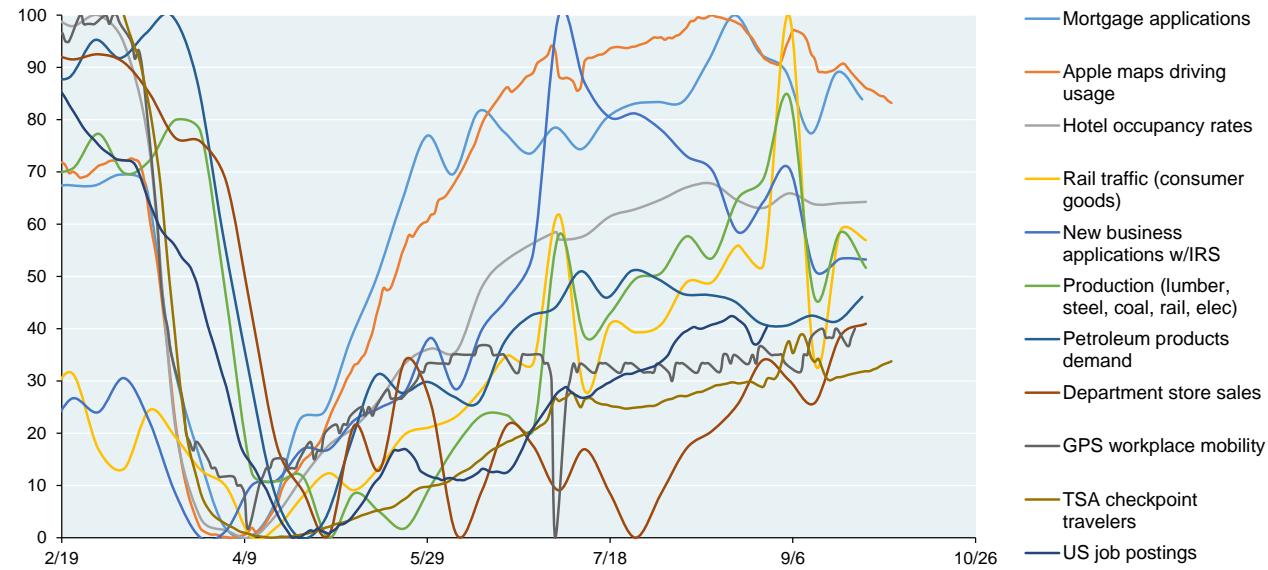


[1] The US reopens: reopening, mobility, production and spending

High frequency US data tracker

Index, with 0 = lowest observed value and 100 = highest observed value, Jan 1 2020 to present



Source: WWPA, EIA, AISI, EEI, AAR, Redbook, Census Bureau, TSA.gov, Apple, Smith Travel, MBA, Google, ThinkNum, JPMAM. October 05, 2020.

Contents

- High frequency recovery summary, national level (above)
- Credit and debit card spending: nationwide spending; social distancing spending by infection severity; close-up look at retail and oil spending; growth in e-commerce
- Mobility data: changes in movement by reopening status for transit, retail and stay-at-home
- Additional national data: US/NYC travel tracker, hotel occupancy rates, mortgage applications, manufacturing activity, shipping, demand for crude oil and floating storage, rail traffic for consumer goods, Weekly Economic Index

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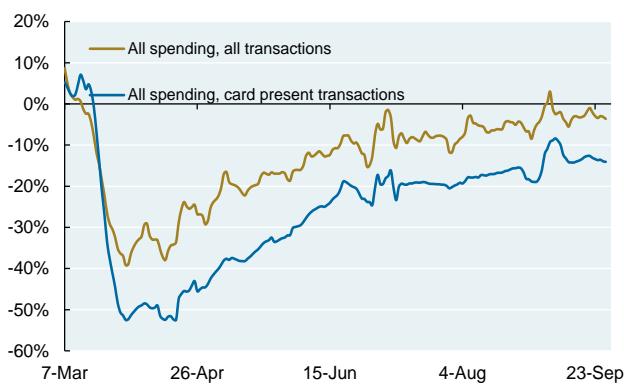
Credit and debit card spending trends

Here's our new analysis on the US consumer based on select internal Chase transaction data¹. On a national level, consumer spending in our credit and debit card data set² is down ~3% vs 2019 (first chart). However, this aggregation includes a lot of e-commerce. When narrowing the focus to consumer transactions that took place with "cards present", the y/y decline in spending is larger.

We're also interested specifically in **discretionary "social distancing spending" (SDS)**. For our purposes, we define SDS as "card present" transactions for retail, lodging, restaurants, rental cars, ride hailing/taxis/limos, amusement parks, tourist attractions, theaters, night clubs and other recreational services. In other words, **discretionary spending that requires people to go someplace and not buy from home**. In our dataset, card-present SDS represented around one third of all consumer spending in 2019. The SDS decline this year is even sharper than the decline in total spending, since the latter includes food, healthcare, gasoline, recurring payments and other non-discretionary items.

National credit and debit card spending trends

Spending change 2020 vs 2019, 7 day smoothing



Source: Internal Chase data, JPMAM. Sep 27, 2020.

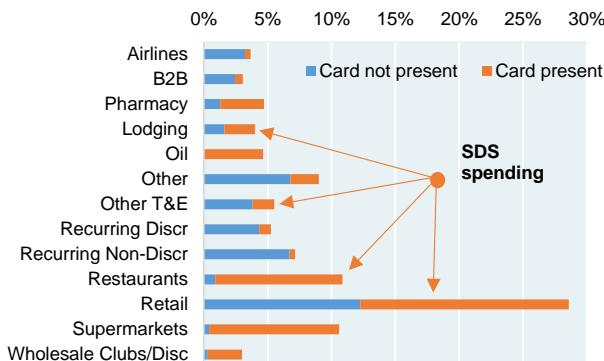
National credit and debit card spending trends

Social distancing spending, card present transactions
Spending change 2020 vs 2019, 7 day smoothing



Source: Internal Chase data, JPMAM. Social distancing: retail, lodging, restaurants, amusement parks, theaters and other recreational services. Sep 27, 2020.

Dataset spending categories by transaction type, 2019



Source: Internal Chase data, JPMAM, 2019.

¹ This report uses rigorous security protocols for selected data sourced from Chase credit and debit card transactions to ensure all information is kept confidential and secure. All selected data is highly aggregated and all unique identifiable information, including names, account numbers, addresses, dates of birth, and Social Security Numbers, is removed from the data before the report's author receives it.

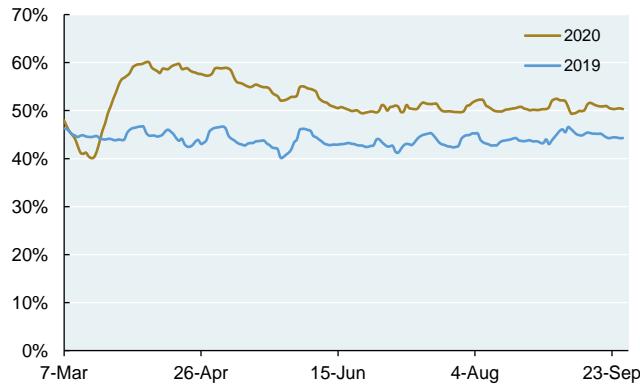
² Our data may not be representative of national spending trends. While it is based on a large number of cardholders, we have not normalized the data for age, gender, income or other factor differences vs the national average.

E-commerce monitor

Lingering consumer preferences for e-commerce after the pandemic is over may be one of its more lasting legacies, with implications for a wide range of sectors and industries.

All spending e-commerce shares

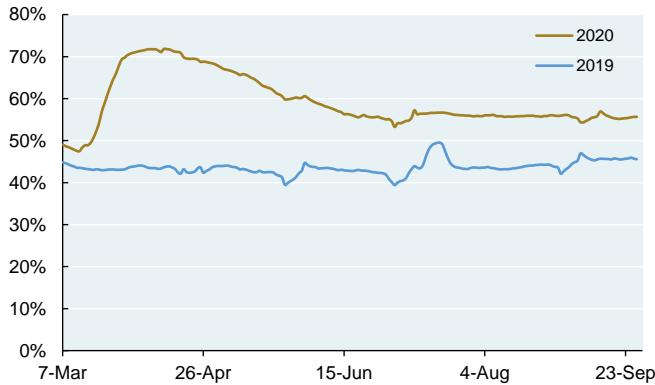
Share of total spending via e-commerce



Source: Internal Chase data, JPMAM. Sep 27, 2020.

Retail spending e-commerce shares

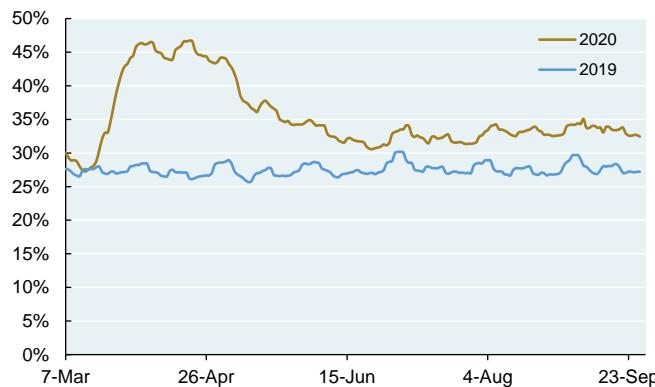
Share of total spending via e-commerce



Source: Internal Chase data, JPMAM. Sep 27, 2020.

Healthcare/Pharmacy spending e-commerce shares

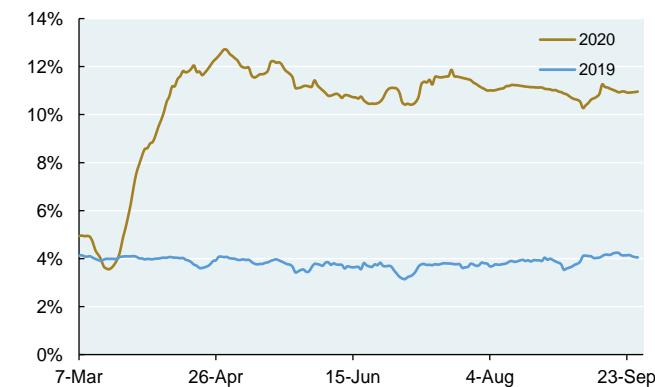
Share of total spending via e-commerce



Source: Internal Chase data, JPMAM. Sep 27, 2020.

Supermarket spending e-commerce shares

Share of total spending via e-commerce



Source: Internal Chase data, JPMAM. Sep 27, 2020.

Wholesale/Discount clubs spending e-commerce shares

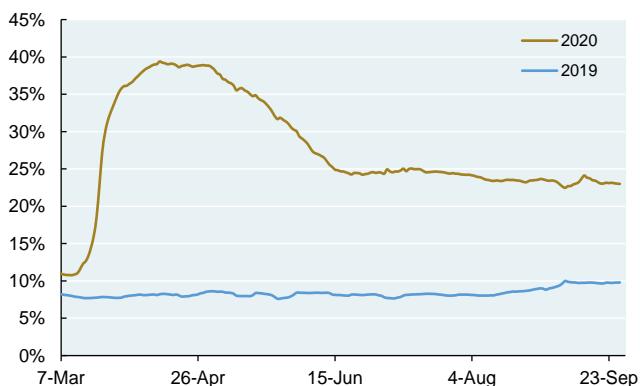
Share of total spending via e-commerce



Source: Internal Chase data, JPMAM. Sep 27, 2020.

Restaurant spending e-commerce shares

Share of total spending via e-commerce



Source: Internal Chase data, JPMAM. Sep 27, 2020.

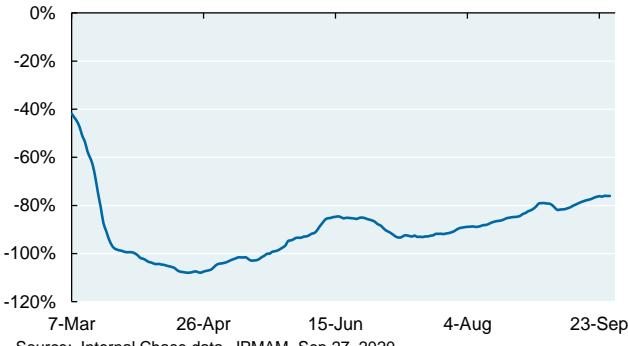
Other spending trends: airlines, oil and recurring spending

National credit and debit card spending trends
 Oil spending, all transactions
 Spending change 2020 vs 2019, 7 day smoothing



Source: Internal Chase data, JPMAM. Sep 27, 2020.

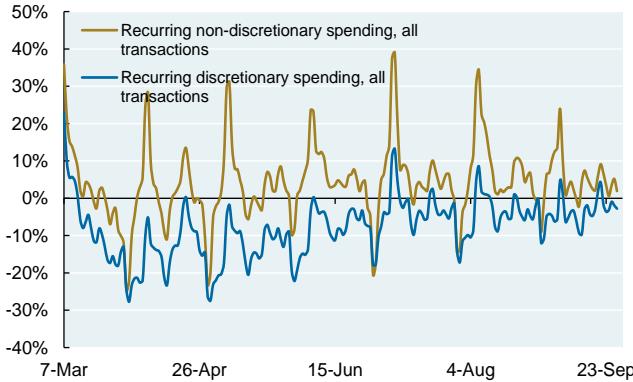
National credit and debit card spending trends
 Airline spending, all transactions
 Spending change 2020 vs 2019, 7 day smoothing



Source: Internal Chase data, JPMAM. Sep 27, 2020.

Recurring payments are either discretionary (cable TV/internet, gyms, equipment and furniture leasing and member organizations) or non-discretionary (utilities, child care, telecom services and insurance).

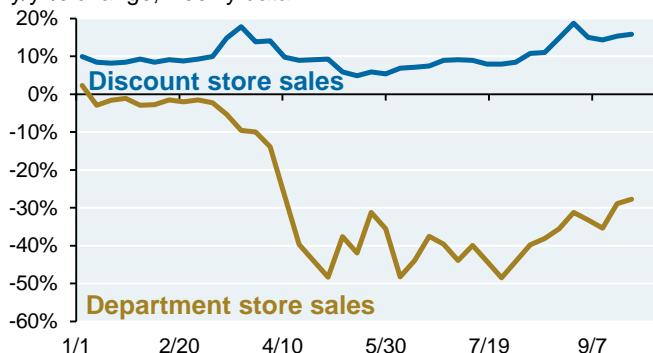
National credit and debit card spending trends
 Spending change 2020 vs 2019, 7 day smoothing



Source: Internal Chase data, JPMAM. Sep 27, 2020.

Nationwide consumer, mobility and manufacturing trackers**US retail sales**

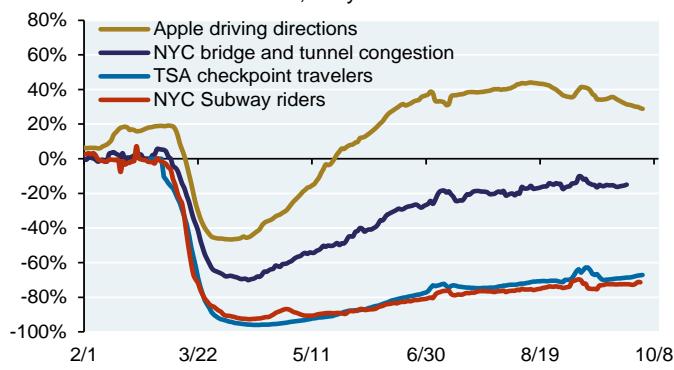
y/y % change, weekly data



Source: Redbook Research. September 26, 2020

United States and New York City travel tracker

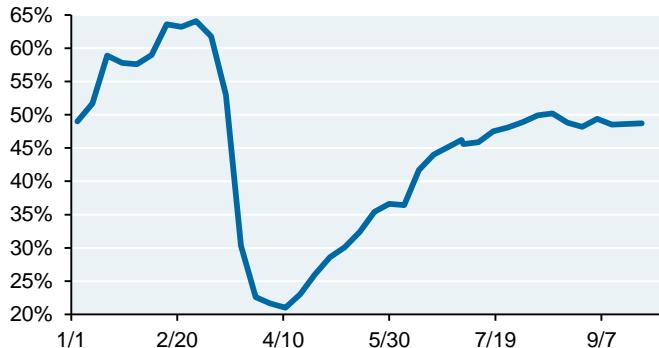
% decline from baseline level, daily data



Source: NYC MTA, TSA, Apple. October 4, 2020.

US hotel occupancy rate

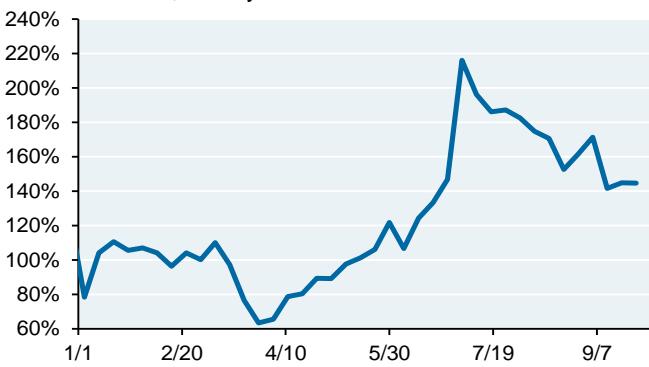
Weekly data



Source: Smith Travel. September 26, 2020

New business applications with the IRS

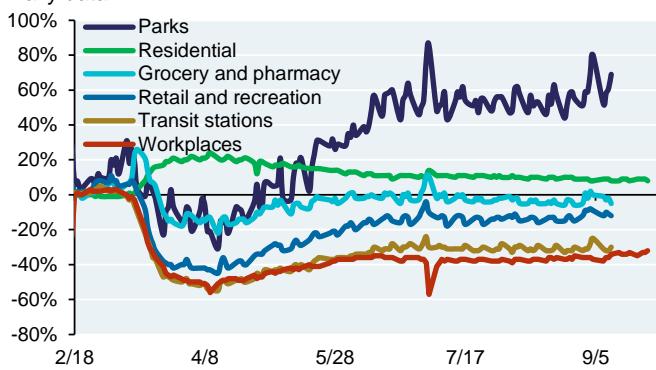
% of 2019 level, weekly data



Source: US Census Bureau. September 26, 2020

% change in Google user locations vs Jan baseline

Daily data



Source: Google COVID-19 Community Mobility Reports. September 25, 2020.

US mortgage applications for purchases of single-family homes, y/y % change, weekly data

Source: Mortgage Bankers Association. September 25, 2020

Estimated year over year % change in US GDP growth based on Weekly Economic Index conditions



Source: The Federal Reserve Bank of New York. September 26, 2020

US 2020 high frequency manufacturing tracker y/y % change, weekly data



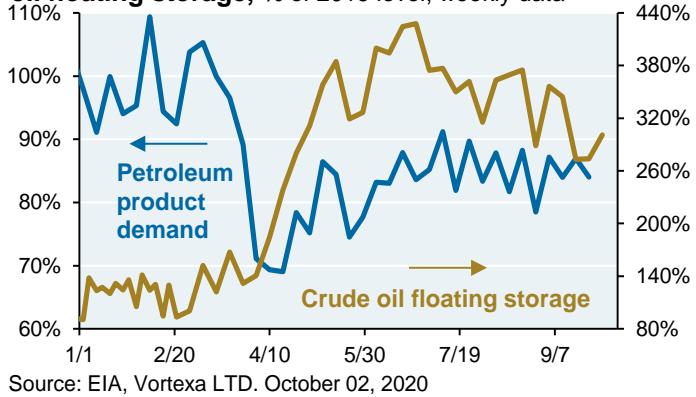
Source: WWPA, EIA, AISI, AAR, EEI, Haver. JPMAM. September 26, 2020.

Baltic exchange dry index vs industrial commodity prices, Index level



Source: Bloomberg. October 05, 2020. Bloomberg's Industrial Metals Index reflects price changes in Copper, Aluminum, Zinc, and Nickel

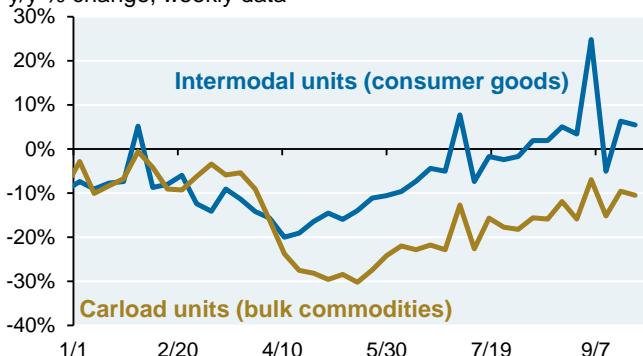
US demand for petroleum products vs global crude oil floating storage, % of 2019 level, weekly data



Source: EIA, Vortexa LTD. October 02, 2020

US railroad traffic

y/y % change, weekly data

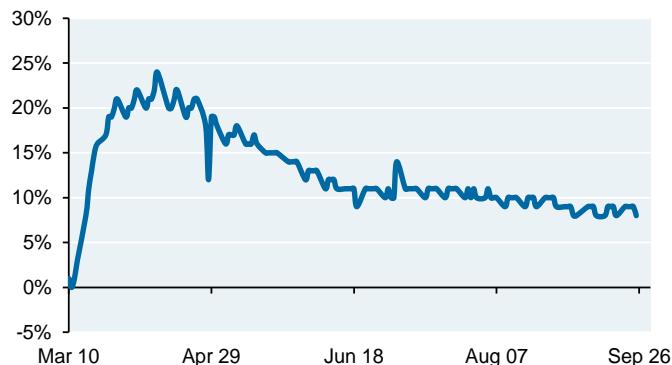


Source: Association of American Railroads. September 26, 2020

US Mobility data

US residential mobility data

% change from baseline



US retail, restaurants and recreation mobility data

% change from baseline



US transit stations mobility data

% change from baseline



US workplaces mobility data

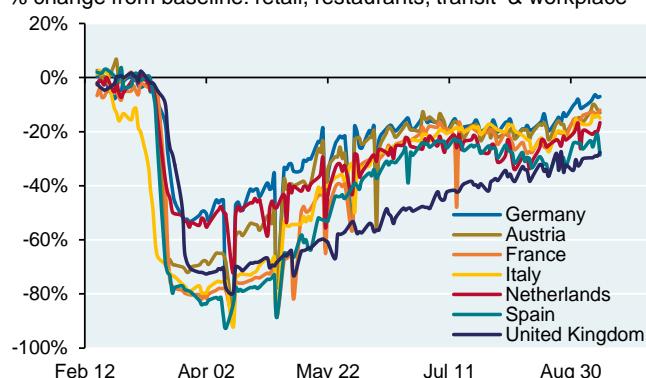
% change from baseline



International mobility data

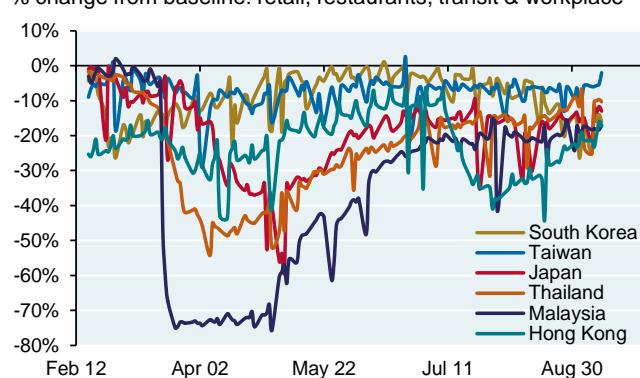
Regional mobility data: Europe

% change from baseline: retail, restaurants, transit & workplace



Regional mobility data: Asia

% change from baseline: retail, restaurants, transit & workplace



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