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Evictions and the Economy as the Moratoriums End (Hill)

- With the Supreme Court striking down the federal eviction moratorium and with most state-level restrictions set to expire over the next month, we explore how sharply evictions could rise under current policy, and we estimate the potential impact on the economy.
- Despite a severe recession, evictions actually declined during the coronacrisis due to the national eviction moratorium, with eviction filings declining 65% in Blue states and 61% nationwide.
- Using rent delinquency data from real estate companies, the National Multifamily Housing Council, and the Census Pulse survey, we estimate 2½-3½ million households are behind on rent, with $12-17bn owed to landlords.
- Despite the $25bn dispersed from the Treasury to state and local governments, the process of providing these funds to households and landlords has been slow. Only 350k households received assistance in July, and at this pace, we estimate 1-2 million households will remain without aid and at risk of eviction when the last 2021 eviction bans expire on September 30.
- The strength of the housing and rental market suggests landlords will try to evict tenants who are delinquent on rent unless they obtain federal assistance. And evictions could be particularly pronounced in cities hardest hit by the coronacrisis, since apartment markets are actually tighter in those cities. Taken together, we believe roughly 750k households will ultimately be evicted later this year under current policy.
- Our literature review indicates a small drag on consumption and job growth from an eviction episode of this magnitude, but the implications for covid infections and public health are probably more severe.
- The end of the moratoriums would also exert downward pressure on shelter inflation as vacancy rates rise. Under our baseline estimates, post-moratorium evictions will raise the vacancy rate by about 1pp, which on its own would lower shelter inflation by 0.3pp in 2022, partially offsetting the intense upward pressure from the housing shortage.

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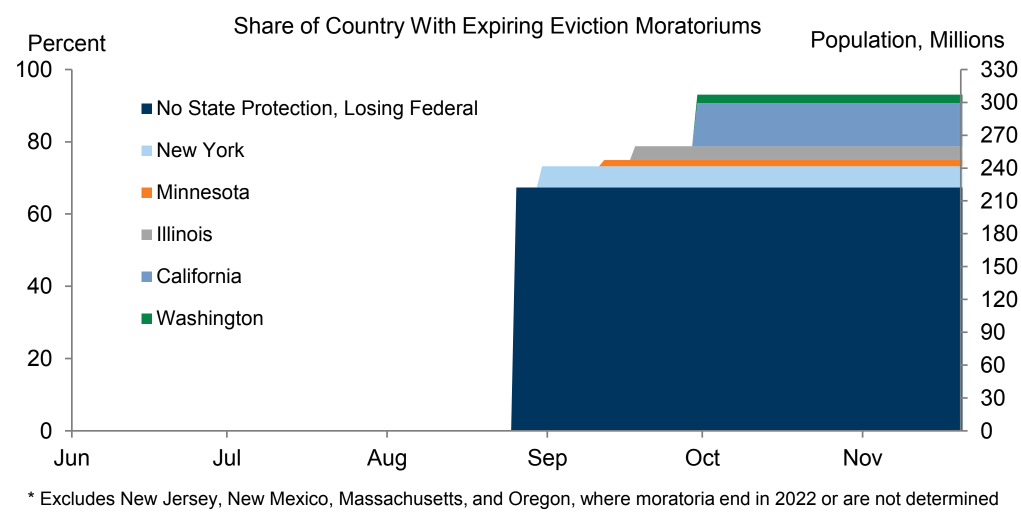
Evictions and the Economy as the Moratoriums End (Hill)

With the Supreme Court striking down the federal eviction moratorium previously set to expire on October 3 and with most state and local protections set to end by September, we take stock of the economic impact of the eviction moratorium, and explore how sharply evictions are likely to rise following its cancellation.

A Rental Policy Shock

On Thursday, the Supreme Court overturned the federal eviction moratorium[1] that had constrained the ability of landlords to evict tenants adversely affected by the pandemic recession. As shown in Exhibit 1, because most states do not currently have eviction bans in place and because those that do are also set to expire by September, roughly 90% of the country will lose access to these emergency protections by the start of the fourth quarter.

Exhibit 1: Thursday's Supreme Court Ruling Leaves Most of the Country Without Eviction Protection; NY and CA Bans Also Expiring Soon



Source: Goldman Sachs Global Investment Research

The end of the eviction moratorium is likely to result in a sharp and rapid increase in eviction rates in coming months unless Emergency Rental Assistance (ERA) funding is distributed at a much faster pace or Congress addresses the issue, for example in the upcoming reconciliation package. Exhibit 2 summarizes these key deadlines.

[1] The Biden administration and the CDC had issued a new eviction moratorium on August 3rd after the previous version expired on July 31. The Biden/CDC moratorium covered roughly 90% of housing areas as the prior federal ban.

Exhibit 2: Tenant Protections Will Weaken Sharply Due to Supreme Court Rulings and Looming State Moratorium Expiration Dates

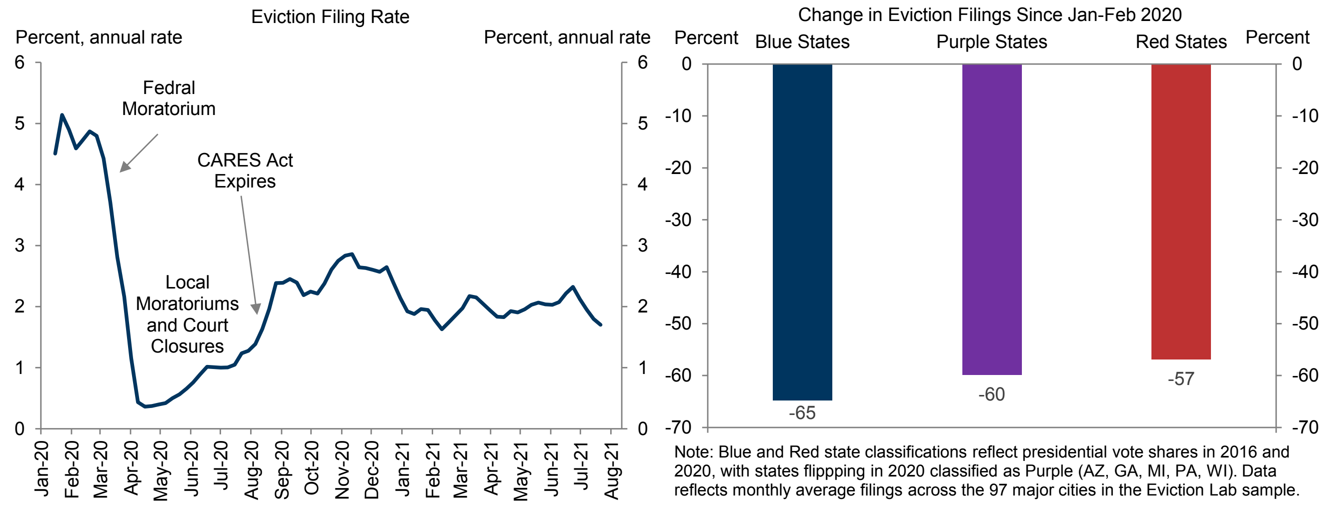
	Policy Change	Eligibility Criteria	Expiration
Congress			
CARES Act, Mar 2020	Eviction moratorium	1. In covered housing program, 2. Rural housing voucher program, **or** 3. Federally-backed mortgages	Expired 23 Aug 2020
Executive branch			
CDC Order, Sep 2020	Eviction moratorium	1. Pursued housing assistance, 2. Likely to be homeless after eviction, 3. Making best efforts to pay part of the rent, 4. Substantial household income loss, **and** 5. Under $99k annual income ($198k if filing jointly) or received CARES Act stimulus check	Expired 31 Jul 2021
CDC Order, Aug 2021	Eviction moratorium	1. Same as above, **and** 2. County experiencing "high" or "substantial" rates of Covid transmission (95% of US)	Struck Down 26 Aug 2021
State programs			
California	Eviction moratorium	1. Covid-related financial hardship after August 2020, **and** 2. Paying at least 25% of rent due	30 Sep 2021
New York	Eviction moratorium	Covid-related financial hardship.	31 Aug 2021
Massachusetts	Eviction moratorium	Pending application for rental assistance	Discretion of the Court
Illinois	Eviction moratorium	Covid-related financial hardship.	18 Sep 2021
Washington	Eviction moratorium	1. Pending application for rental assistance, **or** 2. Jurisdiction anticipating additional rental assistance resources	30 Sep 2021
New Jersey	Eviction moratorium	1. Below 120% of Area Median Income **and** 2. Pending application for rental assistance, **and** 3. Covid-related financial hardship 1. Same as above , **and** 2. Below 80% of Area Median Income, **and**	31 Aug 2021 31 Dec 2021
Oregon	Eviction moratorium	Pending application for rental assistance	60 Days from Court Order
Minnesota	Eviction moratorium	All nonpayment of rent Pending application for rental assistance	12 Sep 2021 1 Jun 2022
Supreme Court			
Alabama Realtors v. HHS, Aug 2021	Strikes down CDC eviction moratorium	Applies to CDC eviction moratorium	NA
Chrysafis v. Marks, Aug 2021	New York tenants seeking eviction protection must prove financial hardship in Court	Applies to New York State eviction moratorium	NA

Source: Goldman Sachs Global Investment Research

These policies significantly reduced evictions during the first 18 months of the pandemic, with eviction rates actually falling instead of rising as we typically expect during a recession. Because of the legal gray area and income-eligibility requirements of the federal eviction bans, state and local moratoriums have often been more effective in preventing evictions. As shown in the left panel of Exhibit 3, eviction rates plummeted to near-zero while the strictest eviction bans of spring 2020 were in effect[2], and on average, eviction filing rates remain less than half their pre-crisis pace.

2 The direct impact of lockdowns and court closures also likely contributed.

Exhibit 3: Eviction Rates Plummeted During the Coronacrisis—Particularly in Blue States—as Policy Changes More than Offset the Impact of Deteriorating Tenant Finances



Note: Blue and Red state classifications reflect presidential vote shares in 2016 and 2020, with states flippping in 2020 classified as Purple (AZ, GA, MI, PA, WI). Data reflects monthly average filings across the 97 major cities in the Eviction Lab sample.

Source: EvictionLab, Goldman Sachs Global Investment Research

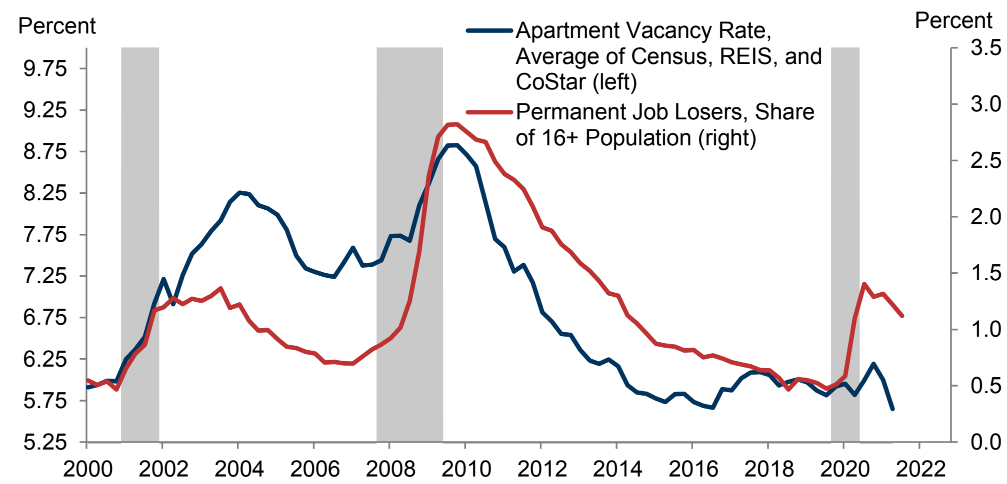
As shown in the right panel, eviction filings have generally fallen more dramatically in states and cities adopting more stringent protections like California and New York (-65% across Blue States). These states are also more likely to interpret the federal moratoriums more generously than Red States.

Economic Impact of the Moratoriums

The eviction moratoriums primarily affected the real economy through their impact on public health, with smaller effects on tenant-occupied housing consumption and consumer cash flows. With over 5% of the 45mn households who rent delinquent in April/May 2020, according to the National Multifamily Housing Council (NMHC), a mass eviction episode in mid-2020 could have significantly increased covid-related hospitalizations and deaths. Research shows that by reducing homelessness and overcrowded living quarters during a pandemic, eviction bans reduced the spread of the virus—in turn preventing even larger decline in public health and economic activity.

As shown in Exhibit 4, instead of rising by the roughly 1.5 points implied by coronacrisis permanent job losses, rental vacancy rates ticked up modestly in mid-2020 then quickly fell back to and below pre-crisis levels. And this counterfactual rate is likely an underestimate: if landlords had also resorted to mass evictions of workers on temporary layoff, the vacancy rate rise could have been several times larger.

Exhibit 4: Income Support Programs and Eviction Moratoriums Prevented a Much Larger Rise in Pandemic Housing Losses



Source: Goldman Sachs Global Investment Research, Census Bureau, CoStar, Moody's Analytics

While the public health benefits and second-order growth effects are difficult to estimate, the more straightforward impact of the eviction bans on tenant-occupied housing consumption was also likely positive. This consumption category continued to rise during the crisis in spite of the surge in unemployment (+0.9% in 2020 and +0.8% in 1H21, real basis). However, the category represents only 2.5% of GDP, so the direct impact on GDP levels through this channel was probably small (0.1-0.2% of GDP)[3].

Today's Eviction Backlog

Estimates of rental delinquencies run the gamut from under 1mn units to upwards of 15mn[4], with the wide range reflecting the rapid changes in the labor and rental markets over the last year, as well as the lack of timely and representative data on the subject. Our estimates, shown in Exhibit 5, indicate 1-2mn households at risk of eviction even after next month's federal aid distributions, and we believe roughly 750k households would be evicted under the status quo.

As shown in the exhibit, we estimate the number of housing units at risk of eviction, based on uncollected tenant revenues in 2021Q2 for large property managers, representing 20mn tenant-occupied housing units[5], and based on survey data reporting

[3] Another possible growth channel is the reduced consumption and investment activity of landlords, property managers, and residential REITs—for whom the moratoriums reduced rental income (due to longer average delinquency spells among tenants). However, with opportunities for consumption and investment already significantly depressed by the pandemic, we believe the incremental drag from property-owner cash flow constraints were small or insignificant for the economy as a whole.

[4] The Philly Fed estimated nearly 1 million units with back rent still owed in March 2021, the Census Household Pulse survey currently indicates roughly 6 million households behind on rent, and Stout estimates an even higher number (between 7-14 million households).

[5] For large property managers, we estimate the current pace of delinquencies based on the bad debt expense reported during Q2 earnings season. This line item represents the net share of quarterly rental revenues still uncollected ~3 weeks after the end of the quarter. At 2.0% on average across residential REITS, this would be consistent with 2 of every 100 units missing rent payments for April, May, and June 2021 (on a revenue-weighted basis). Because some rental units missed payments earlier in the crisis but nonetheless made all three rent payments in Q2, this 2.0% figure likely understates the total delinquencies. Accordingly,

the share of consumers who owe back rent and also "lost employment income" during the pandemic, representing the remaining 25mn units[6].

Because the moratoriums also deferred hundreds of thousands of evictions unrelated to the pandemic, we add an additional backlog to reflect these missing filings using Eviction Lab data[7] (we estimate only "pandemic-related" delinquencies from the first subset to avoid double counting).

we add another 2.3pp based on 1Q21 and 4Q20 NMHC rent delinquency trend—which has the benefit of a longer history but the drawback of only tracking payments for the most recent month. Together, we estimate that 4.3% of housing units are delinquent and at risk of eviction among large property managers, or 0.8mn units.

6 Lacking timely data from smaller "mom and pop" landlords, we analyze and adjust consumer survey data to estimate delinquencies in the remaining 25mn units of the rental market. Because some rent payments are delayed even in normal economic times and because landlords generally do not evict tenants whose debts are small or short-lived, we identify tenants in the survey data who are not current on rent payments AND lost employment income during the pandemic recession—7.8% of households based on the Census Pulse survey. On a weighted-average basis, this implies 2.6mn households at risk of eviction nationwide because of the pandemic.

7 We assume a counterfactual eviction rate of 2.5%—based on the low-unemployment economy heading into the pandemic—and we calculate this backlog by applying the actual decline in eviction filings using the Eviction Lab dataset.

Exhibit 5: 2½-3½ Million Households Now at Risk of Eviction

Rent Delinquencies and Back Rent Outstanding, August 2021	REITs & Large Properties	Small Landlords	All Rental Properties
Recession-related Delinquencies			
Number of units			
Renter-occupied housing units (mn)	19.4	25.2	44.7
Share missing rent payments in 2Q21 [1]	1.5%		
Share with unpaid rent earlier in crisis [2]	1.7%		
Coronacrisis delinquencies (% of rental units) [3]	**3.2%**	**7.8%**	
Units at risk of eviction (mn)	**0.6**	**2.0**	**2.6**
Rent outstanding			
Average number of months owed [4]			4.4
Average monthly housing rent, economy-wide			$1,043
Coronacrisis back rent outstanding ($bn)			**12.0**
Moratorium-related Eviction Backlog			
Counterfactual eviction rate (in normal economy)[5]			2.5%
Actual decline in eviction filings, Mar '20 - Aug '21			-61%
Months			18
Additional backlog (% of rental units)			**2.3%**
Units at risk of eviction (mn)			**1.0**
Total units at risk of eviction (mn)			**2.6-3.6**
Percent of rental housing stock			5-7%
Total backrent due ($bn)			**12-17**

(1) Reflects revenue impact of unpaid tenant rent for publicly traded residential REITs (simple average of MAA, CPT, ESS, EQR, AMH, AIRC, INVH, UDR, and AVB). We subtract 50bps to reflect the bad debt expense typically during normal economic periods (estimated separately).
(2) Based on average NMHC rent delinquencies during 4Q20 and 1Q21, scaled to 2Q21 residential REIT actuals. Assumes units missing rent payments during March-September 2020 missed additional rent payments subsequently (and thus are counted above) or vacated their housing units.
(3) 7.8% reflects the share of rental households missing rent payments in 2Q21 that had also lost employment income, Census Household Pulse Survey
(4) Reflects Equity Residential ratio of tenant debt outstanding to the 2Q21 flow of tenant bad debt (also adjusted for units with outstanding delinquencies from previous periods)
(5) Assumes eviction rate of 2.5%, consistent with a late-cycle, low-unemployment economy (versus to 2.8% in 2016 and 3.7% during 2008-09).

Source: Census Bureau, National Multifamily Housing Council, Equity Residential, Goldman Sachs Global Investment Research

Together, we estimate 2½-3½mn households significantly behind on rent and at risk of eviction without policy support. Eviction Lab data indicate that roughly half of eviction filings historically result in eviction (47% over 2006-2016), and in our remaining analyses, we assume that barring a new eviction ban from Congress or a much faster pace of ERA distribution, 750k households will face eviction in the fall and winter months. With 8-9mn Americans currently unemployed and emergency unemployment programs winding down, the sudden loss of tenant protections could plausibly generate an eviction episode of this magnitude.

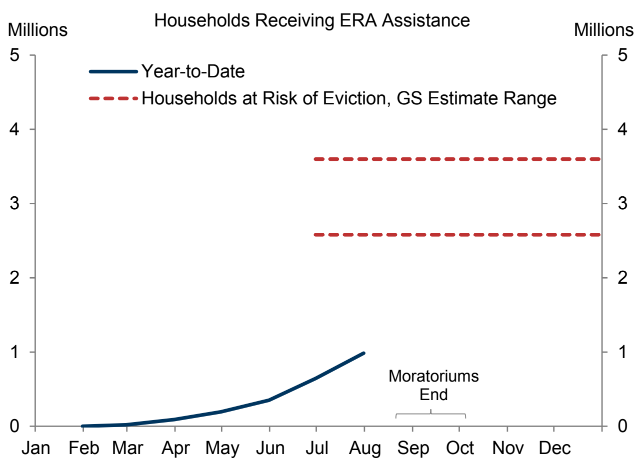
We translate these figures to a dollar amount of back rent based on the stock and flow of bad tenant debt among residential REITs. Specifically, we assume Equity Residential's ratio of bad debt (on its balance sheet) to the Q2 flow of bad debt (the revenue impact on the income statement). Coupled with our other assumptions, this implies 4.4 months of rent payments outstanding on average across tenants who are behind on rent. This is consistent with research from the Center for Budget and Policy Priorities estimating average tenant debt at 3 months' rent. Taken together, we estimate $12-17bn of bad tenant debt accumulated during the crisis.

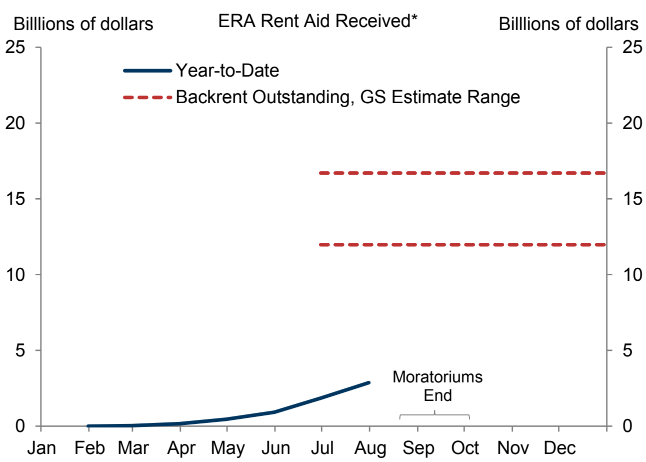
Yet Another Bottleneck

With $25bn already dispersed from the Treasury to state and local governments and another $20bn available[8], the size of the Congressional allocation would appear more than sufficient to prevent an eviction crisis. But so far, the process of recovering back rents from the ERA has been disappointingly slow, in part because doing so requires a significant amount of matching of information from the renter and the landlord. After doubling month-over-month in June to $1.5bn, the pace of distributions plateaued at $1.7bn in July (and $4.5bn cumulatively). Because of this and because utilities and electric bills are absorbing a significant minority of these funds[9], under current policy, a significant share of the 2½-3½mn households behind on rent could ultimately face eviction later this year.

As shown in Exhibit 6, at the current monthly processing pace of 350k households, we estimate that 1-2mn delinquent households would remain without ERA aid at the start of Q4 when the last 2021 eviction bans are set to expire (NY, WA).

Exhibit 6: Emergency Rental Assistance Aid May Not Arrive in Time





*For rent and rent arrears. Assumes 39% of ERA distributions allocated toward utilities payments (versus 61% for rent), reflecting the economy-wide spending ratio in 2019.

Source: EvictionLab, Goldman Sachs Global Investment Research

The strength of the housing and rental market suggests landlords will try to evict delinquent units unless they can obtain federal funding. In fact, as shown in Exhibit 7, apartment markets are actually *tighter* in cities hardest hit by the coronacrisis. This reduces the incentive for landlords to negotiate with delinquent tenants or wait for federal aid.

Economic Consequences

What would a surge in evictions mean for employment, consumption, and inflation?

Reviewing the literature, we find that eviction increases the likelihood of a subsequent

[8] $46bn of Emergency Rental Assistance (ERA) funding under the CARES and ARP Acts is available to keep eligible, lower-income tenants in their homes.

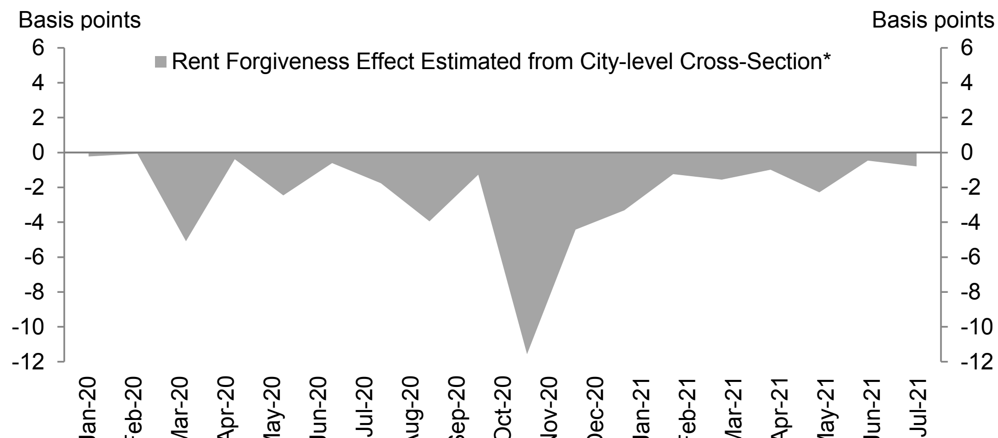
[9] Additionally, only lower-income households are eligible for federal aid, with the threshold set at 80% of median area income.

unemployment spell by around 2pp[10]. Based on 750k units and 1.17 payroll jobs per household, we estimate 20k incremental job losses over the next year as a result of the end of the moratoriums.

While the consumption effects of such job losses would be small for economy as a whole, the end of the moratoriums also means that households who skipped rent payments would need to cut back in other areas. Based on a marginal propensity to consume (MPC) of 0.7 for delinquent units during Q2, we estimate a ¼pp drag on Q4 consumption growth from this channel[11].

We conclude by analyzing the inflation implications of these developments. While small in GDP terms, housing rental prices provide the source data for 17% of the core PCE inflation basket and 40% of the core CPI basket. As explored in more detail here, we believe eviction moratoriums reduced shelter inflation early in the crisis by increasing the prevalence of rent forgiveness: the CPI statisticians impute a 95% price reduction for such housing units. Updating our previous proxy based on city-level rent declines, we estimate rent forgiveness lowered PCE shelter prices by 0.32% during 2020 and by another 0.1% in 2021.

Exhibit 7: Minimal Drag from Rent Forgiveness on 2021 Shelter Inflation, Thanks to Labor Market Improvement and Emergency Unemployment Programs



*Reflects city-level declines in not-seasonally shelter CPI (rent + OER), aggregated using geographic weights. For months with positive rent growth in each year since 2010, we use the shortfall relative to the 10-year minimum as our proxy of the city-level rent forgiveness effect for that MSA and month.

Source: Goldman Sachs Global Investment Research

Looking ahead, the end of the moratoriums will likely boost the market supply of rental units, because evicted tenants often move in with family members or leave the urban rental market entirely. Based on the historical relationship between vacancies and

[10] The magnitude of these estimates span a wide range, from 1pp to 22pp; we favor the methodology of estimates towards the lower end of this spectrum that estimate the causal relationship.

[11] To estimate the impact of resuming rent payments on consumption, we first take our estimates of the number of units that skipped payments in Q2 and multiply them by the average monthly housing rent to get a dollar value of skipped rent payments. To get the annualized consumption effect, we apply marginal propensities to consume (MPCs) from previously-estimated ranges to the annualized dollar value of rent payments and scale it by Q2 annualized Personal Consumption Expenditures. We use relatively high MPCs to reflect our assumption that households who are behind on rent are at the lower end of the income distribution, and therefore consume a higher share of their income. Using this method, we estimate that the end of eviction moratoriums over the coming months will result in an annualized 26bps drag on consumption in Q4.

shelter inflation (holding unemployment constant), we estimate a 500k rise in vacancies would boost the rental vacancy rate by 1pp and exert 0.3pp of downward pressure on shelter inflation in 2022[12]. Despite this headwind, based on the continued improvement in the labor market, robust housing market fundamentals, and the sharp pickup in mid-year rental prices, we forecast PCE housing inflation to pick up from 2.2% currently to 3.5% at year-end and 4.6% in 2022.

Spencer Hill

Thank you to Manuel Abecasis for his extensive contributions to this report.

[12] Controlling for the unemployment rate to prevent omitted variable bias, we estimate a 1pp increase in the rental vacancy rate lowers year-on-year shelter inflation by 0.3pp (p-value = 0.00).

The US Economic and Financial Outlook

THE US ECONOMIC AND FINANCIAL OUTLOOK
(% change on previous period, annualized, except where noted)

	2019	2020	2021 (f)	2022 (f)	2023 (f)	2024 (f)	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
OUTPUT AND SPENDING														
Real GDP	**2.3**	**-3.4**	*6.0*	*4.5*	*1.9*	*2.1*	**6.3**	**6.6**	*5.5*	*6.5*	*4.5*	*3.5*	*2.5*	*1.5*
Real GDP (annual=Q4/Q4, quarterly=yoy)	**2.6**	**-2.3**	*6.2*	*3.0*	*1.9*	*2.1*	**0.5**	**12.2**	*5.7*	*6.2*	*5.8*	*5.0*	*4.2*	*3.0*
Consumer Expenditures	**2.2**	**-3.8**	*7.8*	*3.7*	*1.8*	*2.1*	**11.4**	**11.9**	*0.0*	*6.0*	*4.0*	*3.0*	*2.0*	*1.5*
Residential Fixed Investment	**-0.9**	**6.8**	*11.4*	*3.4*	*2.6*	*2.0*	**13.3**	**-11.5**	*5.9*	*6.0*	*4.0*	*4.0*	*3.0*	*3.0*
Business Fixed Investment	**4.3**	**-5.3**	*8.3*	*6.1*	*4.1*	*3.9*	**12.9**	**9.3**	*6.6*	*6.4*	*6.1*	*5.6*	*5.1*	*4.1*
Structures	**2.1**	**-12.5**	*-7.3*	*2.7*	*4.9*	*3.4*	**5.4**	**-5.4**	*0.5*	*2.0*	*2.0*	*4.0*	*8.0*	*6.0*
Equipment	**3.3**	**-8.3**	*14.5*	*6.8*	*3.0*	*2.8*	**14.1**	**11.6**	*6.3*	*7.0*	*8.0*	*7.0*	*4.0*	*2.5*
Intellectual Property Products	**7.2**	**2.8**	*10.5*	*7.0*	*5.0*	*5.2*	**15.6**	**14.6**	*10.0*	*8.0*	*6.0*	*5.0*	*5.0*	*5.0*
Federal Government	**3.8**	**5.0**	*0.9*	*-1.2*	*0.0*	*0.0*	**11.3**	**-5.2**	*-4.0*	*-2.0*	*0.0*	*0.0*	*0.0*	*0.0*
State & Local Government	**1.3**	**0.9**	*0.9*	*3.3*	*0.6*	*0.5*	**-0.1**	**0.3**	*5.6*	*5.0*	*5.0*	*2.0*	*0.5*	*0.5*
Net Exports ($bn, '12)	**-905**	**-943**	*-1,245*	*-1,267*	*-1,250*	*-1,236*	**-1226**	**-1247**	*-1243*	*-1264*	*-1272*	*-1270*	*-1265*	*-1262*
Inventory Investment ($bn, '12)	**75**	**-42**	*-35*	*110*	*69*	*60*	**-88**	**-169**	*26*	*90*	*105*	*115*	*120*	*100*
Industrial Production, Mfg.	**-2.0**	**-6.6**	*6.7*	*5.2*	*1.8*	*2.0*	**2.7**	**5.0**	*6.3*	*7.3*	*5.8*	*4.6*	*3.1*	*1.4*
HOUSING MARKET														
Housing Starts (units, thous)	**1,292**	**1,397**	*1,623*	*1,676*	--	--	**1,599**	**1,586**	*1,662*	*1,645*	*1,653*	*1,682*	*1,686*	*1,685*
New Home Sales (units, thous)	**683**	**828**	*860*	*918*	*977*	*978*	**896**	**739**	*876*	*928*	*913*	*901*	*908*	*951*
Existing Home Sales (units, thous)	**5,327**	**5,658**	*5,972*	*5,964*	*6,086*	*6,210*	**6,303**	**5,833**	*5,862*	*5,891*	*5,920*	*5,949*	*5,979*	*6,009*
Case-Shiller Home Prices (%yoy)*	**3.4**	**9.9**	*9.4*	*7.6*	*6.2*	--	**11.7**	**15.2**	*11.7*	*9.4*	8.1	6.1	7.8	7.6
INFLATION (% ch, yr/yr)														
Consumer Price Index (CPI)**	**2.3**	**1.3**	*4.9*	*2.2*	*2.4*	*2.4*	**1.9**	**4.8**	*5.2*	*5.0*	*4.6*	*3.1*	*2.1*	*2.2*
Core CPI **	**2.2**	**1.6**	*4.4*	*2.5*	*2.5*	*2.5*	**1.4**	**3.7**	*4.1*	*4.2*	*4.5*	*3.1*	*2.4*	*2.5*
Core PCE** †	**1.6**	**1.5**	*3.80*	*2.00*	*2.15*	*2.20*	**1.7**	**3.4**	*3.5*	*3.8*	*3.6*	*2.6*	*2.1*	*2.0*
LABOR MARKET														
Unemployment Rate (%)^	**3.6**	**6.7**	*4.1*	*3.5*	*3.3*	*3.2*	**6.0**	**5.9**	*4.7*	*4.1*	*3.7*	*3.6*	*3.5*	*3.5*
U6 Underemployment Rate (%)^	**6.8**	**11.7**	*7.5*	*6.7*	*6.3*	*6.1*	**10.7**	**9.7**	*8.4*	*7.5*	*7.0*	*6.8*	*6.7*	*6.7*
Payrolls (thous, monthly rate)	**168**	**-785**	*643*	*204*	*116*	*100*	**518**	**607**	*831*	*617*	*317*	*200*	*156*	*143*
Employment-Population Ratio (%)^	**61.0**	**57.4**	*59.7*	*60.2*	*60.3*	*60.2*	**57.8**	**58.1**	*59.2*	*59.9*	*60.0*	*60.1*	*60.2*	*60.2*
Labor Force Participation Rate (%)^	**63.3**	**61.5**	*62.2*	*62.4*	*62.3*	*62.2*	**61.5**	**61.6**	*61.9*	*62.2*	*62.3*	*62.3*	*62.4*	*62.4*
GOVERNMENT FINANCE														
Federal Budget (FY, $bn)	**-984**	**-3,132**	*-3,000*	*-1,300*	*-1,100*	*-1,200*	--	--	--	--	--	--	--	--
FINANCIAL INDICATORS														
FF Target Range (Bottom-Top, %)^	**1.5-1.75**	**0-0.25**	*0-0.25*	*0-0.25*	*0.25-0.5*	*0.75-1*	**0-0.25**	**0-0.25**	*0-0.25*	*0-0.25*	*0-0.25*	*0-0.25*	*0-0.25*	*0-0.25*
10-Year Treasury Note^	**1.92**	**0.93**	*1.60*	*1.80*	*2.30*	*2.45*	**1.74**	**1.45**	*1.40*	*1.60*	*1.60*	*1.60*	*1.60*	*1.80*
Euro (€/$)^	**1.12**	**1.22**	*1.21*	*1.25*	*1.30*	*1.30*	**1.17**	**1.18**	*1.18*	*1.21*	*1.23*	*1.24*	*1.25*	*1.25*
Yen ($/¥)^	**109**	**103**	*109*	*105*	*102*	*100*	**111**	**111**	*110*	*109*	108	107	106	105

* Weighted average of metro-level HPIs for 381 metro cities where the weights are dollar values of housing stock reported in the American Community Survey. Annual numbers are Q4/Q4.
** Annual inflation numbers are December year-on-year values. Quarterly values are Q4/Q4.
† PCE = Personal consumption expenditures. ^ Denotes end of period.
Note: Published figures in bold.
Source: Goldman Sachs Global Investment Research.

Source: Goldman Sachs Global Investment Research

Economic Releases

Date		Time (ET)	Indicator	Estimate GS	Estimate Consensus	Last Report
Mon	**Aug 30**	**10:00**	**Pending Home Sales (July)**	**+1.0%**	**+0.4%**	**-1.9%**
		10:30	Dallas Fed Manufacturing Index (August)	n.a.	23.0	23.7
Tue	**Aug 31**	9:00	FHFA House Price Index (June)	n.a.	+1.9%	+1.7%
		9:00	**S&P/Case-Shiller Home Price Index (June)**	**+1.7%**	**+1.8%**	**+1.8%**
		9:45	**Chicago Purchasing Managers' Index (August)**	**63.0**	**68.0**	**73.4**
		10:00	**Consumer Confidence (August)**	**124.0**	**123.0**	**129.1**
Wed	**Sep 01**	**8:15**	**ADP Employment (August)**	**+600k**	**+638k**	**+330k**
		10:00	**Construction Spending (July)**	**+0.4%**	**+0.2%**	**+0.1%**
		10:00	**ISM Manufacturing Index (August)**	**58.0**	**58.5**	**59.5**
		17:00	**Lightweight Motor Vehicle Sales (August)**	**13.9M**	**14.5M**	**14.8M**
Thu	**Sep 02**	**8:30**	**Nonfarm Productivity (Q2 final)**	**+2.3%**	**+2.4%**	**+2.3%**
			Unit Labor Costs (Q2 final)	**+0.9%**	**+1.0%**	**+1.0%**
		8:30	**Initial Jobless Claims**	**+340k**	**+345k**	**+353k**
			Continuing Claims	n.a.	+2,800k	2,862k
		8:30	**Trade Balance (July)**	**-$72.2bn**	**-$71.0bn**	**-$75.5bn**
		10:00	**Factory Orders (July)**	**flat**	**+0.3%**	**+1.5%**
Fri	**Sep 03**	**8:30**	**Nonfarm Payrolls (August)**	**+600k**	**+750k**	**+943k**
			Private Payrolls (August)	**+450k**	**+700k**	**+703k**
			Unemployment Rate (August)	**+5.2%**	**5.2%**	**5.4%**
			Average Hourly Earnings (August mom)	**+0.3%**	**+0.3%**	**+0.4%**
			Average Hourly Earnings (August yoy)	**+3.9%**	**+4.0%**	**+4.0%**
			Labor Force Participation Rate	n.a.	61.8%	61.7%
		10:00	**ISM Services Index (August)**	**62.1**	**62.0**	**64.1**

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

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We, Jan Hatzius, Alec Phillips, David Mericle, Spencer Hill, CFA, Joseph Briggs and Ronnie Walker, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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