

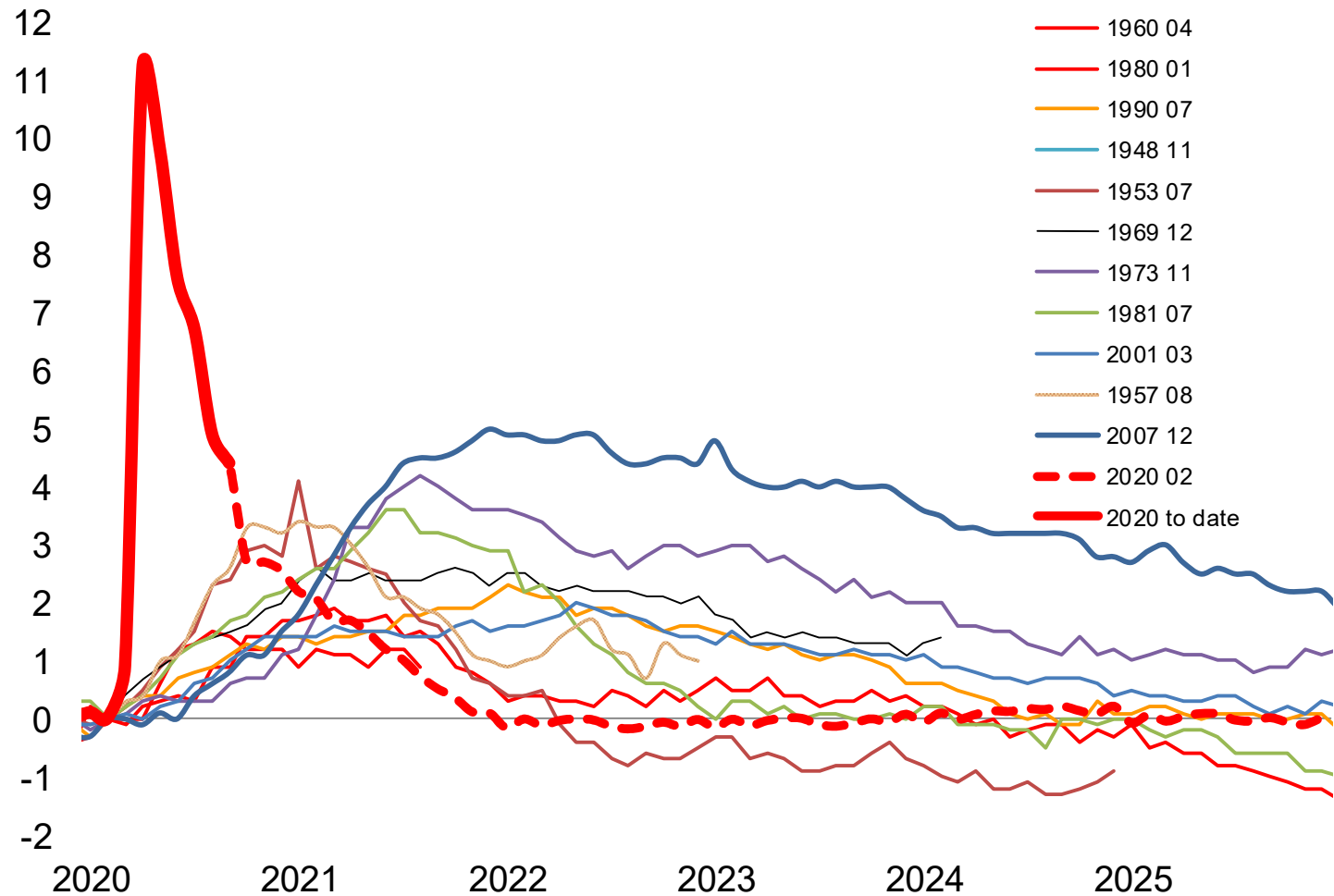

Navigating the Covid-19 Unnatural Disaster

Chicagoland Apartment Association

October 8, 2020

Following the Script of a Natural Disaster

Deviation of the unemployment rate from the business cycle low point (percentage points)

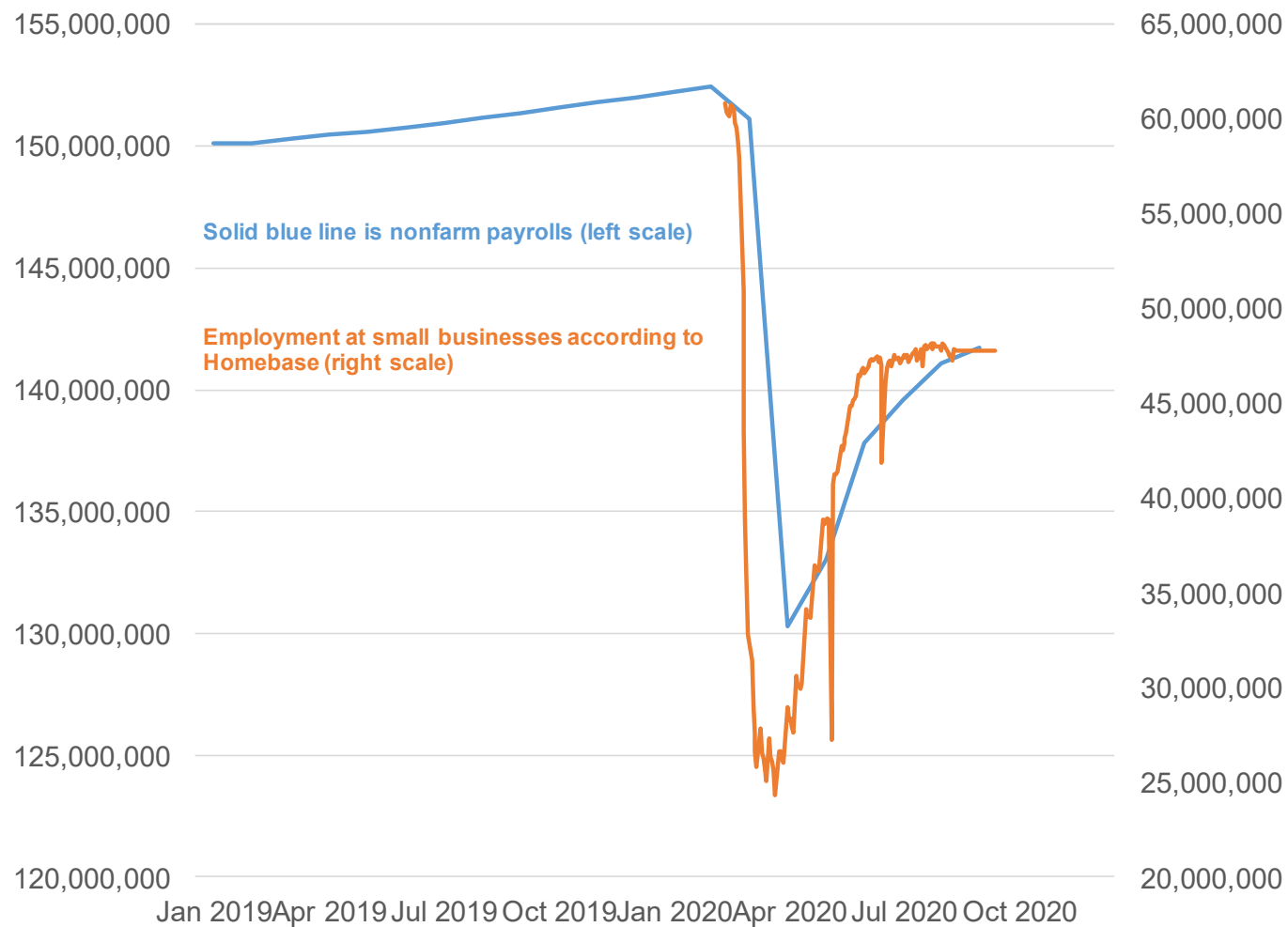


Note: The unemployment low point of each cycle is lined up to February 2020.
Sources: Haver Analytics; U.S. Department of Labor. Updated through September 2020.

Small Businesses Bore the Brunt

Nonfarm payrolls (number)

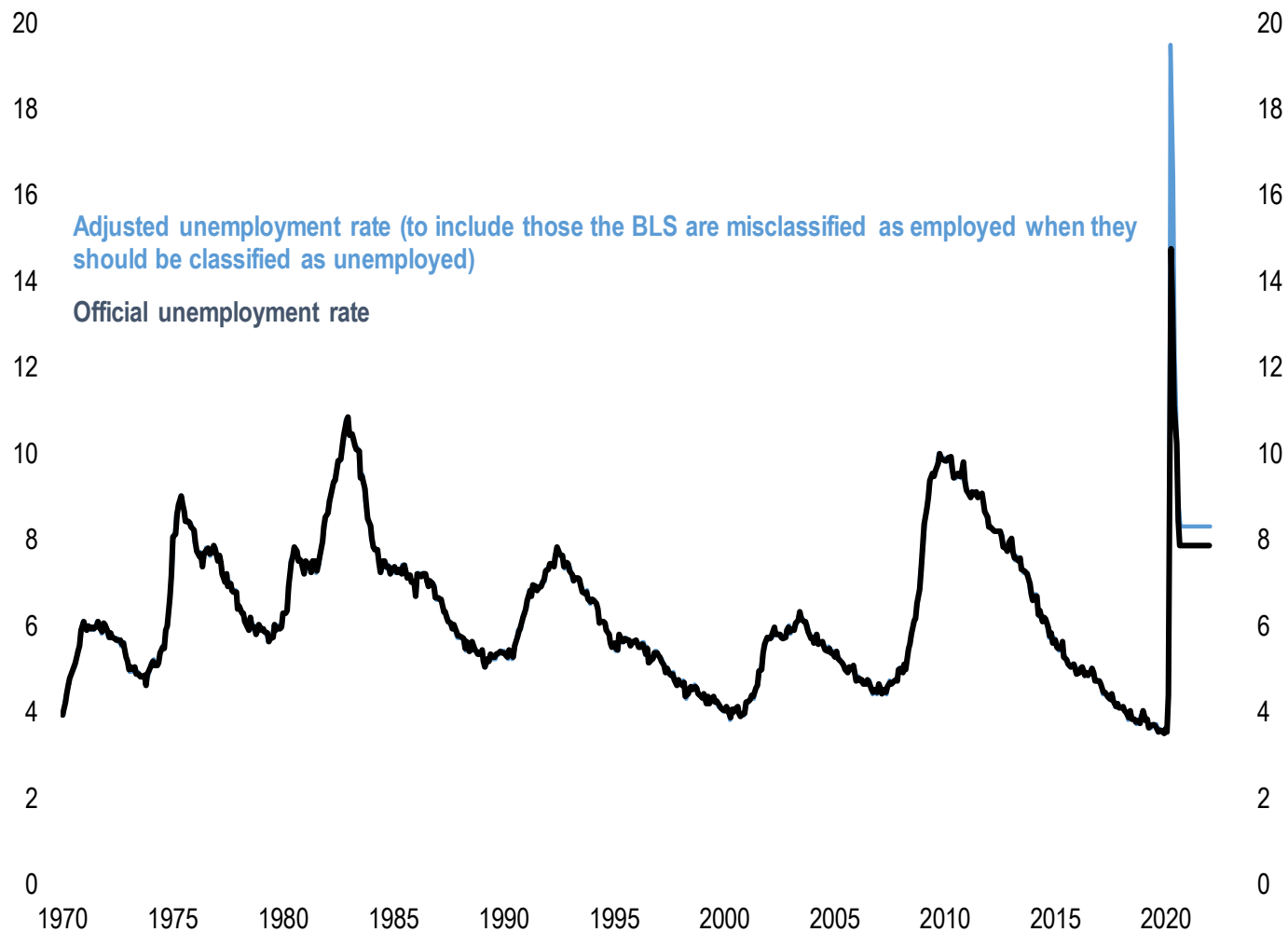
Employment at small business establishments (number)



Sources: Haver Analytics; U.S. Department of Labor; Homebase. Updated through September 2020 (employment) and September 4, 2020 (Homebase)

But Jobs Are Only Half the Story

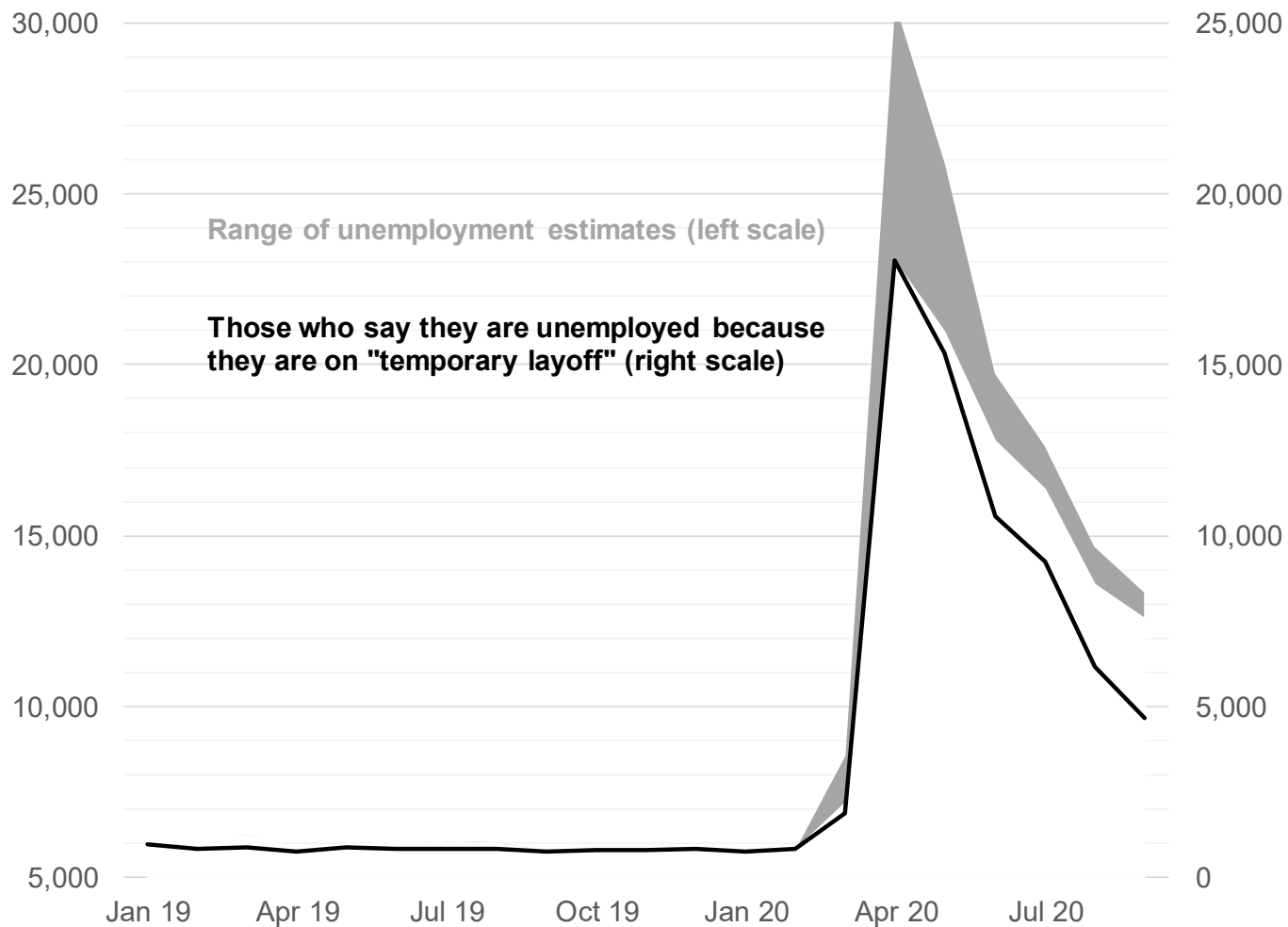
Unemployment (percent of the labor force)



Sources: Haver Analytics; U.S. Department of Labor. Updated through September 2020.

Most Furloughs Were/Are Temporary

Unemployment and "temporary layoff" (thousands)



Sources: Haver Analytics, U.S. Department of Labor. Updated through September 2020.

PPP Was a Big Help and ...

How Many Jobs (Actual Number) Does a \$673 Billion (\$349 billion + \$310 billion) ¹ PPP Program Protect for Eight Weeks? ²

		Number of People Potentially Covered
Phase 1, March 27, 2020 (SBA Opens for Applications on April 3) (First Wave Exhausted by April 16)	\$349 billion	30,000,000
Phase 2, April 24, 2020	\$310 billion	26,647,564
EIDL Support	\$10 billion EIDL \$60 billion EIDL	
Memo:		
\$521 billion disbursed (\$38.5 billion cancelled or returned)		16,650,000
\$132 billion still available		9,997,564

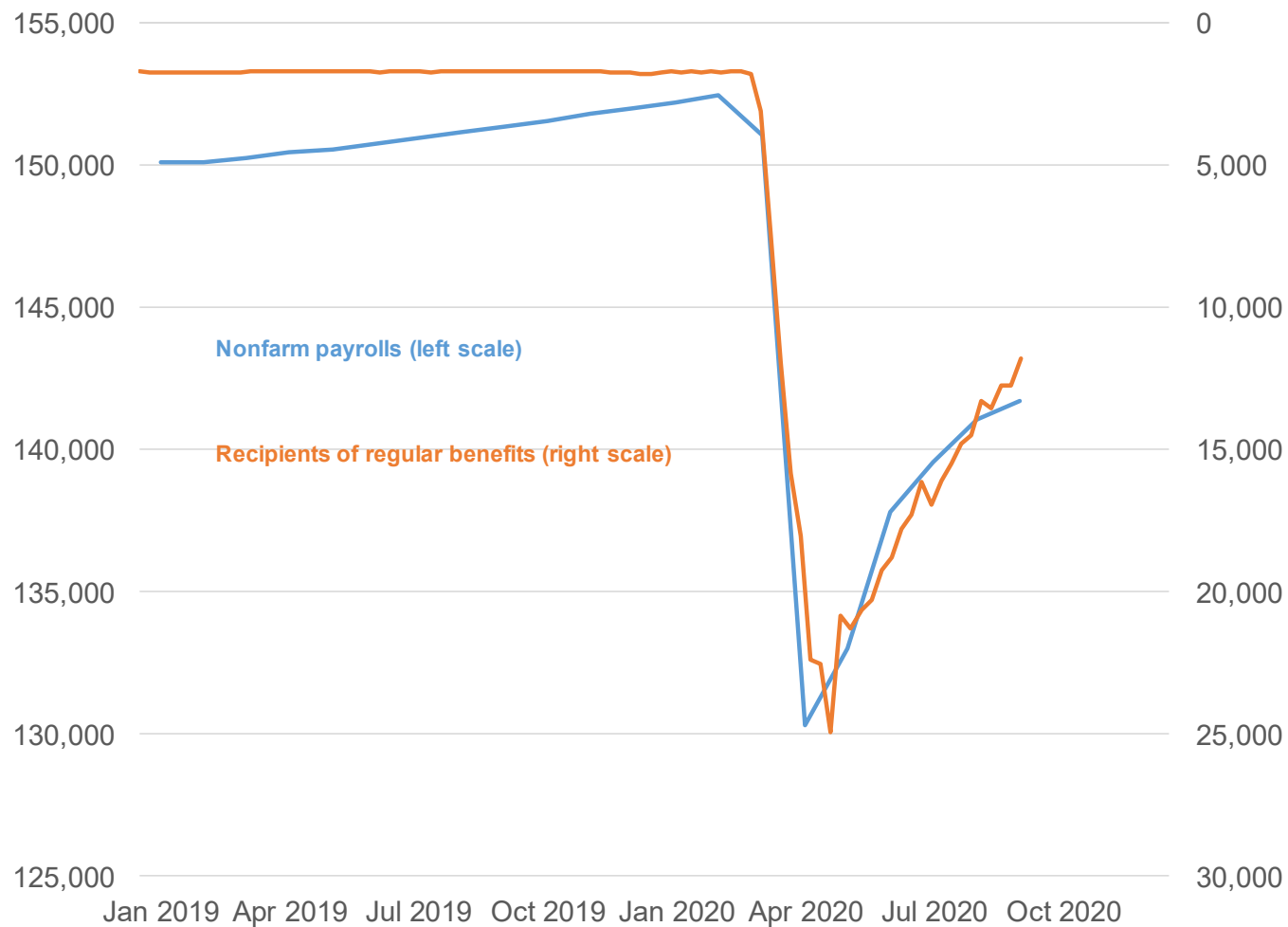
¹ Not including \$60 billion in the CARES 2 Act added to the SBA's Economic Injury Disaster Loan Program. That accommodates 7,000,000 requests.

² Assumes that a borrower is eligible for 2½ times the average monthly payroll cost of an employee.

... Put Folks Back on the Books

Nonfarm payrolls (thousands)

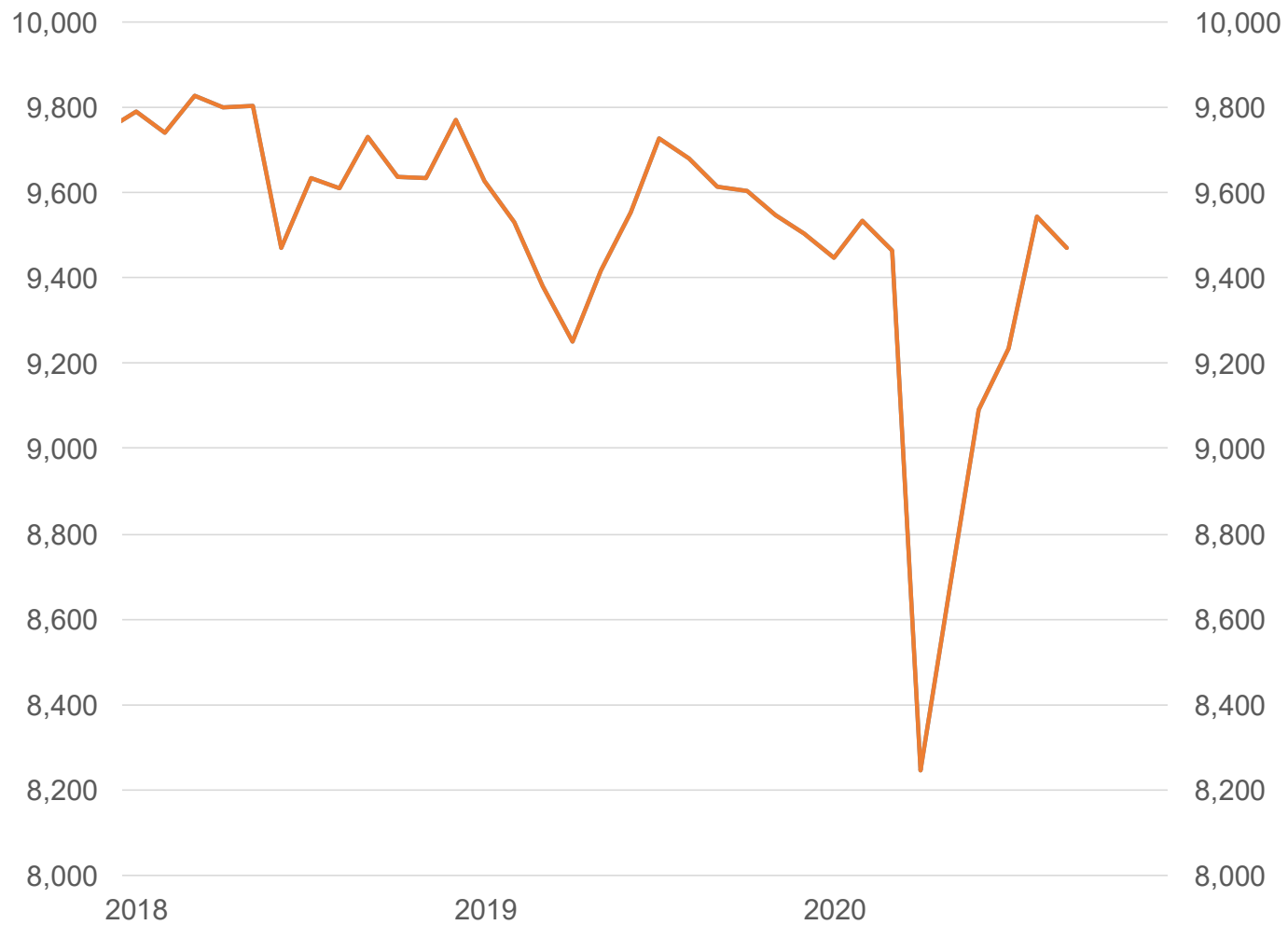
Recipients of regular state UI program benefits (thousands)



Sources: Haver Analytics; U.S. Department of Labor; Updated through September 2020 (payrolls) and September 19, 2020 (claimants).

Self Employment Is Back

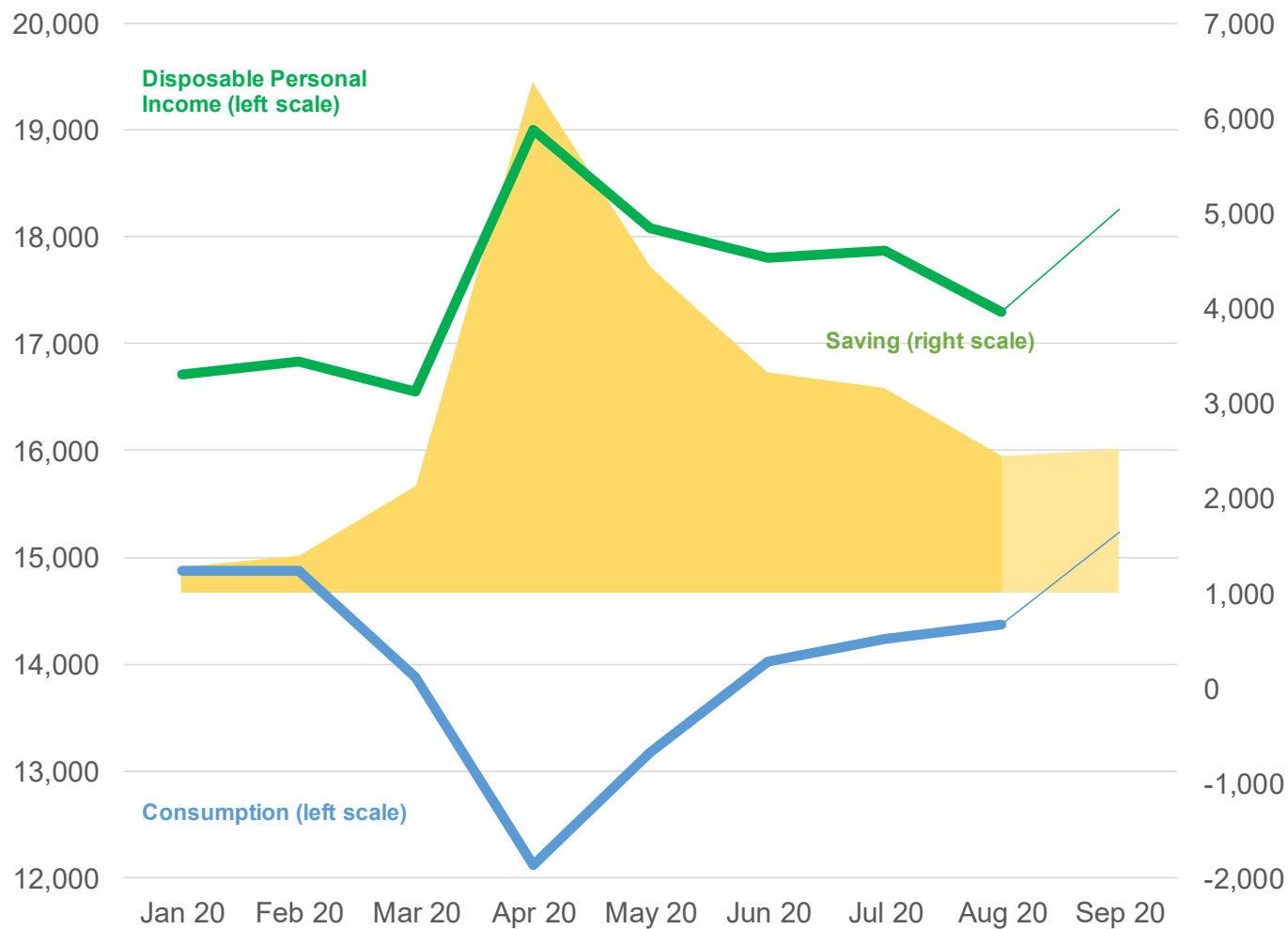
Self-employment (thousands)



Sources: Haver Analytics; U.S. Department of Labor. Updated through September 2020.

Income Transfers (“Paid Leave”) ...

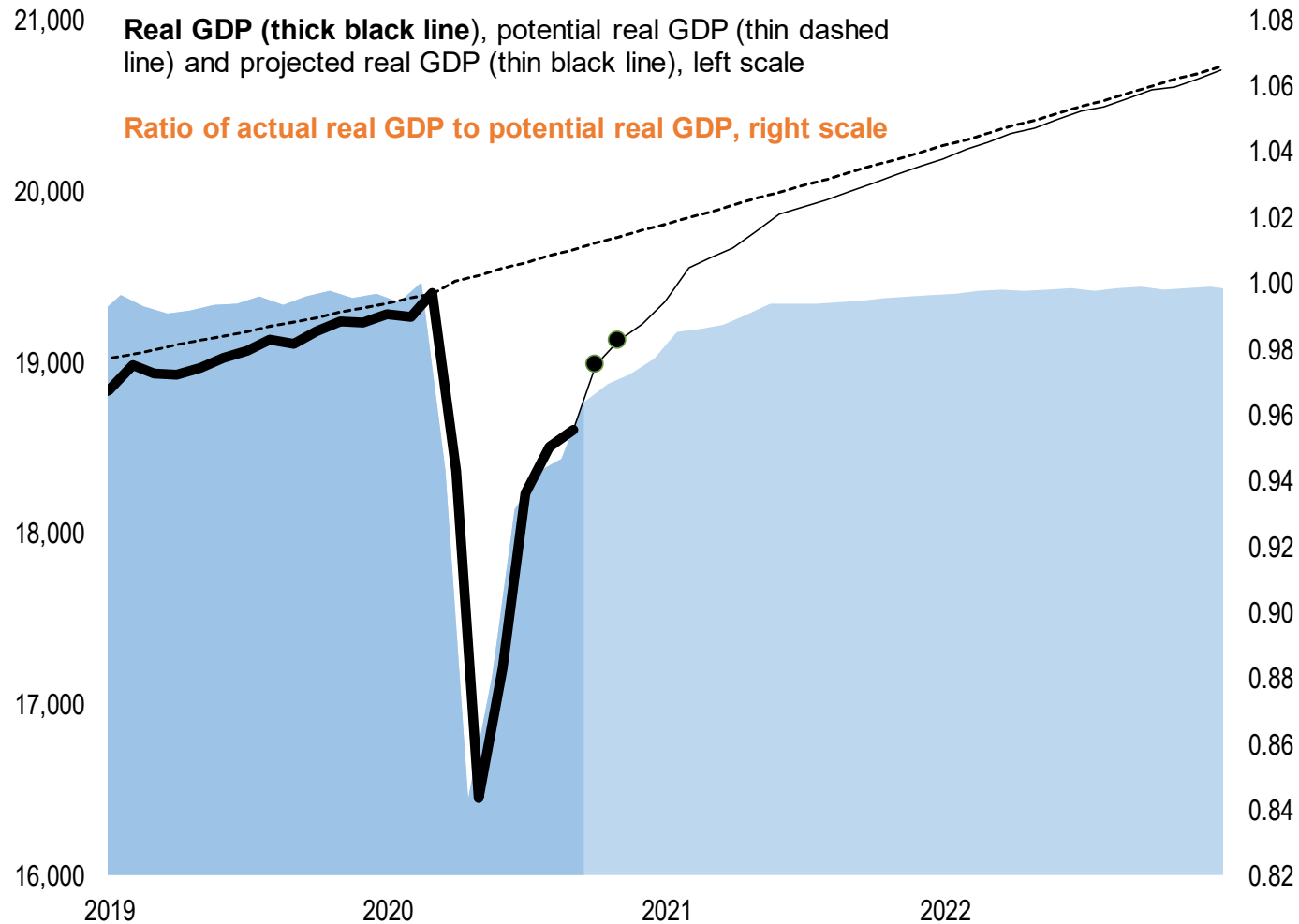
The Consumer Is Ready to Roll (billions of dollars annualized)



Sources: Haver Analytics; U.S. Department of Commerce. Updated through August 2020.

... Propelled This

Real GDP (billions of chained 2012 dollars)

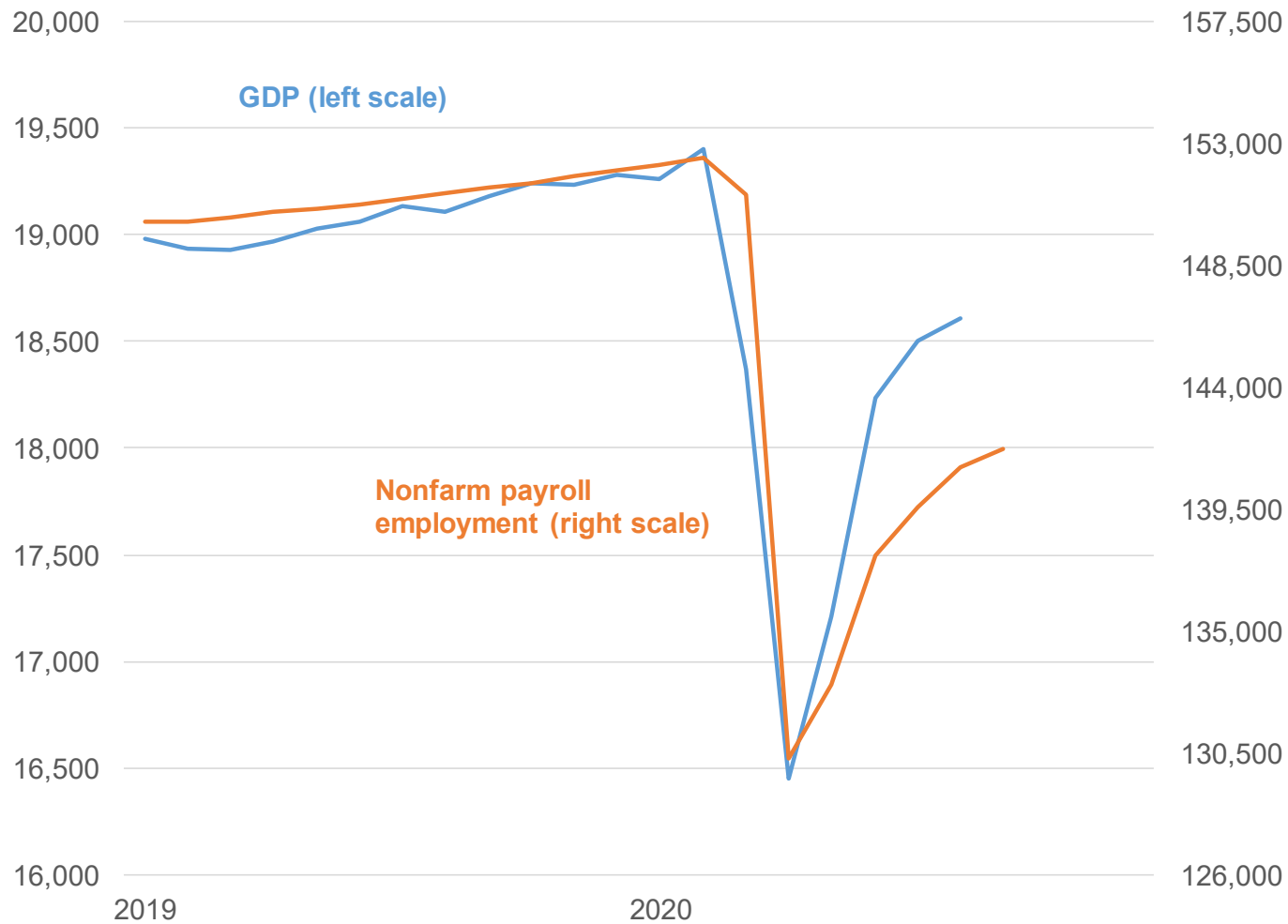


Sources: Haver Analytics; IHS Market. Updated through August 2020.

But There's a Big Divide

Real GDP (billions of chained 2012 dollars)

Nonfarm payrolls (thousands)



Sources: Haver Analytics; IHS Markit; U.S. Department of Labor. Updated through August 2020 (HIS) and September 2020 (BLS).

Why Natural Disaster/Business Cycle Matters

NMHC Rent Payment Tracker										
	2019					2020				
Percentage of Rent Payments Made By:	6th* of Month	13th of Month	20th of Month	27th of Month	End of Month	6th* of Month	13th of Month	20th of Month	27th of Month	End of Month
April	82.9%	90.1%	93.3%	95.9%	97.7%	78.0%	85.0%	89.2%	91.7%	94.6%
May	81.7%	89.8%	93.0%	94.8%	96.6%	80.2%	87.7%	90.8%	93.3%	95.1%
June	81.6%	88.9%	92.2%	94.7%	96.0%	80.8%	89.0%	92.2%	94.2%	95.9%
July	79.7%	90.1%	93.4%	95.3%	96.6%	77.4%	87.6%	91.3%	93.3%	95.7%
August	81.2%	88.9%	92.1%	94.0%	95.8%	79.3%	86.9%	90.0%	92.1%	94.5%
September	81.2%	88.7%	91.8%	93.7%		76.4%	86.2%	90.1%	92.2%	

Data collected from between 11.1 - 11.5 million apartment units each month.

Methodology:

Data are collected weekly, with the first data collection happening the 1st through the 6th, and all data collections following will be cumulative. For example, the second collection will be the 1st through the 13th, the third will be the 1st through the 20th and so on for the remainder of each month.

When establishing the initial dates for the Rent Payment Tracker, NMHC wanted to track when rent was officially "late" and used the close of business on the 5th as that date. After consultation with property managers and data providers we were informed that a variety of dates are used to determine when rent is considered late, with some saying rent isn't late until as late as the 10th. In addition, those that use the 5th as their deadline reported that many people pay on the last day possible and that some of those payments aren't posted until the 6th. Based on this information, NMHC adjusted its methodology to make the close of business on the 6th the deadline for the first week. Moving this date also moved all other reporting dates by one day.

Partial payments are counted only once monthly, and the payment is captured in the first time period in which it occurs. For example, if an apartment household resident pays a quarter of their rent during the week of May 1, it would be captured in the first week. Subsequent payments that month would not be captured in the data to avoid double counting.

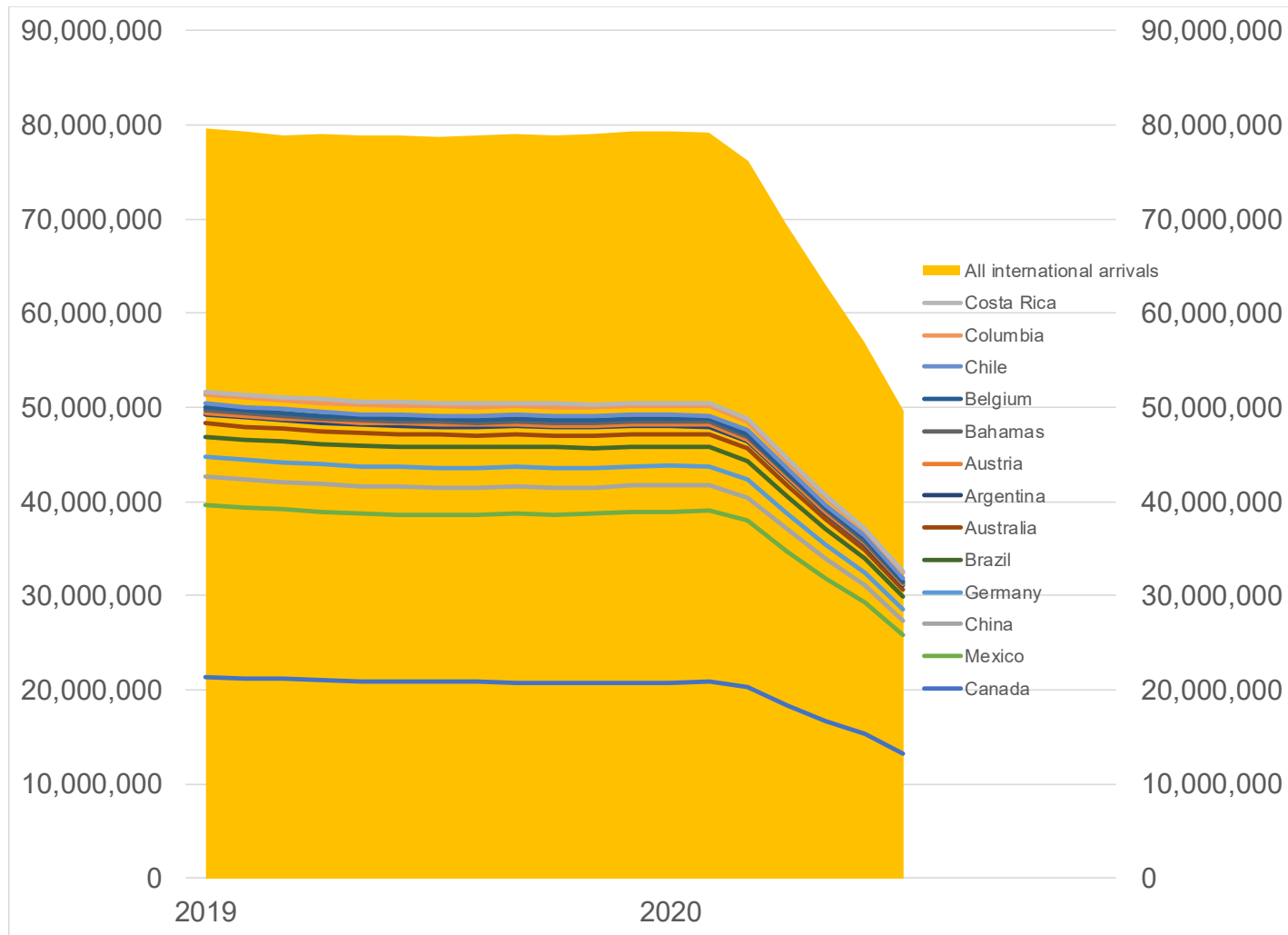
The percentages are based on the total occupied units, excluding vacant units, purpose-built student housing, privatized military housing, and subsidized affordable units. The number of total occupied units will change for many of the property management software (PMS) providers as new units are leased or units are vacated; as such, the total number of units in the dataset will fluctuate.

*Note: These figures are as initially reported; these are calendar days, so the specific day of the week can have an affect on these reported figures, as leasing offices can have reduced hours or be closed on those days, creating potential delays for payment processing.

Sources: National Multifamily Housing Council. Updated through September 2020.

One More Big Hurdle to Clear ...

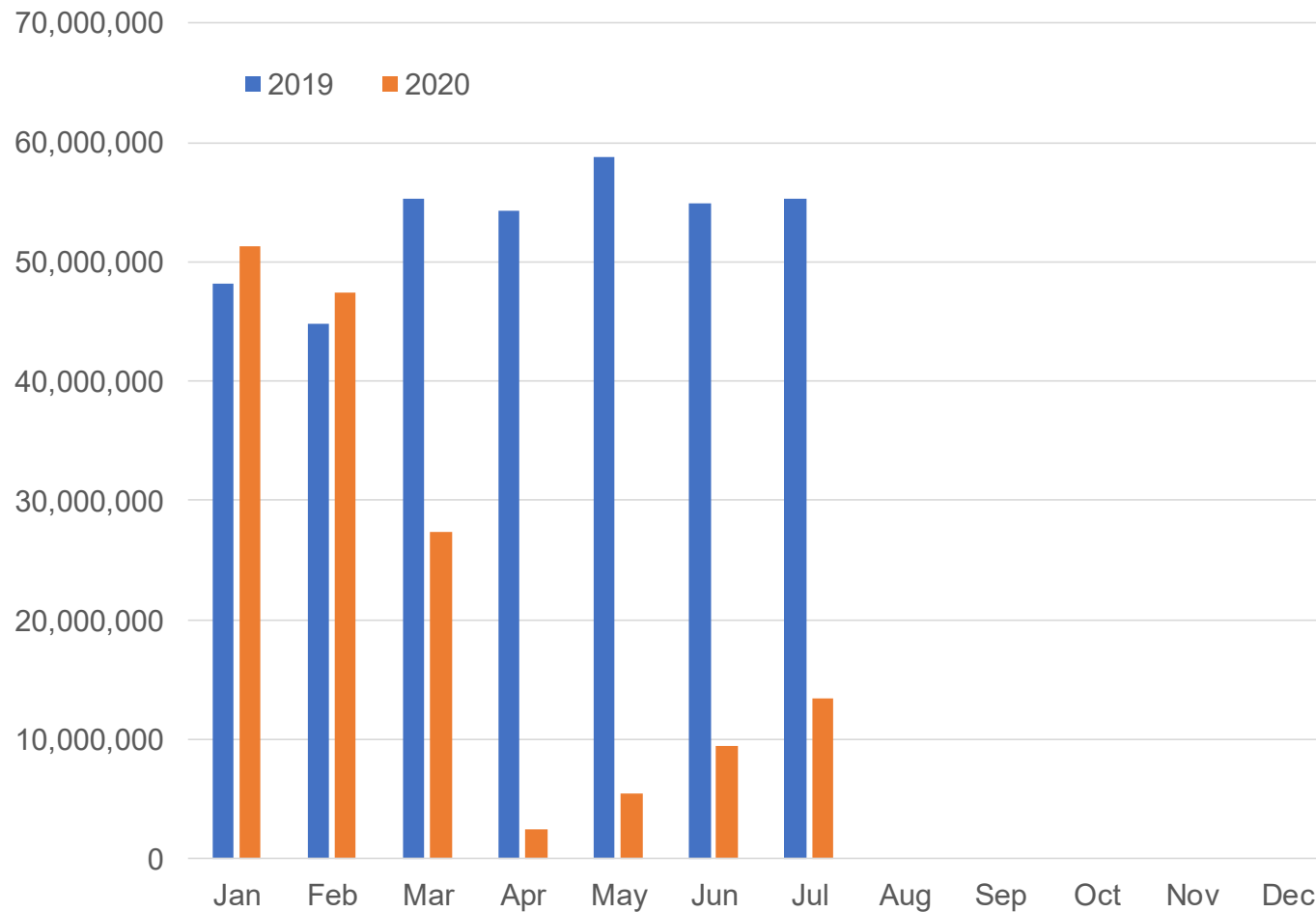
Number of people arriving to the U.S. over the most recent 12 months



Sources: Haver Analytics; National Transportation and Tourism Office. Updated through July 2020.

... and It's More About Psychology

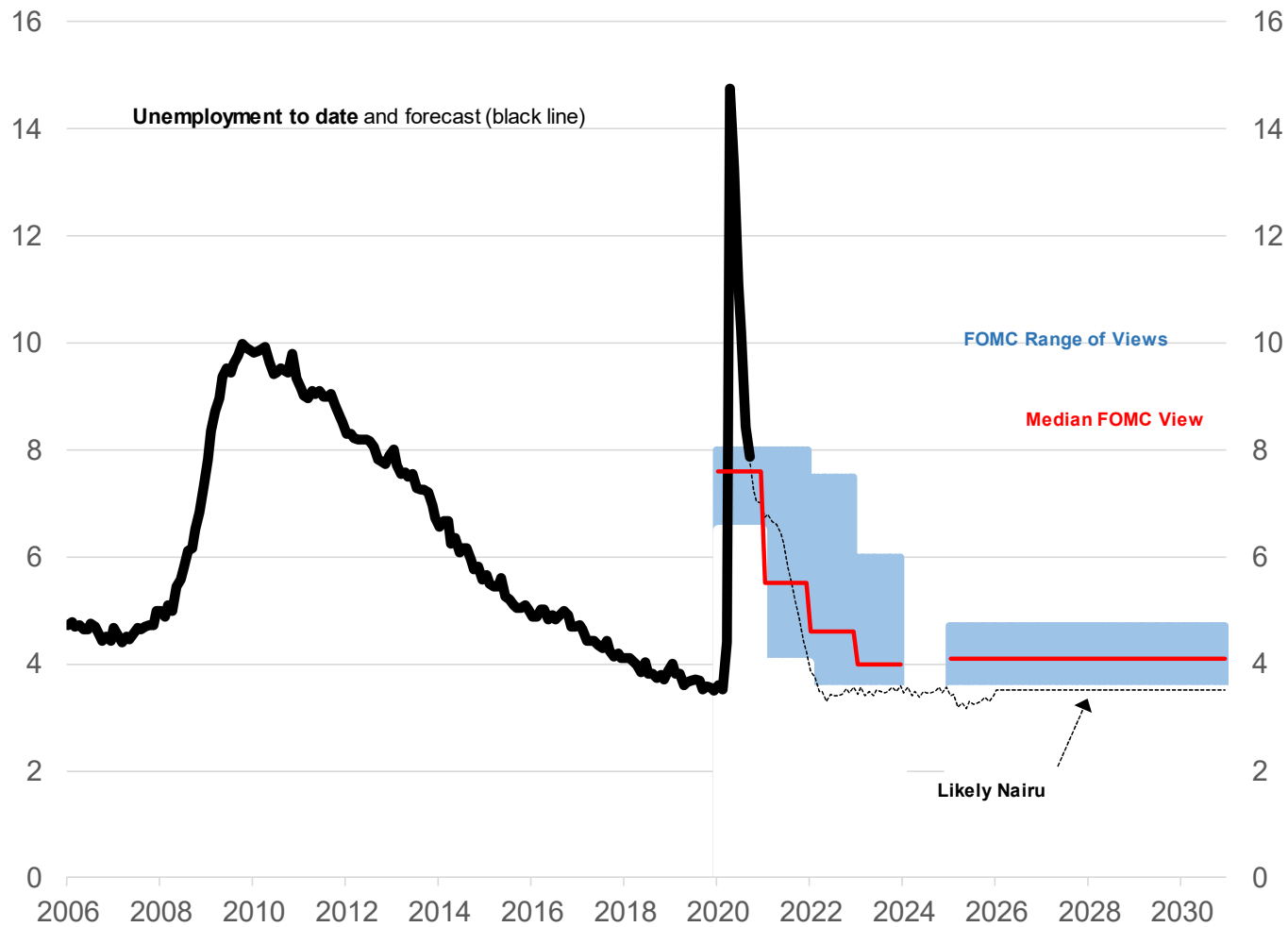
Number of passengers departing from the 10 busiest U.S. airports



Sources: Haver Analytics; Selected airports. Updated through July 2020.

The Federal Reserve's Predictions

Unemployment rate (percent of the labor force)



Sources: Haver Analytics; U.S. Department of Labor; Federal Reserve Board. Updated through September 2020 (unemployment) and September 16, 2020 (FOMC).

Global GDP Road Map (CIB)

Real GDP	Annualized% change from the previous quarter					Percent change over the four quarters of each year					
	2019 Q4	2020 Q1	Q2	Q3	Q4	2017	2018	2019	2020	2021	Steady State ¹
Global	1.8	-10.1	-27.1	28.7	6.5	3.7	2.7	2.6	-2.7	3.5	
Global (PPP Basis)	2.3	-12.5	-19.2	22.9	6.5	3.8	3.0	2.9	-1.9	4.1	
Nafta	2.0	-5.2	-33.1	34.2	3.3	2.7	2.4	2.1	-3.2	2.7	
Canada	0.6	-8.2	-38.7	44.5	5.5	3.2	1.8	1.5	-3.7	3.5	2.0
Mexico	-2.3	-4.6	-52.7	42.0	17.0	1.8	1.2	-0.8	-6.9	4.1	2.5
United States	2.4	-5.0	-31.4	33.0	2.5	2.7	2.5	2.3	-2.9	2.5	1.8
Europe	1.0	-0.5	-48.1	44.9	5.5	3.2	1.3	1.5	-5.8	2.7	1.5
EU-28	0.4	0.4	-50.4	48.0	5.7	3.1	1.5	1.2	-6.1	2.8	1.5
France	-0.8	-21.5	-44.8	90.0	3.0	3.1	1.4	0.8	-4.0	2.8	1.5
Germany	-0.1	-7.8	-33.5	45.0	5.0	3.6	0.3	0.4	-1.7	3.0	1.5
Italy	-0.8	-20.3	-45.0	14.0	2.4	1.9	0.2	0.1	-15.4	1.8	1.5
Spain	1.7	-19.4	-54.3	80.0	0.0	3.1	2.3	1.7	-9.8	3.1	1.5
United Kingdom	0.0	-8.5	-59.8	95.3	18.5	1.6	1.4	1.1	-3.9	2.6	1.5
Asia	3.4	-21.3	-5.4	18.2	9.9	5.1	4.2	3.8	-1.0	4.7	
Japan	-7.0	-2.3	-28.1	11.0	13.0	2.6	-0.3	-0.7	-3.1	2.5	0.8
China	5.2	-40.0	46.0	10.4	8.2	6.7	6.3	5.9	1.1	4.9	7.5
India	3.5	2.7	-68.8	99.0	20.0	7.2	5.7	4.1	-6.5	12.5	6.0
Korea	5.4	-5.0	-12.0	5.0	7.5	2.9	3.2	2.4	-1.5	3.2	4.0
Taiwan	6.6	-4.1	-5.5	9.2	5.0	3.9	1.3	3.9	1.0	2.8	
Indonesia	4.8	-2.7	-25.0	28.5	4.0	5.1	5.2	4.9	-0.6	4.6	
Singapore	0.6	-3.1	-42.9	40.0	2.0	2.8	0.8	0.8	-5.7	1.4	
Hong Kong	2.2	-20.2	-72.2	175.0	10.0	2.0	4.9	1.3	-9.5	3.7	
Australia	2.2	-1.0	-25.2	10.1	7.9	2.4	2.2	2.3	-3.2	3.3	
Other	1.0	-2.9	-21.3	21.7	5.9	3.0	2.1	2.0	-0.4	3.5	
Brazil	2.2	-9.5	-33.5	37.0	3.8	2.4	0.8	1.6	-3.8	1.3	3.3

¹ Maximum growth rate when the economy is close to full employment.

Source: Economic Research, Corporate Investment Bank, JPMorgan Chase & Co.

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