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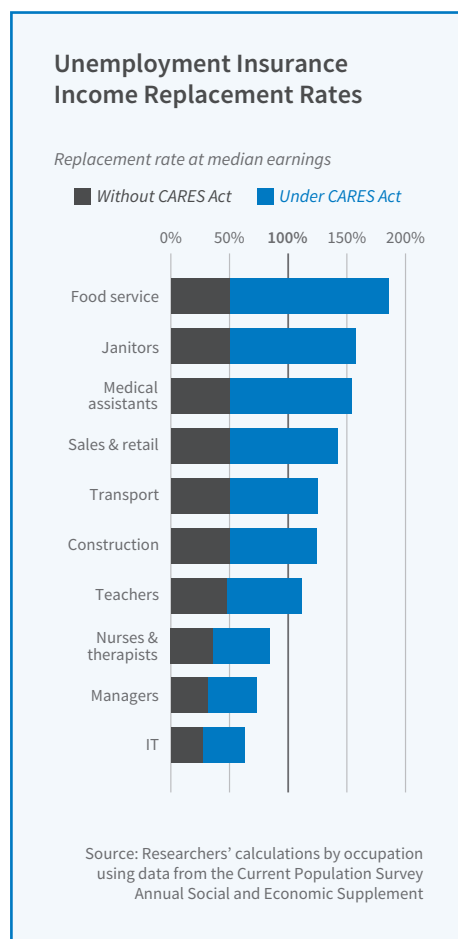
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Unemployment Benefit Replacement Rates during the Pandemic

Paying unemployment insurance benefits to those who lose their jobs provides them with financial support as they look for work. If a state sets benefits too high, it may discourage job-finding and delay beneficial labor reallocation. If benefits are too low, the unemployed may suffer from inadequate resources to sustain a minimum standard of living.

In **US Unemployment Insurance Replacement Rates during the Pandemic** (NBER Working Paper 27216), Peter Ganong, Pascal J. Noel, and Joseph S. Vavra calculate the distribution of unemployment insurance benefits under the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Under this legislation, the federal government added \$600 per week to state unemployment insurance (UI) benefits. As a result, the researchers estimate, half of the eligible unemployed are now entitled to total unemployment benefits that replace at least 134 percent of their lost wages. Two-thirds are eligible for benefits larger than their lost earnings, and a fifth are eligible for benefits that at least double their lost earnings.

The researchers construct quarterly earnings histories for workers using earnings data from the Current Population Survey Annual Social and Economic Supplement. They then apply the UI benefit formula for each state to calculate UI benefits, and they add payments



under the CARES Act. The CARES Act adds the same fixed amount to all workers' benefits, which leads to unemployment benefits that exceed wages at the lower end of the wage distribution. The mean prior weekly earnings of

Due to federal relief efforts, two-thirds of unemployed workers are receiving benefits larger than their lost earnings, and a fifth are receiving benefits that are at least double their lost earnings.

the unemployed were almost \$1,000 a week, while the median was less than \$750 a week.

The generosity of unemployment benefits varies across states, but prior to CARES most states replaced 30–50 percent of lost earnings. With the additional \$600-a-week payment from CARES on top of these baseline benefits, total payments now equal or exceed previous earnings for 68 percent of workers. The median beneficiary receives an amount equal to 134 percent of lost wages. In the bottom 20 percent of the income distribution, total unemployment benefits—UI plus CARES—are more than twice lost wages.

Because median lost wages are much lower than mean lost wages, and the CARES benefit boost was designed to generate a 100 percent earnings replacement for someone with mean earnings, total unemployment benefits now exceed lost wages for the median unemployed worker in every state. In Maryland, the median eligible unemployed worker receives benefits equal to 129 percent of lost earnings. In New Mexico, this value is 177 percent.

The researchers conclude that the

CARES Act benefits provide substantial income expansion and liquidity for low-income unemployed workers. They also affect the distribution of resources within income groups. For example, janitors who stay on the job may be paid less than unemployed janitors collecting 158 percent of their prior wage, and laid-off retail workers collect 142 per-

cent of their prior wage while their colleagues who remain at work receive only their prior wage — and have to work.

The researchers note that when using a fixed increment to benefits for all unemployed workers, it is “quite difficult to achieve high replacement rates for most workers without also having replacement

rates over 100 percent for many workers.” They note that a federal policy that topped up state UI benefits to a fixed percentage of the prior earnings that states use to calculate unemployment benefits would do a superior job of replacing lost income without paying benefits that exceed lost wages.

—Linda Gorman

The Magnitude and Distribution of Job Losses Early in the Pandemic

The first few months of the COVID-19 pandemic saw a historic decline in employment in the United States. More than a fifth of the workforce was laid off through the end of April, an experience that was unprecedented in the post-World War II period. Many job losses came from businesses suspending operations, often in response to state stay-at-home mandates. Low-wage workers and small businesses were hardest hit.

The pandemic-related downturn differed from other modern recessions in both the speed and magnitude of job loss. Tomaz Cajner, Leland D. Crane, Ryan A. Decker, John Grigsby, Adrian Hamins-Puertolas, Erik Hurst, Christopher Kurz, and Ahu Yildirmaz present systematic evidence on these employment effects in **The US Labor Market during the Beginning of the Pandemic Recession** (NBER Working Paper 27159).

The researchers analyze weekly data from ADP, the nation’s largest payroll processing firm. These data suggest that between mid-February and mid-April, nearly 27 million workers lost their jobs, with employment rebounding by 7 million jobs between late April and late

May. The employment decline for workers in the bottom quintile of the wage distribution through late May, 30 percent, was six times greater than the 5 percent drop for workers in the top quintile. Employment losses were 4 percentage points larger for women relative to men

payroll but did not report any hours, or receive any pay, during a pay period. Workers on unpaid leave are counted as active employees. Paid employees, in contrast, include only those who reported positive hours and received a paycheck. The researchers find that active employ-

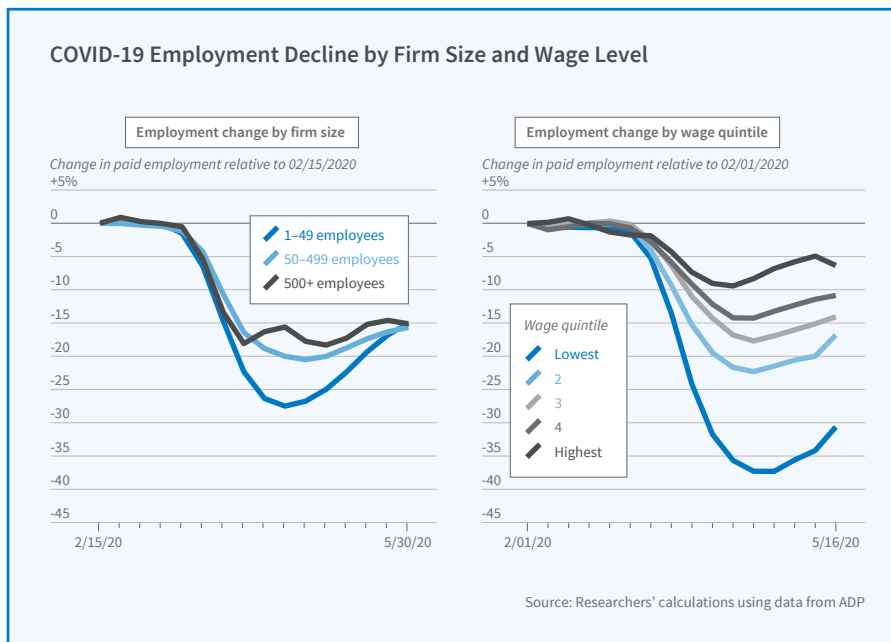
In the first three months, employment fell 30 percent for those in the bottom quintile of the wage distribution, compared with a 5 percent drop among those in the top quintile.

with only a small portion of the difference explained by industry and firm size.

The ADP payroll data, which cover about one-fifth of private sector workers in the US, distinguish between active employees and paid employees. Active employees include those who are on the

ment dropped by 11 percent, while paid employment fell 21 percent, between mid-February and mid-April, which suggests that a large fraction of workers who lost their jobs were on layoffs that were intended to be temporary.

Business shutdowns were a key factor in the job losses. The researchers find that about one-quarter percent of lost paid employment through late April was attributed to business exits — firms that reported no employment. Small businesses experienced the largest declines in employment during that time period. On average, firms with fewer than 50 employees laid off more than 25 percent of their workforces, while those with more



than 100 employees laid off between 15 and 20 percent. Over one-third of the employment rebound between late April and late May resulted from the reopening of previously shuttered firms. When these firms reentered, they had employment levels that were 40 percent lower than their pre-pandemic levels. Much of the employment growth both for reen-

tering firms and continuing firms that occurred between late April and late May resulted from the recall of workers who were temporarily laid off.

Average wages rose by more than 5 percent as more lower-paid than highly paid workers became unemployed. In fact, over 10 percent of workers received wage cuts during this period—a rate

higher than wage cuts observed during the Great Recession. While job losses were concentrated among low-wage workers, nominal wage cuts were concentrated among higher-wage workers. Over 15 percent of workers in the highest wage quintile received a wage cut between April and May.

—*Laurent Belsie*

Buybacks, Dividends, and Internal Corporate Investment

Since 2000, corporations have spent three times as much buying back shares and paying dividends as in the period 1971 to 1999. The trend has sparked concern in some quarters that firms are foregoing internal investments that might boost innovation or make their workers more productive.

Generalizations are difficult, however, and the analysis needs to be firm-specific, according to [Kathleen Kahle](#) and [René M. Stulz](#) in **Are Corporate Payouts Abnormally High in the 2000s?** (NBER Working Paper 26958). “Abnormally high payouts can be a good development if funds retained within the firm would otherwise have been wasted, or a bad development if the funds would have been better employed within the firm,” they write.

Among the non-financial firms listed on US exchanges that the researchers studied, the rise in payouts comes entirely from share buybacks. Dividends as a share of operating income dipped slightly from 14.4 percent before 2000 to 14 percent in the 2000–17 period. In contrast, share repurchases surged from 4.8 percent

of operating income before 2000 to 21.2 percent in the post-2000 period. US corporations spent nearly \$10 trillion between 2000 and 2017 buying back their shares.

The researchers identified several fac-

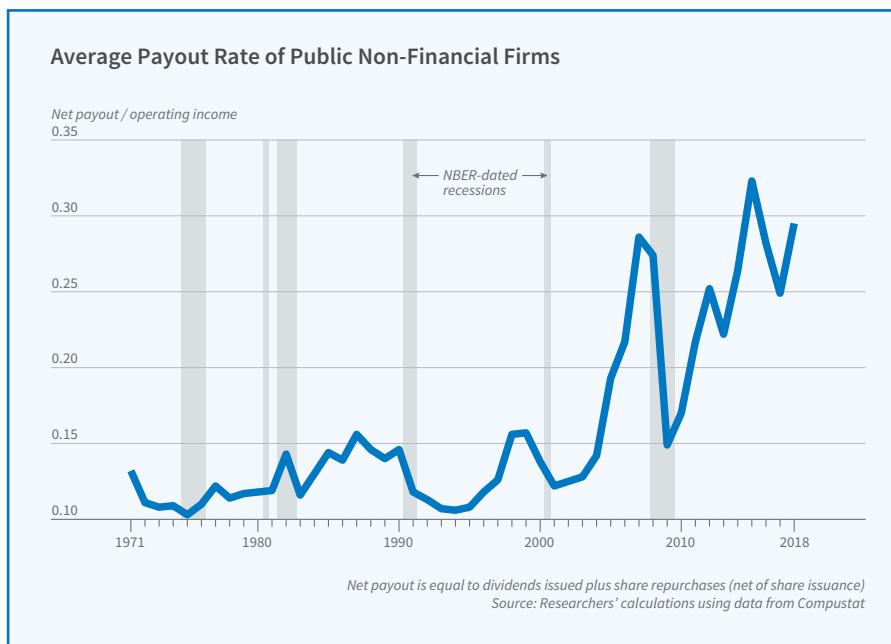
greater proportion of companies are older, larger, have substantial cash holdings, and are less indebted than in the late 20th century.

To analyze how these changing firm

A greater proportion of American companies are older, larger, and more profitable than in the late 20th century, which explains much of the increase in corporate payouts.

tors that have contributed to rising share repurchases. US corporations have had more profits in the aggregate in the 2000s than in the 1971–99 period. That alone explains 38 percent of the increase in payouts. In addition, the composition of corporate America has changed. Today a

attributes contribute to payouts, the researchers estimated statistical models to explain payout behavior in the 1971–99 period, and then tried to predict payout patterns after 2000. They found that their models could predict fairly accurately post-2000 aggregate results. For example, they predicted payouts of \$784 billion for 2017; the actual was \$734 billion. When the researchers predicted payouts for individual firms, however, they tended to underestimate the actual values. The gap was particularly noticeable in extreme payout years, such as 2017, when the firm-level models predicted that firms would pay out 26 percent of their operating income, but the actual rate was 48 percent.



The researchers did not find any evidence that higher payouts had reduced corporate capital expenditures or corporate performance. The firms in the top

10 percent of the payout distribution had higher returns than firms in the lower 90 percent, and they had less debt and a lower level of capital expenditures relative to

assets. While their capital expenditures fell after 2000, the same was true for firms with lower payouts.

—*Laurent Belsie*

Concentration and Pricing Power: Hospitals versus Insurers

The ability of hospitals to raise prices after mergers is significantly blunted in markets with few health insurers, according to findings reported in **Countervailing Market Power and Hospital Competition** (NBER Working Paper 27005). [Eric Barrette](#), [Gautam Gowrisankaran](#), and [Robert Town](#) emphasize that it is essential to consider both the supply- and the demand-side characteristics of a market to make accurate projections of the price impact of potential mergers. They find that a typical hospital merger would raise prices four times as much in a market with many, competitive insurers as in one with a small number of large insurers.

Market power among both sellers (hospitals) and buyers (insurance companies) matters. The most advantageous position for a hospital in terms of maximizing revenue is to be the dominant player in a market with many insurers. It can use its strong bargaining position to command higher prices since insurers must include it in their plans if they are to remain competitive. However, if there are only a few dominant insurers, they can use their monopoly power to drive a better bargain with hospitals.

The researchers study the role of hos-

pital and insurer competition using data on health care claims over the period 2011–14 from three national insurers: Aetna, Humana, and UnitedHealthcare.

A typical hospital merger would raise the price of an average hospital stay by 4.3 percent in a market at the 25th percentile of insurer concentration, but by only 1 percent in one at the 75th percentile.

The dataset includes information on 40 million individuals under age 65 enrolled in employer-sponsored care. The researchers reviewed more than 2.25 million hos-

pital at the 75th percentile of concentration can charge 4.6 percent or \$538 more per average procedure than a hospital in a market at the 25th percentile of hospital concen-

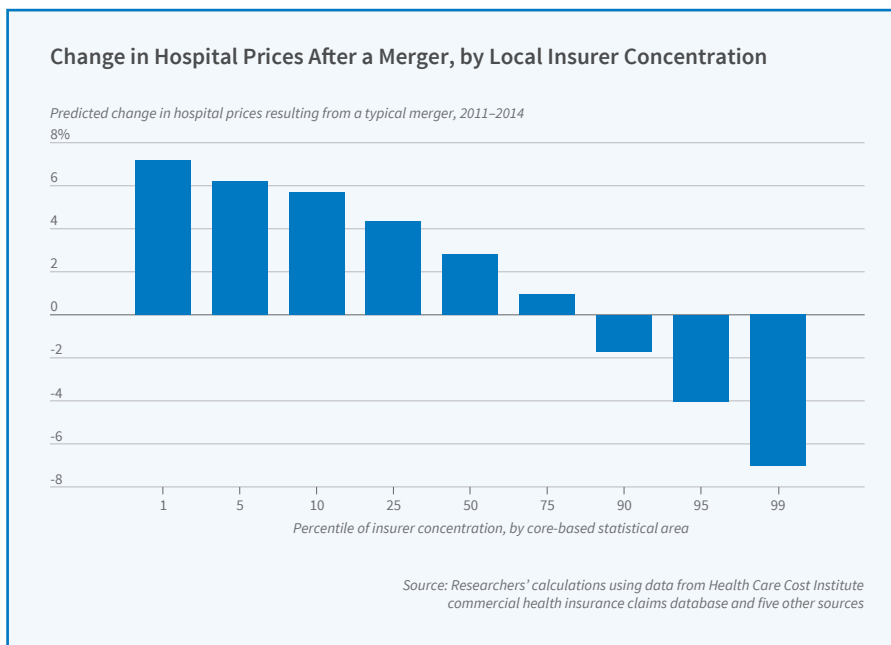
tration. However, the ability of hospitals to exercise their market power is sharply reduced when the insurer market is highly concentrated. The difference between hos-

pital prices in markets at the 75th and 25th percentiles of the hospital concentration distribution is 7.1 percent when the concentration of insurers is relatively low (25th percentile), but only 1.5 percent if the concentration of insurance companies is at the 75th percentile.

The researchers point out that differences in insurer concentration matter for the impact of hospital mergers. They estimate that a typical hospital

merger would increase the average hospital price by 4.3 percent at the 25th percentile of insurer concentration, but only 1.0 percent at the 75th percentile. For this reason, they conclude that regulatory authorities need to consider insurer concentration when evaluating potential hospital mergers.

—*Steve Maas*



pital admissions and calculated their average prices after adjusting for severity of condition and hospital characteristics.

The researchers also rank markets by their degree of concentration, from lowest (1st percentile) to highest (99th percentile). In a market with the median level of insurer concentration, a hospital

Tax Haven Financing Skews Cross-Border Investment Statistics

Official statistics on foreign investment show that investors from the United States, the eurozone, and other large developed nations invest relatively little in large, fast-growing, emerging markets. These statistics are misleading, according to the findings presented in **Redrawing the Map of Global Capital Flows: The Role of Cross-Border Financing and Tax Havens** (NBER Working Paper 26855), because they don't take into account the holdings of securities issued in tax havens, many of which represent claims on emerging market firms.

In 2017, for example, these data indicated that US investors held \$144 billion in Australian corporate bonds, compared to only \$8 billion in Brazil and \$3 billion in China. When the researchers link securities to the countries of their ultimate issuers, US investors hold \$50 billion in Brazilian corporate bonds and \$47 billion in Chinese bonds. When stock holdings are added, the total of US investments in China soars from the official \$160 billion to roughly \$750 billion. This pattern is common to many other large investor economies.

Adjusting for the effect of investment companies based in tax havens gives a better picture of the size of global financial imbalances, the currency risk of a nation's external liabilities, and the rise of the globalization of finance, according to the researchers [Antonio Coppola](#), [Matteo Maggiori](#), [Brent Neiman](#), and [Jesse Schreger](#).

Tax havens are mostly small nations, like the Cayman Islands and Bermuda, and their tax rules tend to attract many shell companies. In 2017, securities issued in these countries accounted for 10 percent of the total value of holdings of corporate bonds world-

wide and about 8 percent of global equities. The researchers use data from seven commercially available sources to link investments in tax haven based entities to the countries of their beneficial owners.

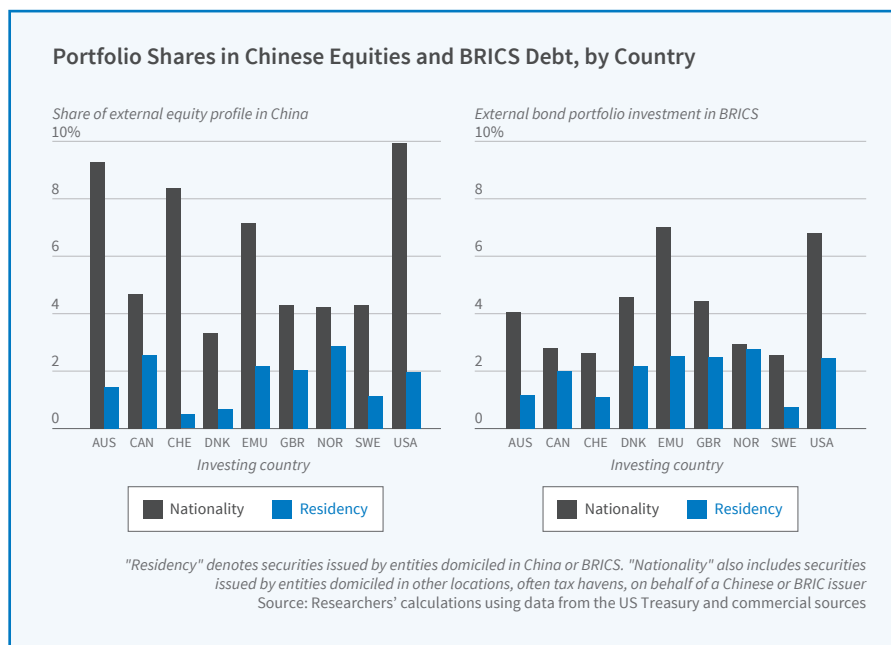
In 2017, securities issued by corporations based in tax havens — mostly offshore financial centers — accounted for 10 percent of the value of outstanding corporate bonds worldwide and about 8 percent of global equity.

The investments take various forms. For example, Brazil's Vale SA, a mining and logistics company, has a subsidiary in the Cayman Islands called Vale Overseas Ltd. Thus, official data lists the Caymans as the location of the investment, when in actuality the subsidiary

are in corporate bonds, while the researchers' adjustments raise the percentage to 66 percent. The adjustments also reveal that a larger share of developed market investment in emerging markets bonds is in foreign

currency than the official data suggest.

The researchers find that the nation with the largest reallocation is China. Big Chinese firms, such as Alibaba, Baidu, JD.com, and Tencent, have adopted a unique corporate structure known as a variable interest entity (VIE) as a result of restrictions on foreign ownership in strategic industries. While foreign investors own equity claims on the tax haven-based shell companies, the equity of the operating firms located in China needs to remain in the hands of Chinese citizens to satisfy Chinese regulations. These positions are very large; the researchers estimate that nearly 10 percent of US and eurozone foreign equity positions actually represent claims on Chinese firms,



simply issues bonds. The researchers reallocate these bonds and treat them as Brazilian.

The study also reallocates holdings and liabilities of foreign affiliates in nations besides the tax havens. For example, the securities of Toyota Motor North America — officially US securities — can be adjusted to become Japanese securities.

The reallocations can expose patterns in the data that the official data obscure. One example is US investment in Brazilian bonds. The US Treasury's International Capital data show that only 25 percent of such invest-

rather than the 2 percent in the official data.

The stock market valuation of these Chinese tech giants has soared in recent years, but these valuation effects are not reflected in China's official external accounts due to the use of the VIE offshore structure. The researchers calculate that this leads China's official net foreign asset position to be overstated by more than \$1 trillion. Adjusting for offshore VIE structures, China appears to be a much smaller net creditor to the rest of the world than it is in the official data.

—Laurent Belsie

Ride-Hailing Services Associated with Uptick in Traffic Deaths

While ride-hailing services such as Uber and Lyft provide convenient transportation and flexible job opportunities, a new study suggests that these benefits may also come with a number of costs. Fatalities among automobile occupants and pedestrians, gasoline consumption, and traffic congestion have all risen since the ride-hailing services were launched in 2010, while public transportation ridership has fallen.

The Cost of Convenience: Ride Hailing and Traffic Fatalities (NBER Working Paper 26783) documents a marked increase in fatalities among both motor vehicle occupants and non-occupants—pedestrians and bike riders—after the introduction of the services, reversing a decades-long trend. When ride hailing was introduced, the United States was experiencing record-low levels of fatal traffic-related accidents, according to the National Highway Traffic Safety Administration. By analyzing the staggered introduction of ride-hailing services in major metropolitan areas, [John M. Barrios](#), [Yael Hochberg](#), and [Hanyi Yi](#) show that the jump in motor vehicle-related fatalities is correlated with the arrival of ride hailing, particularly in large urban areas.

The researchers tracked the number of traffic accidents and the number of motor vehicle-related fatalities between 2010 and

2016. The data do not allow identification of incidents related specifically to ride-sharing vehicles and drivers. The rise in overall fatalities is evident for occupants of all types

In locations where ride hailing has become prevalent, fatalities, vehicle miles traveled, gasoline consumption, and traffic congestion have increased.

of motor vehicles and for non-occupants, including pedestrians and bike riders. The effects are observed on all days of the week and times of the day.

Another potential explanation of this trend is the rise in smartphone usage during

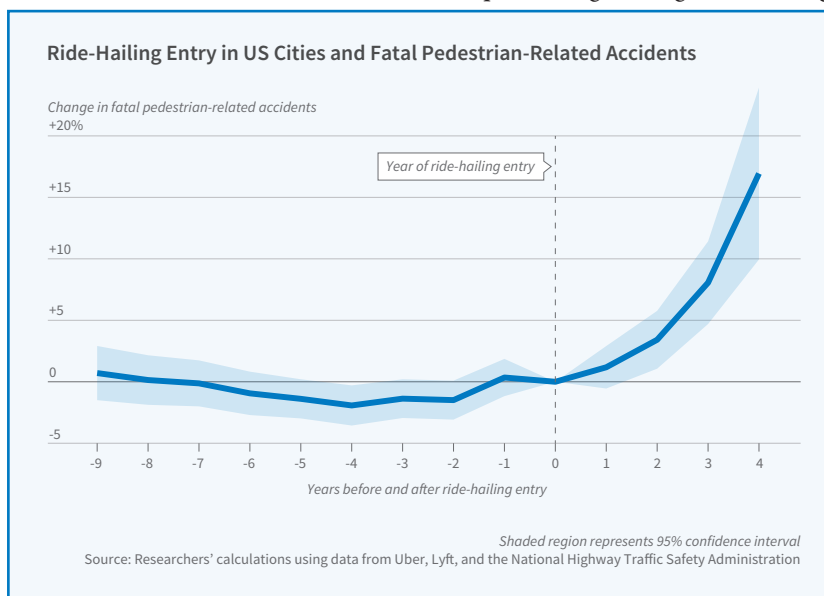
but that it could not explain the entire increase. Ride sharing is related to fatalities even after controlling for smartphone use in a metro area.

Ride-hailing services also seem to have

increased a number of driving-related costs, including vehicle miles traveled, gasoline consumption, and traffic congestion, as measured by annual hours on the road. These increases likely are derived in part from the number of ride-hailing vehicles on the road. Drivers are subsidized by their companies to remain on the road even during lulls in demand. An increase in ride hailing was also associated with a dip in the use of public transportation in large metro areas, suggesting that some riders substitute ride-hailing services for public transportation.

The researchers caution that they are describing short-term effects that may change with time. For instance, driving quality may improve as drivers gain experience. In addition, they point out that ride-hailing services have a number of benefits that may counterbalance their costs, including providing flexible transportation options to underserved populations and offering job opportunities for workers with otherwise limited labor market options.

—Jennifer Roche



this time, which may have resulted in more distractions for both ride-hailing and non-ride-hailing drivers as well as for pedestrians. The researchers found that the rise in smartphone usage was positively correlated with fatalities,

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