Welcome.

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Our region
Outlook for Tucson

George Hammond
Director
Economic and Business Research Center

Highlights and Takeaways

- Arizona job growth is still strong
  - Especially in health care, construction, and manufacturing
  - Both Phoenix and Tucson had a strong third quarter
- Income is rising at a solid pace
  - But per capita growth is more moderate
  - Education is key to closing the gap with the nation
- Job and income gains fuel household consumption
- Arizona population is rising rapidly
  - Driven primarily by migration as natural increase fades
- The Arizona outlook is strong
  - Continued growth is likely, but recession risks remain elevated
Tucson’s Economy: Periods of Rain and Shine

MAP Dashboard Economy Scorecard

Arizona Job Gains Have Been Up and Down

Over-the-Year Job Growth

Tucson MSA Job Growth by Industry

Thousands of Jobs, Over-the-Year Change, Third Quarter 2019

Manufacturing Jobs Are a Bright Spot

Over-the-Year Job Growth

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Federal Procurement Spending
Prime Contracts in Arizona, Federal Fiscal Year

Tucson MSA Construction Jobs Are Rising Fast

Tucson Housing Permits Are at a Solid Level

Headwinds and Tailwinds
Tucson MSA Over-the-Year Job Growth, Smoothed

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Annual Growth Before Adjustment for Inflation

Tucson MSA Personal Income Growth

Arizona Household Consumption Spending Growth

Spending on Services Leads the Way

The Structure of Arizona Spending

Household Consumption Spending in 2018

Tucson MSA Retail Sales

Retail, Restaurants and Bars, Gasoline, Food

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**Net Migration Flows to Arizona**

Job-to-Job Migration, LEHD, 2017

Employed workers with little or no time between jobs

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**Arizona Birth Rates Converged**

Hispanic and Non-Hispanic

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**Tucson MSA Jobs Outpace the U.S.**

Annual Growth

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**Tucson MSA Components of Population Change**

Net Migration and Natural Increase

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Our world
U.S. Economic Outlook

Jim Glassman
Managing Director and Head Economist
JPMorgan Chase

George Hammond, director
Economic and Business Research Center
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Global Economic Update: Life in Steady State

December 6, 2019

A WIZARD OF OZ MOMENT

Fire and Fury from the Wizard

1) Slow growth a sign of trouble
2) Recession
3) Inverted Treasury yield curve
4) Skewed income distribution
5) Trade imbalances and tariffs
6) Brexit
7) Industrial stall
8) Cap ex slump
9) The politics of polarization

Yes, Global Growth Has Slowed
Real GDP in selected regions (percent change from four quarters earlier)

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That Isn't the Whole Story …

Real GDP (percent change from four quarters earlier)

... But This Is

Unemployment rate (percent of the labor force)

Industrial Activity Isn't the Whole Economy

Real GDP and manufacturing output (percent change from 12 months earlier)

No One Knows the US Better Than This …

Initial applications for unemployment benefits (thousands, weekly)
... and Its Cousin (Recalls > Layoffs Still)

Three Equity Lifts

Unprecedented Cyclical Backdrop

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Economic History Books Are Sobering

Unemployment, actual and Nairu (percent of the labor force, scale reversed)

But, Although We're Back …

Unemployment (percent of the labor force)

... Inflation Isn't ... That's BIG

Chain PCE inflation (percent change from 12 months earlier)

Technological Innovation, Socially Disruptive but Equity Friendly
Skewing Income Distribution …

Gini coefficient (0=maximum equality, 1=minimum distribution)

… An Echo of This …

Income share (percentage of Gross Domestic Income)

… Looks Like Labor-Displacing Technology

Labor productivity and real hourly compensation (ratio to respective 1985 Q4 level)

The Industrial Economy Is More Challenging

Nonfarm payroll employment in manufacturing (millions)
The Future Will Be More Competitive

CONCLUSION

I Don’t Fear It

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for sponsoring Jim Glassman at today’s event.
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   Within 90 days

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