



UHERO

THE ECONOMIC RESEARCH ORGANIZATION
AT THE UNIVERSITY OF HAWAII

RECOVERY RESUMES, BUT OMICRON LOOMS

DR. CARL BONHAM
EXECUTIVE DIRECTOR, UHERO
PROFESSOR, DEPARTMENT OF ECONOMICS

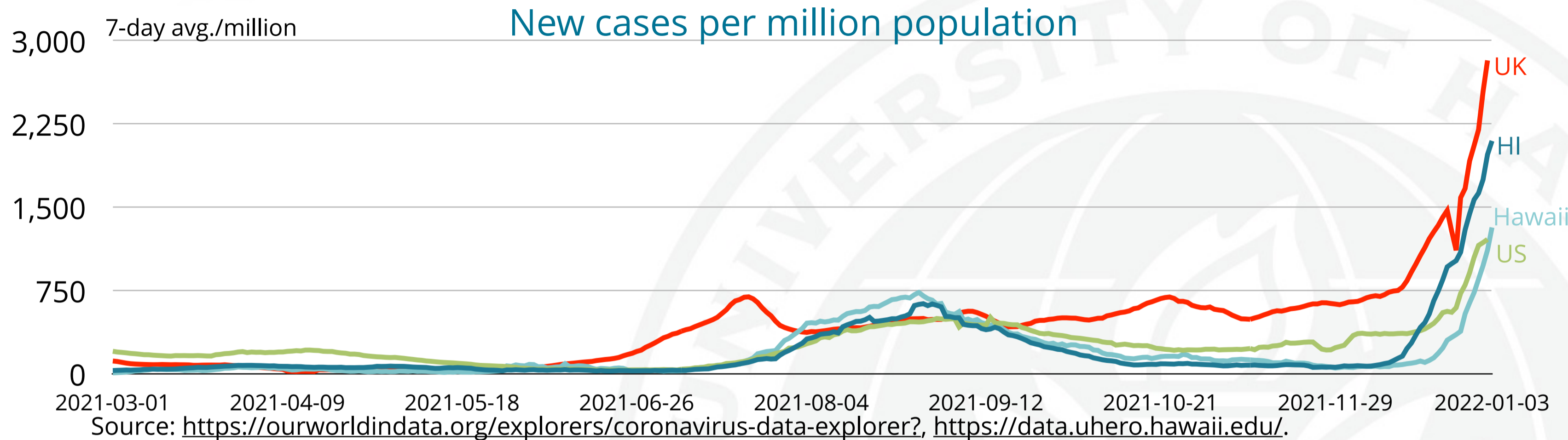
SENATE COMMITTEE ON WAYS & MEANS
HOUSE FINANCE COMMITTEE
INFORMATIONAL BRIEFING
JANUARY 4, 2022

Recovery Resumes, But Omicron Looms

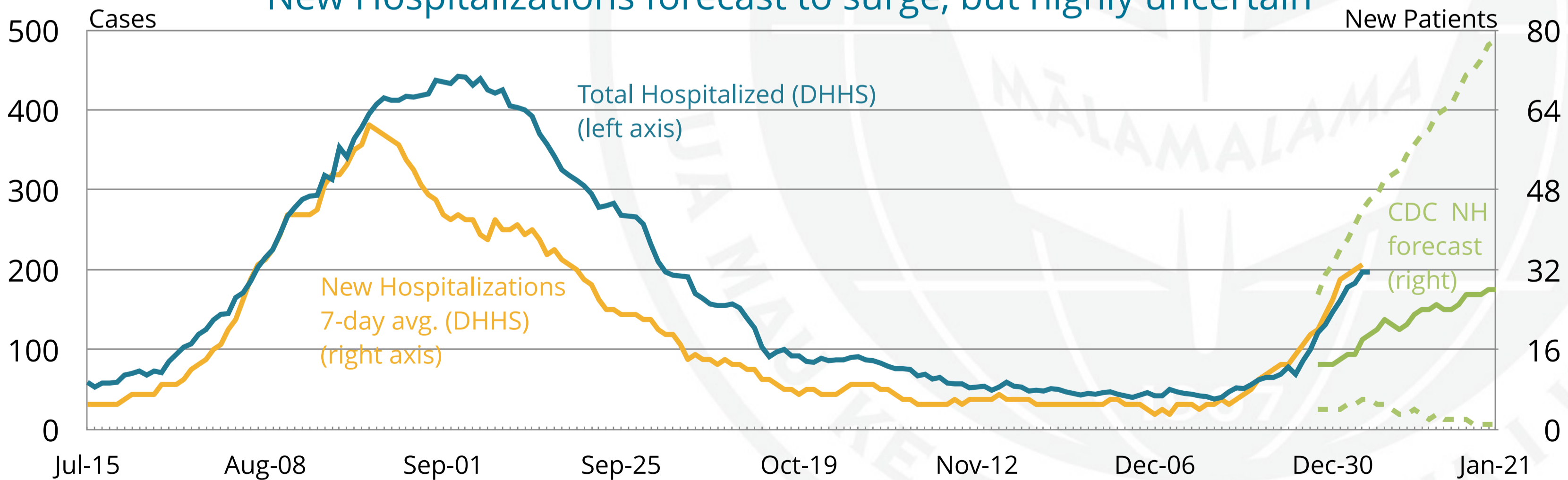
uncertainty continues to rule the day

- Again with you, COVID?
 - How contagious?
Omicron's effective reproductive rate is estimated to be 3-5 times Delta. Cases are doubling in 2-3 days in many countries.
 - How virulent?
Still too early to tell. Early studies find evidence of significant reductions in risk of hospitalization ranging from 15% to 66% reduction. No information on long-term effects.
 - How effective are vaccines and treatments?
Boosters appear to provide good protection against hospitalization and severe disease.
 - Urging boosters is not enough.
All islands should be using vaccine passports.
Workplace safety requires a booster, 2 shots is not "fully vaccinated" any more.
At current rate it will take more than 5 months to boost everyone eligible.
- Uncertainty impacts economic forecast
 - International travel restrictions are a blow. Scenarios consider their duration.
 - Waning federal \$ means a drop in household incomes in 2022. BBB looks less likely.
 - Uncertain persistence of inflation and labor shortages are key drivers of outlook.

Omicron cases are spreading much faster than Delta



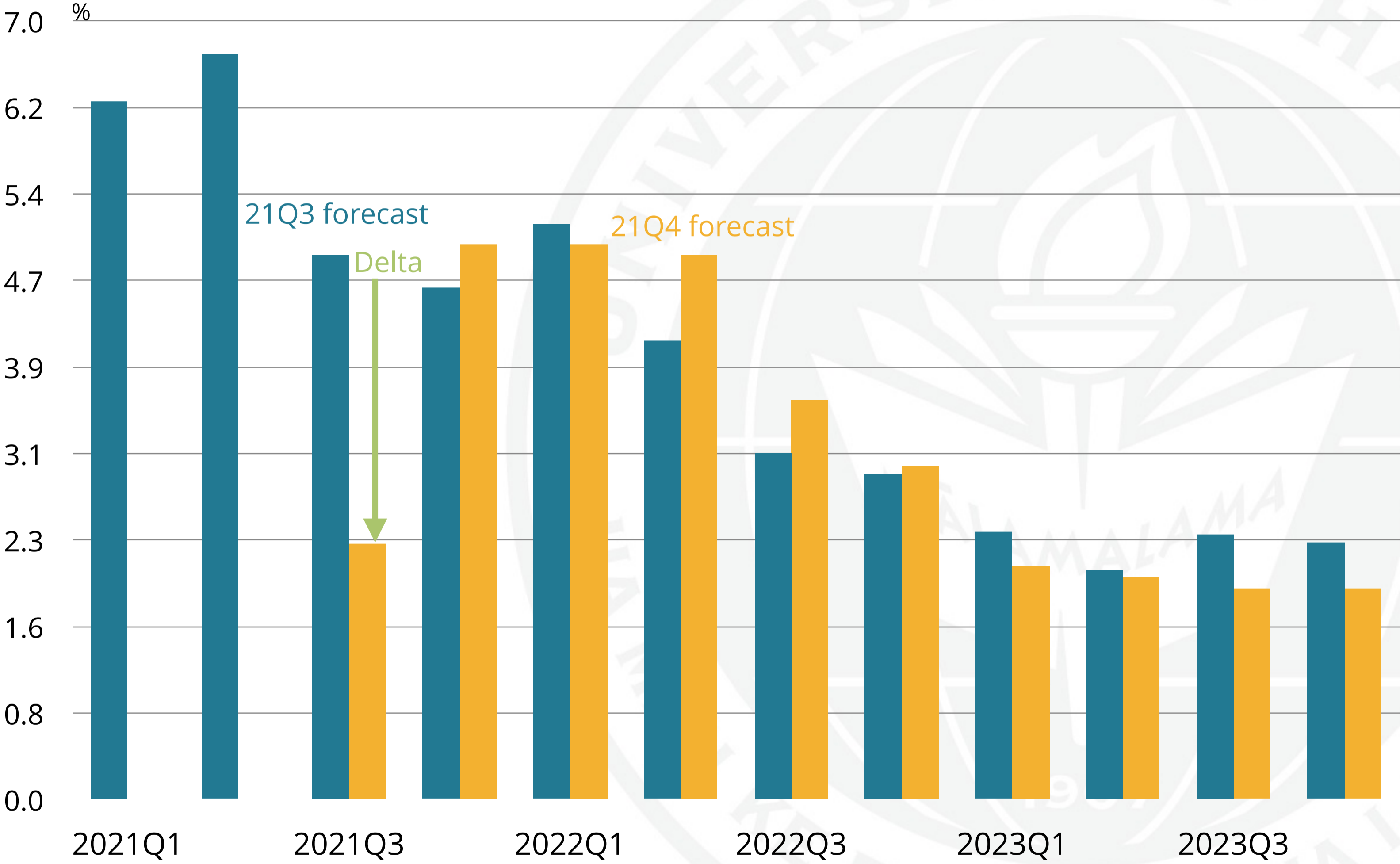
New Hospitalizations forecast to surge, but highly uncertain



Source: [UHERO Data](#)— US DHHS, [CDC Ensemble Forecast for New Hospitalizations + 95% prediction interval from 12/27 forecast](#).

Like Delta, Omicron will slow US economy

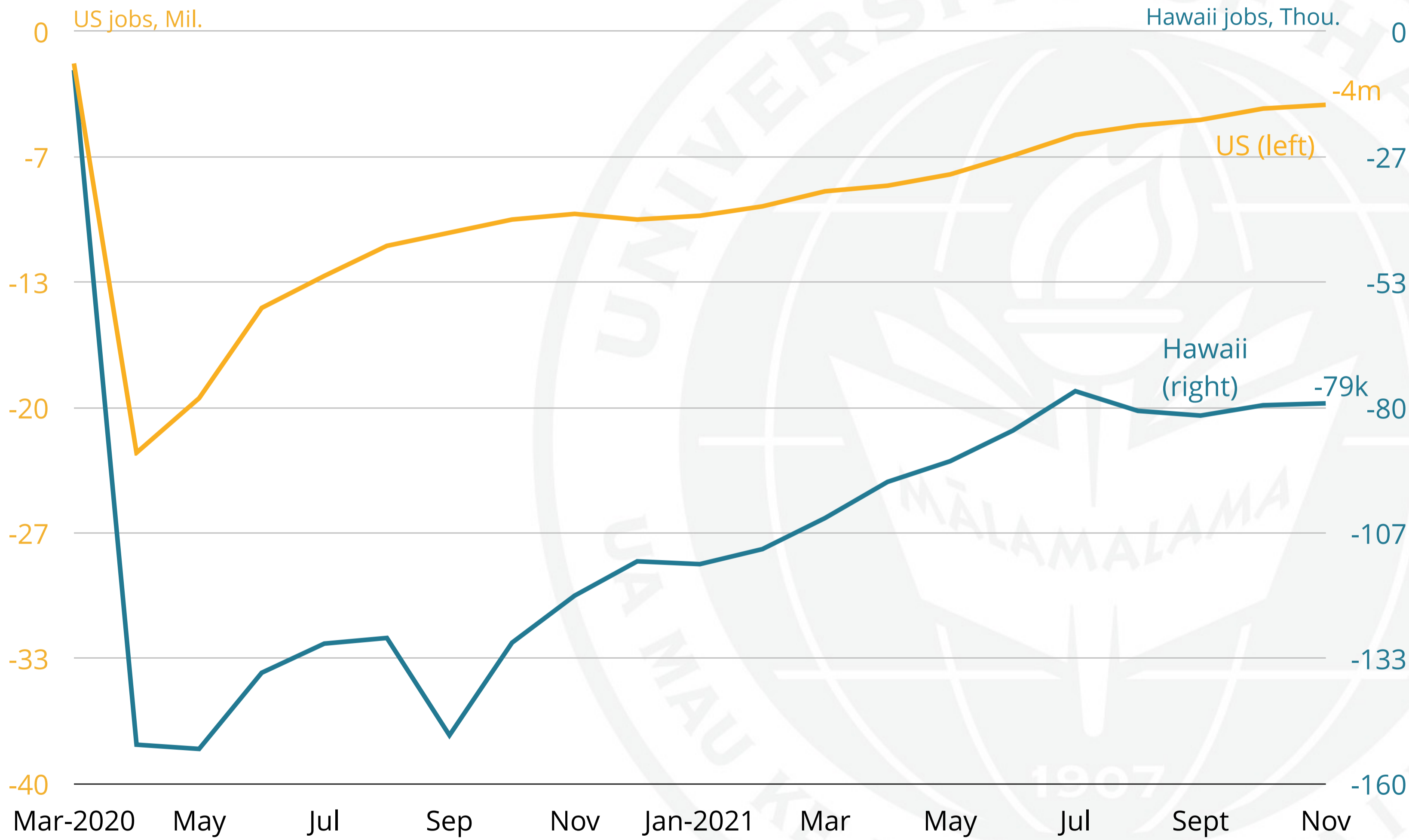
still, US real GDP growth remains robust



Source: BEA, UHERO forecasts. Percent change from preceding quarter, seasonally adjusted at annual rate.

After Delta stall, jobs recovery faces Omicron challenge

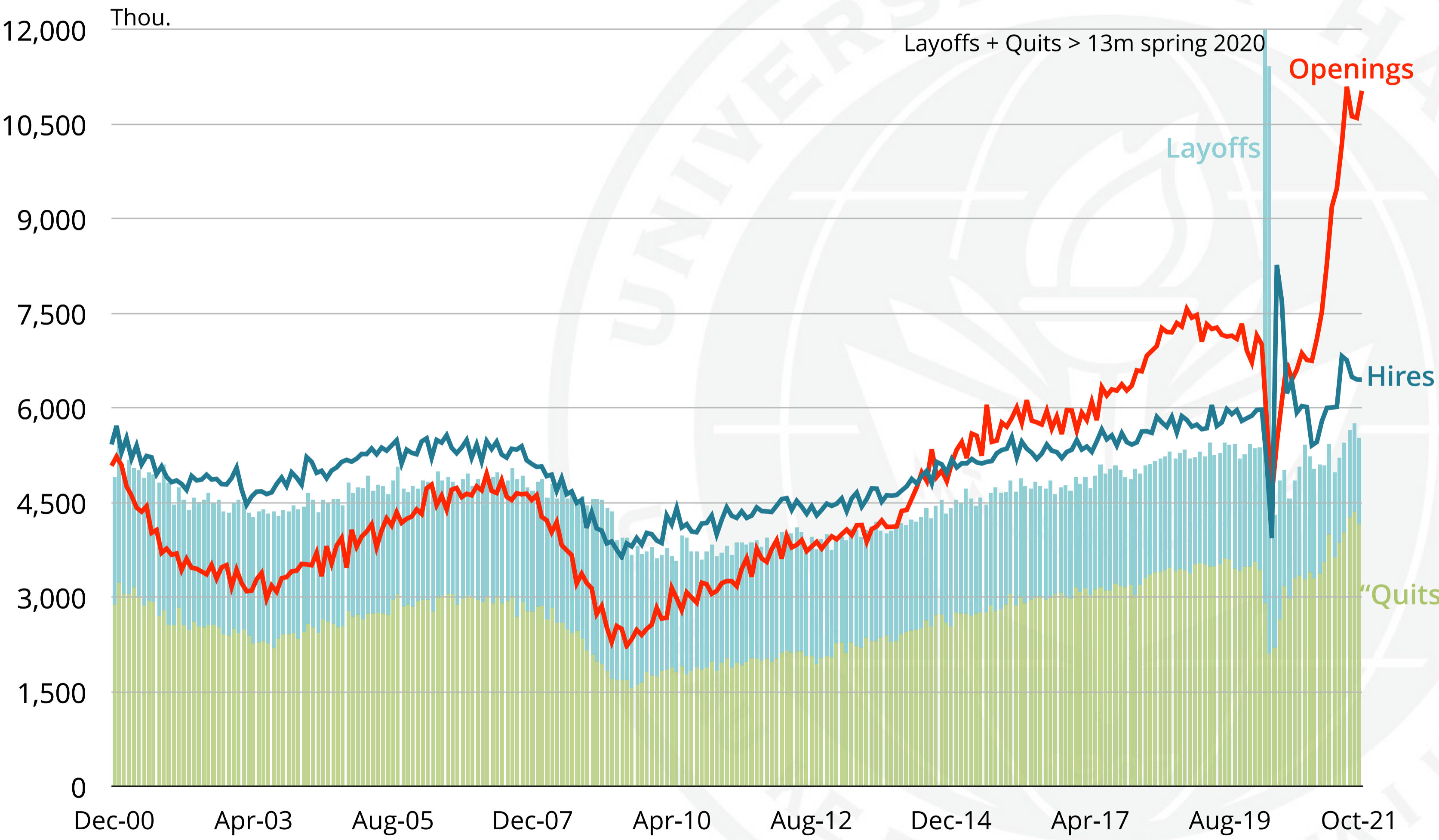
pandemic induced change in jobs



Source: Bureau of Labor Statistics, UHERO estimate of benchmark jobs. Change in Jobs from February 2020.

With available jobs plentiful, quits are at record highs

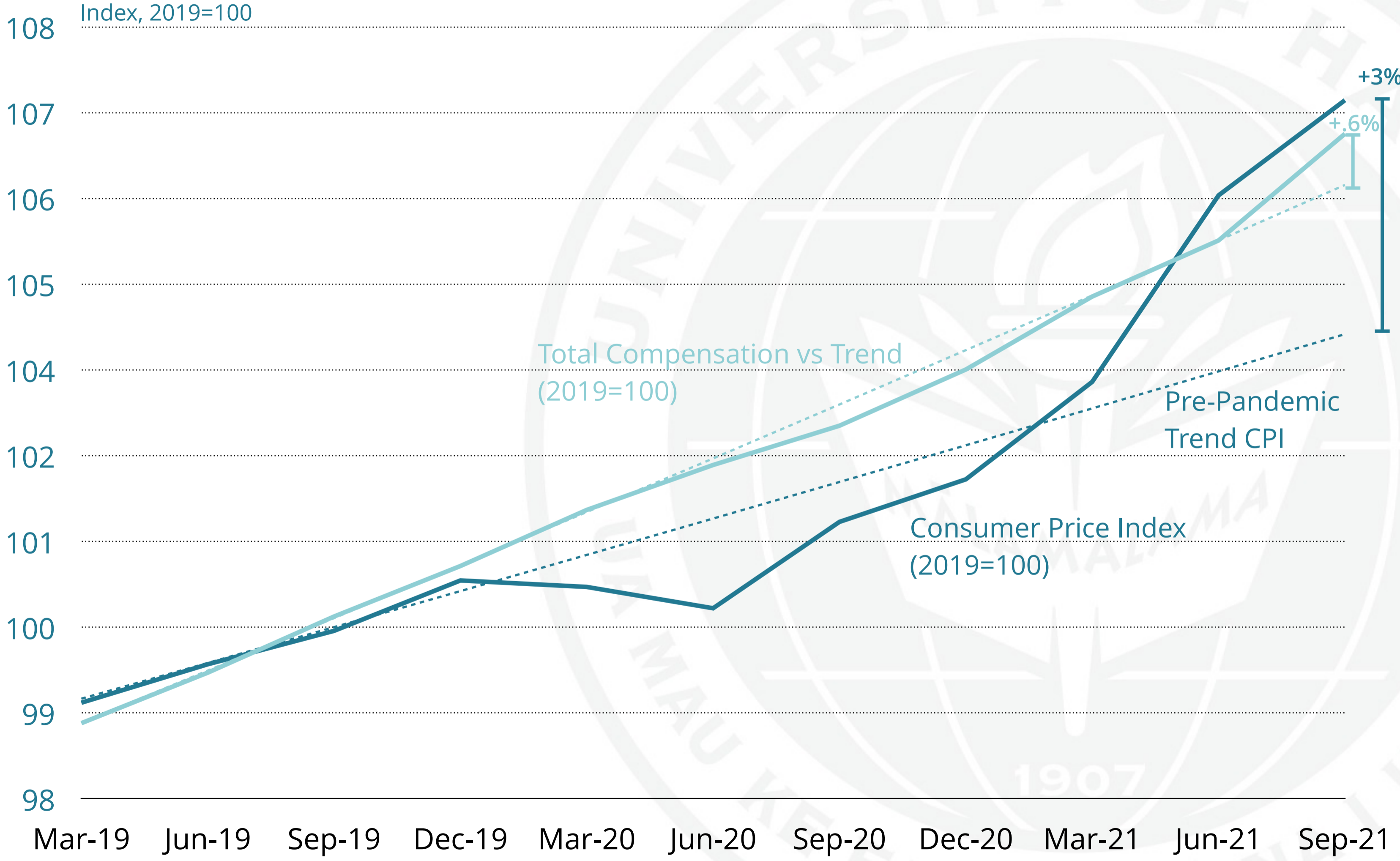
US labor "shortage" more than 3x higher than 2019 tight labor market



Source: BLS, UHERO Data Portal.

Yet wages are not keeping up with inflation

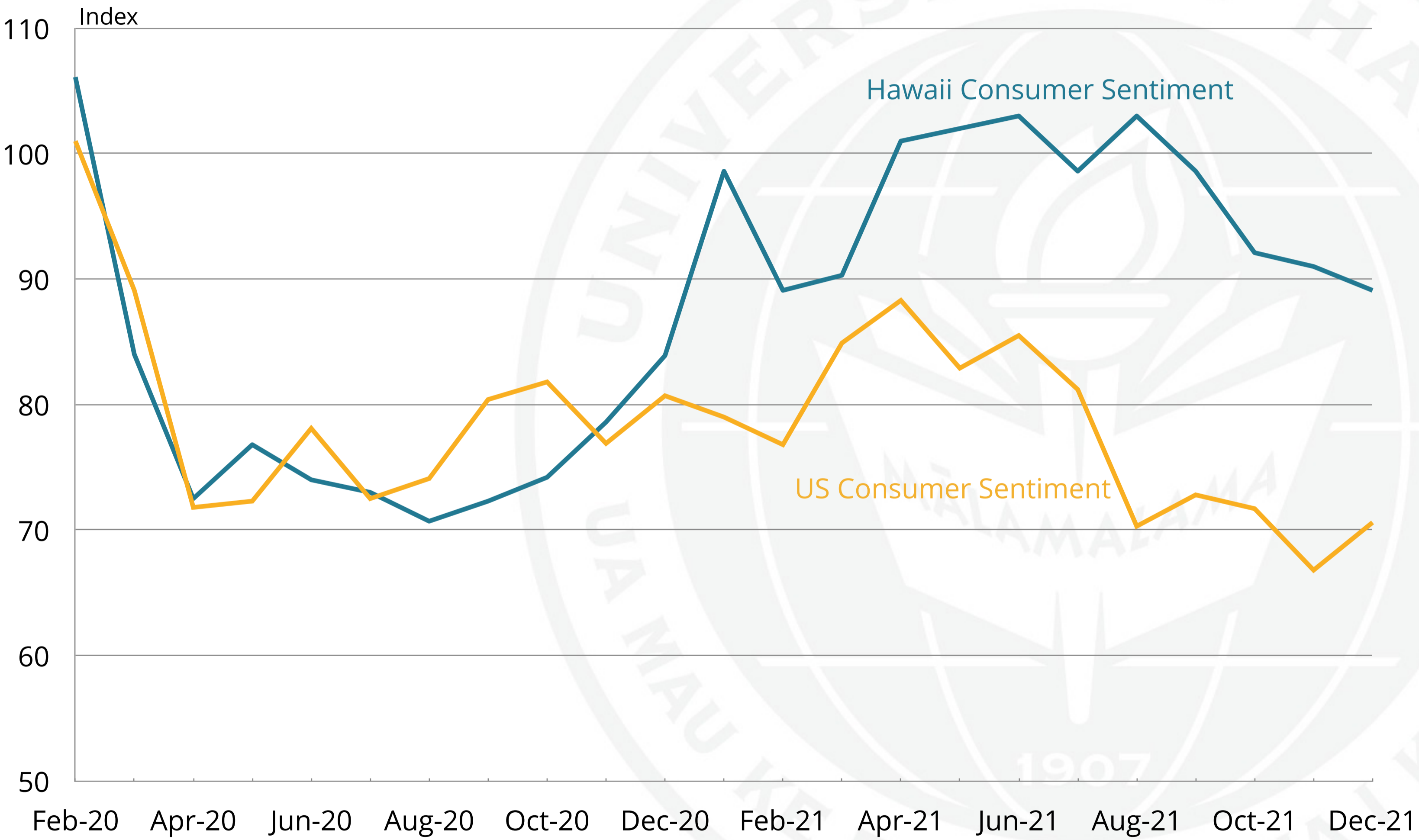
US Total worker compensation vs CPI



Source: BLS, UHERO.

Its no wonder that sentiment has fallen sharply

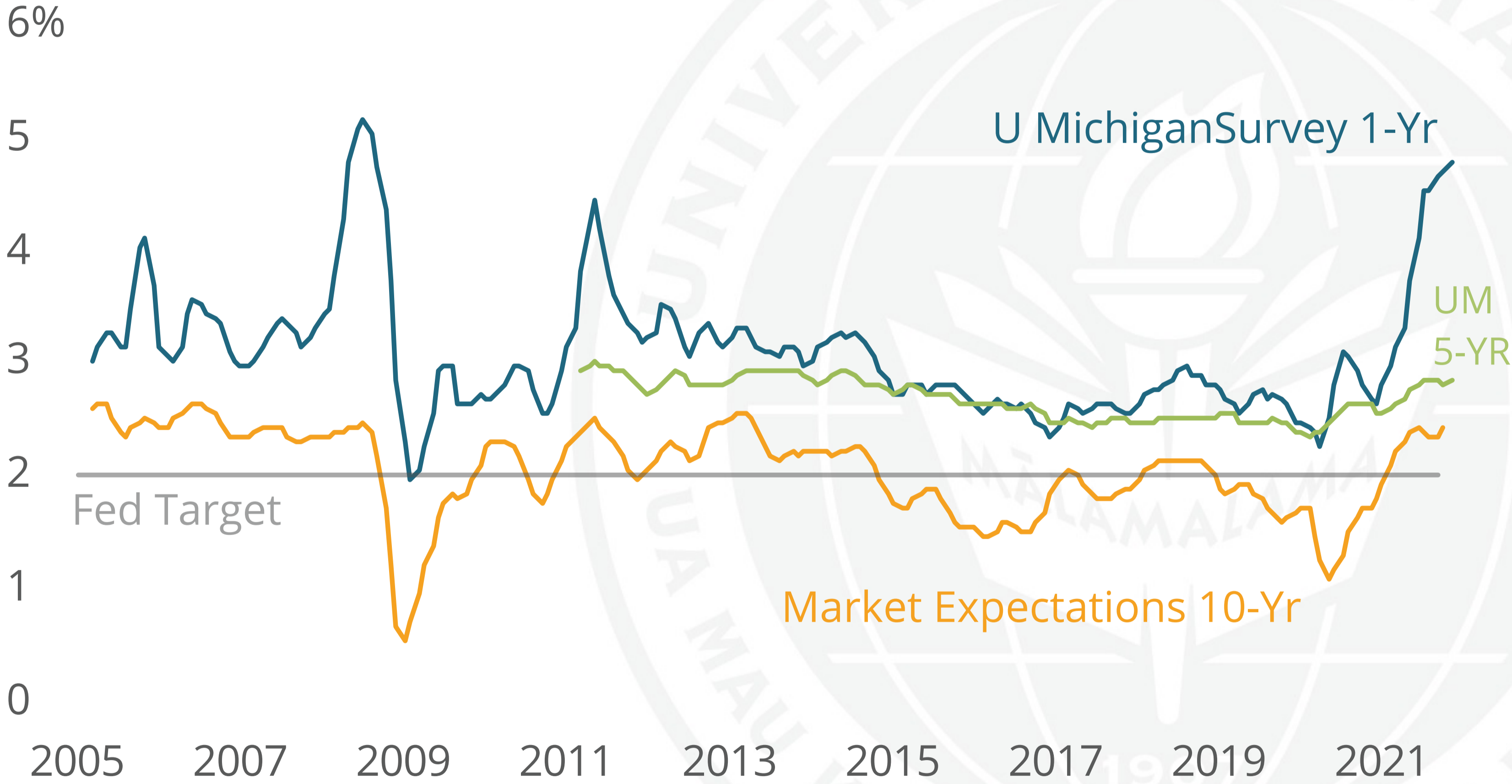
Consumers feeling the pinch



Source: University of Michigan, Survey of Consumers; Morning Consult Survey: [UHERO Data](#)

Longer run expectations are still anchored, almost

markets still expect inflation to be temporary

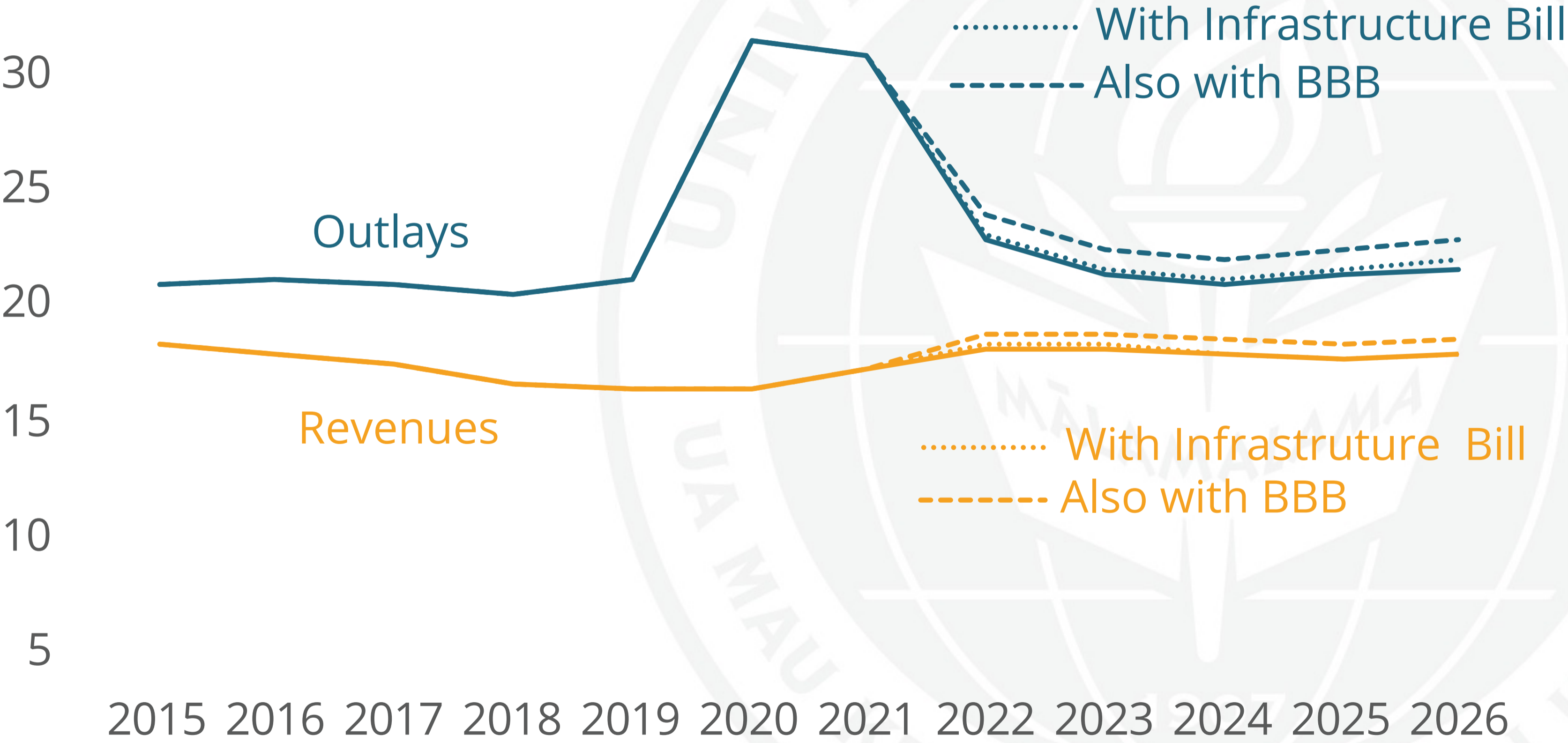


Source: FRED, University of Michigan Survey Research Center.

US Federal Outlays and Revenues

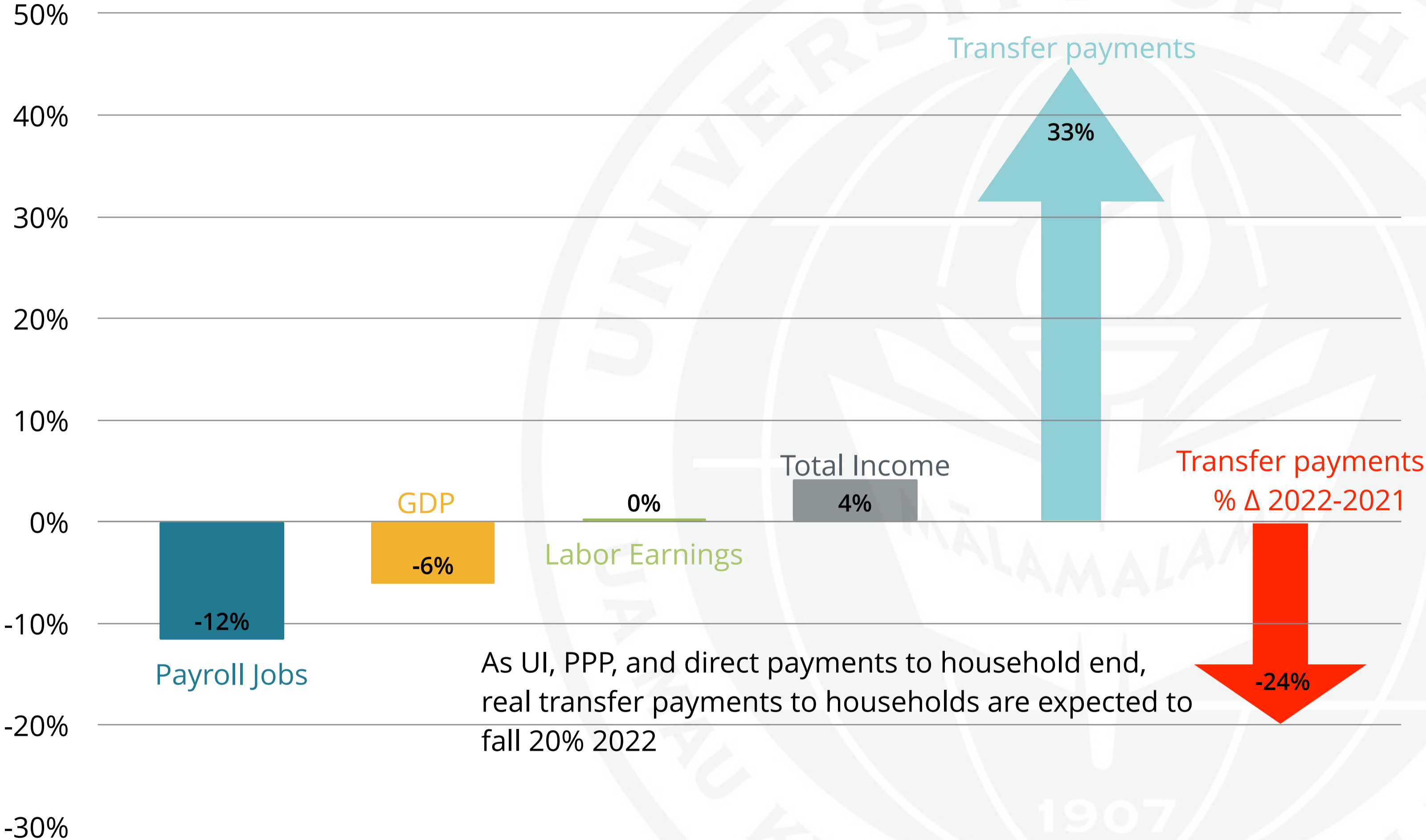
net spending set to fall below 2019 levels by 2023

35 % of GDP



Hawaii faces serious short term headwinds

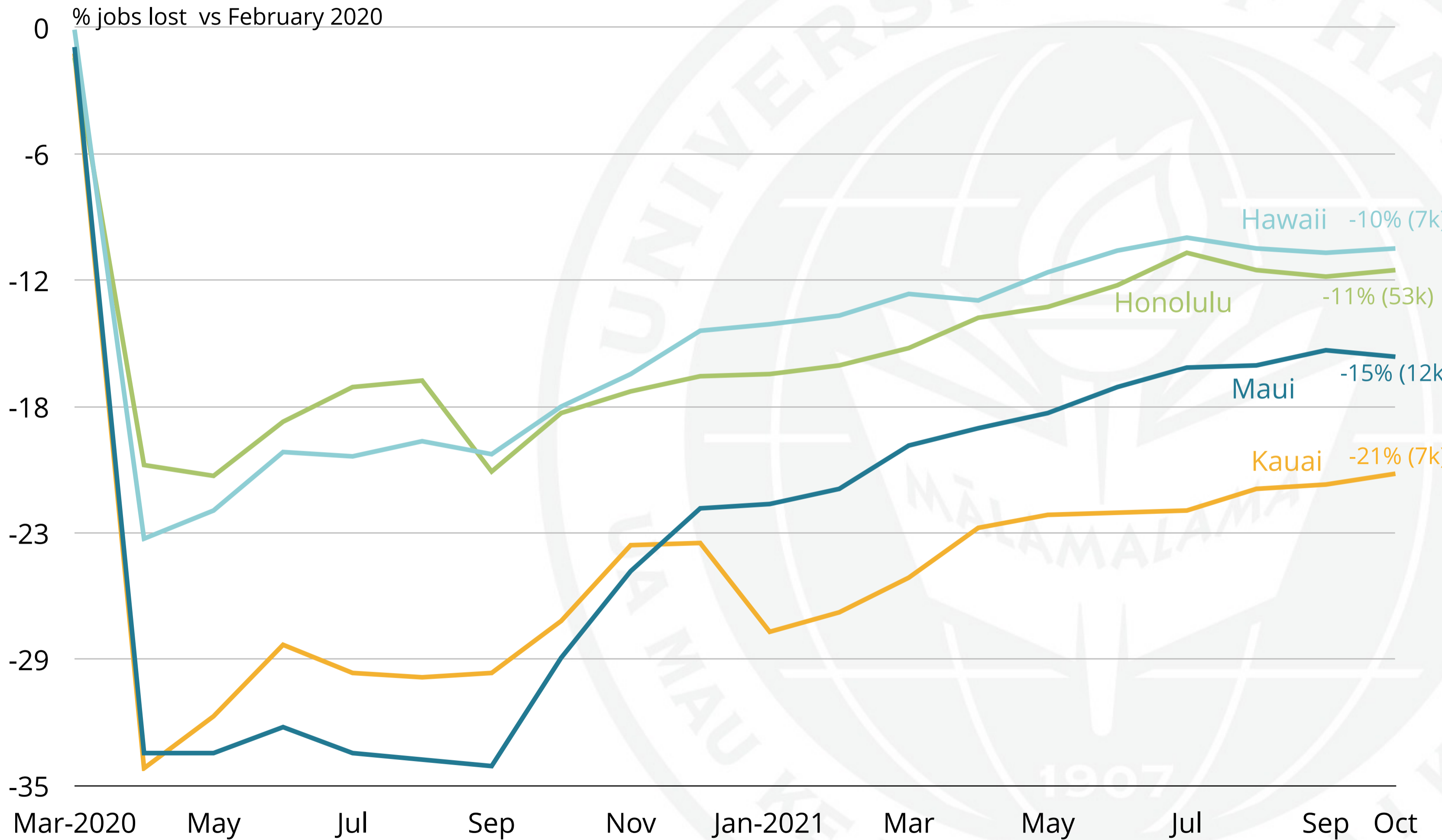
19Q4-21Q3 lost output, income and jobs, now federal support



Source: UHERO.data—BLS, BEA, UHERO. Nominal GDP and Income deflated using Honolulu CPI. Percent change 2019 Q4 to 2021 Q3, seasonally adjusted.

While job market recovery depends on Omicron/labor force

Delta stall left all counties at least 10% below 2020 job counts



Source: Bureau of Labor Statistics, UHERO benchmark job estimates, seasonally adjusted.

It wasn't just a stall in hiring

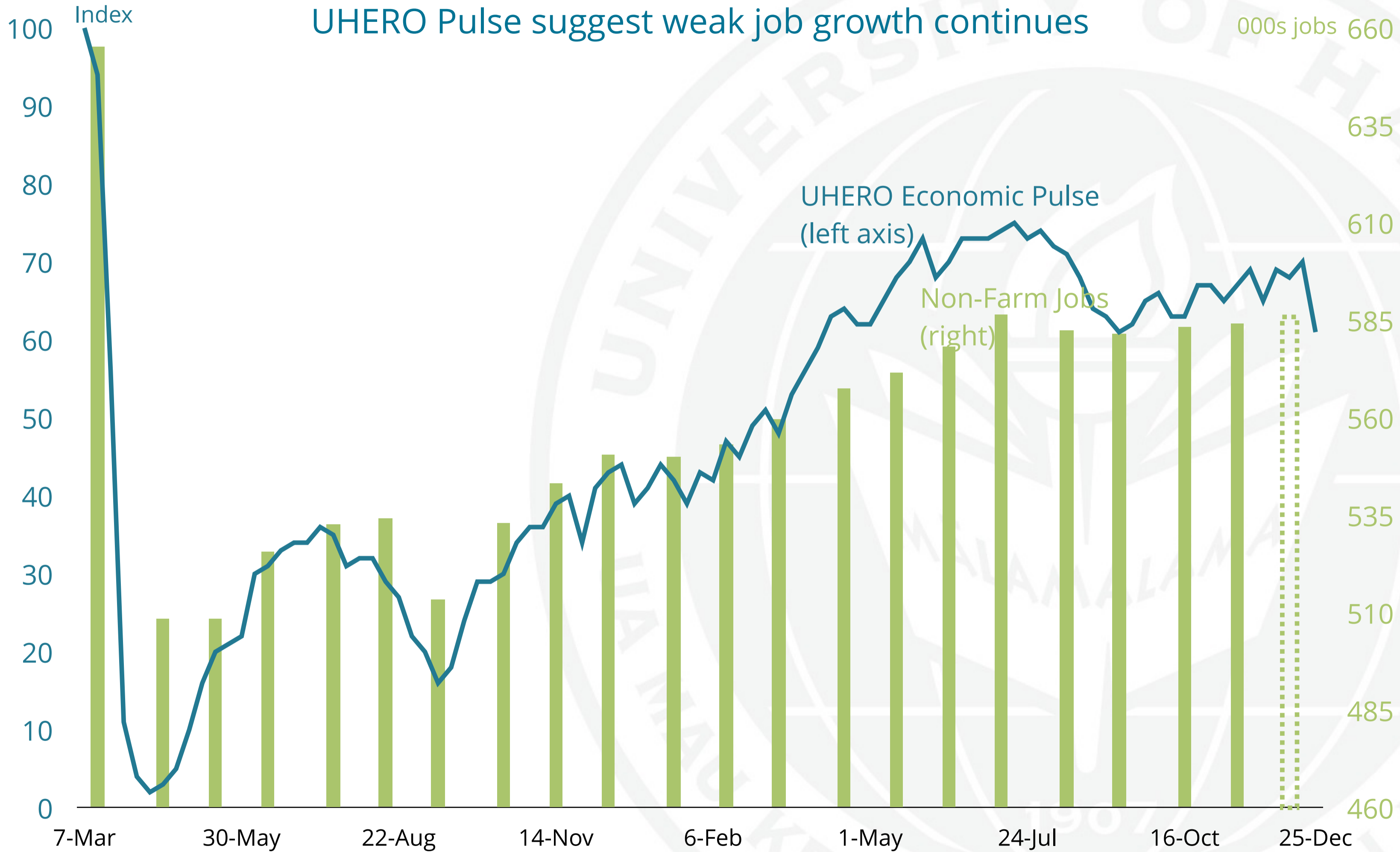
Hours worked fell sharply with Delta too



Source: Bureau of Labor Statistics, UHERO benchmark job estimates, seasonally adjusted.

Very near term labor market expectations

UHERO Pulse suggest weak job growth continues

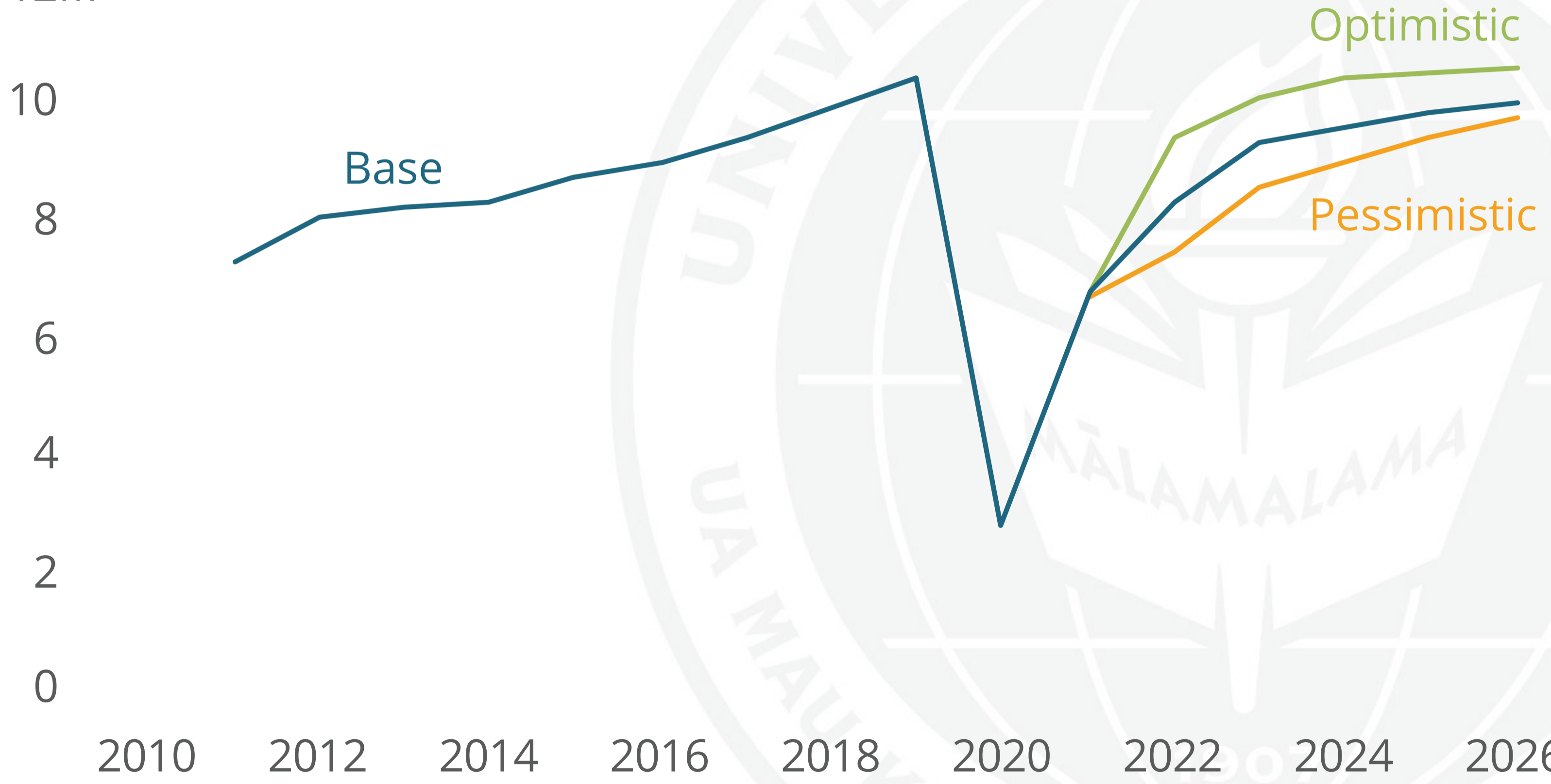


Source: <https://uhero.hawaii.edu/nowcasting-the-trajectory-of-the-covid-19-recovery-the-weekly-uhero-economic-pulse/>
 BLS, UHERO. <https://tinyurl.com/UHERO-EPvsJobs>

As Covid-19 continues to weigh on international market

Omicron will determine the extent of tourism recovery

Visitor arrivals by air
12M

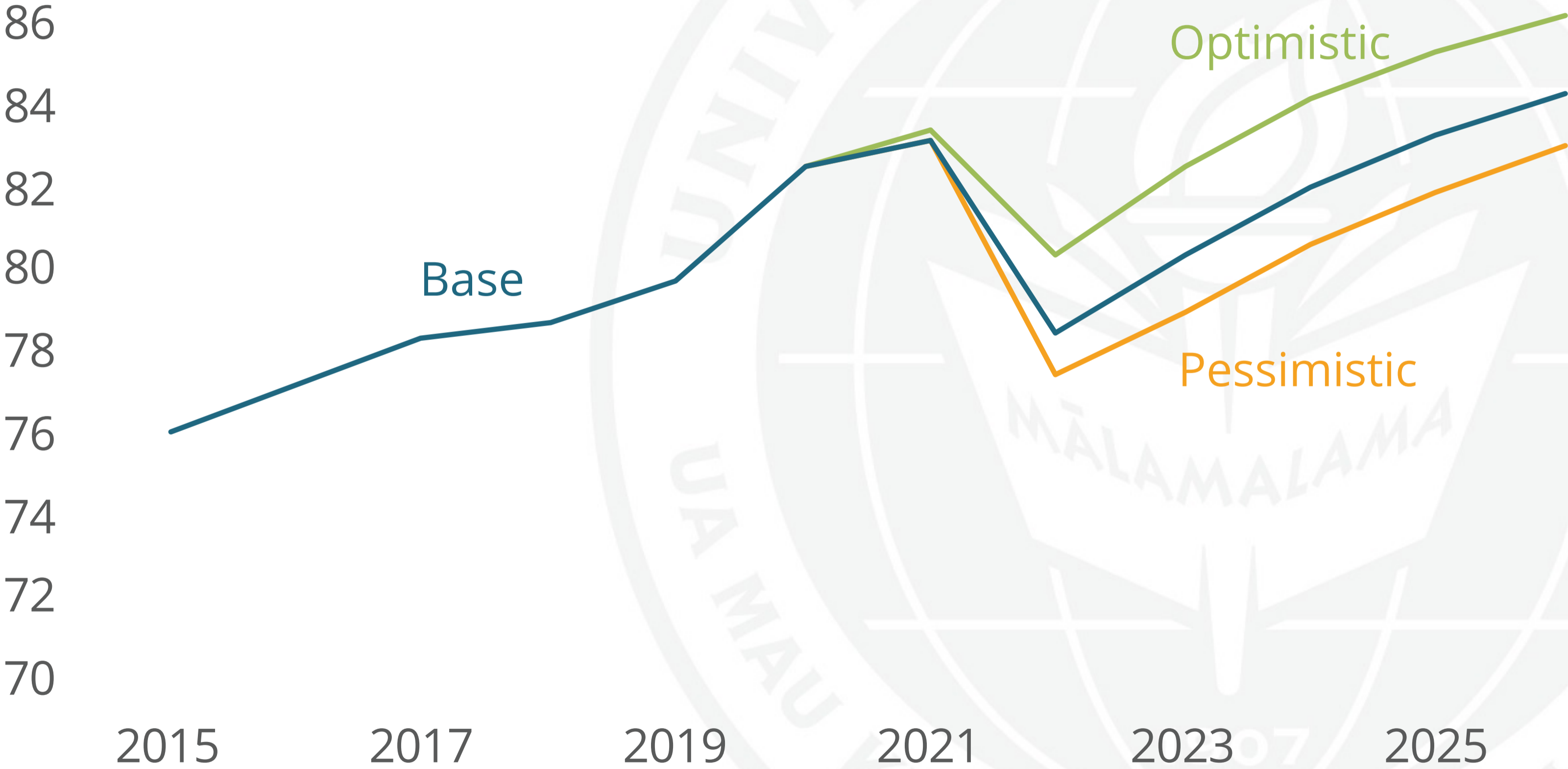


Source: HTA, UHERO 21Q4 forecast.

Income declines with end of federal support

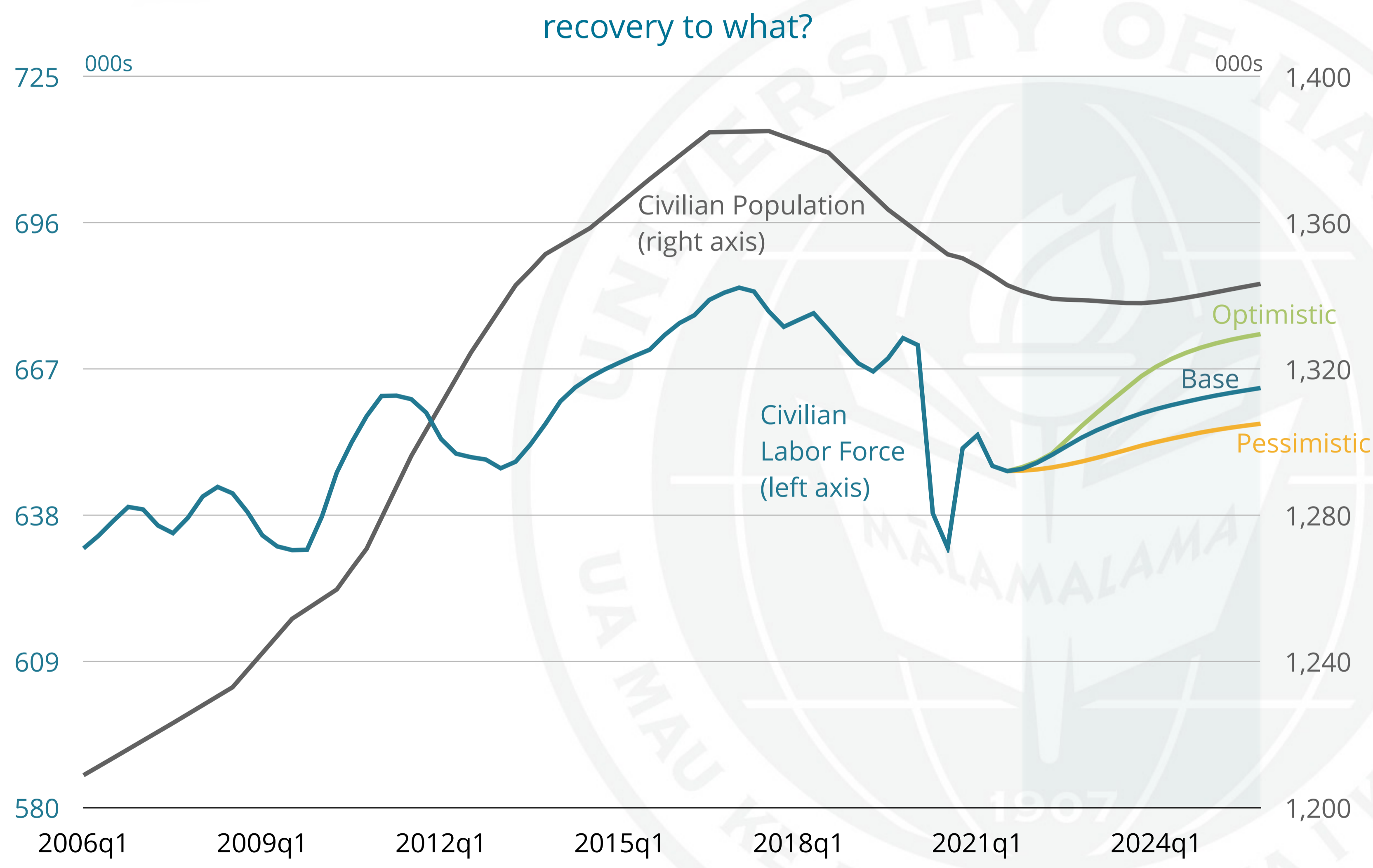
accumulated savings and jobs recovery will cushion the blow

88 Bil. of 2020\$



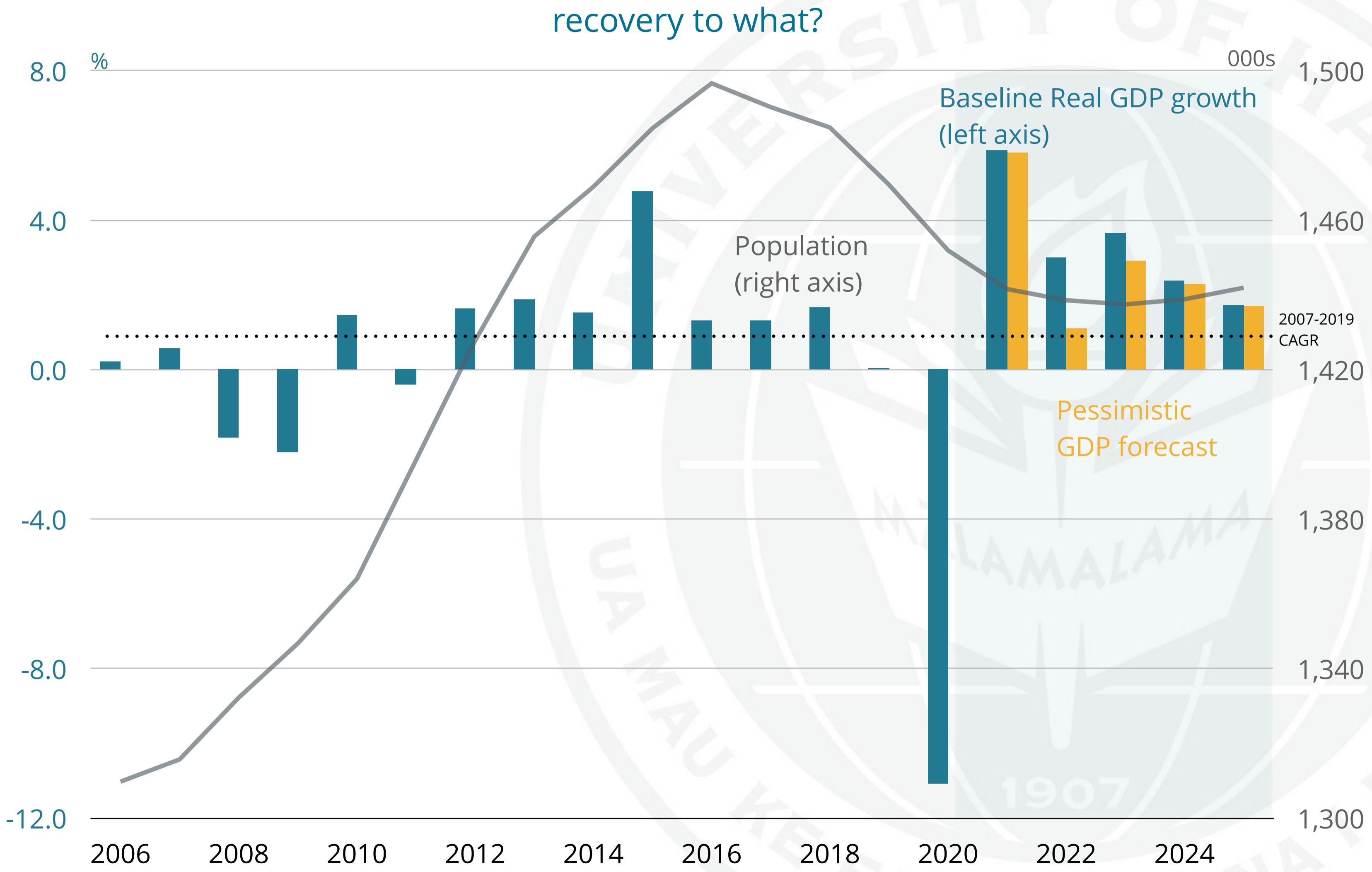
Source: BEA, BLS, UHERO 21Q4 forecast.

As Hawaii's nascent recovery proceeds, the question remains



Source: BLS, BEA, Census, UHERO 21Q4 forecast.

As Hawaii's nascent recovery proceeds, the question remains



Source: BLS, BEA, CENSUS, UHERO estimates of intercensal population (2011-2019), UHERO 21Q4 forecast, draft 22Q1 forecast.

Recovery Resumes, But Omicron Looms

uncertainty continues to rule the day

TABLE 17: BASELINE FORECAST SCENARIO

	2019	2020	2021	2022	2023	2024
STATE OF HAWAII						
Nonfarm Payrolls (Thou)	658.6	560.9	574.0	600.2	627.1	639.4
% Change	0.1	-14.8	2.3	4.6	4.5	2.0
Unemployment Rate (%)	2.5	11.8	7.7	5.4	3.4	2.8
Real Personal Income (Mil 2020\$)	79,748.2	82,526.4	83,184.6	78,453.9	80,372.4	81,995.1
% Change	1.4	3.5	0.8	-5.7	2.4	2.0
Real GDP (Mil 2020\$)	93,221.5	82,884.4	87,664.1	90,059.2	93,326.9	95,542.0
% Change	0.0	-11.1	5.8	2.7	3.6	2.4
Total Visitor Arrivals by Air (Thou)	10,385.8	2,708.3	6,749.2	8,286.5	9,321.2	9,570.6
% Change	5.0	-73.9	149.2	22.8	12.5	2.7
Visitor Days (Thou)	89,690.4	28,515.8	64,833.2	77,476.8	85,127.4	86,279.8
% Change	2.2	-68.2	127.4	19.5	9.9	1.4
Real Visitor Expenditures (Mil 2020\$)	17,994.2	4,840.8	12,561.8	16,460.4	17,892.1	17,535.7
% Change	-0.4	-73.1	159.5	31.0	8.7	-2.0

TABLE 19: PESSIMISTIC FORECAST SCENARIO

	2019	2020	2021	2022	2023	2024
STATE OF HAWAII						
Nonfarm Payrolls (Thou)	658.6	560.9	573.8	592.1	613.9	625.7
% Change	0.1	-14.8	2.3	3.2	3.7	1.9
Unemployment Rate (%)	2.5	11.8	7.7	6.4	4.7	4.0
Real Personal Income (Mil 2020\$)	79,748.2	82,526.4	83,165.5	77,484.5	78,957.9	80,577.9
% Change	1.4	3.5	0.8	-6.8	1.9	2.1
Real GDP (Mil 2020\$)	93,221.5	82,884.4	87,725.7	88,729.0	91,301.8	93,419.0
% Change	0.0	-11.1	5.8	1.1	2.9	2.3
Total Visitor Arrivals by Air (Thou)	10,385.8	2,708.3	6,709.2	7,452.4	8,557.4	9,012.7
% Change	5.0	-73.9	147.7	11.1	14.8	5.3
Visitor Days (Thou)	89,690.4	28,515.8	64,417.2	70,144.1	79,973.0	83,367.0
% Change	2.2	-68.2	125.9	8.9	14.0	4.2
Real Visitor Expenditures (Mil 2020\$)	17,994.2	4,840.8	12,556.5	14,686.0	16,993.5	17,335.2
% Change	-0.4	-73.1	159.4	17.0	15.7	2.0

BLOGS

[Hawaii Needs to Focus on Developing Good Governance in Managing Tourism](#)

October 13, 2021

By Paul Brewbaker, Frank Haas, and James Mak In order to develop and apply policies for tourism in destinations, there is usually a requirement for

[Read More »](#)

[What do families in Hawai'i use electricity for?](#)

September 29, 2021

By Nori Tarui and Pratistha Gyawali CDA Project Dashboard IntroductionThe dashboard illustrates Hawai'i's residential electricity usage based on the 2019 Residential Energy Use Survey, a

[Read More »](#)

[Identifying wastewater management tradeoffs: costs, nearshore water quality, and implications for](#)

NEWS

[Survey on COVID-19 Business Mandates](#)

September 16, 2021

The University of Hawaii Economic Research Organization (UHERO) in partnership with the Pacific Alliance Against COVID-19 (PAAC), the City and County of Honolulu (OneOahu), and

[Read More »](#)

[New Environmental Policy and Planning Group publication](#)

April 22, 2021

A new publication led by 'Ike Wai and UHERO's Environmental Policy and Planning Group evaluates the projected change in groundwater recharge, sustainable yield, and groundwater

[Read More »](#)

[New UHERO publication on agroforestry restoration in](#)

BRIEFS

[COVID-19 Mandates: Recommendations for Hawai'i Businesses](#)

August 23, 2021

Read the summary blog post. By Ruben Juarez, Alika Maunakea, May Okihiro, and Carl Bonham Faced with the largest increase in cases since the beginning

[Read More »](#)

[Developing a Dream Destination: From Laissez-Faire to Destination Management](#)

July 19, 2021

Read the summary blog post. By James Mak In 2008, I published an interpretive history of how public policies toward tourism in Hawaii changed over

[Read More »](#)

[The Agricultural Economic Landscape in Hawai'i and the Potential for Future](#)

FORECASTS

[UHERO Forecast for the State of Hawaii: Delta wave swamps tourism, but return to recovery expected](#)

September 24, 2021

Hawaii's recovery has experienced a setback with the recent surge in COVID-19. Record virus numbers and preventive policy responses have caused an abrupt tourism pullback

[Read More »](#)

[UHERO Forecast for the State of Hawaii: Vaccinations and US Strength Drive Upgraded Hawaii Forecast](#)

May 14, 2021

Economic conditions in Hawaii are improving. The dominant US visitor market has outperformed expectations, and built-up savings and pent-up demand will drive mainland arrivals to

[Read More »](#)

RESEARCH AND REPORTS

[The Efficacy of Hawaii COVID-19 Business Mandates](#)

October 12, 2021

By Ruben Juarez, Alika Maunakea, May Okihiro, and Carl Bonham Despite the national attention around COVID-19 vaccination mandates for businesses, including President Biden's recent announcement,

[Read More »](#)

[Using Temperature Sensitivity to Estimate Shiftable Electricity Demand Implications for power system investments and climate change](#)

September 2, 2021

Growth of intermittent renewable energy and climate change make it increasingly difficult to manage electricity demand variability. Transmission and centralized storage technologies can help, but