3%	-2.2%	-1.7%	-1.0%	-1.2%	-1.1%	-0.9%
Nondurable Goods	100.595	97.079	95.867	97.437	99.572	101.663	102.506	104.145	105.914
% Ch	0.5%	-3.5%	-1.2%	1.6%	2.2%	2.1%	0.8%	1.6%	1.7%
Services	104.853	106.823	109.325	111.984	114.970	118.227	121.523	124.864	128.308
% Ch	2.5%	1.9%	2.3%	2.4%	2.7%	2.8%	2.8%	2.7%	2.8%
Consumer Price Index (1982-84=100)	2.367	2.370	2.400	2.451	2.513	2.576	2.625	2.683	2.745
% Ch	1.6%	0.1%	1.3%	2.1%	2.5%	2.5%	1.9%	2.2%	2.3%
SELECTED INTEREST RATES									
Federal Funds	0.1%	0.1%	0.4%	1.0%	1.8%	2.8%	3.4%	3.4%	3.4%
NY Fed Discount	0.8%	0.8%	1.0%	1.6%	2.4%	3.4%	3.9%	4.0%	4.0%
Prime	3.3%	3.3%	3.5%	4.1%	4.9%	5.9%	6.4%	6.5%	6.5%
Existing Home Mortgage	4.3%	4.0%	3.9%	4.2%	4.7%	5.2%	5.3%	5.3%	5.3%
U.S. Govt. 3-Month Bills	0.0%	0.1%	0.3%	0.9%	2.0%	2.8%	3.2%	3.2%	3.2%
U.S. Govt. 6-Month Bills	0.1%	0.2%	0.5%	1.0%	2.1%	3.1%	3.6%	3.6%	3.6%
U.S. Govt. 5-Year Notes	1.6%	1.5%	1.3%	1.9%	2.8%	3.3%	3.5%	3.5%	3.5%
U.S. Govt. 10-Year Notes	2.5%	2.1%	1.8%	2.3%	2.9%	3.4%	3.5%	3.6%	3.5%
EXCHANGE RATES (2009=1.000)									
Major Currency Trading Partners	1.093	1.309	1.366	1.354	1.342	1.445	1.429	1.425	1.402
% Ch	4.6%	19.8%	4.4%	-0.9%	-0.9%	7.7%	-1.1%	-0.2%	-1.6%
Other Important Trading Partners	1.009	1.128	1.236	1.222	1.253	1.368	1.385	1.377	1.368
% Ch	2.1%	11.7%	9.6%	-1.1%	2.5%	9.2%	1.2%	-0.5%	-0.7%
SELECTED US PRODUCTION INDICES									
Wood Products	108.4	112.7	116.9	122.2	126.0	126.9	129.0	130.2	131.7
% Ch	2.5%	4.0%	3.7%	4.5%	3.1%	0.8%	1.6%	0.9%	1.2%
Computers & Electronic Products	107.4	108.1	110.4	113.9	119.9	126.2	129.9	132.0	135.3
% Ch	4.1%	0.6%	2.1%	3.2%	5.2%	5.3%	3.0%	1.6%	2.5%
Food	102.9	104.4	106.6	111.0	115.1	117.6	119.7	121.8	123.9
% Ch	0.9%	1.5%	2.1%	4.1%	3.7%	2.2%	1.7%	1.8%	1.7%
Agricultural Chemicals	108.1	94.6	96.5	116.8	121.5	127.1	129.8	131.2	132.7
% Ch	-6.9%	-12.5%	2.1%	21.0%	4.1%	4.6%	2.1%	1.1%	1.2%
Metal Ore Mining	104.9	99.9	99.3	97.6	93.8	96.5	96.7	95.8	95.1
% Ch	3.1%	-4.7%	-0.6%	-1.7%	-3.9%	2.8%	0.3%	-1.0%	-0.7%

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

DEMOGRAPHICS

	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
POPULATION												
Idaho (Thousands)	1,666.8	1,675.3	1,684.3	1,693.8	1,703.7	1,713.0	1,721.6	1,729.5	1,736.7	1,742.1	1,745.7	1,747.5
% Ch	2.0%	2.1%	2.2%	2.3%	2.4%	2.2%	2.0%	1.8%	1.7%	1.3%	0.8%	0.4%
National (Millions)	323.042	323.625	324.299	324.877	325.357	325.939	326.613	327.191	327.671	328.253	328.927	329.516
% Ch	0.6%	0.7%	0.8%	0.7%	0.6%	0.7%	0.8%	0.7%	0.6%	0.7%	0.8%	0.7%
BIRTHS												
Idaho (Thousands)	22,605	22,509	22,415	22,323	22,235	22,169	22,126	22,106	22,109	22,111	22,113	22,113
% Ch	-1.7%	-1.7%	-1.7%	-1.6%	-1.6%	-1.2%	-0.8%	-0.4%	0.1%	0.0%	0.0%	0.0%
National (Thousands)	4,017	4,023	4,030	4,036	4,041	4,047	4,054	4,060	4,063	4,069	4,075	4,080
% Ch	0.7%	0.6%	0.7%	0.6%	0.5%	0.6%	0.7%	0.5%	0.4%	0.5%	0.6%	0.5%
DEATHS												
Idaho (Thousands)	13,205	13,289	13,412	13,573	13,774	13,947	14,094	14,213	14,306	14,375	14,421	14,444
% Ch	1.4%	2.6%	3.7%	4.9%	6.0%	5.1%	4.3%	3.4%	2.6%	2.0%	1.3%	0.6%
National (Thousands)	2,639	2,646	2,654	2,661	2,667	2,674	2,682	2,689	2,695	2,703	2,710	2,718
% Ch	1.4%	1.1%	1.2%	1.1%	0.9%	1.1%	1.2%	1.1%	0.9%	1.1%	1.2%	1.1%
NET MIGRATION												
Idaho (Thousands)	16,374	20,233	23,539	26,291	28,491	29,480	29,260	27,829	25,189	21,403	16,470	10,392
HOUSING												
HOUSING STARTS												
Idaho	12,154	12,410	12,789	12,308	11,535	13,663	14,611	16,463	17,835	14,816	15,256	15,446
% Ch	91.0%	8.7%	12.8%	-14.2%	-22.9%	96.9%	30.8%	61.2%	37.7%	-52.4%	12.4%	5.1%
National (Millions)	1.144	1.163	1.150	1.253	1.231	1.171	1.172	1.259	1.317	1.261	1.218	1.258
% Ch	4.9%	6.9%	-4.4%	40.8%	-6.7%	-18.2%	0.3%	33.5%	19.6%	-16.0%	-13.0%	13.9%
SINGLE UNITS												
Idaho	9,581	9,842	10,375	10,279	9,486	10,995	11,542	13,161	13,670	12,414	12,456	12,713
% Ch	52.2%	11.4%	23.5%	-3.7%	-27.5%	80.5%	21.4%	69.0%	16.4%	-32.0%	1.4%	8.5%
National (Millions)	0.784	0.761	0.758	0.837	0.835	0.828	0.849	0.894	0.889	0.896	0.870	0.890
% Ch	19.0%	-11.4%	-1.4%	48.4%	-0.6%	-3.3%	10.5%	22.9%	-2.2%	2.9%	-10.8%	9.3%
MULTIPLE UNITS												
Idaho	2,573	2,568	2,414	2,029	2,049	2,668	3,069	3,302	4,165	2,402	2,800	2,733
% Ch	409.3%	-0.8%	-22.0%	-50.0%	3.9%	187.3%	75.2%	34.0%	152.9%	-88.9%	84.6%	-9.1%
National (Millions)	0.360	0.402	0.392	0.416	0.396	0.342	0.322	0.365	0.428	0.365	0.347	0.368
% Ch	-19.2%	56.6%	-9.9%	26.8%	-18.2%	-44.0%	-21.4%	64.4%	88.5%	-46.9%	-18.0%	26.0%
HOUSING STOCK												
Idaho (Thousands)	582.5	585.2	587.9	590.6	593.0	596.0	599.2	602.9	606.9	610.1	613.5	616.9
% Ch	1.8%	1.8%	1.9%	1.8%	1.7%	2.0%	2.2%	2.5%	2.7%	2.2%	2.2%	2.2%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

DEMOGRAPHICS

	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
POPULATION												
Idaho (Thousands)	1,761.6	1,768.3	1,775.1	1,781.8	1,788.6	1,795.4	1,802.3	1,809.2	1,816.2	1,823.1	1,829.9	1,836.7
% Ch	3.3%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
National (Millions)	330.105	330.693	331.282	331.870	332.457	333.043	333.629	334.214	334.799	335.382	335.965	336.547
% Ch	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
BIRTHS												
Idaho (Thousands)	22,184	22,261	22,342	22,421	22,500	22,583	22,667	22,752	22,838	22,921	23,005	23,086
% Ch	1.3%	1.4%	1.5%	1.4%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.4%
National (Thousands)	4,086	4,091	4,095	4,100	4,105	4,109	4,113	4,116	4,120	4,123	4,126	4,129
% Ch	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%
DEATHS												
Idaho (Thousands)	14,452	14,531	14,611	14,689	14,768	14,846	14,925	15,005	15,086	15,167	15,248	15,329
% Ch	0.2%	2.2%	2.2%	2.2%	2.1%	2.1%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%
National (Thousands)	2,724	2,732	2,739	2,747	2,755	2,763	2,771	2,779	2,787	2,795	2,803	2,812
% Ch	1.0%	1.1%	1.1%	1.1%	1.2%	1.2%	1.2%	1.1%	1.1%	1.2%	1.2%	1.2%
NET MIGRATION												
Idaho (Thousands)	17,187	18,422	21,599	26,540	19,192	19,391	19,493	19,669	19,864	19,900	19,863	19,747
HOUSING												
HOUSING STARTS												
Idaho	15,477	15,521	15,645	15,893	16,200	16,536	16,884	17,183	17,425	17,650	17,846	18,029
% Ch	0.8%	1.1%	3.2%	6.5%	8.0%	8.6%	8.7%	7.3%	5.8%	5.3%	4.5%	4.2%
National (Millions)	1.264	1.308	1.336	1.364	1.392	1.420	1.439	1.443	1.438	1.432	1.434	1.436
% Ch	1.9%	14.7%	8.8%	8.6%	8.4%	8.3%	5.7%	1.1%	-1.4%	-1.6%	0.5%	0.5%
SINGLE UNITS												
Idaho	12,858	12,997	13,165	13,446	13,788	14,148	14,490	14,800	15,081	15,339	15,561	15,758
% Ch	4.7%	4.4%	5.3%	8.8%	10.6%	10.9%	10.0%	8.9%	7.8%	7.0%	5.9%	5.2%
National (Millions)	0.892	0.926	0.946	0.966	0.986	1.006	1.020	1.023	1.019	1.015	1.017	1.018
% Ch	0.9%	16.2%	8.9%	8.7%	8.5%	8.4%	6.0%	7.2%	-1.6%	-1.6%	0.5%	0.5%
MULTIPLE UNITS												
Idaho	2,619	2,524	2,479	2,447	2,412	2,388	2,394	2,382	2,343	2,311	2,285	2,271
% Ch	-15.7%	-13.7%	-6.9%	-5.2%	-5.5%	-3.9%	1.0%	-2.0%	-6.4%	-5.4%	-4.4%	-2.5%
National (Millions)	0.372	0.382	0.390	0.398	0.406	0.414	0.419	0.420	0.419	0.417	0.418	0.418
% Ch	4.4%	11.2%	8.6%	8.5%	8.3%	8.1%	4.9%	0.9%	-0.9%	-1.6%	0.5%	0.5%
HOUSING STOCK												
Idaho (Thousands)	620.3	623.7	627.1	630.6	634.2	637.9	641.6	645.4	649.3	653.2	657.2	661.2
% Ch	2.2%	2.2%	2.2%	2.3%	2.3%	2.3%	2.4%	2.4%	2.4%	2.4%	2.5%	2.5%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

OUTPUT, INCOME, & WAGES

	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
U.S. GROSS DOM. PRODUCT (Billions)												
Current Dollars	18,409	18,641	18,800	18,979	19,163	19,359	19,588	19,832	20,041	20,412	20,659	20,904
% Ch	1.2%	5.1%	3.5%	3.9%	3.9%	4.2%	4.8%	5.1%	4.3%	7.6%	4.9%	4.8%
2009 Chain-Weighted	17,523	17,622	17,707	17,784	17,863	17,995	18,121	18,224	18,324	18,512	18,671	18,792
% Ch	1.5%	2.3%	1.9%	1.8%	1.8%	3.0%	2.8%	2.3%	2.2%	4.2%	3.5%	2.6%
PERSONAL INCOME - CURR \$												
Idaho (Millions)	66,979	67,880	68,445	68,915	70,304	71,359	72,019	73,569	74,301	75,124	75,773	76,437
% Ch	3.4%	5.5%	3.4%	2.8%	8.3%	6.1%	3.8%	8.9%	4.0%	4.5%	3.5%	3.5%
Idaho Nonfarm (Millions)	64,906	65,815	66,533	67,187	68,274	69,299	70,104	71,666	72,571	73,267	74,059	74,772
% Ch	3.6%	5.7%	4.4%	4.0%	6.6%	6.1%	4.7%	9.2%	5.1%	3.9%	4.4%	3.9%
National (Billions)	15,947	16,032	16,171	16,352	16,604	16,721	16,895	17,103	17,319	17,500	17,680	17,840
% Ch	1.6%	2.2%	3.5%	4.6%	6.3%	2.8%	4.2%	5.0%	5.2%	4.2%	4.2%	3.7%
PERSONAL INCOME - 2009 \$												
Idaho (Millions)	64,759	65,246	65,507	65,640	66,621	67,489	67,843	68,838	69,102	69,526	69,853	70,039
% Ch	3.1%	3.0%	1.6%	0.8%	6.1%	5.3%	2.1%	6.0%	1.5%	2.5%	1.9%	1.1%
Idaho Nonfarm (Millions)	62,754	63,262	63,677	63,995	64,697	65,540	66,039	67,057	67,493	67,808	68,273	68,513
% Ch	3.4%	3.3%	2.7%	2.0%	4.5%	5.3%	3.1%	6.3%	2.6%	1.9%	2.8%	1.4%
National (Billions)	15,418	15,410	15,477	15,575	15,735	15,814	15,915	16,003	16,107	16,196	16,299	16,347
% Ch	1.4%	-0.2%	1.7%	2.6%	4.2%	2.0%	2.6%	2.2%	2.6%	2.2%	2.6%	1.2%
PER CAPITA PERS INC - CURR \$												
Idaho	40,185	40,518	40,638	40,687	41,265	41,658	41,833	42,538	42,783	43,122	43,405	43,740
% Ch	1.4%	3.4%	1.2%	0.5%	5.8%	3.9%	1.7%	6.9%	2.3%	3.2%	2.6%	3.1%
National	49,364	49,538	49,863	50,332	51,034	51,301	51,728	52,272	52,855	53,312	53,751	54,141
% Ch	1.0%	1.4%	2.7%	3.8%	5.7%	2.1%	3.4%	4.3%	4.5%	3.5%	3.3%	2.9%
PER CAPITA PERS INC - 2009 \$												
Idaho	38,853	38,946	38,893	38,754	39,103	39,398	39,407	39,803	39,789	39,909	40,013	40,079
% Ch	1.2%	1.0%	-0.5%	-1.4%	3.7%	3.0%	0.1%	4.1%	-0.1%	1.2%	1.1%	0.7%
National	47,728	47,616	47,723	47,940	48,361	48,519	48,728	48,911	49,157	49,339	49,551	49,609
% Ch	0.8%	-0.9%	0.9%	1.8%	3.6%	1.3%	1.7%	1.5%	2.0%	1.5%	1.7%	0.5%
AVERAGE ANNUAL WAGE												
Idaho	40,375	41,205	41,212	41,429	41,629	42,412	42,809	43,754	43,546	43,873	44,164	44,463
% Ch	1.3%	8.5%	0.1%	2.1%	1.9%	7.7%	3.8%	9.1%	-1.9%	3.0%	2.7%	2.7%
National	55,641	55,737	56,020	56,517	57,078	57,376	57,915	58,250	58,828	59,220	59,635	60,000
% Ch	-0.4%	0.7%	2.0%	3.6%	4.0%	2.1%	3.8%	2.3%	4.0%	2.7%	2.8%	2.5%

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**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

OUTPUT, INCOME, & WAGES

	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
U.S. GROSS DOM. PRODUCT (Billions)												
Current Dollars	21,178	21,427	21,681	21,935	22,179	22,426	22,659	22,886	23,125	23,355	23,586	23,823
% Ch	5.3%	4.8%	4.8%	4.8%	4.5%	4.5%	4.2%	4.1%	4.2%	4.0%	4.0%	4.1%
2009 Chain-Weighted	18,910	19,029	19,142	19,249	19,344	19,447	19,524	19,603	19,681	19,753	19,823	19,899
% Ch	2.5%	2.5%	2.4%	2.3%	2.0%	2.1%	1.6%	1.6%	1.6%	1.5%	1.4%	1.5%
PERSONAL INCOME - CURR \$												
Idaho (Millions)	77,308	78,300	79,329	80,414	81,441	82,533	83,640	84,731	85,686	86,743	87,782	88,821
% Ch	4.6%	5.2%	5.4%	5.6%	5.2%	5.5%	5.5%	5.3%	4.6%	5.0%	4.9%	4.8%
Idaho Nonfarm (Millions)	75,612	76,544	77,495	78,503	79,622	80,634	81,628	82,602	83,655	84,643	85,646	86,664
% Ch	4.6%	5.0%	5.1%	5.3%	5.8%	5.2%	5.0%	4.9%	5.2%	4.8%	4.8%	4.8%
National (Billions)	18,038	18,265	18,491	18,718	18,961	19,186	19,392	19,597	19,824	20,029	20,232	20,439
% Ch	4.5%	5.1%	5.0%	5.0%	5.3%	4.8%	4.4%	4.3%	4.7%	4.2%	4.1%	4.2%
PERSONAL INCOME - 2009 \$												
Idaho (Millions)	70,368	70,874	71,426	72,043	72,614	73,295	73,867	74,512	74,921	75,420	75,911	76,396
% Ch	1.9%	2.9%	3.2%	3.5%	3.2%	3.8%	3.2%	3.5%	2.2%	2.7%	2.6%	2.6%
Idaho Nonfarm (Millions)	68,825	69,284	69,775	70,330	70,993	71,608	72,089	72,640	73,146	73,595	74,064	74,542
% Ch	1.8%	2.7%	2.9%	3.2%	3.8%	3.5%	2.7%	3.1%	2.8%	2.5%	2.6%	2.6%
National (Billions)	16,418	16,533	16,649	16,769	16,906	17,038	17,126	17,234	17,334	17,415	17,496	17,580
% Ch	1.8%	2.8%	2.8%	2.9%	3.3%	3.2%	2.1%	2.5%	2.3%	1.9%	1.9%	1.9%
PER CAPITA PERS INC - CURR \$												
Idaho	43,884	44,281	44,691	45,130	45,534	45,969	46,407	46,833	47,179	47,581	47,970	48,358
% Ch	1.3%	3.7%	3.8%	4.0%	3.6%	3.9%	3.9%	3.7%	3.0%	3.4%	3.3%	3.3%
National	54,642	55,233	55,818	56,400	57,032	57,608	58,125	58,637	59,211	59,720	60,221	60,731
% Ch	3.8%	4.4%	4.3%	4.2%	4.6%	4.1%	3.6%	3.6%	4.0%	3.5%	3.4%	3.4%
PER CAPITA PERS INC - 2009 \$												
Idaho	39,945	40,081	40,238	40,432	40,600	40,824	40,985	41,184	41,252	41,370	41,483	41,594
% Ch	-1.3%	1.4%	1.6%	1.9%	1.7%	2.2%	1.6%	2.0%	0.7%	1.1%	1.1%	1.1%
National	49,737	49,995	50,257	50,529	50,851	51,160	51,333	51,565	51,773	51,925	52,077	52,236
% Ch	1.0%	2.1%	2.1%	2.2%	2.6%	2.4%	1.4%	1.8%	1.6%	1.2%	1.2%	1.2%
AVERAGE ANNUAL WAGE												
Idaho	44,767	45,126	45,483	45,884	46,287	46,667	47,038	47,394	47,759	48,134	48,518	48,918
% Ch	2.8%	3.2%	3.2%	3.6%	3.6%	3.3%	3.2%	3.1%	3.1%	3.2%	3.2%	3.3%
National	60,432	60,927	61,446	61,984	62,528	63,023	63,604	64,183	64,771	65,372	65,995	66,637
% Ch	2.9%	3.3%	3.5%	3.6%	3.6%	3.2%	3.7%	3.7%	3.7%	3.8%	3.9%	3.9%

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

PERSONAL INCOME -- CURR \$\$

	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
WAGE AND SALARY PAYMENTS												
Idaho (Millions)	28,632	29,361	29,670	29,989	30,415	31,185	31,648	32,527	32,802	33,228	33,628	34,021
% Ch	6.4%	10.6%	4.3%	4.4%	5.8%	10.5%	6.1%	11.6%	3.4%	5.3%	4.9%	4.8%
National (Billions)	7,981	8,025	8,107	8,210	8,325	8,396	8,507	8,588	8,711	8,806	8,905	8,997
% Ch	1.3%	2.2%	4.1%	5.2%	5.7%	3.4%	5.4%	3.9%	5.8%	4.5%	4.6%	4.2%
FARM PROPRIETORS INCOME												
Idaho (Millions)	1,441	1,420	1,261	1,073	1,375	1,405	1,257	1,239	1,061	1,183	1,094	1,039
% Ch	-21.6%	-5.6%	-37.9%	-47.5%	169.7%	8.8%	-35.9%	-5.5%	-46.4%	54.8%	-26.8%	-18.7%
National (Billions)	41	41	37	31	42	42	36	35	35	37	29	26
% Ch	-69.6%	3.7%	-36.9%	-49.3%	245.1%	-6.8%	-41.2%	-10.0%	-2.2%	21.4%	-62.2%	-40.1%
NONFARM PROPRIETORS INCOME												
Idaho (Millions)	6,586	6,329	6,437	6,449	6,448	6,599	6,706	6,715	6,898	6,970	7,111	7,248
% Ch	2.3%	-14.7%	7.0%	0.7%	-0.1%	9.7%	6.7%	0.5%	11.4%	4.2%	8.4%	8.0%
National (Billions)	1,374	1,363	1,382	1,408	1,433	1,453	1,471	1,491	1,515	1,531	1,551	1,561
% Ch	3.8%	-3.2%	5.6%	7.6%	7.4%	5.9%	4.9%	5.4%	6.6%	4.5%	5.3%	2.6%
DIVIDENDS, RENT & INTEREST												
Idaho (Millions)	14,851	15,007	15,125	15,306	15,694	15,748	15,808	16,296	16,438	16,580	16,619	16,715
% Ch	2.0%	4.3%	3.2%	4.9%	10.6%	1.4%	1.5%	12.9%	3.5%	3.5%	0.9%	2.3%
National (Billions)	3,171	3,199	3,221	3,254	3,326	3,335	3,347	3,438	3,469	3,502	3,538	3,567
% Ch	1.6%	3.6%	2.7%	4.2%	9.2%	1.1%	1.4%	11.3%	3.6%	3.9%	4.1%	3.3%
OTHER LABOR INCOME												
Idaho (Millions)	7,321	7,498	7,595	7,652	7,705	7,908	7,957	8,170	8,193	8,272	8,489	8,553
% Ch	5.3%	10.0%	5.2%	3.0%	2.8%	11.0%	2.5%	11.1%	1.1%	3.9%	10.9%	3.0%
National (Billions)	1,283	1,287	1,296	1,310	1,327	1,343	1,356	1,366	1,376	1,385	1,394	1,403
% Ch	0.2%	1.3%	2.8%	4.2%	5.5%	4.7%	3.9%	3.2%	2.9%	2.6%	2.6%	2.7%
GOVT. TRANSFERS TO INDIV.												
Idaho (Millions)	12,109	12,352	12,471	12,559	12,844	12,804	12,979	13,101	13,410	13,467	13,450	13,556
% Ch	1.3%	8.3%	3.9%	2.8%	9.4%	-1.2%	5.6%	3.8%	9.8%	1.7%	-0.5%	3.2%
National (Billions)	2,747	2,770	2,789	2,807	2,834	2,842	2,875	2,888	2,934	2,966	2,998	3,030
% Ch	5.2%	3.4%	2.7%	2.7%	3.9%	1.1%	4.8%	1.7%	6.6%	4.4%	4.4%	4.3%
CONTRIB. FOR SOCIAL INSUR.												
Idaho (Millions)	5,205	5,321	5,357	5,395	5,482	5,606	5,674	5,820	5,904	5,974	6,036	6,157
% Ch	6.3%	9.3%	2.7%	2.8%	6.6%	9.4%	4.9%	10.7%	5.9%	4.9%	4.2%	8.3%
National (Billions)	1,226	1,232	1,244	1,258	1,281	1,291	1,306	1,317	1,344	1,357	1,371	1,385
% Ch	1.9%	2.1%	3.7%	4.6%	7.5%	3.2%	4.8%	3.5%	8.2%	4.1%	4.1%	4.2%
RESIDENCE ADJUSTMENT												
Idaho (Millions)	1,244	1,234	1,243	1,281	1,304	1,317	1,338	1,341	1,403	1,400	1,418	1,462
% Ch	13.5%	-3.2%	3.0%	12.8%	7.1%	4.1%	6.6%	0.9%	19.7%	-0.9%	5.4%	12.9%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

PERSONAL INCOME -- CURR \$\$

	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
WAGE AND SALARY PAYMENTS												
Idaho (Millions)	34,388	34,793	35,234	35,729	36,242	36,758	37,240	37,712	38,189	38,673	39,174	39,681
% Ch	4.4%	4.8%	5.2%	5.7%	5.9%	5.8%	5.3%	5.2%	5.2%	5.2%	5.3%	5.3%
National (Billions)	9,097	9,204	9,313	9,423	9,531	9,646	9,741	9,841	9,946	10,052	10,160	10,270
% Ch	4.5%	4.8%	4.8%	4.8%	4.7%	4.9%	4.0%	4.2%	4.4%	4.3%	4.4%	4.4%
FARM PROPRIETORS INCOME												
Idaho (Millions)	1,064	1,119	1,194	1,269	1,172	1,249	1,357	1,469	1,367	1,433	1,465	1,481
% Ch	10.1%	22.2%	29.4%	27.6%	-27.1%	28.9%	39.5%	37.2%	-25.0%	20.6%	9.3%	4.4%
National (Billions)	25	28	33	40	49	58	68	75	80	82	81	79
% Ch	-6.1%	48.4%	92.6%	121.1%	124.7%	107.4%	79.6%	51.1%	27.7%	9.6%	-2.8%	-10.3%
NONFARM PROPRIETORS INCOME												
Idaho (Millions)	7,321	7,359	7,386	7,396	7,392	7,385	7,398	7,396	7,399	7,399	7,399	7,408
% Ch	4.1%	2.1%	1.5%	0.5%	-0.2%	-0.4%	0.7%	-0.1%	0.2%	0.0%	0.0%	0.5%
National (Billions)	1,580	1,591	1,599	1,604	1,602	1,600	1,603	1,602	1,603	1,603	1,603	1,606
% Ch	4.9%	2.7%	2.2%	1.2%	-0.5%	-0.6%	0.7%	-0.2%	0.3%	0.0%	0.0%	0.5%
DIVIDENDS, RENT & INTEREST												
Idaho (Millions)	16,840	17,131	17,399	17,678	17,947	18,211	18,477	18,748	19,016	19,284	19,542	19,798
% Ch	3.0%	7.1%	6.4%	6.6%	6.2%	6.0%	6.0%	6.0%	5.8%	5.7%	5.5%	5.3%
National (Billions)	3,597	3,664	3,725	3,786	3,843	3,900	3,955	4,009	4,061	4,114	4,163	4,212
% Ch	3.5%	7.6%	6.8%	6.7%	6.2%	6.0%	5.8%	5.6%	5.3%	5.3%	4.9%	4.8%
OTHER LABOR INCOME												
Idaho (Millions)	8,595	8,690	8,795	8,912	9,033	9,155	9,268	9,380	9,492	9,607	9,725	9,845
% Ch	2.0%	4.5%	4.9%	5.4%	5.6%	5.5%	5.1%	4.9%	4.9%	4.9%	5.0%	5.0%
National (Billions)	1,411	1,427	1,444	1,461	1,478	1,496	1,511	1,526	1,542	1,559	1,576	1,593
% Ch	2.2%	4.8%	4.8%	4.8%	4.7%	4.9%	4.0%	4.2%	4.4%	4.3%	4.4%	4.4%
GOVT. TRANSFERS TO INDIV.												
Idaho (Millions)	13,844	13,991	14,147	14,308	14,612	14,786	14,962	15,139	15,416	15,594	15,778	15,964
% Ch	8.8%	4.3%	4.5%	4.6%	8.8%	4.8%	4.8%	4.8%	7.5%	4.7%	4.8%	4.8%
National (Billions)	3,079	3,110	3,143	3,176	3,240	3,276	3,312	3,348	3,405	3,442	3,479	3,517
% Ch	6.7%	4.1%	4.3%	4.3%	8.3%	4.5%	4.5%	4.4%	7.0%	4.3%	4.4%	4.4%
CONTRIB. FOR SOCIAL INSUR.												
Idaho (Millions)	6,228	6,286	6,350	6,425	6,532	6,610	6,685	6,759	6,864	6,940	7,019	7,099
% Ch	4.7%	3.7%	4.2%	4.8%	6.8%	4.9%	4.6%	4.5%	6.4%	4.5%	4.6%	4.6%
National (Billions)	1,401	1,414	1,427	1,440	1,460	1,474	1,486	1,499	1,519	1,533	1,547	1,561
% Ch	4.7%	3.6%	3.8%	3.8%	5.6%	4.0%	3.3%	3.5%	5.5%	3.6%	3.7%	3.8%
RESIDENCE ADJUSTMENT												
Idaho (Millions)	1,484	1,503	1,524	1,548	1,574	1,599	1,623	1,646	1,670	1,693	1,718	1,743
% Ch	6.3%	5.2%	5.7%	6.5%	6.8%	6.7%	6.1%	5.8%	5.8%	5.8%	5.9%	5.9%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

EMPLOYMENT

	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TOTAL NONFARM EMPLOYMENT												
Idaho	686,714	690,184	697,382	701,321	708,188	713,274	717,392	721,851	731,427	735,590	739,694	743,333
% Ch	4.1%	2.0%	4.2%	2.3%	4.0%	2.9%	2.3%	2.5%	5.4%	2.3%	2.3%	2.0%
National (Thousands)	143,446	143,980	144,711	145,260	145,854	146,327	146,880	147,436	148,069	148,703	149,326	149,947
% Ch	1.7%	1.5%	2.0%	1.5%	1.6%	1.3%	1.5%	1.5%	1.7%	1.7%	1.7%	1.7%
GOODS PRODUCING SECTOR												
Idaho	108,470	109,370	110,605	111,077	112,851	114,296	115,502	116,931	119,627	120,199	120,924	121,599
% Ch	8.2%	3.4%	4.6%	1.7%	6.5%	5.2%	4.3%	5.0%	9.5%	1.9%	2.4%	2.3%
National (Thousands)	19,735	19,713	19,743	19,794	19,945	20,020	20,095	20,247	20,463	20,617	20,747	20,907
% Ch	0.7%	-0.5%	0.6%	1.1%	3.1%	1.5%	1.5%	3.1%	4.3%	3.1%	2.5%	3.1%
MANUFACTURING												
Idaho	65,409	65,755	66,044	65,905	66,957	67,476	68,099	68,214	69,278	69,577	69,916	70,238
% Ch	2.7%	2.1%	1.8%	-0.8%	6.5%	3.1%	3.7%	0.7%	6.4%	1.7%	2.0%	1.9%
National (Thousands)	12,419	12,400	12,403	12,393	12,436	12,467	12,501	12,571	12,656	12,730	12,785	12,853
% Ch	0.3%	-0.6%	0.1%	-0.3%	1.4%	1.0%	1.1%	2.3%	2.7%	2.3%	1.8%	2.1%
DURABLE MANUFACTURING												
Idaho	38,469	38,711	38,755	38,752	39,035	39,438	39,802	40,034	40,855	40,997	41,191	41,393
% Ch	2.6%	2.5%	0.5%	0.0%	3.0%	4.2%	3.7%	2.4%	8.5%	1.4%	1.9%	2.0%
National (Thousands)	7,800	7,768	7,752	7,736	7,754	7,770	7,790	7,842	7,912	7,970	8,019	8,064
% Ch	-0.4%	-1.6%	-0.8%	-0.8%	0.9%	0.8%	1.0%	2.7%	3.6%	3.0%	2.5%	2.3%
LOGGING & WOOD PRODUCTS												
Idaho	7,535	7,839	7,641	7,772	7,767	7,799	7,875	7,965	8,065	8,103	8,137	8,138
% Ch	6.4%	17.1%	-9.7%	7.0%	-0.3%	1.7%	4.0%	4.7%	5.1%	1.9%	1.7%	0.1%
National (Thousands)	442	443	444	446	448	447	445	446	453	454	454	457
% Ch	0.4%	1.1%	1.0%	1.7%	1.5%	-1.1%	-1.3%	1.1%	5.9%	1.3%	0.0%	2.0%
METAL FABRICATION												
Idaho	5,789	5,785	6,009	5,997	6,023	6,005	5,864	5,864	5,930	5,941	5,898	5,953
% Ch	1.8%	-0.3%	16.4%	-0.8%	1.8%	-1.2%	-9.1%	0.0%	4.6%	0.7%	-2.8%	3.8%
National (Thousands)	1,436	1,424	1,415	1,412	1,415	1,423	1,435	1,450	1,468	1,483	1,494	1,497
% Ch	-1.7%	-3.4%	-2.4%	-0.9%	1.0%	2.2%	3.5%	4.1%	5.1%	4.3%	3.0%	0.7%
MACHINERY												
Idaho	3,101	3,067	3,093	3,109	3,099	3,165	3,254	3,220	3,287	3,313	3,362	3,393
% Ch	19.7%	-4.3%	3.4%	2.1%	-1.3%	8.9%	11.7%	-4.2%	8.6%	3.2%	6.0%	3.8%
National (Thousands)	1,092	1,077	1,070	1,065	1,069	1,076	1,083	1,091	1,104	1,120	1,130	1,137
% Ch	-4.0%	-5.3%	-2.6%	-2.0%	1.5%	2.7%	2.5%	3.2%	4.8%	6.0%	3.4%	2.8%
COMPUTER & ELECTRONICS												
Idaho	12,207	12,214	12,091	11,988	12,005	12,147	12,387	12,394	12,682	12,706	12,783	12,871
% Ch	1.9%	0.2%	-4.0%	-3.4%	0.6%	4.8%	8.1%	0.2%	9.6%	0.7%	2.5%	2.8%
National (Thousands)	1,054	1,052	1,046	1,041	1,037	1,039	1,042	1,052	1,058	1,064	1,069	1,074
% Ch	1.8%	-0.7%	-2.3%	-2.0%	-1.2%	0.6%	1.3%	3.8%	2.3%	2.4%	1.8%	1.9%
OTHER DURABLES												
Idaho	9,838	9,806	9,922	9,886	10,141	10,321	10,422	10,591	10,891	10,934	11,012	11,038
% Ch	-3.4%	-1.3%	4.8%	-1.4%	10.7%	7.3%	4.0%	6.6%	11.8%	1.6%	2.9%	1.0%
National (Thousands)	3,776	3,772	3,776	3,773	3,784	3,786	3,785	3,802	3,829	3,848	3,872	3,899
% Ch	0.5%	-0.5%	0.5%	-0.4%	1.2%	0.1%	-0.1%	1.9%	2.9%	2.0%	2.5%	2.9%

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**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

EMPLOYMENT

	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TOTAL NONFARM EMPLOYMENT												
Idaho	746,295	749,084	752,791	756,930	761,333	766,090	770,181	774,321	778,342	782,297	786,323	790,223
% Ch	1.6%	1.5%	2.0%	2.2%	2.3%	2.5%	2.2%	2.2%	2.1%	2.0%	2.1%	2.0%
National (Thousands)	150,526	151,066	151,561	152,015	152,431	153,060	153,149	153,321	153,563	153,765	153,947	154,120
% Ch	1.6%	1.4%	1.3%	1.2%	1.1%	1.7%	0.2%	0.4%	0.6%	0.5%	0.5%	0.5%
GOODS PRODUCING SECTOR												
Idaho	122,288	122,924	123,800	124,696	125,478	126,172	126,890	127,684	128,475	129,323	130,183	131,004
% Ch	2.3%	2.1%	2.9%	2.9%	2.5%	2.2%	2.3%	2.5%	2.5%	2.7%	2.7%	2.5%
National (Thousands)	21,035	21,140	21,194	21,287	21,342	21,369	21,413	21,442	21,495	21,530	21,572	21,604
% Ch	2.5%	2.0%	1.0%	1.8%	1.0%	0.5%	0.8%	0.5%	1.0%	0.7%	0.8%	0.6%
MANUFACTURING												
Idaho	70,628	70,970	71,483	72,018	72,364	72,638	72,904	73,149	73,417	73,672	73,921	74,167
% Ch	2.2%	2.0%	2.9%	3.0%	1.9%	1.5%	1.5%	1.3%	1.5%	1.4%	1.4%	1.3%
National (Thousands)	12,916	12,975	12,975	13,010	12,993	12,936	12,891	12,833	12,805	12,773	12,756	12,729
% Ch	2.0%	1.8%	0.0%	1.1%	-0.5%	-1.7%	-1.4%	-1.8%	-0.9%	-1.0%	-0.5%	-0.8%
DURABLE MANUFACTURING												
Idaho	41,563	41,736	42,049	42,340	42,476	42,604	42,760	42,917	43,100	43,243	43,382	43,515
% Ch	1.7%	1.7%	3.0%	2.8%	1.3%	1.2%	1.5%	1.5%	1.7%	1.3%	1.3%	1.2%
National (Thousands)	8,102	8,167	8,169	8,203	8,191	8,151	8,118	8,073	8,047	8,016	7,998	7,974
% Ch	1.9%	3.2%	0.1%	1.6%	-0.6%	-1.9%	-1.6%	-2.2%	-1.3%	-1.5%	-0.9%	-1.2%
LOGGING & WOOD PRODUCTS												
Idaho	8,174	8,195	8,246	8,262	8,253	8,255	8,299	8,341	8,391	8,417	8,434	8,441
% Ch	1.8%	1.0%	2.5%	0.8%	-0.4%	0.1%	2.2%	2.0%	2.5%	1.2%	0.8%	0.3%
National (Thousands)	459	461	464	468	469	471	473	475	477	478	480	481
% Ch	2.2%	1.7%	2.2%	3.8%	1.3%	1.2%	2.2%	1.0%	1.9%	1.2%	1.3%	1.1%
METAL FABRICATION												
Idaho	5,983	6,007	6,044	6,077	6,104	6,128	6,150	6,172	6,193	6,215	6,239	6,268
% Ch	2.0%	1.6%	2.5%	2.2%	1.8%	1.6%	1.4%	1.5%	1.4%	1.4%	1.6%	1.8%
National (Thousands)	1,500	1,518	1,522	1,531	1,531	1,525	1,519	1,508	1,500	1,491	1,488	1,486
% Ch	0.9%	5.0%	1.0%	2.3%	0.0%	-1.7%	-1.5%	-2.8%	-2.0%	-2.3%	-1.0%	-0.4%
MACHINERY												
Idaho	3,429	3,461	3,488	3,514	3,524	3,538	3,554	3,574	3,596	3,618	3,641	3,663
% Ch	4.3%	3.7%	3.2%	3.0%	1.1%	1.7%	1.8%	2.2%	2.6%	2.4%	2.5%	2.5%
National (Thousands)	1,143	1,151	1,154	1,165	1,166	1,162	1,159	1,151	1,148	1,145	1,147	1,148
% Ch	1.8%	3.0%	1.1%	3.9%	0.4%	-1.5%	-1.1%	-2.5%	-1.2%	-0.9%	0.6%	0.5%
COMPUTER & ELECTRONICS												
Idaho	12,869	12,862	12,884	12,931	12,991	13,038	13,074	13,120	13,182	13,225	13,264	13,299
% Ch	0.0%	-0.2%	0.7%	1.5%	1.9%	1.5%	1.1%	1.4%	1.9%	1.3%	1.2%	1.1%
National (Thousands)	1,082	1,083	1,080	1,078	1,074	1,070	1,068	1,066	1,066	1,066	1,068	1,071
% Ch	2.8%	0.5%	-1.0%	-0.9%	-1.5%	-1.5%	-0.6%	-0.7%	-0.2%	0.1%	0.7%	1.2%
OTHER DURABLES												
Idaho	11,107	11,211	11,387	11,557	11,604	11,644	11,682	11,711	11,738	11,768	11,803	11,844
% Ch	2.5%	3.8%	6.4%	6.1%	1.6%	1.4%	1.3%	1.0%	0.9%	1.1%	1.2%	1.4%
National (Thousands)	3,919	3,953	3,949	3,961	3,950	3,924	3,899	3,873	3,856	3,835	3,816	3,787
% Ch	2.1%	3.5%	-0.4%	1.2%	-1.1%	-2.6%	-2.5%	-2.7%	-1.8%	-2.1%	-2.0%	-3.0%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

EMPLOYMENT

MANUFACTURING (continued)

	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NONDURABLE MANUFACTURING												
Idaho	26,940	27,044	27,288	27,153	27,922	28,038	28,297	28,180	28,423	28,580	28,725	28,846
% Ch	2.7%	1.6%	3.7%	-2.0%	11.8%	1.7%	3.7%	-1.6%	3.5%	2.2%	2.0%	1.7%
National (Thousands)	4,618	4,632	4,652	4,657	4,683	4,697	4,711	4,729	4,744	4,760	4,766	4,789
% Ch	1.5%	1.2%	1.7%	0.4%	2.3%	1.3%	1.1%	1.6%	1.2%	1.3%	0.6%	1.9%
FOOD PROCESSING												
Idaho	17,424	17,411	17,646	17,445	18,033	18,208	18,457	18,193	18,664	18,728	18,885	18,975
% Ch	5.0%	-0.3%	5.5%	-4.5%	14.2%	3.9%	5.6%	-5.6%	10.8%	1.4%	3.4%	1.9%
National (Thousands)	1,541	1,551	1,566	1,570	1,587	1,600	1,608	1,618	1,628	1,635	1,640	1,654
% Ch	3.7%	2.6%	3.9%	1.2%	4.3%	3.3%	2.1%	2.4%	2.4%	1.9%	1.1%	3.4%
PRINTING												
Idaho	1,213	1,226	1,246	1,236	1,229	1,249	1,260	1,463	1,235	1,242	1,247	1,237
% Ch	23.0%	4.6%	6.4%	-3.0%	-2.2%	6.4%	3.6%	81.9%	-49.2%	2.3%	1.8%	-3.4%
National (Thousands)	450	449	446	444	444	441	441	438	436	434	433	432
% Ch	-1.1%	-1.4%	-2.2%	-1.7%	-0.8%	-2.4%	0.4%	-2.8%	-1.5%	-2.2%	-1.2%	-1.0%
CHEMICALS												
Idaho	2,637	2,685	2,726	2,798	2,929	2,949	2,941	2,955	3,011	3,058	3,062	3,080
% Ch	2.0%	7.4%	6.3%	10.9%	20.1%	2.7%	-1.0%	1.9%	7.7%	6.4%	0.6%	2.3%
National (Thousands)	810	811	813	813	817	821	823	829	826	829	834	839
% Ch	1.2%	0.5%	1.0%	-0.1%	2.0%	2.0%	1.1%	2.6%	-1.0%	1.5%	2.4%	2.4%
OTHER NONDURABLES												
Idaho	5,665	5,722	5,671	5,674	5,731	5,633	5,639	5,569	5,514	5,552	5,531	5,554
% Ch	-7.1%	4.0%	-3.5%	0.2%	4.1%	-6.7%	0.4%	-4.9%	-3.9%	2.8%	-1.6%	1.7%
National (Thousands)	1,817	1,822	1,826	1,829	1,835	1,836	1,838	1,845	1,853	1,861	1,859	1,864
% Ch	0.4%	1.0%	1.0%	0.6%	1.4%	0.1%	0.5%	1.5%	1.9%	1.6%	-0.3%	1.0%
MINING												
Idaho	2,453	2,477	2,497	2,443	2,351	2,172	2,177	2,167	2,114	2,127	2,129	2,141
% Ch	15.1%	4.0%	3.2%	-8.4%	-14.3%	-27.2%	1.0%	-1.8%	-9.5%	2.5%	0.4%	2.2%
National (Thousands)	658	616	599	595	604	625	638	646	663	685	698	713
% Ch	-24.1%	-23.5%	-10.6%	-2.5%	6.0%	15.1%	8.7%	5.1%	10.9%	13.9%	7.6%	8.8%
CONSTRUCTION												
Idaho	40,608	41,137	42,064	42,729	43,543	44,648	45,226	46,550	48,235	48,495	48,878	49,219
% Ch	17.4%	5.3%	9.3%	6.5%	7.8%	10.5%	5.3%	12.2%	15.3%	2.2%	3.2%	2.8%
National (Thousands)	6,658	6,697	6,741	6,807	6,905	6,927	6,956	7,030	7,144	7,203	7,264	7,341
% Ch	4.3%	2.3%	2.7%	4.0%	5.9%	1.3%	1.7%	4.3%	6.6%	3.3%	3.5%	4.3%
NONGOODS PRODUCING												
Idaho	578,244	580,814	586,777	590,244	595,337	598,978	601,890	604,920	611,799	615,392	618,770	621,734
% Ch	3.4%	1.8%	4.2%	2.4%	3.5%	2.5%	2.0%	2.0%	4.6%	2.4%	2.2%	1.9%
National (Thousands)	123,711	124,267	124,968	125,465	125,909	126,307	126,785	127,189	127,605	128,086	128,578	129,040
% Ch	1.8%	1.8%	2.3%	1.6%	1.4%	1.3%	1.5%	1.3%	1.3%	1.5%	1.5%	1.4%
SERVICES												
Idaho	344,475	346,592	350,230	353,649	357,685	360,593	362,498	365,077	370,819	373,931	377,066	379,682
% Ch	4.6%	2.5%	4.3%	4.0%	4.6%	3.3%	2.1%	2.9%	6.4%	3.4%	3.4%	2.8%
National (Thousands)	79,956	80,405	80,953	81,409	81,827	82,252	82,691	83,056	83,422	83,854	84,278	84,715
% Ch	2.1%	2.3%	2.8%	2.3%	2.1%	2.1%	2.2%	1.8%	1.8%	2.1%	2.0%	2.1%
INFORMATION												
Idaho	8,986	9,003	9,085	9,120	9,122	9,010	9,019	8,897	8,997	8,970	8,960	8,979
% Ch	-12.7%	0.8%	3.7%	1.6%	0.1%	-4.8%	0.4%	-5.3%	4.6%	-1.2%	-0.5%	0.9%
National (Thousands)	2,773	2,780	2,807	2,815	2,810	2,796	2,790	2,780	2,761	2,769	2,766	2,772
% Ch	1.7%	1.1%	3.9%	1.1%	-0.8%	-1.9%	-0.9%	-1.4%	-2.7%	1.2%	-0.5%	0.9%
FINANCIAL ACTIVITIES												
Idaho	33,504	33,664	34,093	34,568	34,848	35,135	35,314	35,589	36,023	36,471	36,810	36,959
% Ch	0.4%	1.9%	5.2%	5.7%	3.3%	3.3%	2.1%	3.2%	5.0%	5.1%	3.8%	1.6%
National (Thousands)	8,214	8,263	8,316	8,349	8,404	8,435	8,475	8,503	8,535	8,563	8,589	8,614
% Ch	1.7%	2.4%	2.6%	1.6%	2.6%	1.5%	1.9%	1.3%	1.5%	1.3%	1.2%	1.1%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

EMPLOYMENT

MANUFACTURING (continued)

	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NONDURABLE MANUFACTURING												
Idaho	29,065	29,235	29,434	29,678	29,888	30,034	30,144	30,231	30,317	30,429	30,539	30,652
% Ch	3.1%	2.4%	2.8%	3.4%	2.9%	2.0%	1.5%	1.2%	1.1%	1.5%	1.5%	1.5%
National (Thousands)	4,813	4,808	4,806	4,808	4,802	4,785	4,773	4,760	4,758	4,757	4,758	4,755
% Ch	2.1%	-0.4%	-0.2%	0.1%	-0.5%	-1.4%	-1.0%	-1.1%	-0.1%	-0.1%	0.1%	-0.2%
FOOD PROCESSING												
Idaho	19,115	19,215	19,357	19,551	19,720	19,828	19,900	19,953	20,006	20,091	20,176	20,267
% Ch	3.0%	2.1%	3.0%	4.1%	3.5%	2.2%	1.5%	1.1%	1.1%	1.7%	1.7%	1.8%
National (Thousands)	1,671	1,678	1,684	1,690	1,694	1,691	1,691	1,690	1,696	1,703	1,710	1,716
% Ch	4.2%	1.8%	1.3%	1.6%	0.8%	-0.6%	0.0%	-0.2%	1.4%	1.5%	1.8%	1.4%
PRINTING												
Idaho	1,243	1,249	1,248	1,247	1,245	1,241	1,237	1,231	1,223	1,217	1,212	1,209
% Ch	2.1%	1.7%	-0.3%	-0.2%	-0.7%	-1.3%	-1.2%	-1.9%	-2.5%	-2.0%	-1.6%	-1.0%
National (Thousands)	433	432	430	430	428	426	424	423	423	422	423	423
% Ch	0.9%	-0.8%	-1.3%	-0.6%	-1.6%	-1.9%	-1.5%	-1.4%	-0.2%	-0.1%	0.2%	0.2%
CHEMICALS												
Idaho	3,094	3,104	3,114	3,120	3,122	3,124	3,129	3,133	3,138	3,140	3,141	3,139
% Ch	1.9%	1.4%	1.3%	0.7%	0.2%	0.4%	0.5%	0.5%	0.6%	0.3%	0.1%	-0.2%
National (Thousands)	844	839	838	837	837	835	833	831	828	825	822	819
% Ch	2.0%	-2.4%	-0.2%	-0.5%	-0.1%	-0.8%	-1.1%	-1.2%	-1.3%	-1.4%	-1.5%	-1.5%
OTHER NONDURABLES												
Idaho	5,613	5,667	5,716	5,760	5,802	5,841	5,879	5,915	5,950	5,981	6,010	6,037
% Ch	4.3%	3.9%	3.5%	3.1%	2.9%	2.8%	2.6%	2.5%	2.3%	2.2%	2.0%	1.8%
National (Thousands)	1,866	1,860	1,854	1,851	1,843	1,833	1,825	1,816	1,812	1,807	1,803	1,797
% Ch	0.5%	-1.3%	-1.3%	-0.7%	-1.6%	-2.2%	-1.8%	-1.9%	-1.0%	-1.0%	-0.9%	-1.2%
MINING												
Idaho	2,094	2,036	2,034	2,027	2,018	2,001	1,986	1,981	1,978	1,973	1,970	1,975
% Ch	-8.5%	-10.5%	-0.5%	-1.4%	-1.8%	-3.3%	-2.9%	-1.1%	-0.6%	-1.0%	-0.7%	1.1%
National (Thousands)	712	712	717	714	720	730	737	741	744	746	748	750
% Ch	-0.3%	0.0%	2.7%	-1.5%	3.5%	5.5%	4.0%	1.9%	1.8%	0.9%	1.1%	1.4%
CONSTRUCTION												
Idaho	49,567	49,917	50,283	50,650	51,095	51,533	52,000	52,554	53,080	53,677	54,292	54,862
% Ch	2.9%	2.9%	3.0%	3.0%	3.6%	3.5%	3.7%	4.3%	4.1%	4.6%	4.7%	4.3%
National (Thousands)	7,408	7,453	7,502	7,563	7,629	7,703	7,784	7,868	7,946	8,011	8,069	8,124
% Ch	3.7%	2.5%	2.6%	3.3%	3.6%	3.9%	4.3%	4.4%	4.0%	3.3%	2.9%	2.8%
NONGOODS PRODUCING												
Idaho	624,007	626,160	628,991	632,235	635,855	639,918	643,291	646,638	649,867	652,974	656,141	659,219
% Ch	1.5%	1.4%	1.8%	2.1%	2.3%	2.6%	2.1%	2.1%	2.0%	1.9%	2.0%	1.9%
National (Thousands)	129,491	129,926	130,367	130,728	131,089	131,691	131,736	131,879	132,068	132,236	132,375	132,517
% Ch	1.4%	1.4%	1.4%	1.1%	1.1%	1.9%	0.1%	0.4%	0.6%	0.5%	0.4%	0.4%
SERVICES												
Idaho	381,569	383,332	385,352	387,682	390,291	393,014	395,742	398,525	401,147	403,604	406,030	408,391
% Ch	2.0%	1.9%	2.1%	2.4%	2.7%	2.8%	2.8%	2.8%	2.7%	2.5%	2.4%	2.3%
National (Thousands)	85,098	85,508	85,916	86,245	86,536	86,818	87,103	87,314	87,456	87,587	87,711	87,839
% Ch	1.8%	1.9%	1.9%	1.5%	1.4%	1.3%	1.3%	1.0%	0.6%	0.6%	0.6%	0.6%
INFORMATION												
Idaho	8,830	8,661	8,688	8,728	8,769	8,800	8,821	8,837	8,853	8,865	8,879	8,868
% Ch	-6.5%	-7.4%	1.2%	1.9%	1.9%	1.4%	1.0%	0.7%	0.7%	0.5%	0.6%	-0.5%
National (Thousands)	2,793	2,823	2,806	2,779	2,775	2,777	2,793	2,807	2,822	2,832	2,843	2,846
% Ch	3.0%	4.4%	-2.4%	-3.7%	-0.5%	0.2%	2.2%	2.1%	2.2%	1.4%	1.6%	0.5%
FINANCIAL ACTIVITIES												
Idaho	36,999	37,123	37,274	37,487	37,764	38,016	38,247	38,523	38,767	39,009	39,249	39,483
% Ch	0.4%	1.3%	1.6%	2.3%	3.0%	2.7%	2.5%	2.9%	2.6%	2.5%	2.5%	2.4%
National (Thousands)	8,639	8,694	8,759	8,806	8,842	8,868	8,893	8,916	8,924	8,917	8,916	8,921
% Ch	1.2%	2.6%	3.0%	2.2%	1.6%	1.2%	1.1%	1.1%	0.3%	-0.3%	0.0%	0.2%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

EMPLOYMENT

SERVICES (Continued)

	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TRANS., WAREHOUSING, UTILITIES												
Idaho	23,589	23,601	23,728	23,739	23,801	24,235	24,273	24,444	24,990	25,347	25,400	25,531
% Ch	-11.3%	0.2%	2.2%	0.2%	1.0%	7.5%	0.6%	2.8%	9.2%	5.8%	0.8%	2.1%
National (Thousands)	5,503	5,545	5,594	5,634	5,672	5,703	5,735	5,781	5,824	5,861	5,904	5,972
% Ch	1.5%	3.0%	3.6%	2.9%	2.7%	2.2%	2.2%	3.2%	3.0%	2.6%	2.9%	4.7%
PROFESSIONAL & BUSINESS												
Idaho	84,875	86,182	86,789	88,038	89,465	90,243	90,669	91,435	92,785	93,619	94,824	95,472
% Ch	13.6%	6.3%	2.8%	5.9%	6.6%	3.5%	1.9%	3.4%	6.0%	3.6%	5.3%	2.8%
National (Thousands)	19,903	19,984	20,099	20,203	20,271	20,402	20,538	20,651	20,769	20,924	21,062	21,180
% Ch	1.3%	1.6%	2.3%	2.1%	1.3%	2.6%	2.7%	2.2%	2.3%	3.0%	2.7%	2.2%
EDUCATION & HEALTH												
Idaho	98,145	98,436	99,555	99,988	101,719	102,117	102,684	102,946	104,812	105,477	106,327	107,094
% Ch	1.8%	1.2%	4.6%	1.8%	7.1%	1.6%	2.2%	1.0%	7.4%	2.6%	3.3%	2.9%
National (Thousands)	22,396	22,564	22,723	22,872	23,005	23,129	23,272	23,347	23,461	23,579	23,727	23,842
% Ch	2.4%	3.0%	2.8%	2.6%	2.3%	2.2%	2.5%	1.3%	2.0%	2.0%	2.5%	1.9%
LEISURE & HOSPITALITY												
Idaho	71,445	71,643	72,571	73,739	74,185	75,073	75,630	76,682	77,973	78,708	79,072	79,767
% Ch	9.5%	1.1%	5.3%	6.6%	2.4%	4.9%	3.0%	5.7%	6.9%	3.8%	1.9%	3.6%
National (Thousands)	15,506	15,590	15,711	15,816	15,929	16,022	16,095	16,180	16,241	16,295	16,358	16,444
% Ch	3.7%	2.2%	3.1%	2.7%	2.9%	2.4%	1.8%	2.1%	1.5%	1.3%	1.6%	2.1%
OTHER SERVICES												
Idaho	23,931	24,063	24,409	24,457	24,546	24,781	24,910	25,083	25,238	25,339	25,672	25,880
% Ch	2.4%	2.2%	5.9%	0.8%	1.5%	3.9%	2.1%	2.8%	2.5%	1.6%	5.4%	3.3%
National (Thousands)	5,661	5,678	5,703	5,719	5,738	5,764	5,787	5,815	5,831	5,862	5,872	5,891
% Ch	1.5%	1.2%	1.7%	1.2%	1.3%	1.9%	1.6%	1.9%	1.1%	2.2%	0.6%	1.4%
TRADE												
Idaho	113,507	113,671	114,449	114,963	115,428	115,551	115,845	116,020	116,734	117,020	117,389	117,848
% Ch	1.7%	0.6%	2.8%	1.8%	1.6%	0.4%	1.0%	0.6%	2.5%	1.0%	1.3%	1.6%
National (Thousands)	21,613	21,677	21,724	21,755	21,770	21,740	21,760	21,802	21,862	21,896	21,912	21,926
% Ch	1.5%	1.2%	0.9%	0.6%	0.3%	-0.5%	0.4%	0.8%	1.1%	0.6%	0.3%	0.3%
RETAIL TRADE												
Idaho	84,889	85,077	85,675	86,117	86,582	86,414	86,772	86,765	87,416	87,554	87,925	88,262
% Ch	1.2%	0.9%	2.8%	2.1%	2.2%	-0.8%	1.7%	0.0%	3.0%	0.6%	1.7%	1.5%
National (Thousands)	15,758	15,822	15,865	15,883	15,888	15,850	15,883	15,851	15,907	15,933	15,913	15,903
% Ch	2.0%	1.6%	1.1%	0.4%	0.1%	-1.0%	0.0%	0.5%	1.0%	0.7%	-0.5%	-0.2%
WHOLESALE TRADE												
Idaho	28,618	28,593	28,774	28,846	28,846	29,138	29,072	29,255	29,318	29,466	29,465	29,586
% Ch	3.3%	-0.3%	2.6%	1.0%	0.0%	4.1%	-0.9%	2.5%	0.9%	2.0%	0.0%	1.7%
National (Thousands)	5,854	5,855	5,859	5,872	5,882	5,891	5,910	5,933	5,954	5,962	5,999	6,023
% Ch	0.2%	0.0%	0.2%	1.0%	0.7%	0.6%	1.3%	1.6%	1.5%	0.5%	2.5%	1.6%
STATE & LOCAL GOVERNMENT												
Idaho	107,495	107,731	109,249	108,741	109,352	109,916	110,514	110,748	111,104	111,383	111,446	111,350
% Ch	1.7%	0.9%	5.8%	-1.8%	2.3%	2.1%	2.2%	0.9%	1.3%	1.0%	0.2%	-0.3%
National (Thousands)	19,365	19,396	19,487	19,495	19,501	19,510	19,530	19,529	19,528	19,542	19,592	19,600
% Ch	1.1%	0.6%	1.9%	0.2%	0.1%	0.2%	0.4%	0.0%	0.0%	0.3%	1.0%	0.2%
EDUCATION												
Idaho	56,204	56,374	57,235	56,795	57,127	57,167	57,986	57,728	57,809	57,633	57,799	57,674
% Ch	2.4%	1.2%	6.2%	-3.0%	2.4%	0.3%	5.9%	-1.8%	0.6%	-1.2%	1.2%	-0.9%
NONEDUCATION												
Idaho	51,290	51,357	52,015	51,946	52,225	52,748	52,527	53,020	53,294	53,750	53,646	53,677
% Ch	0.9%	0.5%	5.2%	-0.5%	2.2%	4.1%	-1.7%	3.8%	2.1%	3.5%	-0.8%	0.2%
FEDERAL GOVERNMENT												
Idaho	12,767	12,821	12,849	12,891	12,872	12,918	13,034	13,075	13,143	13,057	12,869	12,853
% Ch	1.5%	1.7%	0.9%	1.3%	-0.6%	1.5%	3.6%	1.3%	2.1%	-2.6%	-5.6%	-0.5%
National (Thousands)	2,776	2,789	2,804	2,807	2,811	2,804	2,804	2,802	2,793	2,793	2,797	2,800
% Ch	1.4%	1.9%	2.2%	0.3%	0.6%	-0.9%	0.0%	-0.4%	-1.2%	0.0%	0.5%	0.4%

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**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

EMPLOYMENT

	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SERVICES (Continued)												
TRANS., WAREHOUSING, UTILITIES												
Idaho	25,546	25,566	25,594	25,671	25,790	25,920	26,066	26,226	26,360	26,467	26,603	26,745
% Ch	0.2%	0.3%	0.4%	1.2%	1.9%	2.0%	2.3%	2.5%	2.1%	1.6%	2.1%	2.2%
National (Thousands)	5,997	6,001	6,008	6,009	5,997	5,986	5,978	5,972	5,967	5,957	5,944	5,931
% Ch	1.7%	0.2%	0.5%	0.1%	-0.8%	-0.7%	-0.5%	-0.4%	-0.3%	-0.7%	-0.9%	-0.9%
PROFESSIONAL & BUSINESS												
Idaho	96,217	96,849	97,477	98,106	98,720	99,477	100,255	101,027	101,791	102,502	103,176	103,843
% Ch	3.2%	2.7%	2.6%	2.6%	2.5%	3.1%	3.2%	3.1%	3.1%	2.8%	2.7%	2.6%
National (Thousands)	21,300	21,572	21,887	22,175	22,448	22,634	22,752	22,854	22,947	23,000	23,046	23,105
% Ch	2.3%	5.2%	6.0%	5.4%	5.0%	3.4%	2.1%	1.8%	1.6%	0.9%	0.8%	1.0%
EDUCATION & HEALTH												
Idaho	107,906	108,664	109,511	110,587	111,602	112,583	113,546	114,509	115,446	116,348	117,236	118,136
% Ch	3.1%	2.8%	3.2%	4.0%	3.7%	3.6%	3.5%	3.4%	3.3%	3.2%	3.1%	3.1%
National (Thousands)	23,927	24,036	24,072	24,088	24,075	24,093	24,121	24,154	24,207	24,248	24,281	24,315
% Ch	1.4%	1.8%	0.6%	0.3%	-0.2%	0.3%	0.5%	0.6%	0.9%	0.7%	0.6%	0.6%
LEISURE & HOSPITALITY												
Idaho	79,963	80,156	80,320	80,457	80,824	81,208	81,610	82,024	82,390	82,721	83,040	83,323
% Ch	1.0%	1.0%	0.8%	0.7%	1.8%	1.9%	2.0%	2.0%	1.8%	1.6%	1.5%	1.4%
National (Thousands)	16,534	16,497	16,514	16,545	16,583	16,666	16,788	16,846	16,835	16,892	16,954	17,008
% Ch	2.2%	-0.9%	0.4%	0.7%	0.9%	2.0%	3.0%	1.4%	-0.3%	1.4%	1.5%	1.3%
OTHER SERVICES												
Idaho	26,109	26,312	26,488	26,647	26,823	27,010	27,196	27,379	27,539	27,693	27,847	27,994
% Ch	3.6%	3.1%	2.7%	2.4%	2.7%	2.8%	2.7%	2.7%	2.4%	2.2%	2.2%	2.1%
National (Thousands)	5,907	5,886	5,871	5,843	5,817	5,795	5,779	5,764	5,754	5,741	5,727	5,713
% Ch	1.1%	-1.4%	-1.0%	-1.9%	-1.7%	-1.5%	-1.1%	-1.0%	-0.7%	-0.9%	-1.0%	-1.0%
TRADE												
Idaho	118,197	118,610	119,219	119,764	120,398	121,024	121,678	122,356	123,064	123,719	124,378	124,924
% Ch	1.2%	1.4%	2.1%	1.8%	2.1%	2.1%	2.2%	2.2%	2.3%	2.1%	2.1%	1.8%
National (Thousands)	21,987	21,990	21,988	21,978	21,954	21,933	21,911	21,895	21,900	21,895	21,868	21,842
% Ch	1.1%	0.0%	0.0%	-0.2%	-0.4%	-0.4%	-0.4%	-0.3%	0.1%	-0.1%	-0.5%	-0.5%
RETAIL TRADE												
Idaho	88,534	88,879	89,363	89,802	90,317	90,815	91,327	91,857	92,407	92,914	93,423	93,840
% Ch	1.2%	1.6%	2.2%	2.0%	2.3%	2.2%	2.3%	2.3%	2.4%	2.2%	2.2%	1.8%
National (Thousands)	15,938	15,922	15,898	15,876	15,854	15,833	15,809	15,788	15,789	15,785	15,761	15,737
% Ch	0.9%	-0.4%	-0.6%	-0.6%	-0.6%	-0.5%	-0.6%	-0.5%	0.0%	-0.1%	-0.6%	-0.6%
WHOLESALE TRADE												
Idaho	29,662	29,731	29,856	29,961	30,081	30,209	30,351	30,499	30,657	30,805	30,954	31,084
% Ch	1.0%	0.9%	1.7%	1.4%	1.6%	1.7%	1.9%	2.0%	2.1%	1.9%	2.0%	1.7%
National (Thousands)	6,049	6,068	6,090	6,102	6,100	6,100	6,102	6,107	6,111	6,110	6,107	6,105
% Ch	1.7%	1.2%	1.5%	0.8%	-0.1%	0.0%	0.1%	0.3%	0.3%	-0.1%	-0.2%	-0.2%
STATE & LOCAL GOVERNMENT												
Idaho	111,460	111,416	111,508	111,677	111,846	112,010	112,149	112,283	112,427	112,581	112,740	112,902
% Ch	0.4%	-0.2%	0.3%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%	0.6%	0.6%
National (Thousands)	19,606	19,628	19,662	19,704	19,746	19,788	19,829	19,871	19,912	19,953	19,995	20,036
% Ch	0.1%	0.5%	0.7%	0.9%	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
EDUCATION												
Idaho	57,839	57,817	57,877	57,968	58,091	58,205	58,306	58,410	58,498	58,591	58,686	58,782
% Ch	1.2%	-0.2%	0.4%	0.6%	0.8%	0.8%	0.7%	0.7%	0.6%	0.6%	0.6%	0.7%
NONEDUCATION												
Idaho	53,621	53,599	53,631	53,709	53,755	53,805	53,843	53,873	53,929	53,990	54,054	54,120
% Ch	-0.4%	-0.2%	0.2%	0.6%	0.3%	0.4%	0.3%	0.2%	0.4%	0.5%	0.5%	0.5%
FEDERAL GOVERNMENT												
Idaho	12,781	12,802	12,913	13,111	13,321	13,870	13,723	13,475	13,229	13,070	12,994	13,002
% Ch	-2.2%	0.7%	3.5%	6.3%	6.5%	17.5%	-4.2%	-7.0%	-7.1%	-4.7%	-2.3%	0.3%
National (Thousands)	2,800	2,800	2,800	2,800	2,853	3,153	2,893	2,800	2,800	2,800	2,800	2,800
% Ch	0.0%	0.0%	0.0%	0.0%	7.8%	49.1%	-29.1%	-12.2%	0.0%	0.0%	0.0%	0.0%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

MISCELLANEOUS

	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SELECTED CHAIN-WEIGHTED DEFL.												
Gross Domestic Product	105.043	105.738	106.110	106.703	107.233	107.553	108.134	108.807	109.348	110.172	110.629	111.241
% Ch	-0.2%	2.7%	1.4%	2.3%	2.0%	1.2%	2.2%	2.5%	2.0%	3.0%	1.7%	2.2%
Consumption Expenditures	103.428	104.036	104.485	104.989	105.528	105.735	106.156	106.873	107.524	108.052	108.476	109.135
% Ch	0.2%	2.4%	1.7%	1.9%	2.1%	0.8%	1.6%	2.7%	2.5%	2.0%	1.6%	2.5%
Durable Goods	92.238	91.641	90.836	90.020	90.055	89.349	88.819	88.321	88.085	87.738	87.511	87.088
% Ch	-1.9%	-2.6%	-3.5%	-3.5%	0.2%	-3.1%	-2.4%	-2.2%	-1.1%	-1.6%	-1.0%	-1.9%
Nondurable Goods	95.083	95.817	95.923	96.646	97.438	96.797	97.348	98.164	99.115	99.453	99.439	100.282
% Ch	-5.2%	3.1%	0.4%	3.0%	3.3%	-2.6%	2.3%	3.4%	3.9%	1.4%	-0.1%	3.4%
Services	108.171	108.953	109.751	110.425	110.972	111.644	112.201	113.120	113.840	114.606	115.310	116.125
% Ch	2.3%	2.9%	3.0%	2.5%	2.0%	2.4%	2.0%	3.3%	2.6%	2.7%	2.5%	2.9%
Consumer Price Index	2.378	2.395	2.405	2.422	2.439	2.440	2.453	2.473	2.494	2.505	2.517	2.535
% Ch	-0.1%	2.7%	1.8%	2.7%	3.0%	0.1%	2.1%	3.3%	3.5%	1.7%	2.0%	2.9%
SELECTED INTEREST RATES												
Federal Funds	0.4%	0.4%	0.4%	0.5%	0.7%	1.0%	1.2%	1.2%	1.4%	1.7%	1.9%	2.2%
NY Fed Discount	1.0%	1.0%	1.0%	1.0%	1.3%	1.5%	1.8%	1.8%	2.0%	2.3%	2.5%	2.8%
Prime	3.5%	3.5%	3.5%	3.5%	3.8%	4.0%	4.3%	4.3%	4.5%	4.8%	5.0%	5.3%
Existing Home Mortgage	4.0%	3.9%	3.8%	3.9%	4.4%	4.1%	4.2%	4.2%	4.4%	4.7%	4.8%	5.0%
U.S. Govt. 3-Month Bills	0.3%	0.3%	0.3%	0.4%	0.6%	0.9%	1.0%	1.2%	1.6%	1.8%	2.0%	2.4%
U.S. Govt. 6-Month Bills	0.4%	0.4%	0.4%	0.6%	0.7%	1.0%	1.1%	1.4%	1.7%	2.0%	2.2%	2.5%
U.S. Govt. 5-Year Notes	1.4%	1.2%	1.1%	1.6%	1.9%	1.8%	1.8%	2.1%	2.5%	2.8%	2.8%	3.0%
U.S. Govt. 10-Year Notes	1.9%	1.8%	1.6%	2.1%	2.4%	2.3%	2.2%	2.4%	2.8%	2.9%	2.9%	3.2%
EXCHANGE RATES (2009=1.000)												
Major Currency Trading Partners	1.374	1.333	1.353	1.405	1.408	1.381	1.310	1.318	1.276	1.306	1.329	1.456
% Ch	4.8%	-11.3%	5.9%	16.3%	0.9%	-7.4%	-19.2%	2.4%	-11.9%	9.6%	7.2%	44.0%
Other Important Trading Partners	1.228	1.217	1.232	1.268	1.267	1.227	1.196	1.200	1.181	1.210	1.256	1.364
% Ch	17.5%	-3.4%	4.9%	12.1%	-0.3%	-11.9%	-9.8%	1.4%	-6.4%	10.5%	16.0%	38.8%
SELECTED US PRODUCTION INDICES												
Wood Products	116.2	116.0	115.8	119.6	122.0	120.4	122.0	124.2	126.3	125.7	125.8	126.0
% Ch	4.9%	-0.4%	-0.7%	13.8%	8.2%	-5.2%	5.5%	7.2%	7.1%	-2.0%	0.4%	0.5%
Computers & Electronic Products	108.8	109.6	110.4	112.7	112.7	113.9	113.5	115.6	117.2	119.0	120.9	122.5
% Ch	3.8%	2.7%	3.1%	8.5%	0.1%	4.4%	-1.7%	7.6%	5.7%	6.3%	6.6%	5.6%
Food	106.1	106.4	107.0	106.8	109.2	110.1	112.1	112.5	114.1	114.7	115.6	116.1
% Ch	4.6%	1.3%	2.2%	-0.7%	8.9%	3.7%	7.3%	1.5%	5.6%	2.4%	2.9%	2.0%
Agricultural Chemicals	91.4	93.7	99.5	101.5	107.6	115.1	120.3	124.1	119.5	120.9	121.9	123.7
% Ch	-0.5%	10.4%	26.8%	8.4%	26.4%	30.7%	19.5%	13.1%	-13.8%	4.6%	3.6%	6.0%
Metal Ore Mining	98.9	100.7	97.6	100.2	97.2	102.2	94.4	96.8	90.3	95.1	94.4	95.4
% Ch	-6.1%	7.8%	-11.9%	11.0%	-11.4%	22.0%	-27.2%	10.7%	-24.2%	23.2%	-3.1%	4.2%

National Variables Forecast by IHS Economics
Forecast Begins the Third Quarter of 2018

**IDAHO ECONOMIC FORECAST
QUARTERLY DETAIL
JANUARY 2019**

MISCELLANEOUS

	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SELECTED CHAIN-WEIGHTED DEFL.												
Gross Domestic Product	111.993	112.601	113.264	113.954	114.652	115.321	116.055	116.745	117.502	118.238	118.978	119.722
% Ch	2.7%	2.2%	2.4%	2.5%	2.5%	2.4%	2.6%	2.4%	2.6%	2.5%	2.5%	2.5%
Consumption Expenditures	109.862	110.478	111.064	111.620	112.155	112.604	113.232	113.715	114.367	115.012	115.638	116.263
% Ch	2.7%	2.3%	2.1%	2.0%	1.9%	1.6%	2.2%	1.7%	2.3%	2.3%	2.2%	2.2%
Durable Goods	87.149	86.871	86.594	86.322	86.058	85.792	85.523	85.264	85.048	84.853	84.666	84.469
% Ch	0.3%	-1.3%	-1.3%	-1.3%	-1.2%	-1.2%	-1.2%	-1.2%	-1.0%	-0.9%	-0.9%	-0.9%
Nondurable Goods	100.965	101.561	101.950	102.177	102.365	102.192	102.771	102.697	103.365	103.957	104.415	104.842
% Ch	2.8%	2.4%	1.5%	0.9%	0.7%	-0.7%	2.3%	-0.3%	2.6%	2.3%	1.8%	1.6%
Services	117.000	117.803	118.633	119.472	120.291	121.104	121.933	122.764	123.591	124.430	125.284	126.151
% Ch	3.0%	2.8%	2.8%	2.9%	2.8%	2.7%	2.8%	2.8%	2.7%	2.7%	2.8%	2.8%
Consumer Price Index	2.553	2.570	2.585	2.597	2.609	2.617	2.633	2.642	2.659	2.676	2.692	2.707
% Ch	2.9%	2.6%	2.3%	2.0%	1.9%	1.1%	2.5%	1.3%	2.7%	2.6%	2.4%	2.3%
SELECTED INTEREST RATES												
Federal Funds	2.4%	2.7%	2.9%	3.2%	3.2%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%
NY Fed Discount	3.0%	3.3%	3.5%	3.7%	3.8%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Prime	5.5%	5.8%	6.0%	6.2%	6.3%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Existing Home Mortgage	5.1%	5.2%	5.2%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%
U.S. Govt. 3-Month Bills	2.6%	2.7%	2.8%	3.0%	3.0%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%
U.S. Govt. 6-Month Bills	2.7%	3.0%	3.2%	3.4%	3.5%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
U.S. Govt. 5-Year Notes	3.2%	3.3%	3.4%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
U.S. Govt. 10-Year Notes	3.3%	3.4%	3.5%	3.5%	3.5%	3.5%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
EXCHANGE RATES (2009=1.000)												
Major Currency Trading Partners	1.453	1.446	1.442	1.439	1.429	1.429	1.426	1.431	1.429	1.426	1.425	1.421
% Ch	-0.7%	-1.8%	-1.1%	-1.0%	-2.7%	0.0%	-0.7%	1.2%	-0.5%	-0.7%	-0.5%	-1.0%
Other Important Trading Partners	1.364	1.366	1.368	1.374	1.385	1.388	1.383	1.383	1.380	1.378	1.376	1.376
% Ch	0.1%	0.5%	0.6%	2.0%	3.2%	0.7%	-1.3%	-0.2%	-0.9%	-0.5%	-0.5%	-0.1%
SELECTED US PRODUCTION INDICES												
Wood Products	126.3	126.6	127.1	127.7	128.3	128.8	129.3	129.7	129.9	130.1	130.1	130.5
% Ch	0.9%	1.1%	1.5%	1.9%	1.8%	1.7%	1.5%	1.3%	0.7%	0.5%	0.0%	1.2%
Computers & Electronic Products	124.2	125.6	127.0	128.0	128.9	129.7	130.3	130.9	131.3	131.7	132.2	132.9
% Ch	5.5%	4.7%	4.2%	3.4%	2.8%	2.5%	2.1%	1.6%	1.3%	1.3%	1.6%	2.2%
Food	116.8	117.3	117.9	118.4	118.9	119.4	119.9	120.4	121.0	121.5	122.1	122.6
% Ch	2.2%	2.0%	1.9%	1.8%	1.7%	1.6%	1.7%	1.7%	1.8%	1.9%	1.9%	1.8%
Agricultural Chemicals	125.4	126.9	127.8	128.5	129.1	129.6	130.1	130.3	130.6	131.0	131.4	131.8
% Ch	5.4%	4.8%	3.0%	2.3%	1.7%	1.6%	1.5%	0.8%	1.0%	1.2%	1.1%	1.1%
Metal Ore Mining	96.0	96.4	96.7	96.8	96.8	96.8	96.7	96.6	96.3	96.0	95.6	95.2
% Ch	2.6%	1.7%	1.2%	0.6%	0.0%	-0.1%	-0.3%	-0.7%	-1.1%	-1.4%	-1.6%	-1.4%

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APPENDIX

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THE IHS ECONOMIC US MACROECONOMIC MODEL

IHS Economic Macroeconomic Model is a multiple-equation model of the US economy. Consisting of over 1,200 equations, the model is solved iteratively to generate the results of different policy and forecast scenarios. The model incorporates the best insights of many theoretical schools of thought to depict the economic decision processes and interactions of households, businesses, and governments.

The IHS Economic model is divided into the following eight major sectors:

- I Private Domestic Spending**
- II Production and Income**
- III Taxes**
- IV International Transactions**
- V Financial**
- VI Inflation**
- VII Supply**
- VIII Expectations**

- I. **Private Domestic Spending.** Major aggregate demand components include consumption, investment, and government. Consumer purchases are divided among three categories: durable goods, nondurable goods, and services. In nearly all cases, real expenditures are influenced by real income and the relative price of consumer goods. Durable and semi-durable goods are also sensitive to household net worth, current finance costs, and consumer sentiment.

IHS Economic divides investment into two general categories: fixed investment and inventories. The former is driven by utilization rates, capital stock, relative prices, financial market conditions, financial balance sheet conditions, and government policies. Inventory investment is heavily influenced by such factors as past and present sales levels, vendor performance, and utilization rates.

The government sector is divided into federal government and state and local government. Most of the federal expenditure side is exogenous. Federal receipts are endogenous and divided into personal taxes, corporate taxes, indirect business taxes, and contributions for social insurance. State and local sector receipts depend primarily on federal grants and various tax rates and bases. State and local government spending is driven by legal requirements (i.e., balanced budgets), the level of federal grants (due to the matching requirements of many programs), population growth, and trend increases in personal income.

- II. **Production and Income.** The industrial production sector includes 74 standard industrial classifications. Production is a function of various cyclical and trend variables and a generated output term, i.e., the input-output (I-O) relationship between the producing industry and both intermediate industries and final demand. The cyclical and trend variables correct for changes in I-O coefficients that are implied by the changing relationship between buyers and sellers.

Pre-tax income categories include private and government wages, corporate profits, interest rate, and entrepreneurial returns. Each of these categories, except corporate profits, is determined by some combination of wages, prices, interest rates, debt levels, capacity utilization rate, and unemployment rate. Corporate profits are calculated as the residual of total national income less the nonprofit components of income mentioned above.

- III. **Taxes.** The model tracks personal, corporate, payroll, and excise taxes separately. Tax revenues are simultaneously forecast as the product of the rate and the associated pre-tax income components. The model automatically adjusts the effective average personal tax rate for variations in inflation and income per household, and the effective average corporate rate for credits earned on equipment, utility structures, and R&D. State taxes are fully endogenous, except for corporate profits and social insurance tax rates.
- IV. **International.** The international sector can either add or divert strength from the central flow of domestic income and spending. Imports' ability to capture varying shares of domestic demand depends on the prices of foreign output, the US exchange rate, and competing domestic prices. Exports' portion of domestic spending depends on similar variables and the level of world gross domestic product. The exchange rate itself responds to international differences in inflation, interest rates, trade deficits, and capital flows between the US and its competitors. Investment income flows are also explicitly modeled.
- V. **Financial.** The IHS Economic model includes a highly detailed financial sector. Several short- and long-term interest rates are covered in this model, and they are the key output of this sector. The short-term rates depend upon the balance between the demand and supply of reserves in the banking system. The supply of reserves is the primary exogenous monetary policy lever within the model, reflecting the Federal Reserve's open market purchases or sales of Treasury securities. Longer-term interest rates are driven by shorter-term rates as well as factors affecting the slope of the yield curve. These factors include inflation expectations, government borrowing requirements, and corporate finance needs.
- VI. **Inflation.** Inflation is modeled as a controlled, interactive process involving wages, prices, and market conditions. The principal domestic cost influences are labor compensation, nonfarm productivity, and foreign input costs that later are driven by the exchange rate, the price of oil, and foreign wholesale price inflation. This set of cost influences drives each of the industry-specific producer price indexes, in combination with a demand pressure indicator and appropriately weighted composites of the other producer price indexes.
- VII. **Supply.** In this model, aggregate supply (or potential GNP), is estimated by a Cobb-Douglas production function that combines factor input growth and improvements to total factor productivity. Factor input equals a weighted average of labor, business fixed capital, and energy. Factor supplies are defined by estimates of the full employment labor force, the full employment capital stock net of pollution abatement equipment, the domestic production of petroleum and natural gas, and the stock of infrastructure. Total factor productivity depends upon the stock of research and development capital and trend technological change.
- VIII. **Expectations.** Expectations impact several expenditure categories in the model, but the principal nuance relates to the entire spectrum of interest rates. Shifts in price expectations or the expected government capital needs influences are captured directly in this model through price expectations and budget deficit terms. The former impacts all interest rates and the latter impacts intermediate- and long-term rates. On the expenditure side, inflationary expectations impact consumption via consumer sentiment, while growth expectations affect business investment.

THE IDAHO ECONOMIC MODEL

The Idaho Economic Model (IEM) is an income and employment based model of Idaho's economy. The Model consists of a simultaneous system of linear regression equations, which are estimated using quarterly data. The primary exogenous variables are obtained from the IHS Economics US Macroeconomic Model. Endogenous variables are forecast at the statewide level of aggregation.

The focal point of the IEM is Idaho personal income, which is given by the identity:

personal income = wage and salary payments + other labor income + farm proprietors' income + nonfarm proprietors' income + property income + transfer payments - contributions for social insurance + residence adjustment.

With the exception of farm proprietors' income and wage and salary payments, each of the components of personal income is estimated stochastically by a single equation. Farm proprietors' income and wage and salary payments each comprise submodels containing a system of stochastic equations and identities.

The farm proprietor sector is estimated using a highly-aggregated submodel consisting of equations for crop marketing receipts, livestock marketing receipts, production expenses, inventory changes, imputed rent income, corporate farm income, and government payments to farmers. Farm proprietors' income includes inventory changes and imputed rent, but this component is netted out of the tax base.

At the heart of the IEM is the wage and salary sector, which includes stochastic employment equations for 23 North American Industry Classification System employment categories. Conceptually, the employment equations are divided into basic and domestic activities. The basic employment equations are specified primarily as functions of national demand and supply variables. Domestic employment equations are specified primarily as functions of state-specific demand variables. Average annual wages are estimated for several broad employment categories and are combined with employment to arrive at aggregate wage and salary payments.

The demographic component of the model is used to forecast components of population change and housing starts. Resident population, births, and deaths are modeled stochastically. Net migration is calculated residually from the estimates for those variables. Housing starts are divided into single and multiple units. Each equation is functionally related to economic and population variables.

The output of the IEM (i.e., the forecast values of the endogenous variables) is determined by the parameters of the equations and the values of exogenous variables over the forecast period. The values of equation parameters are determined by the historic values of both the exogenous and endogenous variables. IEM equation parameters are estimated using the technique of ordinary least squares. Model equations are occasionally respecified in response to the dynamic nature of the Idaho and national economies. Parameter values for a particular equation (given the same specification) may change as a result of revisions in the historic data or a change in the time interval of the estimation. In general, parameter values should remain relatively constant over time, with changes reflecting changing structural relationships.

While the equation parameters are determined by structural relationships and remain relatively fixed, the forecast period exogenous variable values are more volatile determinants of the forecast values of endogenous variables. They are more often subject to change as expectations regarding future economic behavior change, and they are more likely to give rise to debate over appropriate values. As mentioned

above, the forecast period values of exogenous variables are primarily obtained from IHS Economics US macroeconomic model.

Since the output of the IEM depends in large part upon the output of the IHS Economics model, an understanding of the IHS Economics model, its input assumptions, and its output is useful in evaluating the results of the IEM's forecast. The assumptions and output of the IHS Economics model are discussed in the National Forecast section.

IDAHO ECONOMIC MODEL

$$\begin{aligned} \text{EEA_ID_2100} &= 3303.443 + 14.493 * @\text{MOVAV}(\text{ID0IP2122_2123}(-1),4) \\ &- 1756.672 * \text{JECIWSP/WPI10} - 1227.158 * @\text{MOVAV}(\text{JEXCHOITPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_2300} &= -15243.688 + 293.891 * \text{ID0HSPRS1_A} + 251.907 * \text{ID0HSPRS1_A}(-1) \\ &+ 209.922 * \text{ID0HSPRS1_A}(-2) + 167.938 * \text{ID0HSPRS1_A}(-3) \\ &+ 125.953 * \text{ID0HSPRS1_A}(-4) + 83.969 * \text{ID0HSPRS1_A}(-5) \\ &+ 41.984 * \text{ID0HSPRS1_A}(-6) + 0.138 * \text{EEA_ID_44_45} + 0.118 * \text{EEA_ID_44_45}(-1) \\ &+ 0.098 * \text{EEA_ID_44_45}(-2) + 0.079 * \text{EEA_ID_44_45}(-3) \\ &+ 0.059 * \text{EEA_ID_44_45}(-4) + 0.039 * \text{EEA_ID_44_45}(-5) \\ &+ 0.020 * \text{EEA_ID_44_45}(-6) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3110} &= 27547.285 + 231.567 * @\text{MOVAV}(\text{IPSG311}(-1),4) \\ &- 599.020 * @\text{MOVAV}((\text{IPSG311}/\text{EMN311}),6) + 44.823 * @\text{TREND} \\ &- 485.475 * @\text{MOVAV}(\text{JEXCHOITPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3230} &= 1137.601 + 17.763 * @\text{MOVAV}(\text{IPSG323},4) \\ &- 7.908 * @\text{MOVAV}((\text{IPSG323}/\text{EMN323}),8) \\ &+ 18.484 * @\text{MOVAV}(\text{JEXCHMTPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3250} &= 2917.240 + 12.914 * @\text{MOVAV}(\text{IPSG3253}(-1),8) \\ &- 1819.882 * \text{DUM951ON} - 42.276 * @\text{MOVAV}(\text{JEXCHMTPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3320} &= -774.128 + 16.603 * @\text{MOVAV}(\text{IPSG332},2) + 26.049 * @\text{TREND} \\ &- 294.614 * @\text{MOVAV}(\text{JEXCHOITPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3330} &= -787.609 + 0.134 * @\text{MOVAV}(\text{IPSG3332},8) * @\text{TREND} \\ &+ 3.563 * @\text{TREND} + 580.834 * @\text{MOVAV}(\text{JEXCHOITPREAL}(-1),4) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_44_45} &= 49309.978 + 196.381 * @\text{MOVAV}(\text{YPADJ_ID},4) / @\text{MOVAV}(\text{JPC},4) \\ &- 465.327 * @\text{TREND} \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_48_49_22} &= -5332.308 + 0.533 * @\text{MOVAV}(\text{EEA_ID_4200},2) \\ &+ 8216.379 * @\text{MOVAV}(\text{ID0NPT}(-1),8) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_5100} &= -10704.928 + 49.917 * @\text{MOVAV}(\text{IPSG51111},4) + 102.462 * @\text{TREND} \\ &- 2719.812 * @\text{MOVAV}(\text{JEXCHMTPREAL}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_52_53} &= 11022.104 - 2926.230 * \text{DUM981ON} + 38.283 * \text{YPADJ_ID}/\text{JPC} \\ &+ 152.068 * @\text{MOVAV}(\text{ID0HSPR}(-1),4) \end{aligned}$$

$$\text{EEA_ID_54_55_56} = 1929.145 + 1.347 * @\text{MOVAV}(\text{ID0YP}(-1),4)$$

$$\begin{aligned} \text{EEA_ID_61_62} &= -36513.125 + 54412.688 * @\text{MOVAV}(\text{ID0NPT},4) \\ &+ 0.667 * @\text{MOVAV}(\text{ID0YP\$}(-1),2) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_3340} &= \text{@BEFORE("2009Q1")*(61676.742 + 76.899*IPSG334(-3)} \\ &+ 54.799*IPSG3342 - 629.907*JPC(-2)) \\ &+ \text{@AFTER("2009Q1")*(4069.662 + 55.564*IPSG334(-3) - 32.880*IPSG3342} \\ &+ 55.721*JPC(-2)) \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_4200} &= \text{@BEFORE("2012Q2")*(8511.609 + 0.228*EEA_ID_44_45)} \\ &+ \text{@AFTER("2012Q2")*(9182.480 + 0.229*EEA_ID_44_45)} \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_71_72} &= -14581.084 + 1.916*\text{@MOVAV}(\text{ID0YP/ID0NPT},4) \\ &+ 59.206*\text{@TREND} \end{aligned}$$

$$\text{EEA_ID_8100} = 5246.540 + 29.376*\text{@MOVAV}(\text{YPADJ_ID},4)/\text{@MOVAV}(\text{JPC},4)$$

$$\begin{aligned} \text{EEA_ID_GVF} &= -3064.454 + 191.494*\text{GFOCWSS} - 0.619*\text{GFOCWSS}*\text{@TREND} \\ &+ 275.854*\text{DUMCENSUS} \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_GVSLAD} &= 4391.016 + 21846.104*\text{@MOVAV}(\text{ID0NPT},4) \\ &+ 0.295*\text{@MOVAV}(\text{ID0YPTXB}(-4),4) + 4558.034*\text{DUM911062} \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_GVSLED} &= -5233.506 + 162625.868*\text{ID0NPT}*((\text{N} - \text{N16A})/\text{N}) \\ &+ 0.143*\text{ID0YPTXB} \end{aligned}$$

$$\begin{aligned} \text{EEA_ID_MFDNEC} &= -6661.973 + 101.694*\text{@MOVAV}(\text{IPSG339},2) \\ &+ 34.530*\text{@MOVAV}(\text{IPSG335},2) + 1673.704*\text{@MOVAV}(\text{JEXCHMTPREAL}(-3),2) \end{aligned}$$

$$\text{EEA_ID_MFNNEC} = -66.321 + 17.339*\text{@MOVAV}(\text{IPSG322},2) + 19.067*\text{@TREND}$$

$$\begin{aligned} \text{EEA_ID_WOOD} &= 16566.524 + 49.980*\text{@MOVAV}(\text{IPSG321},2) \\ &- 17851.609*\text{JECIWSP/WPI08} - 13.359*\text{IPSG321/EMD321} \\ &- 405.028*\text{@MOVAV}(\text{JEXCHOITPREAL}(-1),2) - 3.362*\text{@TREND} \end{aligned}$$

$$\begin{aligned} \text{ID0AHEMF} &= 3.885 \\ &+ 12.326*\text{EEA_ID_DMANU}(-1)/\text{EEA_ID_MANU}(-1)*\text{@MOVAV}(\text{JECIWSP}(-1),4) \\ &+ 12.010*\text{EEA_ID_NMANU}(-1)/\text{EEA_ID_MANU}(-1)*\text{@MOVAV}(\text{JECIWSP}(-1),4) \end{aligned}$$

$$\text{ID0CRCROP} = 185.860 + 1.338\text{e-}05*\text{CRCROP} + 1.873*\text{@TREND}$$

$$\begin{aligned} \text{ID0CRLVSTK} &= -1993.480 + 3.108\text{e-}05*\text{CRCATCVS} + 5.543\text{e-}05*\text{CRDAIRY} \\ &+ 13.285*\text{@TREND} \end{aligned}$$

$$\text{ID0EXFP} = -352.375 + 220.937*\text{WPI01} + 2.969*\text{@TREND} + 1.958\text{e-}05*\text{EXPUS\$}$$

$$\begin{aligned} \text{ID0HSPRS1_A} &= -548.327 - 1.804*(\text{RMMTGEXIST}(-1) \\ &- \text{@MOVAV}(\text{RMMTGEXIST}(-1),4)) + 543.324*\text{ID0KHU1}(-1)/\text{ID0KHU1}(-4) \\ &+ 0.025*\text{@TREND}*\text{@MOVAV}(\text{ID0NPT}(-4),4) \end{aligned}$$

$$\begin{aligned} \text{ID0HSPRS2A_A} &= 0.373 - 0.659*\text{RMMTGEXIST} \\ &+ 480.648*\text{IPSG321/ID0WRWCC\$}(-3) + 0.026*\text{IPSN32732T9} \end{aligned}$$

$$ID0ND = 6.260 + 0.089*ID0NPT + 1.917e-04*@TREND^2$$

$$ID0NPT = 0.432 + 3.671e-07*@MOVAV(EEA_ID,4) + 0.005*@TREND$$

$$ID0WBBF\$ = -167.684 + 362.766*WPI02$$

$$ID0WBBMIL\$ = @BEFORE("2002Q1")*45.465 + @AFTER("2002Q1")*114.606 - 341.066*(ID0NPT/N)*GFMLCWSS + 0.221*D(GFML) + 0.521*GF$$

$$ID0WRWCC\$ = 11024.104 + 1407.896*ID0AHEMF$$

$$ID0NB = -4.920 + 30.255*ID0NPT - 0.115*@TREND$$

$$ID0WRWMF\$ = 7657.622 + 2206.746*ID0AHEMF$$

$$ID0WRWOTH\$ = 3856.046 + 1611.753*ID0AHEMF$$

$$ID0YDIR\$ = -148.291 + 1.082*(YPAIN + ZADIV + YPRENTADJ)*@MOVAV(ID0YPS(-1),4)/@MOVAV(YP(-1),4)$$

$$ID0YFC\$ = -1.345 + 0.788*ID0YFC$(-1) + 0.331*@TREND$$

$$ID0YINV_R\$ = -7.001 + 0.796*YPPROPADJF + 0.539*ID0YINV_R$(-1) + 0.739*@TREND$$

$$ID0YPRF\$ = 0.003 + 1000.004*(ID0CRCROP + ID0CRLVSTK + ID0YTRF\$ + ID0YINV_R\$ - ID0YFC\$ - ID0EXFP)/1000 - 0.000*@TREND$$

$$ID0YPRNF\$ = 68.552 + 4.263*YPPROPADJNF$$

$$ID0YRA\$ = -314.744 + 0.049*ID0WBB\$$$

$$ID0YSI\$ = -23.754 + 1.182*TXSIDOM*ID0WBB\$/YPCOMPWSD$$

$$ID0YSUP\$ = 95.243 + 1.523*YPCOMPSUPPAI*(ID0WBB\$/YPCOMPWSD)$$

$$ID0YTR\$ = -90.627 + 883.729*(YPTRFGF + YPTRFGSL)*(ID0NPT/N)$$

$$ID0YTRF\$ = 23.758 + 9.645e-06*TRF\$US$$

$$ID0YPTXB = (ID0yp\$ - ID0Ysi\$ - ID0YtR\$) / JPC * 100$$

$$ID0YPNF = ID0YPNF\$ / JPC * 100$$

$$ID0YPNF\$ = ID0YPS\$ - ID0YPRF\$ - ID0WBBF\$$$

$$ID0YPPC = ID0YP / ID0NPT$$

$$ID0YP\$PC = ID0YPS\$ / ID0NPT$$

IDWAGE = (ID0WBB\$ - ID0WBBF\$ - ID0WBBMIL\$) / EEA_ID * 1000000

YPADJ_ID = ID0YPNF\$ + @MOVAV(ID0YPRF\$, 4) + @MOVAV(ID0WBBF\$,
4)

IDAHO ENDOGENOUS VARIABLES

EEA_ID	Employment on nonagricultural payrolls, total
EEA_ID_2100	Employment in mining
EEA_ID_2300	Employment in construction
EEA_ID_3110	Employment in food processing
EEA_ID_3230	Employment in printing
EEA_ID_3250	Employment in chemicals
EEA_ID_3320	Employment in fabricated metal products
EEA_ID_3330	Employment in machinery
EEA_ID_3340	Employment in computers and electronic products
EEA_ID_4200	Employment in wholesale trade
EEA_ID_44_45	Employment in retail trade
EEA_ID_48_49_22	Employment transportation, warehousing, and utilities
EEA_ID_5100	Employment in information
EEA_ID_52_53	Employment in finance, insurance, and real estate
EEA_ID_54_55_56	Employment in professional, scientific, and technical services
EEA_ID_61_62	Employment in health care and educational services
EEA_ID_71_72	Employment in leisure and hospitality
EEA_ID_8100	Employment in other services
EEA_ID_DMANU	Employment in durable goods manufacturing
EEA_ID_GOODS	Employment in goods producing
EEA_ID_GV	Employment in government
EEA_ID_GVF	Employment in federal government
EEA_ID_GVSL	Employment in state and local government
EEA_ID_GVSLAD	Employment in state and local government, administration
EEA_ID_GVSLED	Employment in state and local government, education
EEA_ID_MANU	Employment in manufacturing
EEA_ID_MFDNEC	Employment in other durable manufacturing
EEA_ID_MFNNEC	Employment in other nondurable manufacturing
EEA_ID_NMANU	Employment in nondurable manufacturing
EEA_ID_NONGOODS	Employment in nongoods producing
EEA_ID_SV	Employment in services
EEA_ID_WOOD	Employment in wood products and logging
ID0AHEMF	Average hourly earnings in manufacturing
ID0CRCROP	Cash receipts, crops
ID0CRLVSTK	Cash receipts, livestock
ID0EXFP	Farm production expenses
ID0HSPR	Housing starts, total
ID0HSPRS1_A	Housing starts, single units
ID0HSPRS2A_A	Housing starts, multiple units
ID0KHU	Housing stock, total
ID0KHU1	Housing stock, single units
ID0KHU2A	Housing stock, multiple units
ID0NB	Number of births
ID0ND	Number of deaths
ID0NMG	Net in-migration of persons
ID0NPT	Resident population
ID0WBBS	Wage and salary disbursements

ID0WBBCC\$	Wage and salary disbursements, construction
ID0WBBF\$	Wage and salary disbursements, farm
ID0WBBMF\$	Wage and salary disbursements, manufacturing
ID0WBBMIL\$	Wage and salary disbursements, military
ID0WBBOTH\$	Wage and salary disbursements, except farm, manufacturing, military, and construction
ID0WRWCC\$	Average annual wage, construction
ID0WRWMF\$	Average annual wage, manufacturing
ID0WRWOTH\$	Average annual wage, except farm, manufacturing, military, and construction
ID0YDIR\$	Dividend, interest, and rent income
ID0YFC\$	Corporate farm income
ID0YINV_RS	Farm inventory value changes, imputed rent, and income
ID0YP	Total real personal income, 2005 dollars
ID0YP\$	Total personal income
ID0YP\$PC	Per capita personal income
ID0YPNF	Nonfarm personal income, 2005 dollars
ID0YPNF\$	Nonfarm personal income
ID0YPNFPC	Per capita nonfarm income, 2005 dollars
ID0YPPC	Real per capita personal income, 2005 dollars
ID0YPRF\$	Net farm proprietors' income
ID0YPRNF\$	Nonfarm proprietors' income
ID0YPTXB	Tax base, 2005 dollars
ID0YRA\$	Residence adjustment, personal income
ID0YSI\$	Contributions for social insurance
ID0YSUP\$	Other labor income
ID0YTR\$	Transfer payments to individuals
ID0YTRF\$	Government payments to Idaho farmers
IDWAGE	Idaho average annual wage
YPADJ_ID	Adjusted total personal income

NATIONAL EXOGENOUS VARIABLES

CRCATCVS	Cash receipts, US cattle and calves
CRCROP	Cash receipts, US crops
CRDAIRY	Cash receipts, US dairy
DUM911062	These are dummy variables used in regression equations to capture the impacts of discrete economic or noneconomic events such as strikes, plant opening or closures, unusual weather conditions, etc.
DUM951ON	
DUM981ON	
DUM991ON	
DUMCENSUS	
EMD321	Employment in wood products
EMD334	Employment in computer and electronic products
EMN311	Employment in food manufacturing
EMN323	Employment in printing and related support activities
EXPUS\$	Agricultural production expenses, US
GF	Federal purchases of goods and services
GFML	Federal defense purchases of goods and services
GFMLCWSS	Federal government defense personnel outlays
GFOCWSS	Federal government nondefense personnel outlays
ID0IP2122_2123	Industrial production index, metal and nonmetal ore mining, 2012=100.0
IPSG311	Industrial production index, food, 2012=100.0
IPSG321	Industrial production index, wood products, 2012=100.0
IPSG322	Industrial production index, paper, 2012=100.0
IPSG323	Industrial production index, printing, 2012=100.0
IPSG3253	Industrial production index, agricultural chemicals, 2012=100.0
IPSG332	Industrial production index, fabricated metal products, 2012=100.0
IPSG3332	Industrial production index, industrial machinery, 2012=100.0
IPSG334	Industrial production index, computer and electronic products, 2012=100.0
IPSG335	Industrial production index, electrical equipment, appliances, and components, 2012=100.0
IPSG339	Industrial production index, miscellaneous manufacturers, 2012=100.0
IPSG51111	Industrial production index, newspaper publishing, 2012=100.0
IPSN32732T9	Industrial production index, concrete and cement products, 2012=100.0
JECIWSP	Employment cost index—private sector wages and salaries, December 2005=1.00
JEXCHMTPREAL	Real US trade-weighted exchange rate with major currency trading partners, 2005=1.00
JEXCHOITPREAL	Real US trade-weighted exchange rate with other important trading partners, 2009=1.00
JPC	Implicit price deflator, personal consumption, 2009=100.0, chain weighted
N	Population, US
N16A	Population, US, aged 16 and older
RMMTGEXIST	Effective conventional mortgage rate, existing homes, combined lenders
TRF\$US	Government payments to US farms
TXSIDOM	Domestic social security tax receipts
WPI01	Producer price index, farm products, 1982=1.0
WPI02	Producer price index, processed foods and feeds, 1982=1.0
WPI08	Producer price index, lumber and wood products, 1982=1.0
WPI10	Producer price index, metals and metal products, 1982=1.0
YP	Personal income

YPAIN	Personal interest income
YPCOMPSUPPAI	Other labor income, US
YPCOMPWSD	Wage and salary disbursements
YPPROPADJNF	Nonfarm proprietors' income (with inventory valuation and capital consumption adjustments)
YPRENTADJ	Rental income of persons with capital consumption adjustment
YPTRFGF	Federal transfer payments to individuals
YPTRFGSL	State and local transfer payments to individuals
ZADIV	Dividends