

The Economic Outlook and State/Local Government in Indiana

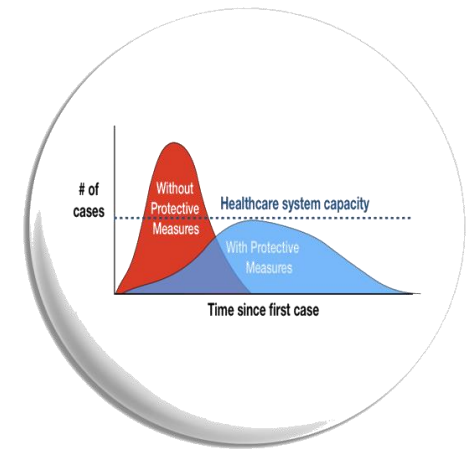
April 1, 2020

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A Forecast for 2020 (Feb. 11, 2020)

	Current	Forecast	Reason
Real GDP Growth	2.3%	2.2%	Growth rate at capacity.
Unemployment Rate	3.6%	3.5%	About as low as it can go.
Inflation Rate	2.3%	2.3%	Fed target, no big changes in oil prices
3-mo. Treasury Bill Interest Rate	1.5%	1.5%	No further reductions in federal funds rate.
10-year Treasury Bond Interest Rate	1.8%	2.2%	Rising deficit.
Recession?			No. Expansionary fiscal and monetary policy, confident consumers.

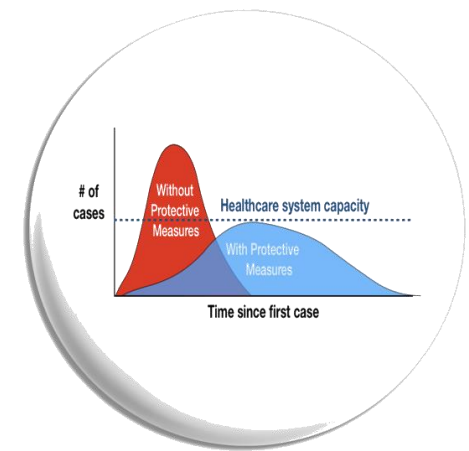
What is happening?



To stop the spread of the virus, we must isolate ourselves from one another. But most economic activity takes place in groups.

What is happening?

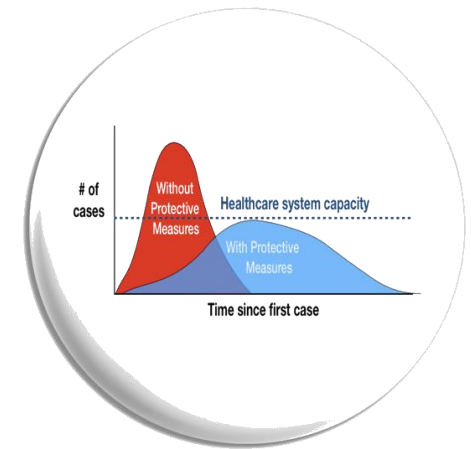
- ▶ Supply is decreasing
 - Supply chains are interrupted
 - Employees are afraid, sick, quarantined
 - Mandated closures
- ▶ Demand is decreasing
 - People fear to associate in groups
 - They reduce shopping and travel
 - Mandated social isolation
- ▶ Financial markets are unstable
 - Businesses and households see sales and incomes fall, withdraw funds, draw on credit lines
 - Lenders must sell assets to meet depositor/borrower/creditor demands
 - Asset values fall, lenders increase reserves



What do we know?

Daily and weekly data

Data Lags: “Flying blind”



▶ Gross Domestic Product growth

- Growth in 4th quarter 2019 was 2.1%
- 1st quarter 2020 GDP growth will be released on April 29
- 2nd quarter 2020 GDP growth will be released on July 30

▶ The Unemployment Rate

- The February unemployment rate was 3.5%
- The March unemployment rate will be released on April 3 (Friday). Based on survey from the 2nd week of March.
- The April unemployment rate will be released on May 8.

Dow Jones Industrial Average, Daily, 2010–2020

FRED  — Dow Jones Industrial Average



Shaded areas indicate U.S. recessions

Source: S&P Dow Jones Indices LLC

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Dow Jones Industrial Average, 3/30/2019 – 3/30/2020




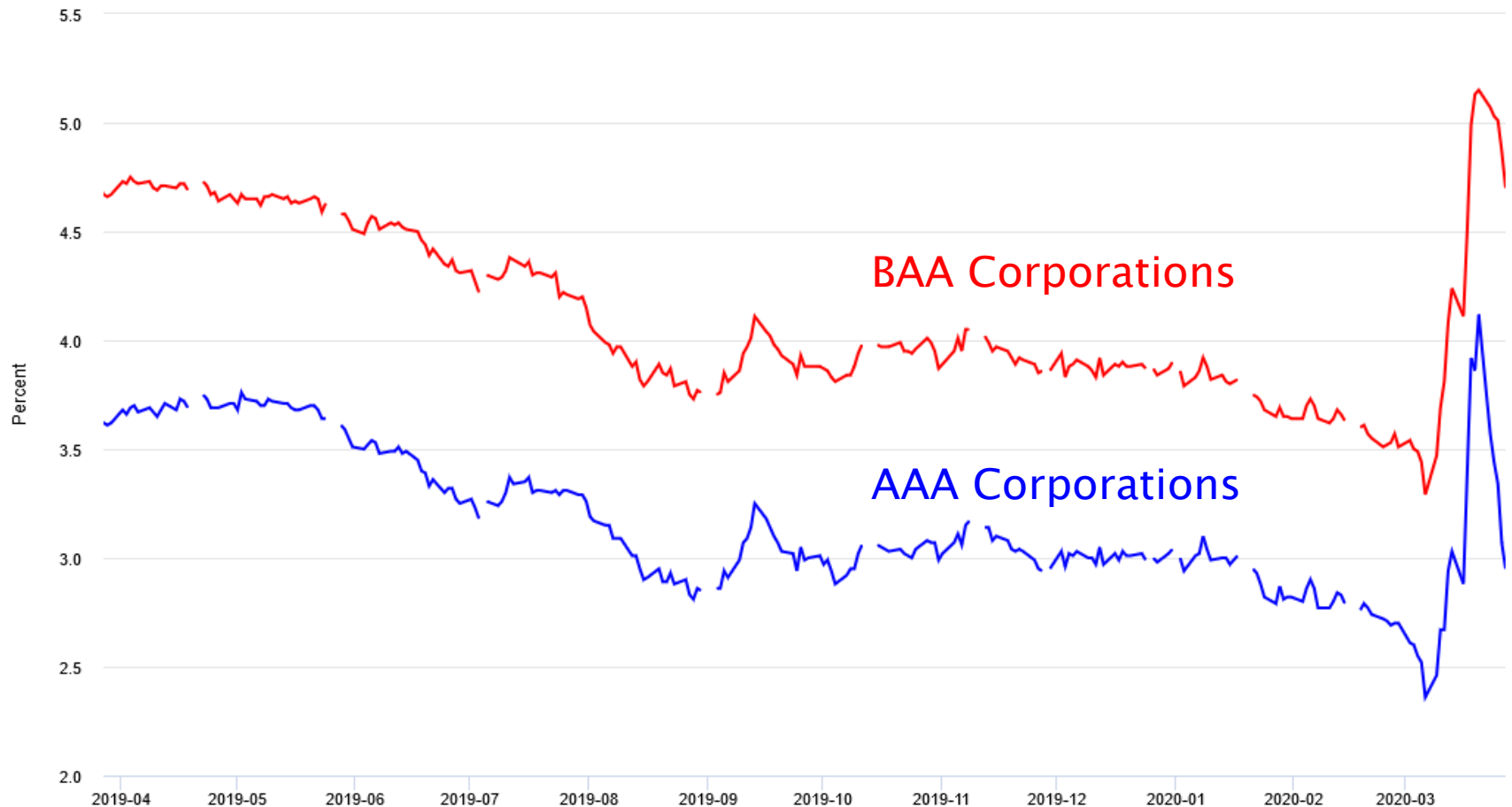
Shaded areas indicate U.S. recessions

Source: S&P Dow Jones Indices LLC

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Corporate Bond Interest Rates

FRED  — Moody's Seasoned Aaa Corporate Bond Yield
— Moody's Seasoned Baa Corporate Bond Yield



Shaded areas indicate U.S. recessions

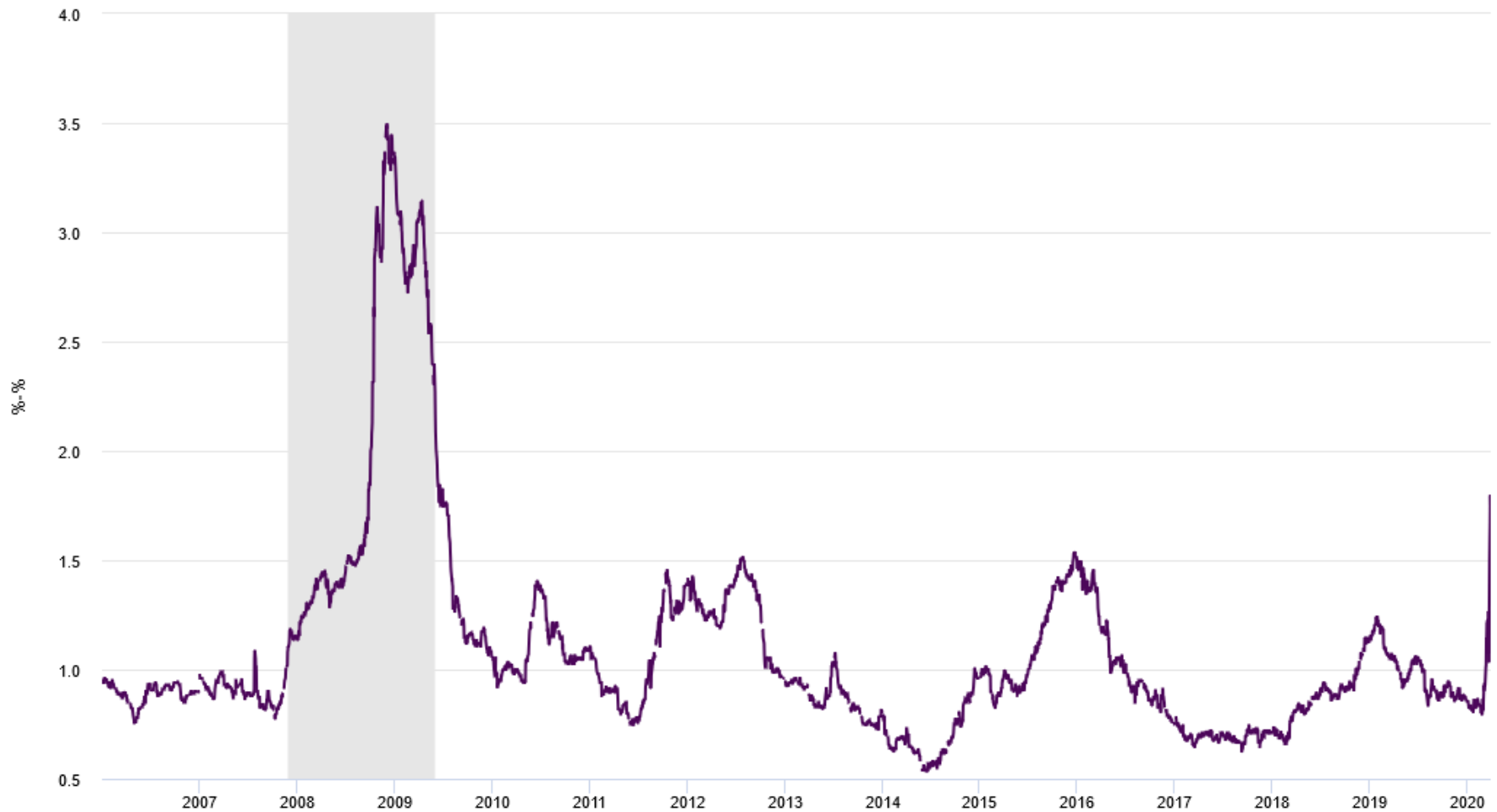
Source: Moody's

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Corporate Bond Interest Rates, Spread BAA–AAA Bonds, 2006–2020

FRED 

Moody's Seasoned Baa Corporate Bond Yield-Moody's Seasoned Aaa Corporate Bond Yield




Shaded areas indicate U.S. recessions

Source: Moody's

fred.stlouisfed.org

10-Year Treasury Bond Interest Rate, 2006-2020

FRED  — 10-Year Treasury Constant Maturity Rate




Shaded areas indicate U.S. recessions

Source: Board of Governors of the Federal Reserve System (US)

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Spread, AAA Corporate Bond Interest Rate minus 10-Year Treasury Bond Interest Rate, 2006-20

FRED  — Moody's Seasoned Aaa Corporate Bond Yield Relative to Yield on 10-Year Treasury Constant Maturity



Shaded areas indicate U.S. recessions

Source: Federal Reserve Bank of St. Louis

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Exchange Rate, Canada Dollar per \$1 US, 3/27/2019 - 3/27/2020

FRED — Canada / U.S. Foreign Exchange Rate



Shaded areas indicate U.S. recessions

Source: Board of Governors of the Federal Reserve System (US)

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Initial Claims for Unemployment Insurance, 1967–2019

FRED  — Initial Claims



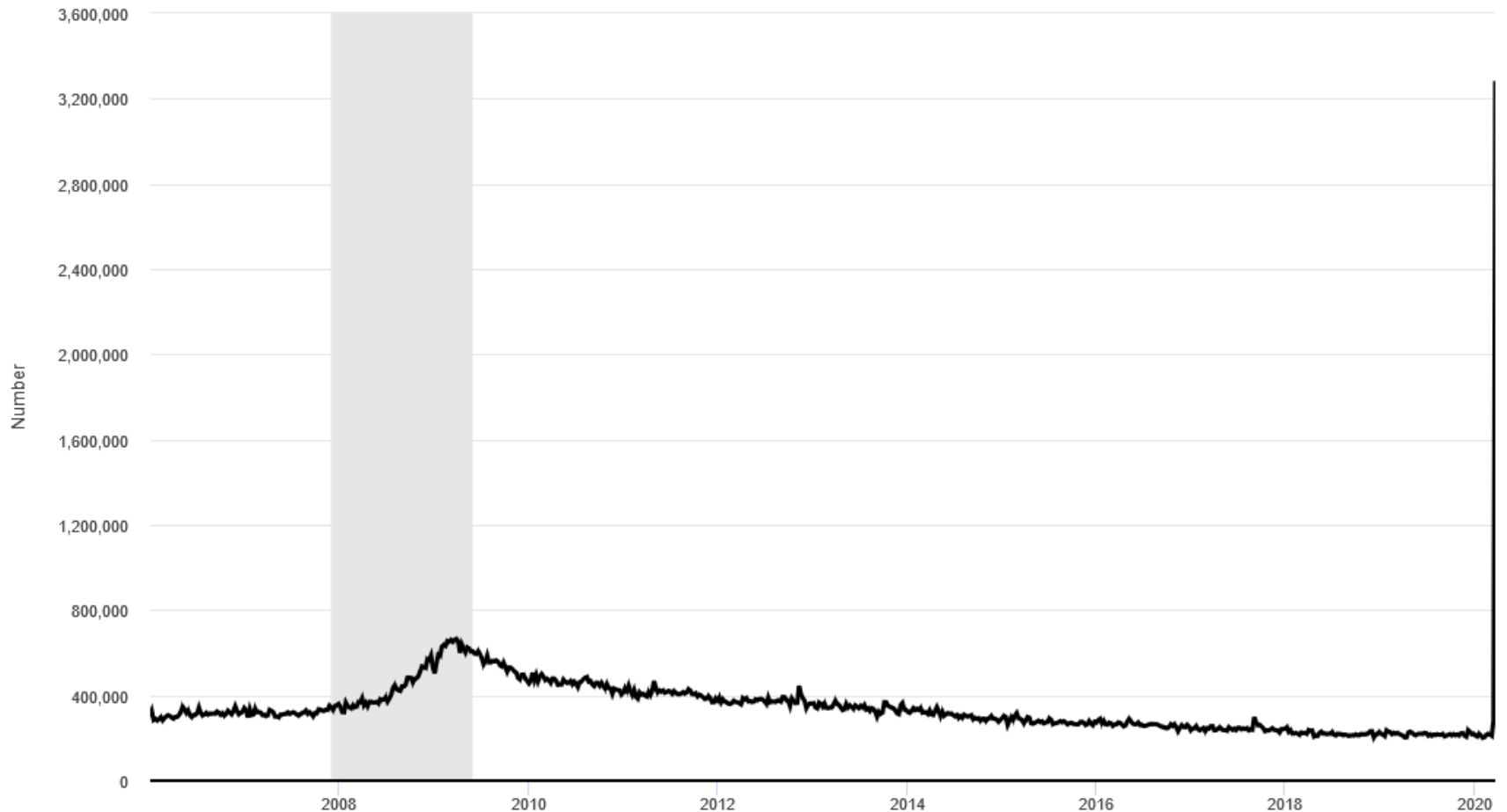
Shaded areas indicate U.S. recessions

Source: U.S. Employment and Training Administration

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Initial Claims for Unemployment Insurance, 2006–2020

FRED  — Initial Claims



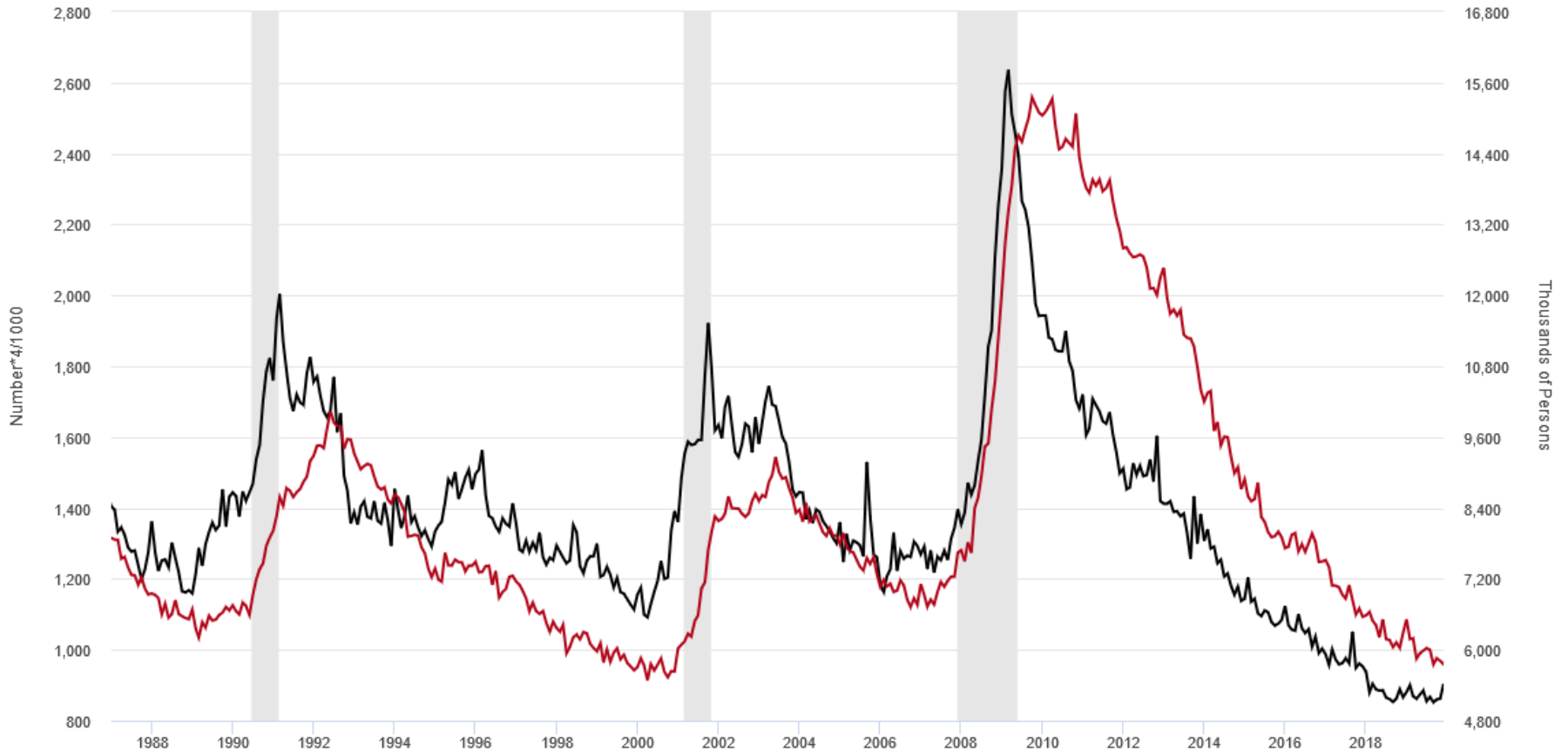
Shaded areas indicate U.S. recessions

Source: U.S. Employment and Training Administration

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Initial Claims for Unemployment and Monthly Total Unemployed People, 1987–2019

FRED — 4-Week Moving Average of Initial Claims*4/1000 (left)
— Unemployment Level (right)

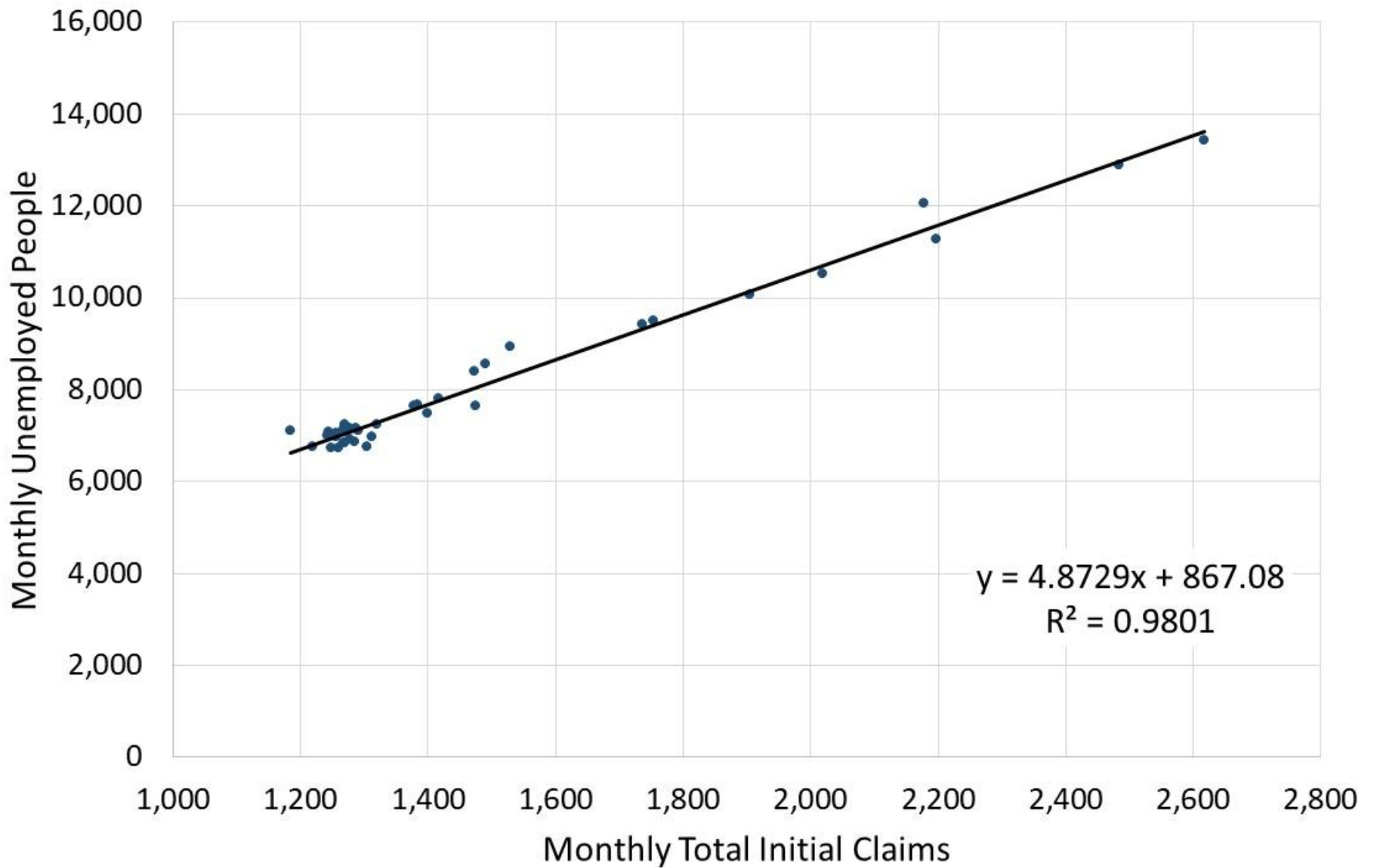


Shaded areas indicate U.S. recessions

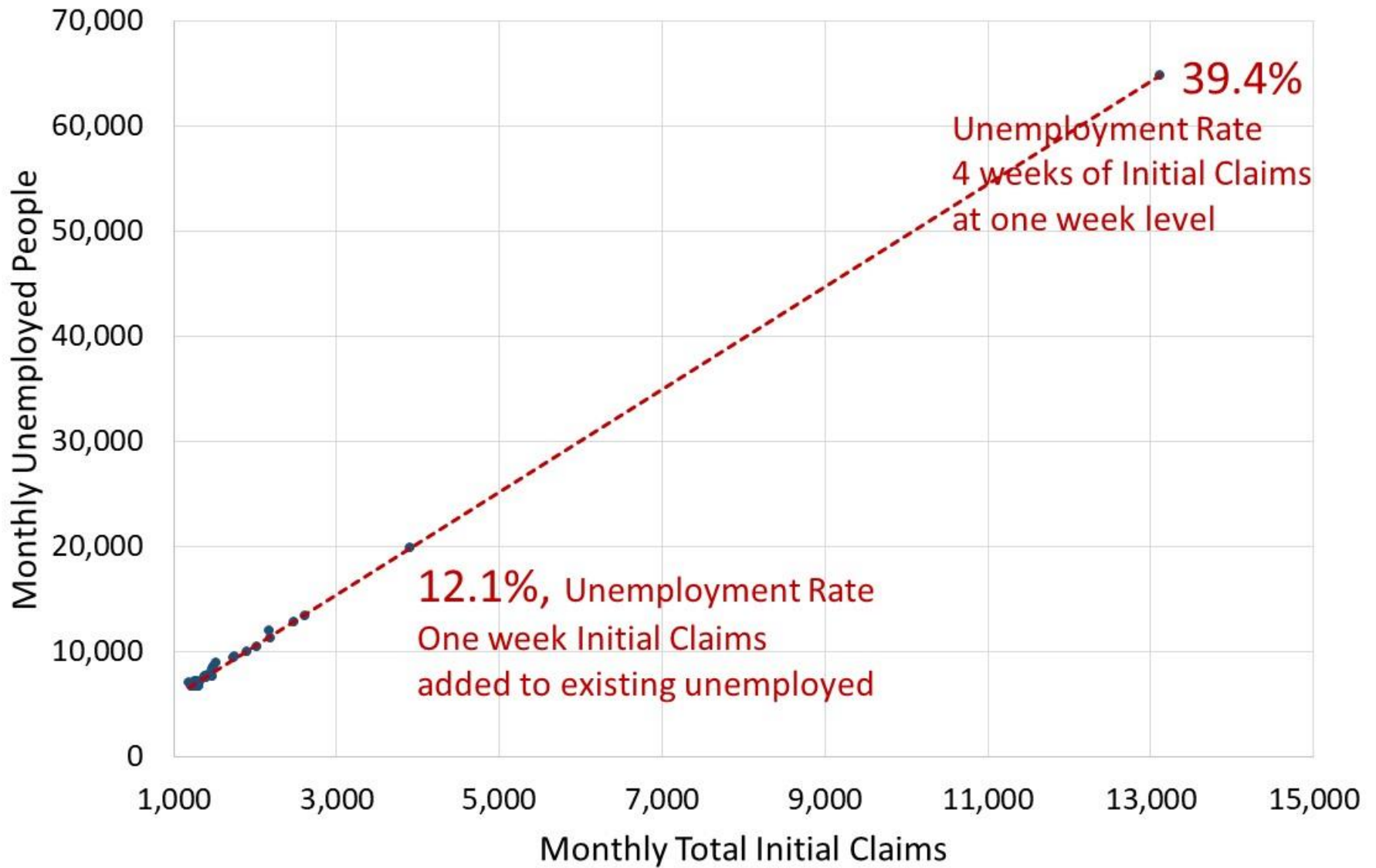
Sources: BLS, U.S. Employment and Training Administration

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4 week total Initial Claims for Unemployment Benefits and Monthly Unemployed People, April 2006 to March 2009



4 week total Initial Claims for Unemployment Benefits and Monthly Unemployed People, April 2006 to March 2009



MARCH 30, 2020

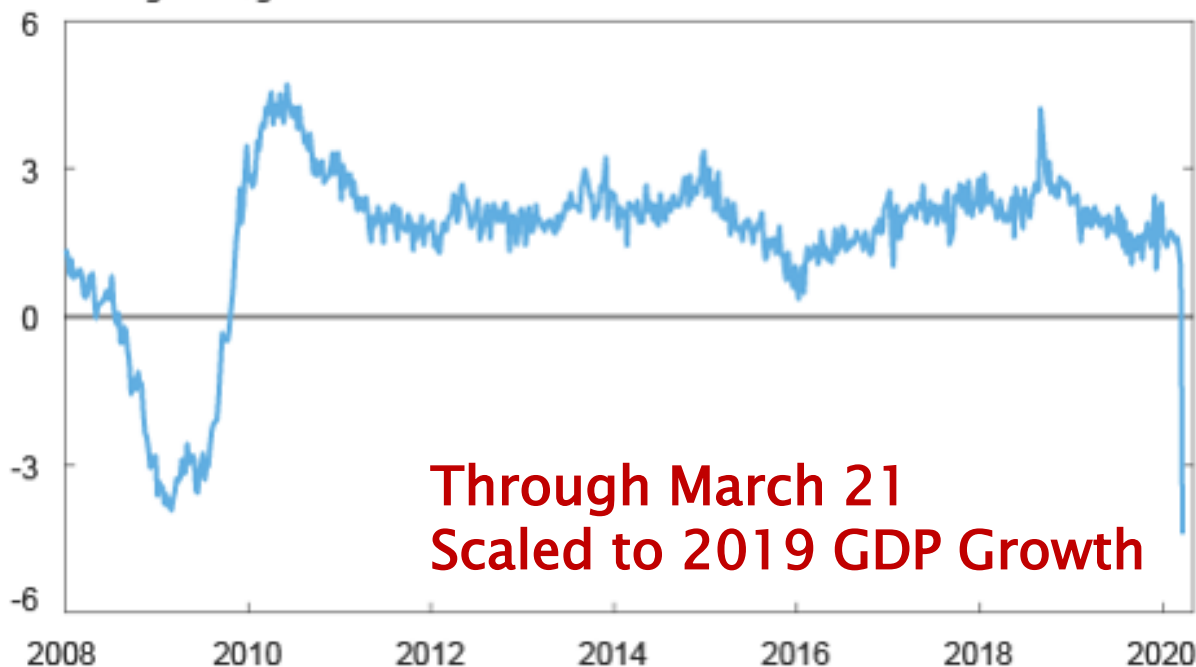
Monitoring Real Activity in Real Time: The Weekly Economic Index

Daniel Lewis, Karel Mertens, and Jim Stock

7 daily/weekly indicators. Same store retail sales, initial claims for unemployment benefits, weekly staffing index, daily survey of consumers, raw steel production, electric utility output, U.S. fuel sales.

Weekly Economic Index

Percentage change



**Through March 21
Scaled to 2019 GDP Growth**

-4.5%

How much is shut down?

We need a number

Headlines: Businesses Close

Auto manufacturing shutdown to take toll on Northwest Indiana's steel industry

Monday, March 23, 2020 6:02 PM

U.S. Steel and Arcelor/Mittal taking blast furnaces offline because of auto plant shutdowns

Wednesday, March 25, 2020 7:58 PM

U.S. Steel to idle Gary Works blast furnace indefinitely, slash capital spending in COVID-19 response

Friday, March 27, 2020 5:31 PM

Amazon workers at Jeffersonville facility fear exposure to virus

John Boyle, (Jeffersonville & New Albany) News and Tribune

Monday, March 30, 2020 10:14 AM

Two biggest hotels in Indianapolis suspend operations

Wednesday, March 25, 2020 10:02 PM

Coronavirus leaves local hotels mostly vacant: "We have no money for payroll," operator of two in Greenfield said; "We have no money for anything"

Tuesday, March 24, 2020 11:28 AM

Southern Indiana casino in Rising Sun to lay off 407 workers

Friday, March 27, 2020 7:15 PM



INDIANA ECONOMIC DIGEST

Daily news on business and economic events throughout Indiana

Headlines: Businesses Expand

Coronavirus creates boom at Washington business providing personal protective equipment for its medical customers

Wednesday, March 25, 2020 5:12 PM


Jasper's Kimball Electronics hiring to meet medical demand

Candy Neal, Staff Writer, (Jasper) Herald

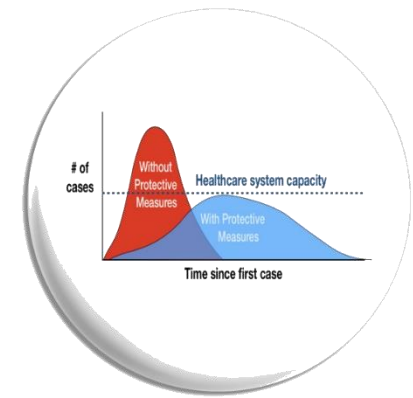
Monday, March 30, 2020 10:42 AM

GM recalls 1,000 workers to build ventilators at Kokomo plant and others in Marion

Saturday, March 28, 2020 7:17 PM

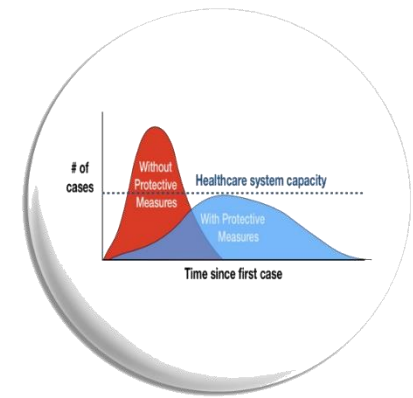


Assumptions: How much of the Indiana economy is shut down?



- ▶ Construction
- ▶ Durable goods manufacturing including autos
- ▶ Non-durable manufacturing except food, beverage, fuel refineries
- ▶ Retail trade except groceries, pharmacies and gas stations
- ▶ Air and ground passenger transportation
- ▶ Real estate
- ▶ Arts, entertainment and recreation
- ▶ Accommodation and food services
- ▶ Other services

Assumptions: How much of the Indiana economy are *not* shut down?



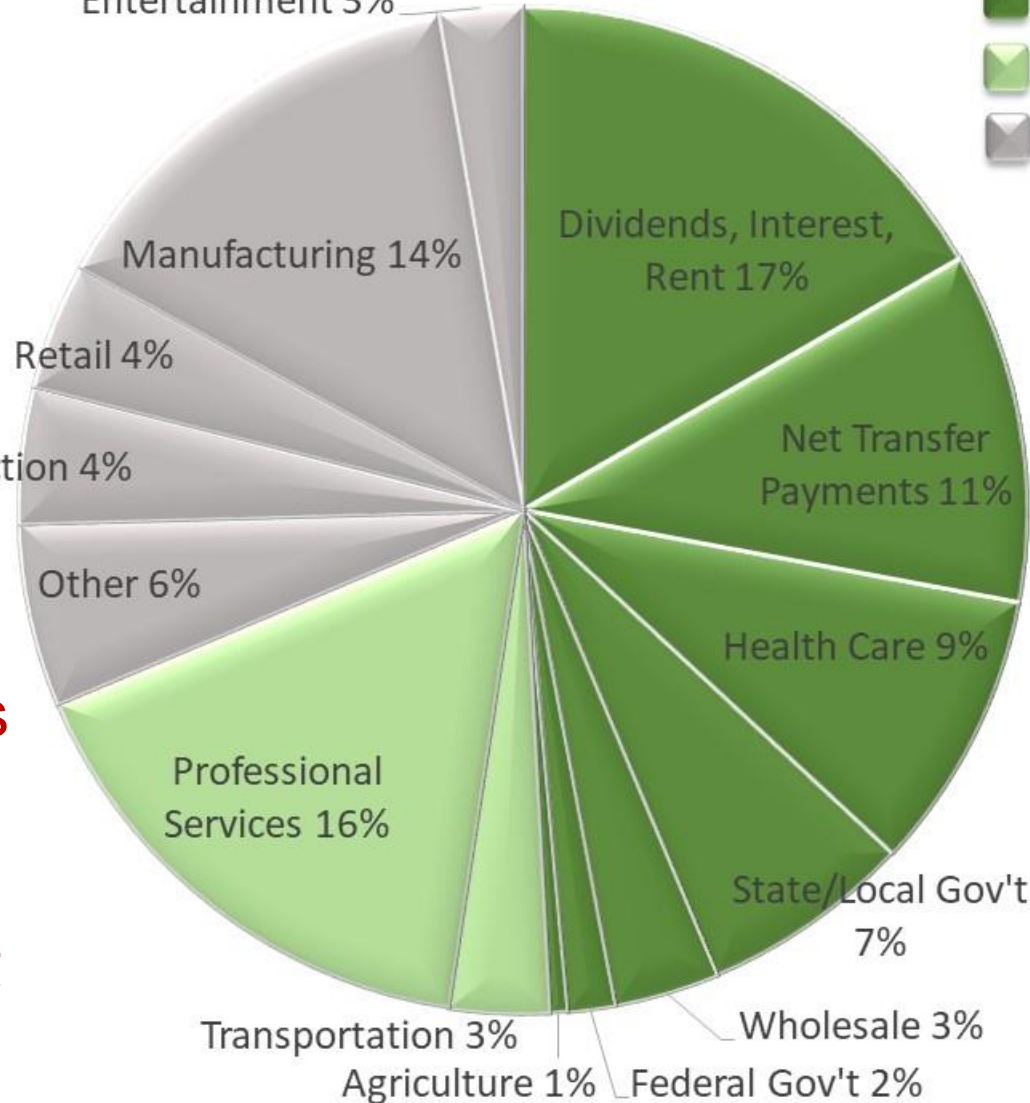
- ▶ Agriculture
- ▶ Mining and Utilities
- ▶ Food and beverage manufacturing, refineries
- ▶ Wholesale trade
- ▶ Retail trade: groceries, pharmacies, hardware/supply, motor fuel
- ▶ Rail, water, truck transportation; warehousing
- ▶ Finance, insurance, rental and leasing
- ▶ Professional, Management, Education services
- ▶ Health care and social assistance
- ▶ Federal, state, local government

Income by Source, Indiana, 2018

Accommodation/
Entertainment 3%

Income during COVID-19

- Continuing
- Mostly continuing
- Mostly shut down



26%
Income Loss

36%
Employment
Loss

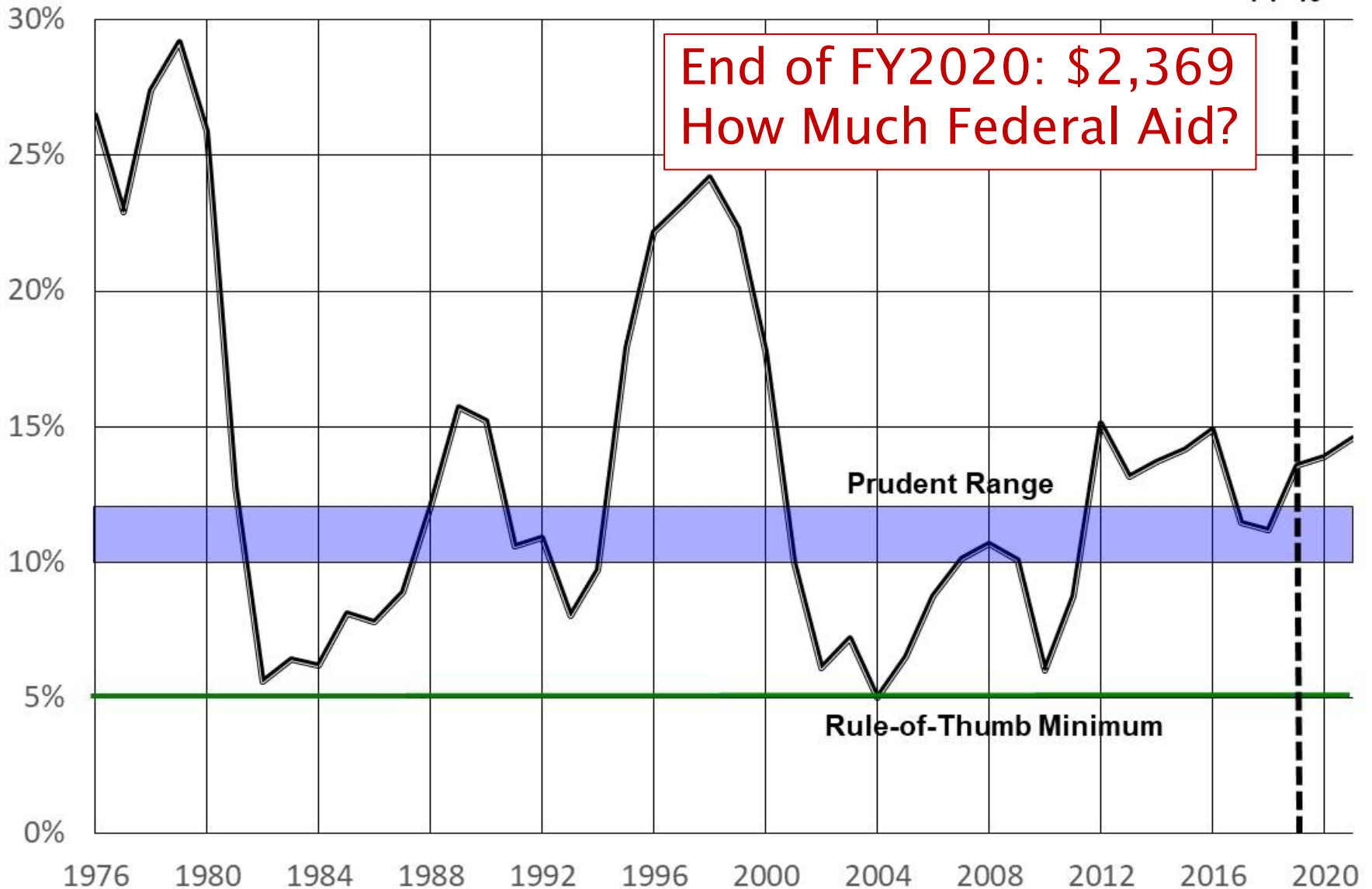
State Revenue Loss

	Actual 2018	Budget 2019	Budget 2020	Budget 2021
Revenues	15,837	16,693	17,056	17,518
Sales Tax	7,663	7,915	8,205	8,460
Ind. Income Tax	5,816	6,057	6,202	6,396
Corp. Income Tax	660	948	875	872
Gaming	442	443	445	464
All Other	1,255	1,329	1,329	1,327

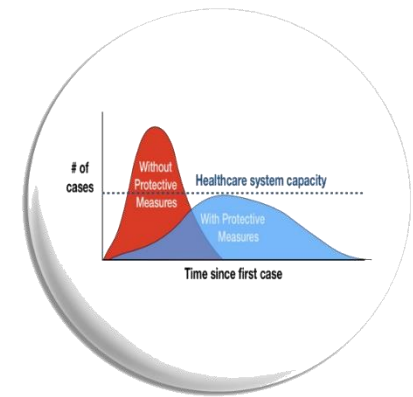
26% for one month: \$370 million
26% for one quarter: \$1.1 billion
26% for half a year: \$2.2 billion

Indiana State Fund Balances as Share of Revenues, FY 1976-2018, Estimated 2019-2021

End of
FY '19



State Revenue Loss



- ▶ *Last Thursday's press conference*
- ▶ Gov. Holcomb anticipates using up to \$1 billion from its \$2.4 billion budget reserve to carry Indiana through the current budget year.
- ▶ OMB Director Cris Johnston: "We plan to continue the existing appropriations and funding for schools as was adopted in the budget through the rest of this biennium." But this "will be influenced by the availability of future revenues, uncertain economic conditions and the flexibility afforded in the recently adopted federal assistance legislation."

Headlines: Local Government

Indiana schools ordered to close through May 1, spring testing canceled amid coronavirus pandemic

Thursday, March 19, 2020 3:23 PM

IHSAA cancels boys basketball tournament

Thursday, March 19, 2020 4:27 PM

Meals will be provided to public in Connersville by the city, local businesses and churches, supplementing what is offered by schools

Saturday, March 21, 2020 12:10 PM

Local first responders, officers increase protective measures to combat spread of coronavirus

Saturday, March 28, 2020 6:40 PM


Delaware County court system 'down to the bare minimum'

Monday, March 23, 2020 7:11 PM

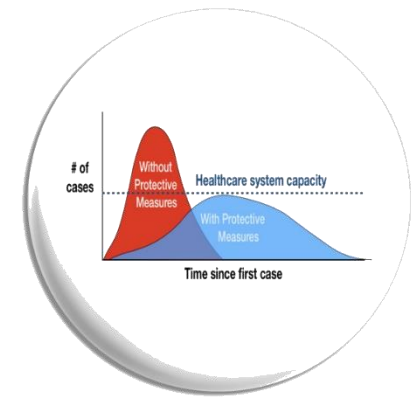
IndyGo to cut schedule, eliminate fares due to coronavirus

Thursday, March 26, 2020 7:54 PM

Property tax delays brings uncertainty to local governments

By TIM TEDESCHI ttedeschi@chronicle-tribune.com Mar 26, 2020   0

Local Government Revenues



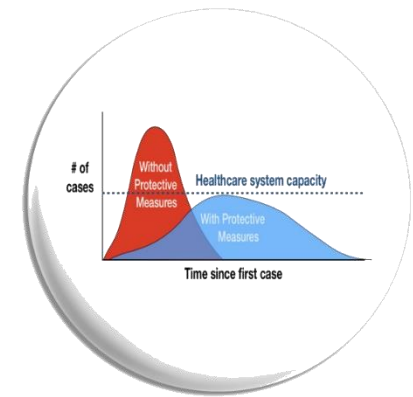
▶ Property Tax

- Levies are fixed. Penalties waived for 60 days, payment delays, delinquency
- Lower property values now affect tax bills in 2022
- Lower Maximum Levy Growth Quotient, 2022–27

▶ Local Income Tax

- Distributions were set last July. State can't "short" local governments w/o legislation
- Lower collections now will reduce distributions in 2021 or 2022; State payment delay to July 15
- Will 15% balance be enough?

Local Government Revenues



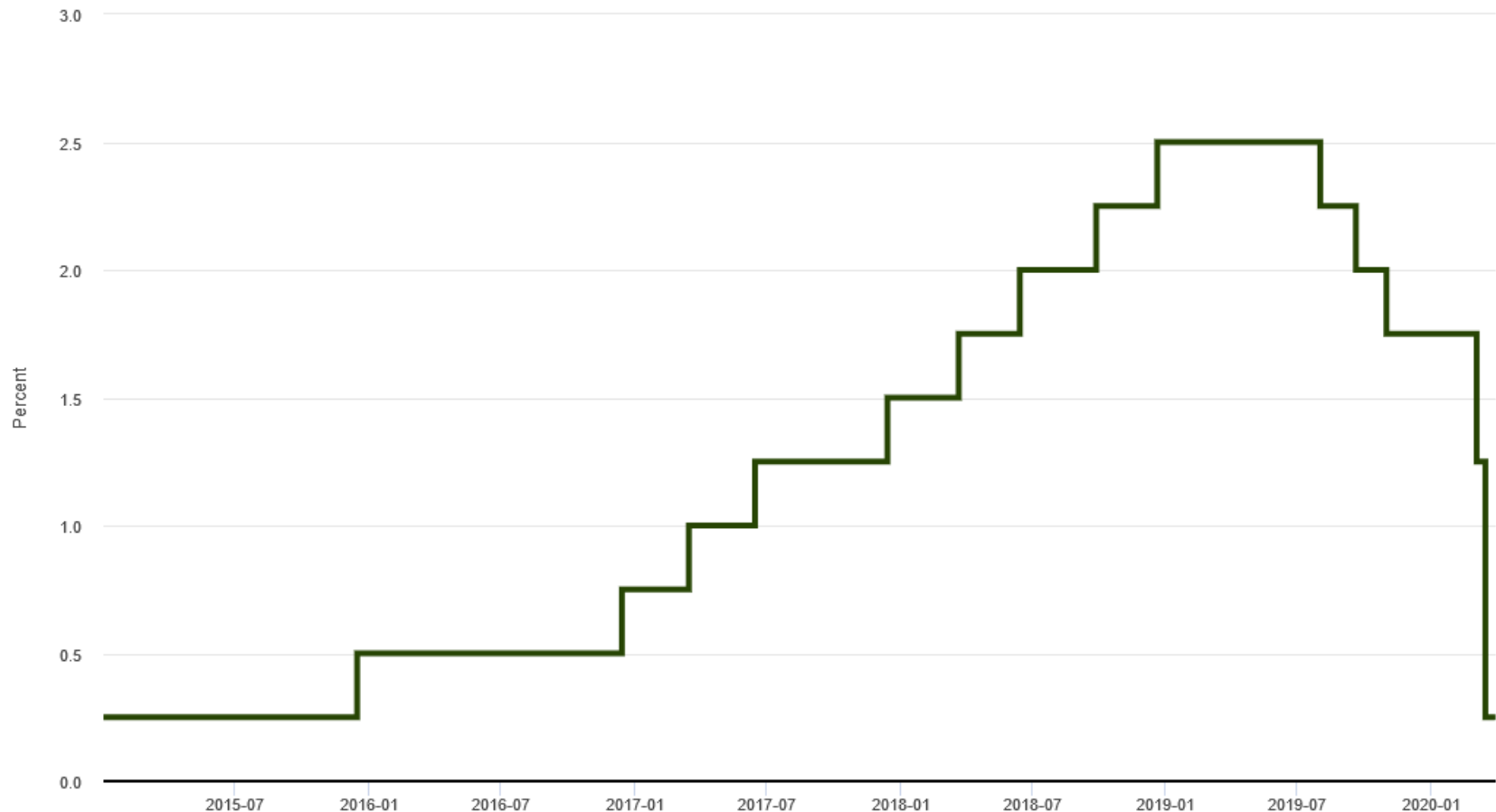
- ▶ State Road Aid
 - Motor fuel tax collections are down; monthly distributions likely to be affected.
- ▶ State School Aid
 - Depends on how long, how deep the recession, how severe is the state revenue loss. State revenue report for March released next week.
- ▶ Other
 - Loss of charges and fees for suspended activities.

What policies have been adopted?

Monetary and Fiscal Policy

Federal Funds Rate, Upper Range of Target Rate, 2015–2020

FRED  — Federal Funds Target Range - Upper Limit



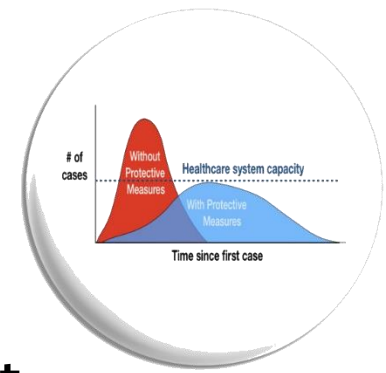
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Source: Board of Governors of the Federal Reserve System (US)

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\$2 Trillion CARES Act

Coronavirus Aid, Relief, and Economic Security (CARES) Act



- ▶ For households: Expanded unemployment insurance, \$1,200 recovery rebate (refundable tax credit).
- ▶ For businesses: Paycheck protection program, payroll tax credit and delayed payment.
- ▶ For businesses, states, cities: Emergency lending program.
- ▶ For states and cities: Coronavirus relief fund.
- ▶ **\$2 trillion is 9% of the U.S. \$21.7 trillion GDP**
- ▶ **Disaster relief, a bridge from February to the time when the virus is under control.**

What can we learn from history?

1918–19 Flu pandemic

Pandemics Depress the Economy, Public Health Interventions Do Not: Evidence from the 1918 Flu

Sergio Correia, Stephan Luck, and Emil Verner*

March 26, 2020

- ▶ Using geographic variation in mortality during the 1918 Flu Pandemic in the U.S., we find that more exposed areas experience a sharp and persistent decline in economic activity. The estimates imply that the pandemic reduced manufacturing output by 18%.
- ▶ We find that cities that intervened earlier and more aggressively do not perform worse and, if anything, grow faster after the pandemic is over. Our findings thus indicate that non-pharmaceutical interventions not only lower mortality; they also mitigate the adverse economic consequences of a pandemic.

V-shaped or L-shaped

Quick sharp recovery or lingering misery?

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