

Consumer Morsel

High energy impact?

23 September 2022

Key talking points

- According to Bank of America data, the average rise in customer utility bills in August was 16.3% YoY. In the short-run, households appear unlikely to get much relief from these higher prices: with world natural gas elevated because of the war in Ukraine and seasonal demand for energy as the US enters winter.
- Can households afford to carry on paying if high prices persist? Utility bills make up a relatively small percentage of overall spending and households are still benefiting from a strong labor market and elevated savings. So in our view there is some buffer.
- But there are some warning lights from a Bank of America and CivicScience survey, which finds 17% of US households have missed or made late payments on utility bills. Lower income groups are under more strain. This suggests we should not be complacent on the impact of high energy prices on consumers.

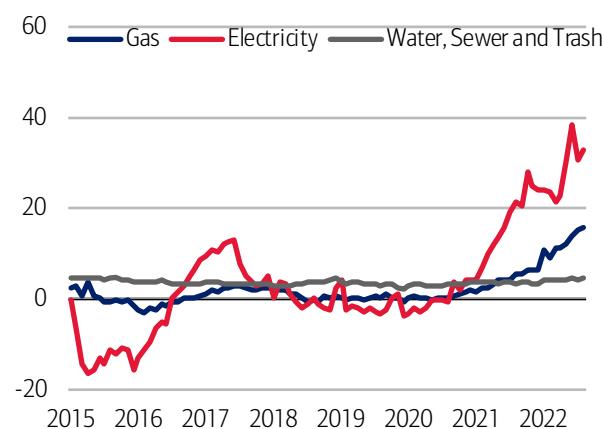
Lower income consumers appear to be experiencing the highest bill increases

US households are facing rising prices for utilities. Electricity prices are showing the highest price inflation – up by a hefty 33% in the year to August (see Exhibit 1), according to the Bureau of Labor Statistics. Natural gas prices are displaying more modest rises but are still up 15.8% YoY.

According to Bank of America customer data, covering ACH (Automated Clearing House), credit, debit and bill pay payment channels, the rise in electricity and gas prices is reflected closely in regular monthly utility bills¹. The average monthly payment was up 16.3% in the year to August and households earning less than \$150K appear to have seen rises in line with this figure. Meanwhile households with income above \$150K have seen smaller increases of 11.1% (see Exhibit 2 for price rise breakdown by household income group). At face value this is concerning, as lower income households will tend to have a higher share of their total spending on utilities – so they are being hit by both experiencing higher price rises and a greater overall spending impact.

Exhibit 1: Consumer prices for household utilities (% change, YoY)

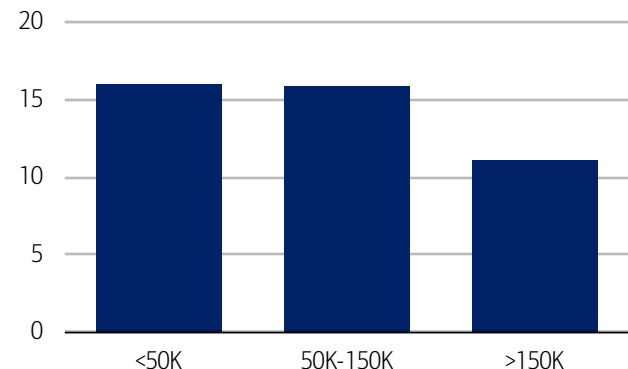
Electricity and Gas prices have increased sharply



Source: Bureau of Labor Statistics (BLS)

Exhibit 2: Average customer monthly utility payment in August (% change, YoY)

Lower income groups have experienced the largest rises in monthly payments



Source: Bank of America internal data

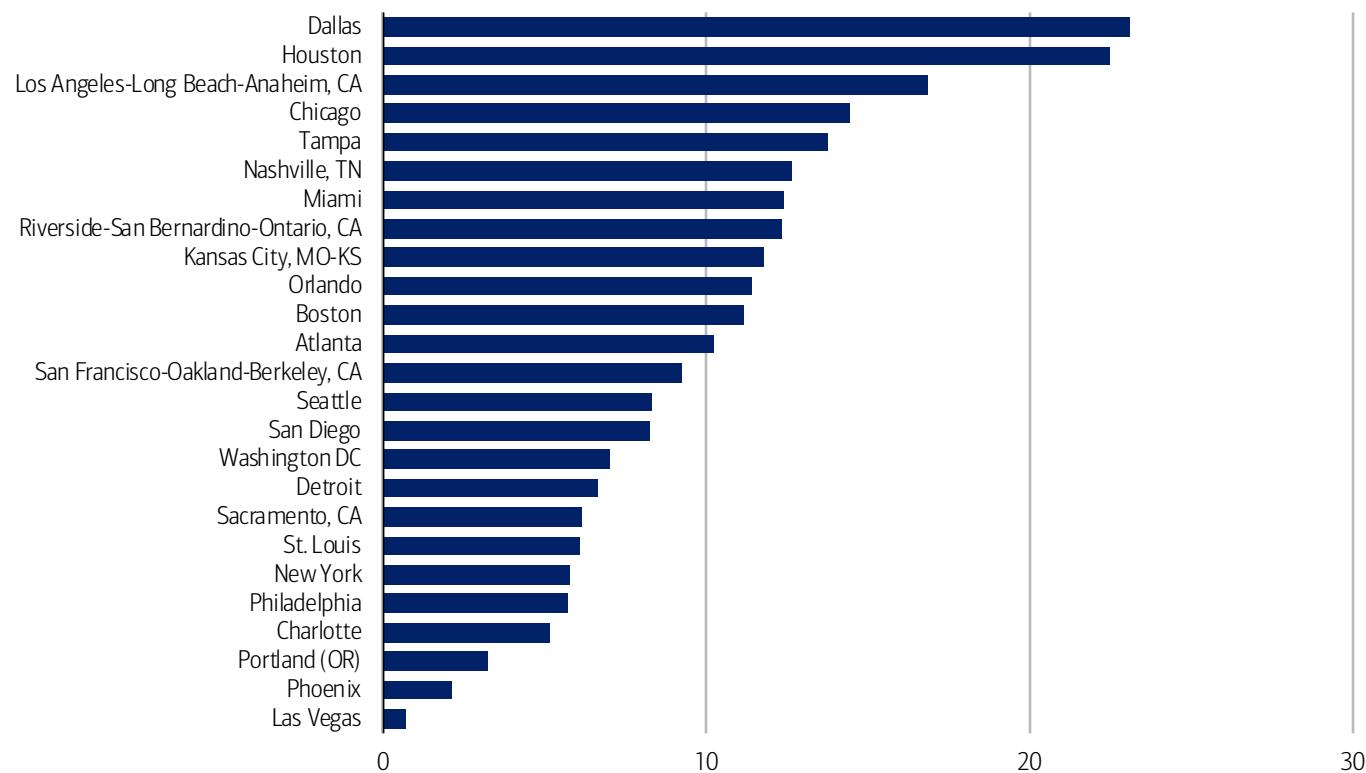
¹ Bank of America data on utility spending includes Electric, Gas, Heating Oil, Sanitary, Water, Coal, Fuel Oil, Liquefied Petroleum and Wood merchant categories.

Interestingly, at the regional level, Bank of America customer data by Core Based Statistical Areas (CBSA) shows a fairly large variation in bill increases – Houston and Dallas registered the highest rises in median monthly customer payments of close to 25% the three months through August 2022 vs the same period in 2021. Las Vegas, Phoenix and Portland report the smallest rises at 0.7%, 2.1% and 3.2%, respectively.

Electric utility bills are a function of the volumetric rate (cents per kilowatt hour) and demand consumption (kilowatts). As a result, the customer bill is very sensitive to temperatures which in the summer months influence air conditioner usage. Southern geographies tend to have higher demand loads in the summer ('summer peaking') versus Northern states that consume more electricity in the winter months typically ('winter peaking').

Exhibit 3: Median customer monthly payment by Core Based Statistical Area (Three-month median covering June-August 2022, % change YoY)

There is some disparity in the rise in bills across the country. Dallas bills increased by 23% YoY, while Las Vegas bills increased by 0.7%.



Source: Bank of America internal data

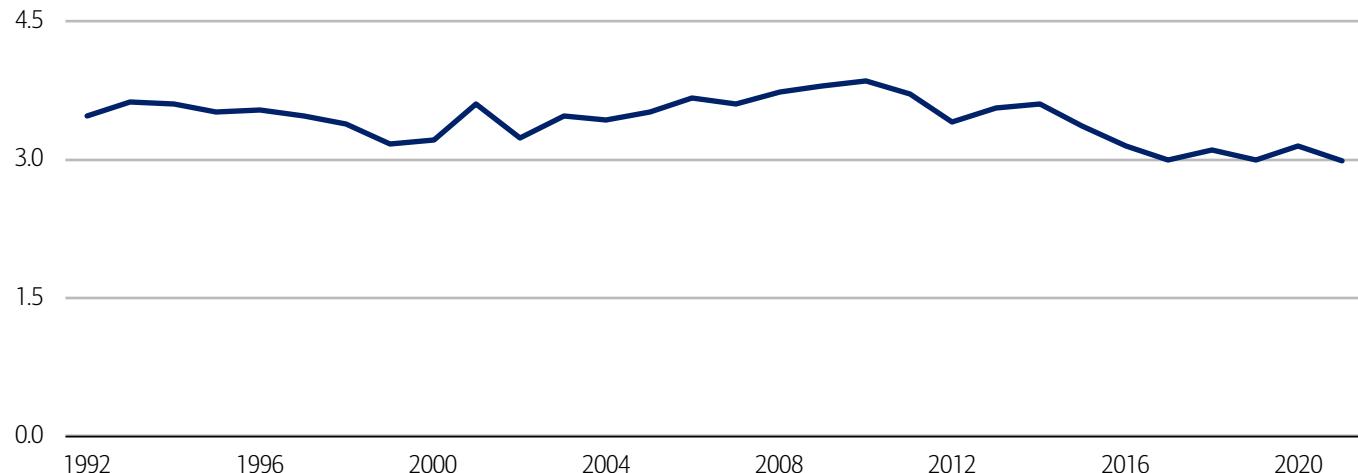
How big of a deal is higher utility spending?

Is higher spending on gas and electricity hurting the average American household? Data from the Bureau of Labor Statistics' Consumer Expenditure Survey indicates that spending on these energy services made up around 3.0% of average household spending in 2021. Between 1992 and 2021 the average share was 3.4%. So, heading into 2022, household spending on these services was not especially high. But the August 2022 weight for gas and electricity services in the Consumer Price Index was 3.6%, indicating that rising utility prices has pushed household spend on utilities slightly above the long-term average.

While regional differences exist, many utilities and state regulators informally target levels below 5.0% with ~2.5-3.5% being deemed as more affordable. And aggregate level US households are still experiencing a strong labor market, solid wage gains and have accumulated savings compared to before the pandemic. So the overall situation, in our view, is not too concerning - in the sense that bills are not nearing unaffordable levels, for now.

Exhibit 4: Spending on natural gas and electricity as a share of average household annual expenditures (%)

The share of overall average household spending on gas and electricity was relatively low in 2020 and 2021



Source: Bureau of Labor Statistics

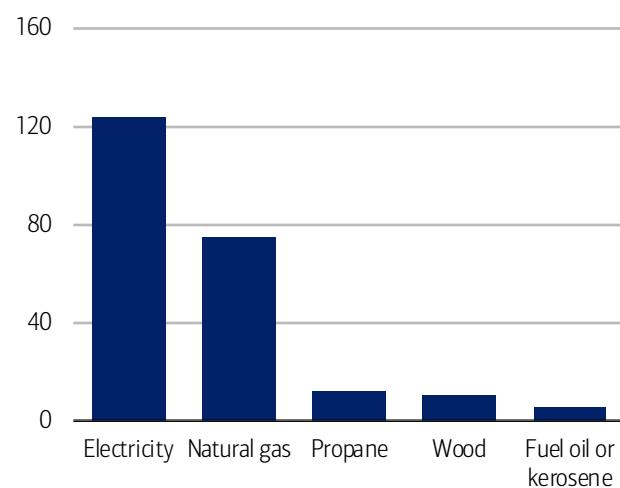
With gas prices likely to remain high, hope for a warm winter...

But what is the outlook for household spending on energy services going forward and if prices stay high for a long period of time will this start to hurt consumers more?

Exhibit 5 and Exhibit 6 show US households' dependency on both electricity and gas is quite balanced. While practically every house has electricity if only to power the lights, marginally more US households use gas to heat their homes, and water heating is pretty evenly split. As mentioned, Northern climates historically rely more on natural gas than electricity in the winter months.

Exhibit 5: Number of US households using various fuels (millions)

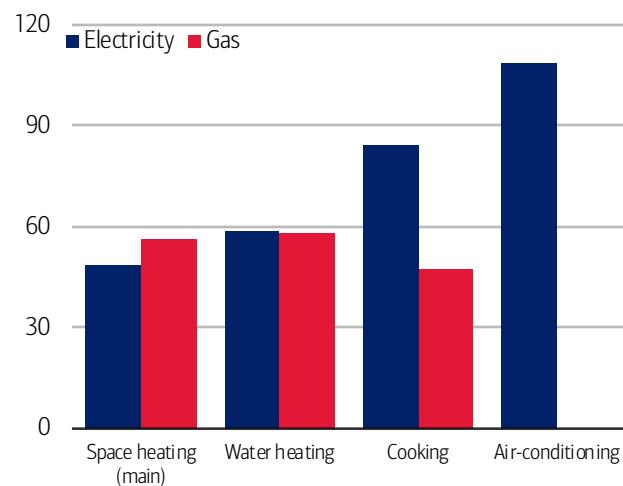
Natural gas is used by around 60% of US households



Source: U.S. Energy Information Administration

Exhibit 6: Households using electricity and gas by end use (millions)

Both gas and electricity are key to home and water heating



Source: U.S. Energy Information Administration

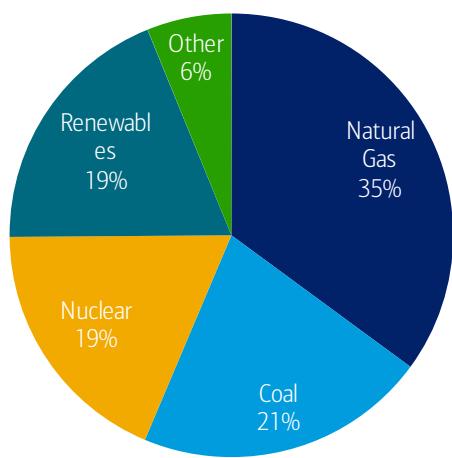
How the price of wholesale natural gas evolves is critical for gas and electricity bills because a high proportion of electricity is generated by burning natural gas (see Exhibit 7). Globally wholesale natural gas prices have been impacted by Russia's invasion of Ukraine and the subsequent uncertainty over gas supply. While Europe has been most affected, given its proximity and the reliance of many countries on Russian gas, increased demand for US natural gas has also seen US wholesale gas prices rise very sharply, as measured by the Henry Hub price (Exhibit 8). And assuming no likely quick end to the war in Ukraine, the price outlook for wholesale gas and the knock-on effect on retail energy prices for US households remains challenging.

BofA Global Research forecasts relatively high natural gas prices through to the end of 2022, before gradually declining in 2023. Many regulated utilities enter into hedging programs to reduce pricing volatility for customers in the short-term, dampening the

immediate impact of higher wholesale prices for many customers but meaning these higher wholesale prices can come through with a lag into retail prices.

Exhibit 7: US Electricity Generation by Fuel Type (%)

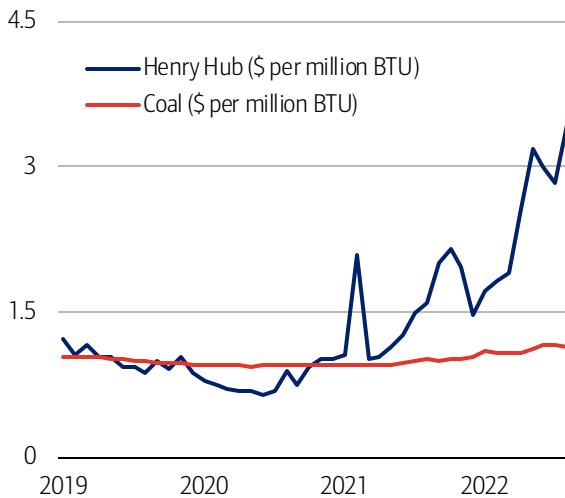
Natural gas fuels just over a third of electricity generation



Source: U.S. Energy Information Administration

Exhibit 8: Power Generation Fuel Costs (Index, 2019=100)

Natural gas prices have soared in 2022



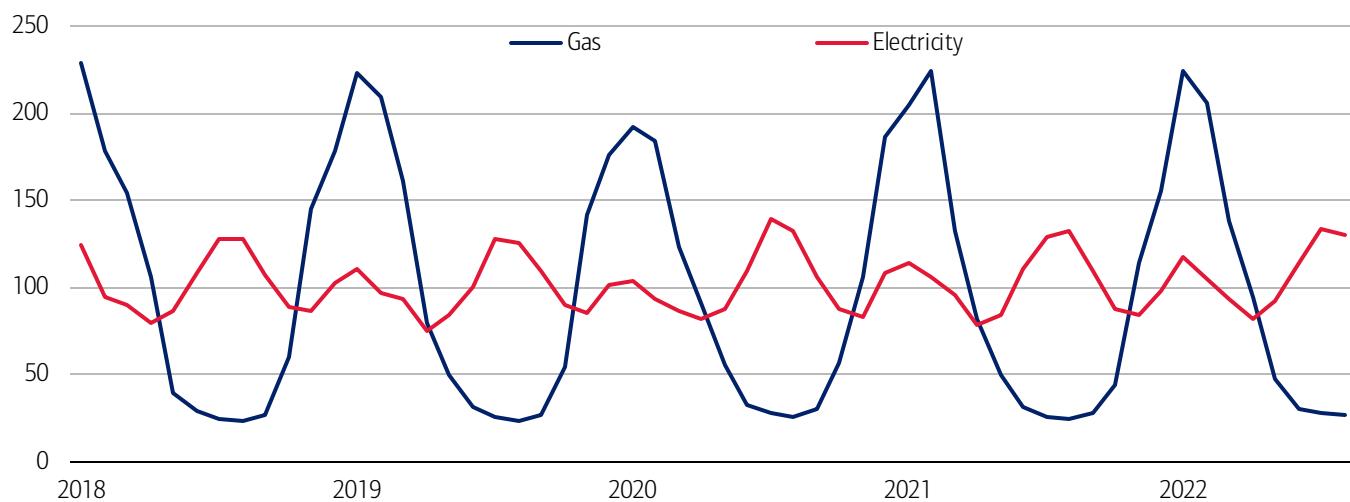
Source: U.S. Energy Information Administration

Exhibit 9 shows that residential demand in the US for both electricity and gas is seasonal, but gas usage varies more over a typical year because it's used mainly to heat homes in the winter months. Electricity consumption is less varied since it's also used to cool homes in the summer – air-conditioning accounts for around 17% of total household electricity demand.

At the regional level, some higher electricity bills from the summer months may have yet to hit households' doormats. In California, for example, the extreme heat wave continued into September and drove record electricity consumption, forcing the grid-operator to use more natural gas in generation than usual.

Exhibit 9: Residential consumption of natural gas (billion cubic feet per day) and electricity (billion kilowatt hours), (Index 2019=100)

Residential gas consumption is considerably more seasonal than electricity consumption



Source: U.S. Energy Information Administration

However, looking forward, a mild winter would imply lower demand for heating both from electricity and gas sources, which could help bring down prices for gas and electricity. Indeed, US residential electricity per capita use has been flat since 2010 due to warmer weather and energy efficiency. But of course, forecasting the weather is very difficult.

How many households are missing or making late payments?

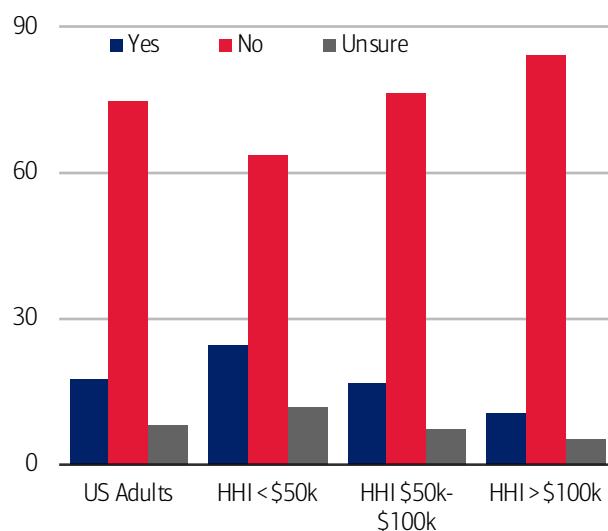
All things considered, the risk of higher bills persisting for some time is clear. So will consumers struggle to meet their bill payments?

Bank of America and CivicScience carried out a survey of the general US population to see whether households have missed or been late paying a utility bill due to financial difficulty. Exhibit 10 shows the response for the overall US sample and by household income groups. Around 17% of households had either missed or made a late payment. For households with income below \$50K, the proportion rises to 25%. Geographically (Exhibit 11), there was not much difference across cities surveyed.

The survey therefore suggests there is a sizeable proportion of the population who may be struggling, even though the aggregate position looks more comfortable. Many US utilities offer extended repayment plans for customers in financial and/or medical hardship to make large payments more manageable. Additionally there are state and local support programs that are available to the customers most in need.

Exhibit 10: Responses to the question, 'Have you, or someone in your household, recently missed or been late on a utility payment due to financial difficulty? (%)'

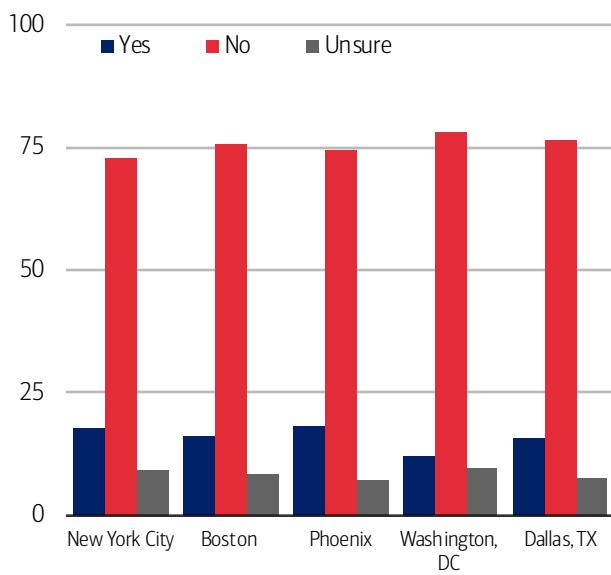
Around 17% of US adults appear say they have missed a utility payment due to financial difficulty



Source: Bank of America, CivicScience

Exhibit 11: Responses to the question, 'Have you, or someone in your household, recently missed or been late on a utility payment due to financial difficulty? (%)'

There appears to be little difference across several cities



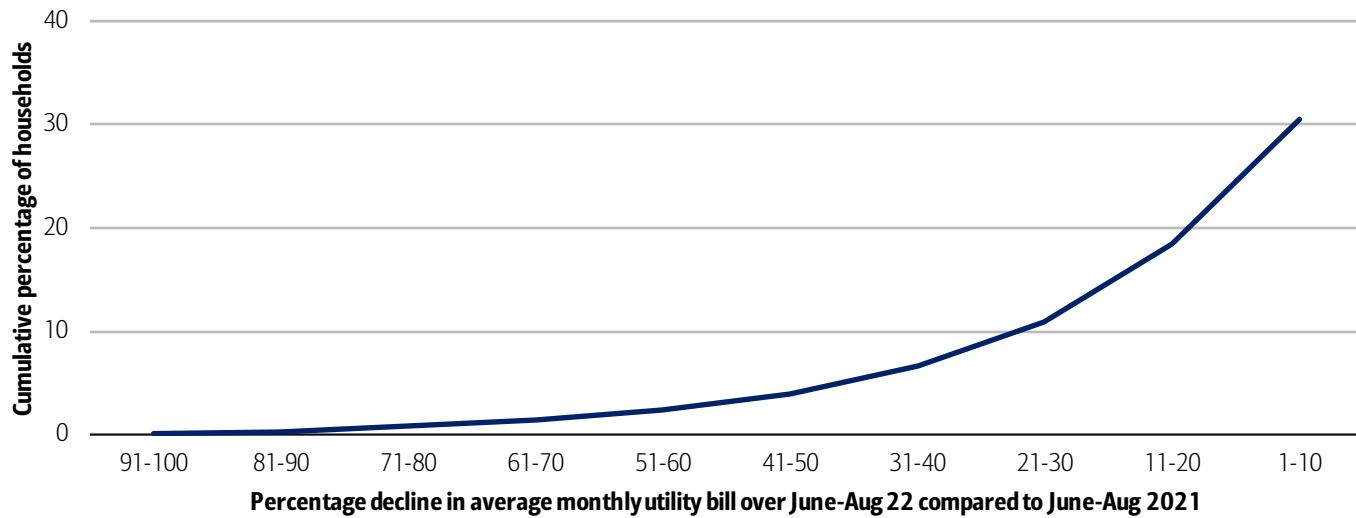
Source: Bank of America, CivicScience

We cross-check the survey results by looking at Bank of America data. Specifically, we look at a fixed sample of households that has operated primary deposit accounts continuously since January 2020. We narrow the sample to customers who did not change state or CBSA over the period to reduce the likelihood of capturing house-movers in the sample.

We then look at the average size of utility payments in June to August 2022 compared to the same months in 2021. We focus on households with an apparent sharp drop in average monthly payments as this may be an indicator that they may have missed or been late with a payment, given the general rise in utility bills over this timeframe. Exhibit 12 shows the cumulative distribution of those households experiencing declines in average utility payments. For example, around 30% of households in the sample experienced a drop in their average utility bill payments of more than 1%. Plainly a 1% drop is small and could easily represent changing consumption or other household changes. However, around 10% of the sample experienced a drop of 20% or more, and around 7% experienced a drop of 30% or more, which suggests these households may have had squeezed finances.

Exhibit 12: The cumulative percentage of households with average utility payments in Jun-Aug 2022 below that in Jun-Aug 2021 (%)

Around 10% of households appeared to have lower average utility payments by 30% or more



Source: Bank of America internal data

Our cross-check findings are in a similar ballpark to the survey results, but highlight that the figure of 17% of surveyed households experiencing significant difficulties with paying their utility bills may be an upper-bound.

The bottom line

The average US consumer is likely to be feeling modest pressure from higher bills given that the proportion of utility spending of total household outgoings is small – at just 3.4%. Moreover, the strong US labor market and associated wage growth mean many households are seeing their incomes rise at a solid rate. Further, deposit balances for many households remain elevated compared to before the pandemic – so households could always draw on these buffers if they needed too.

But for some households, higher utility bills may represent a considerable strain on their finances. The Bank of America and CivicScience survey suggests around 17% of households have missed or made a late payment, with 25% of the lower-income category in this position. If utility prices remain high, which seems quite possible given raised natural gas prices and the hedging dynamic that feathers-in the impact over two to three years, these households could come under pressure to make cuts in their other spending in order to keep the lights on.

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Methodology

Selected Bank of America transaction data is used to inform the macroeconomic views expressed in this report and should be considered in the context of other economic indicators and publicly available information. In certain instances, the data may provide directional and/or predictive value. The data used is not comprehensive; it is based on **aggregated and anonymized** selections of Bank of America data and may reflect a degree of selection bias and limitations on the data available.

The household consumer deposit data based on Bank of America internal data is derived by anonymizing and aggregating data from Bank of America consumer deposit accounts in the US and analyzing that data at a highly aggregated level.

Bank of America credit/debit card spending per household includes spending from active US households only. Only card holders making a minimum of five transactions a month are included in the dataset. Spending from corporate cards are excluded. Data regarding merchants who receive payments are identified and classified by the Merchant Categorization Code (MCC) defined by 7 financial services companies. The data is mapped using proprietary methods from the MCCs to the North American Industry Classification System (NAICS), which is also used by the Census Bureau, in order to classify spending data by subsector. Spending data may also be classified by other proprietary methods not using MCCs.

The utility spending data in this report covers ACH, credit, debit and bill pay payment channels.

The Bank of America and CivicScience survey was conducted between August 31 to September 7, asking 16,773 adults, 'Have you, or someone in your household, recently missed or been late on a utility payment due to financial difficulty?'

Additional information about the methodology used to aggregate the data is available upon request.

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