

**A GLOBAL THINK TANK DEDICATED TO
DELIVERING DATA-RICH ANALYSES AND
EXPERT INSIGHTS FOR THE PUBLIC GOOD**

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Short- and medium-run bumps in income and prices feed through to families' economic welfare, *even when they are predictable*

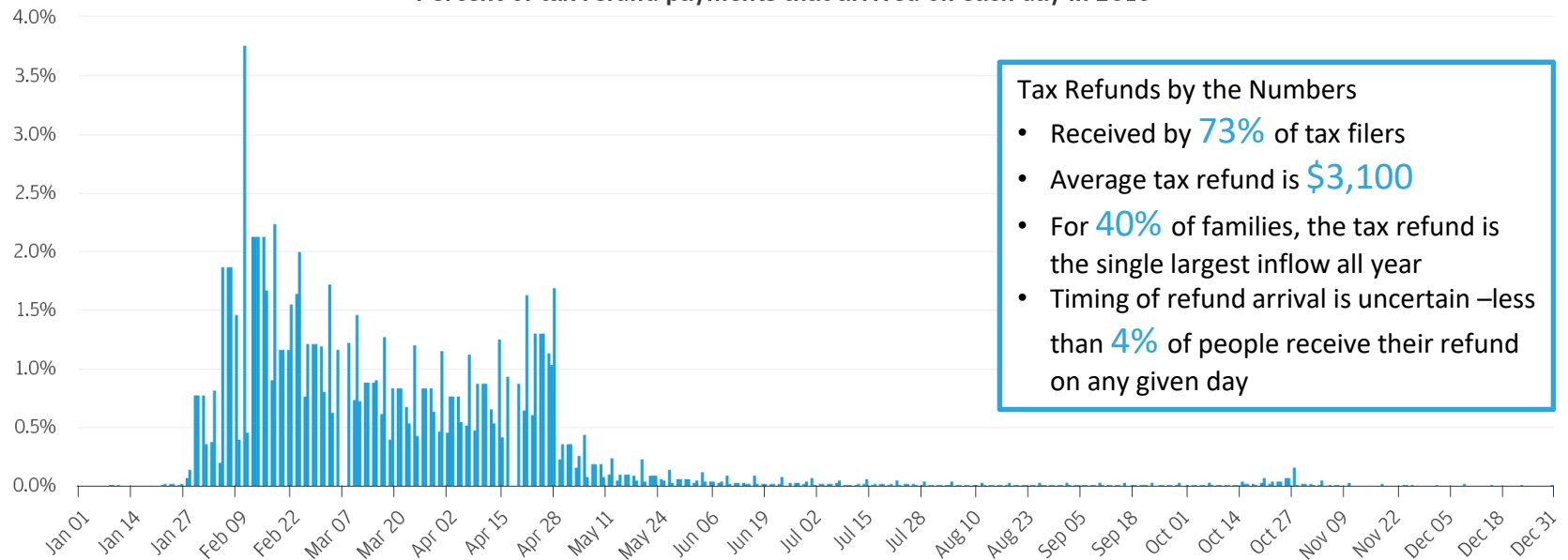
1. **Arrival of tax refund:** Healthcare (and non-healthcare) spending rises dramatically after arrival of a tax refund, but not in anticipation.
2. **Mortgage interest rate resets:** Spending increases in anticipation of a lower monthly mortgage payment, and then increases *again* when the payment is actually adjusted. The average increase in spending *exceeds* the average payment reduction.
3. **Income drop:** Mortgage default was correlated with income loss, regardless of payment affordability or home equity.
4. **Expiration of unemployment benefits:** Spending drops immediately at the start of a spell of unemployment, but then drops *again* when unemployment benefits run out.

Two ongoing research streams motivated by this counterintuitive evidence of major welfare impacts of income *timing*

1. **Tracking & analyzing participation in the online platform economy:** How volatile is income earned through platform participation? Is it countercyclical with other income? With prices?
2. **Tracking purchasing power at high temporal resolution:** How do consumers' non-transfer inflows and cash balances fluctuate from week to week, month to month, and year to year?

1. The arrival of a tax refund: Tax refunds are a significant cash flow event for many households.

Percent of tax refund payments that arrived on each day in 2016

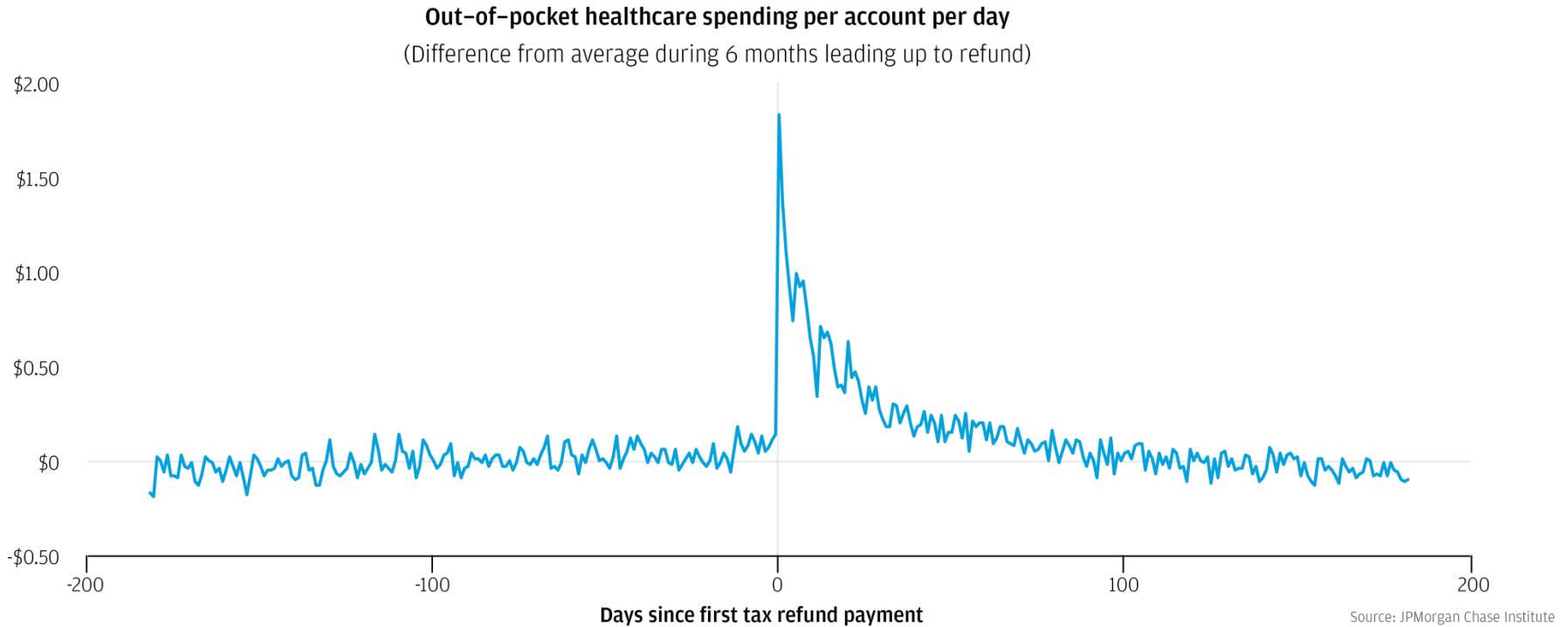


Tax Refunds by the Numbers

- Received by **73%** of tax filers
- Average tax refund is **\$3,100**
- For **40%** of families, the tax refund is the single largest inflow all year
- Timing of refund arrival is uncertain –less than **4%** of people receive their refund on any given day

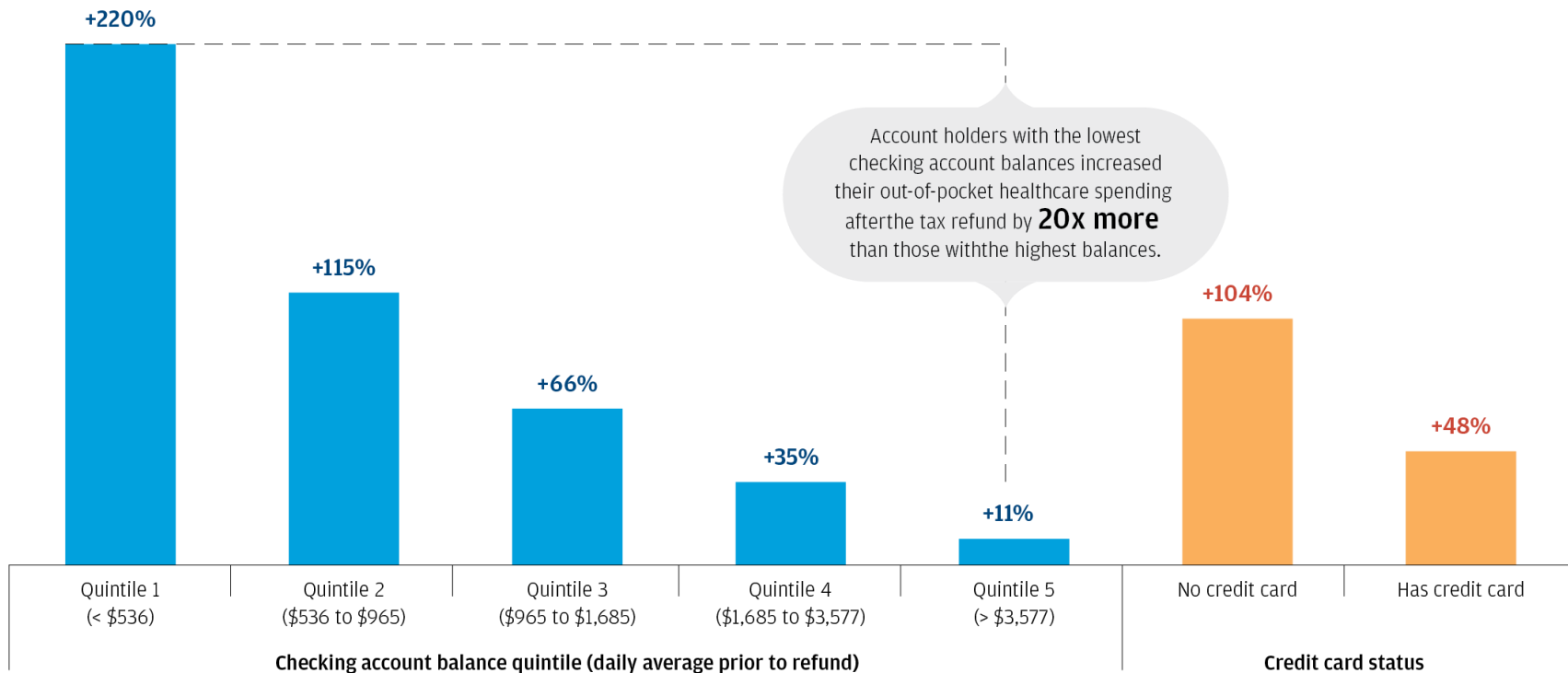
Source: JPMorgan Chase Institute

Consumers immediately increased their out-of-pocket healthcare spending by 60% in the first week and 20% in the 76 days after a tax refund was credited to their account.



Account holders with the lowest checking account balances increased their out-of-pocket healthcare spending after the tax refund by 20X more than those with the highest balances.

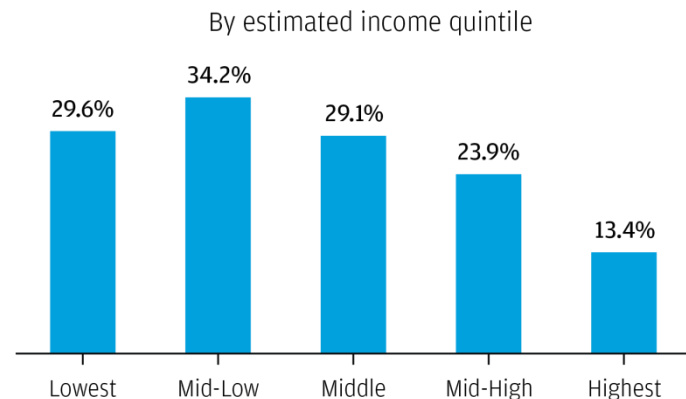
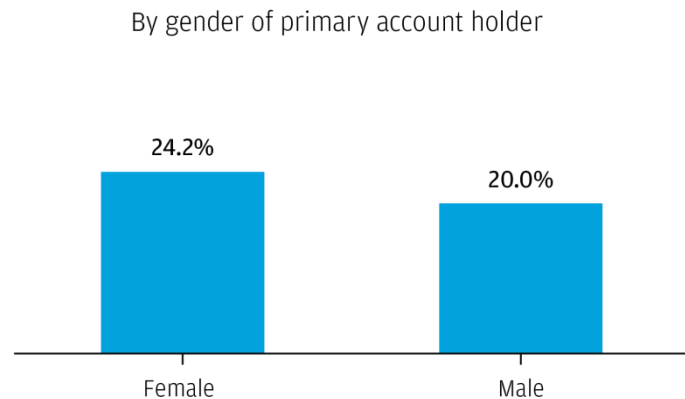
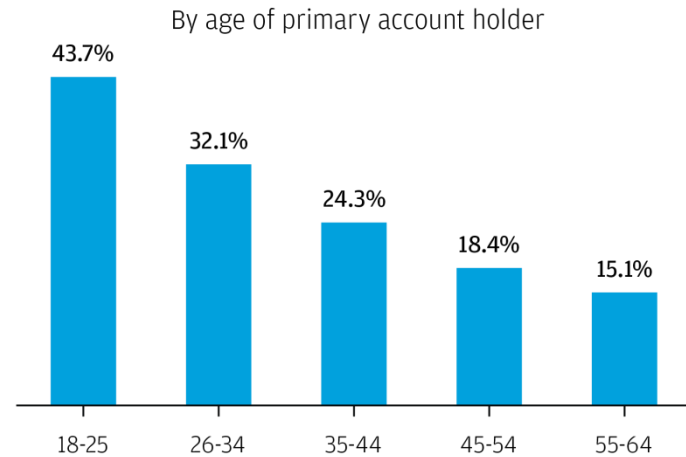
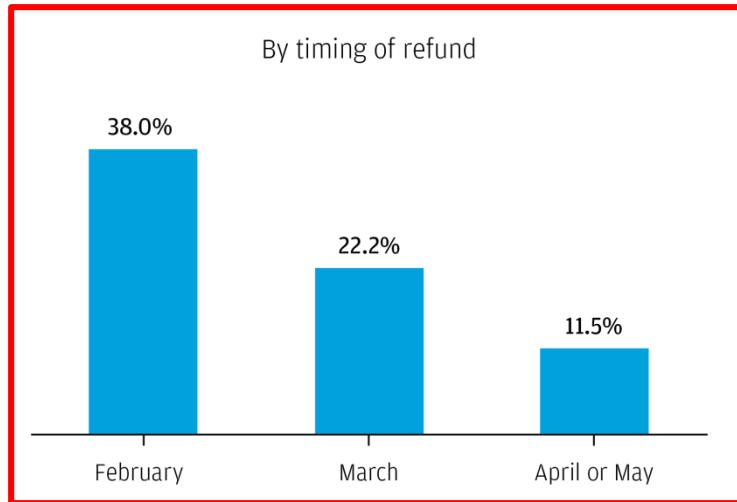
Increase in out-of-pocket healthcare spending
(Week after refund payment versus typical week prior to payment)



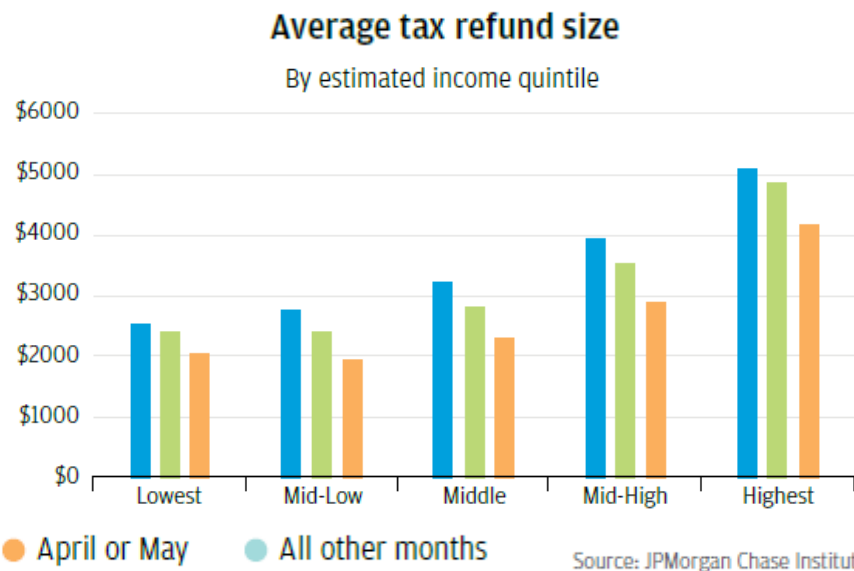
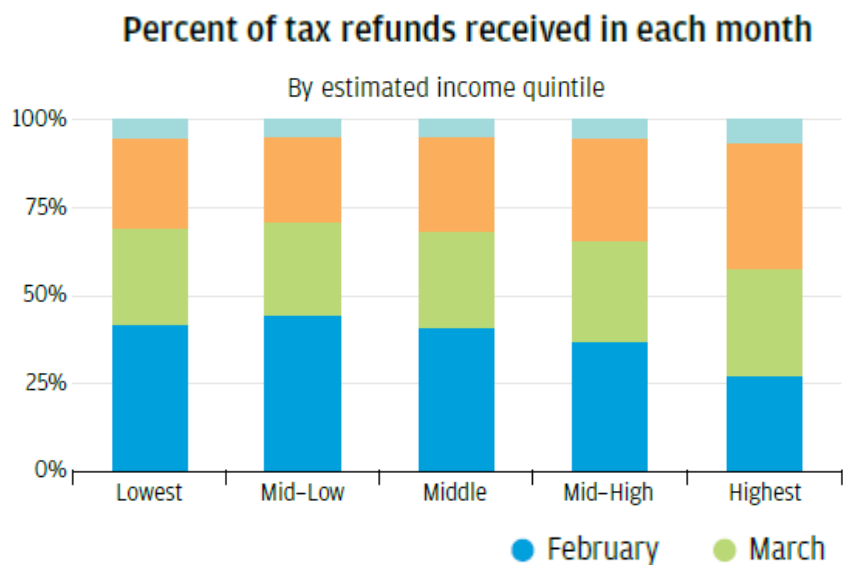
Source: JPMorgan Chase Institute

Spending out of accounts held by **earlier tax filers**, younger people, lower income people, and women increased by the greatest proportion in response to the tax refund.

Percent increase in spending during 76 days after tax refund



Among filers who were owed refunds, lower-income people tended to file earlier in the season. But, even within an income group, those who were owed larger refunds tended to file earlier.



Consumers' own decisions about when to file reflect their pent-up spending needs more directly than their income does.

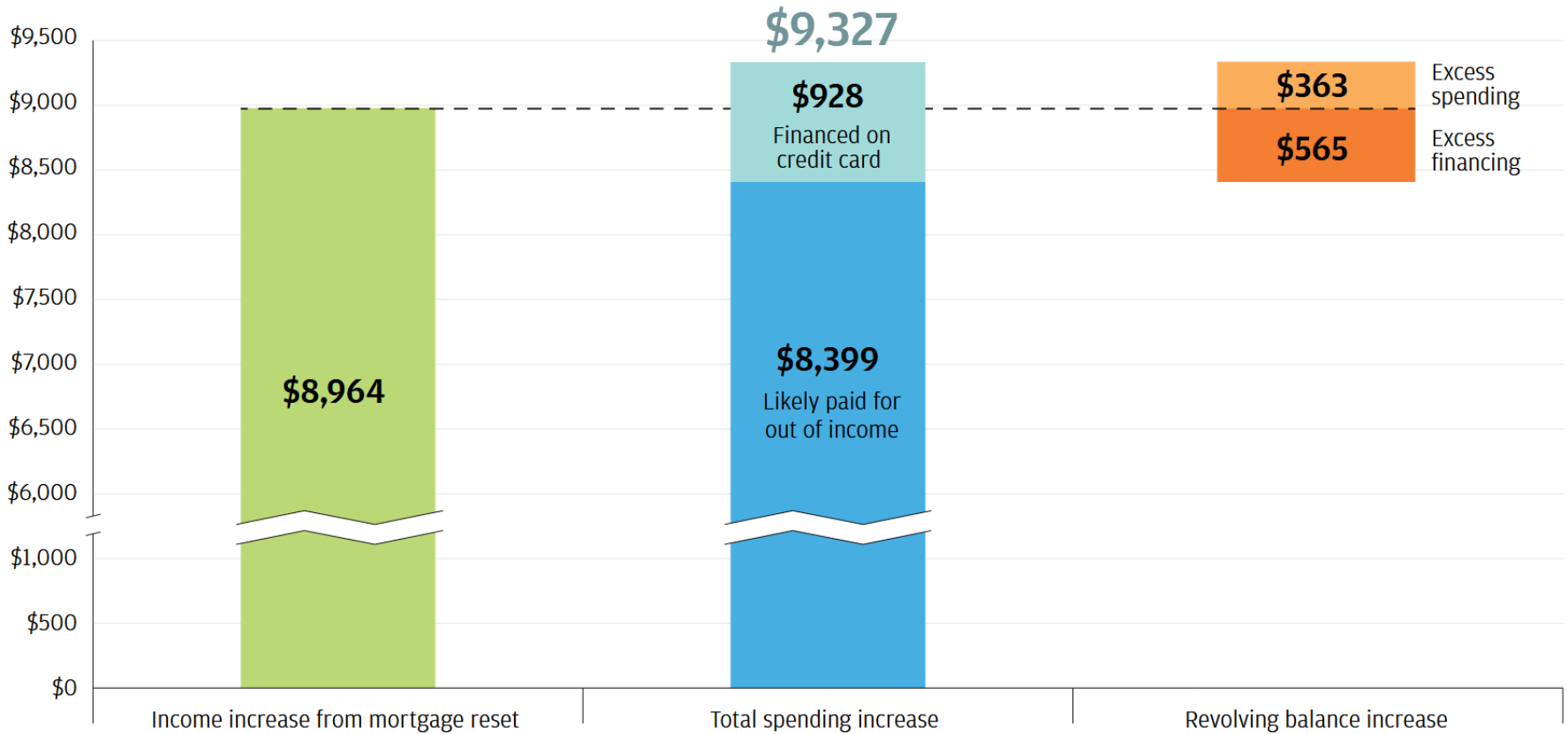
Spending response during 76 days after tax refund



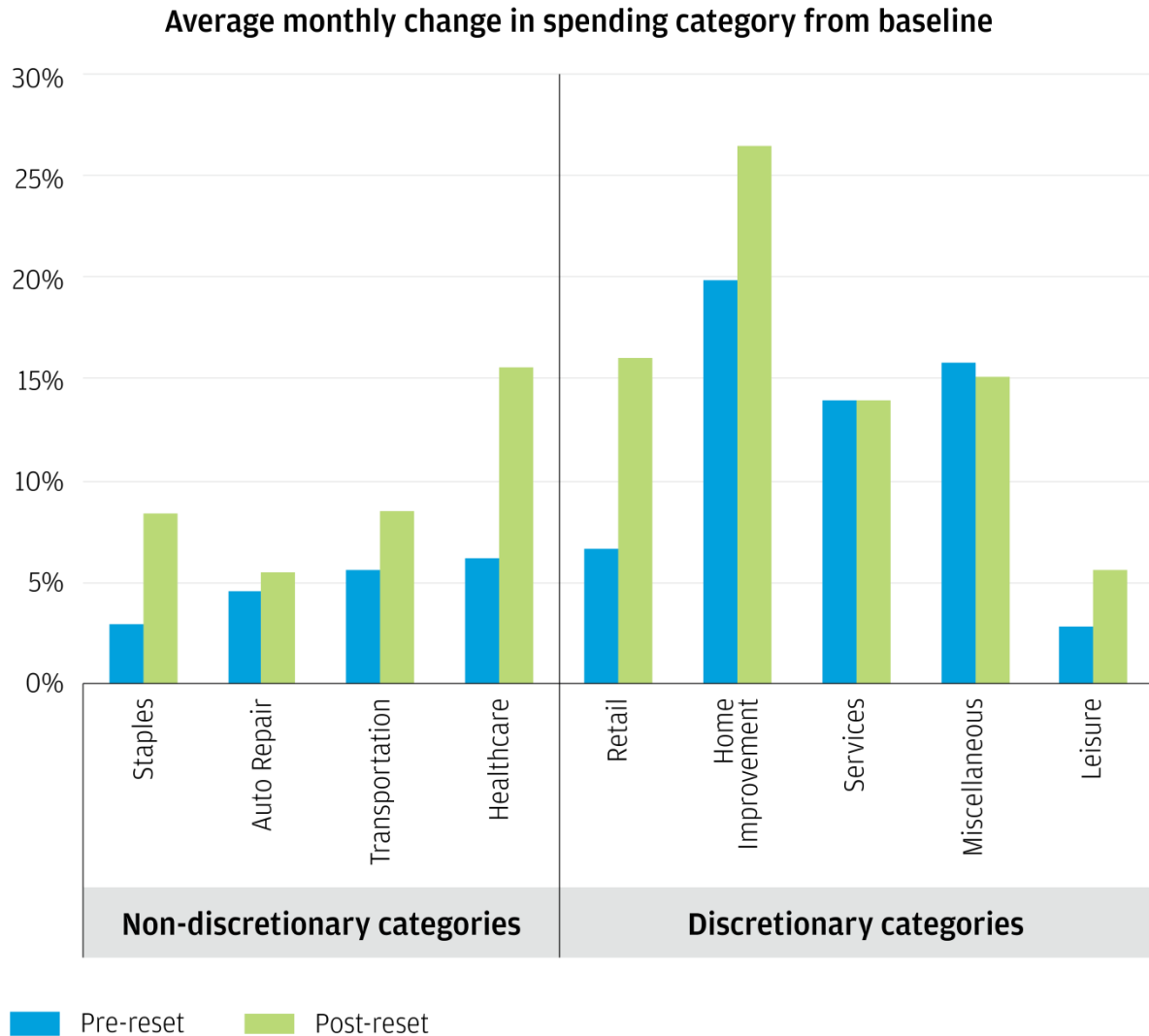
Source: JPMorgan Chase Institute

3. Mortgage reset: Over a span of 2 years after ARM reset, homeowners increased spending by 4 percent more than their mortgage-related savings

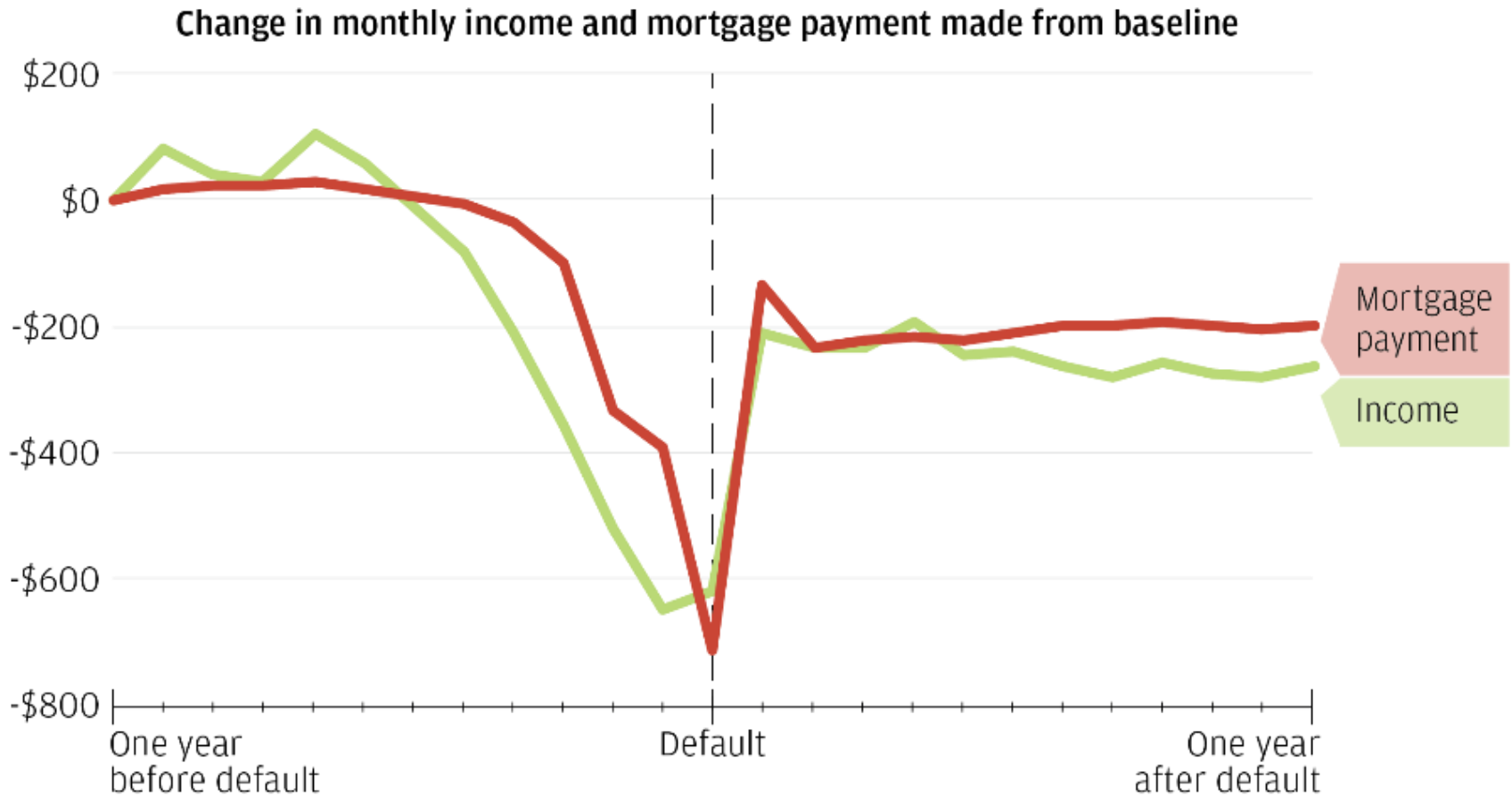
Cumulative average change in income, spending, and revolving balance



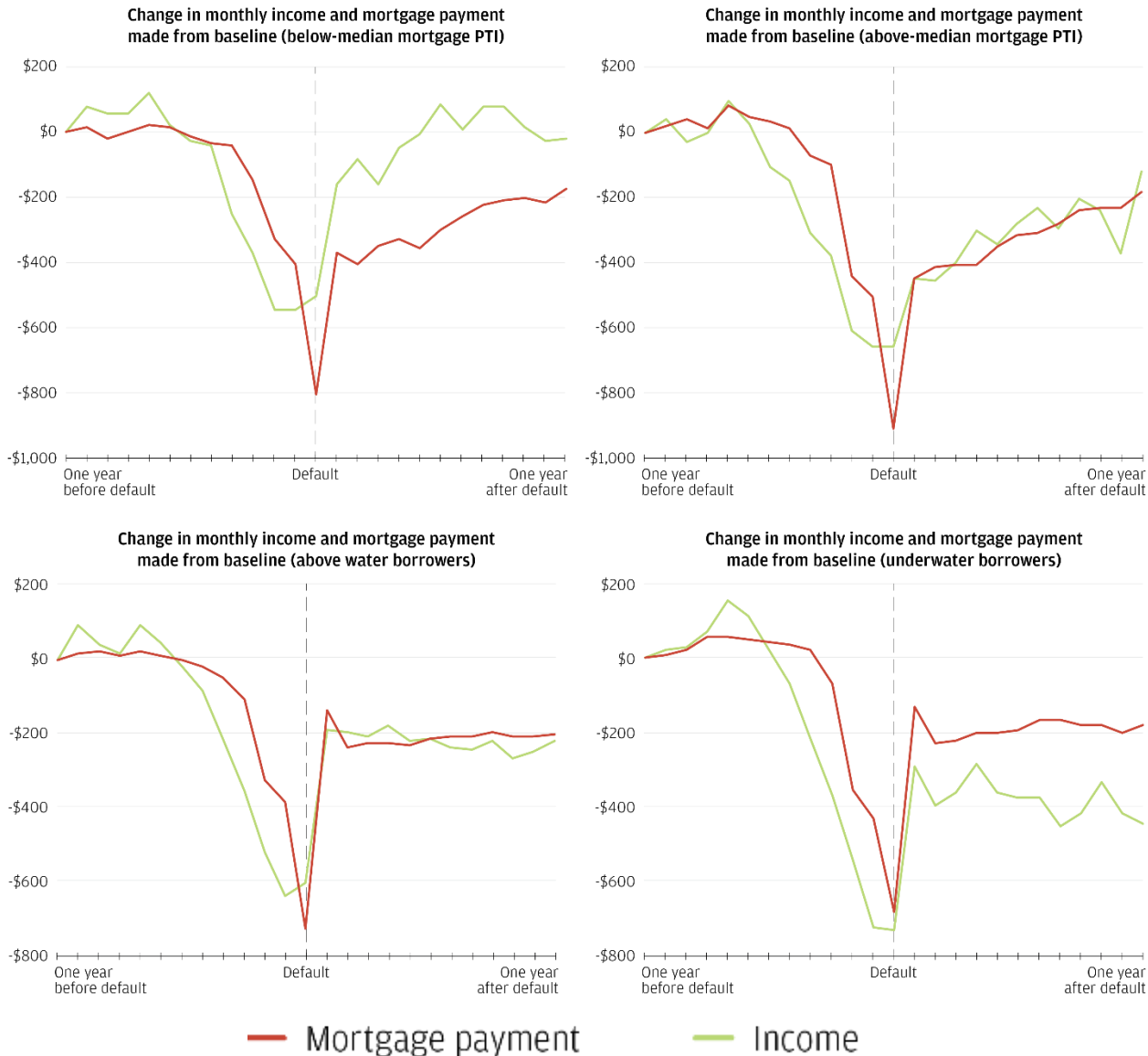
Homeowners used the savings from lower hybrid ARM payments to make more purchases across all spending categories, including home improvements and healthcare but also retail and leisure.



4. Income drop: Mortgage default was correlated with income loss.

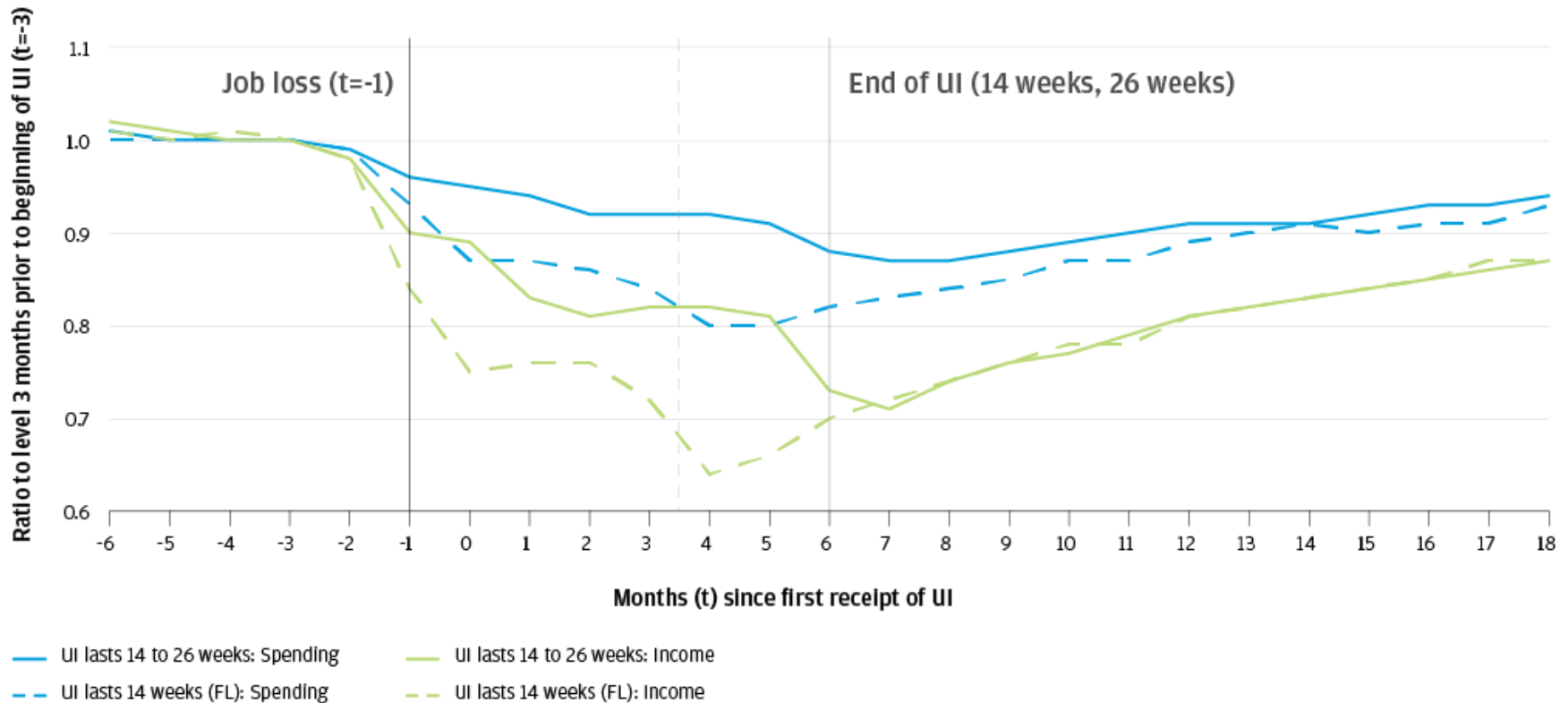


Mortgage default was correlated with income loss, regardless of payment affordability or home equity.



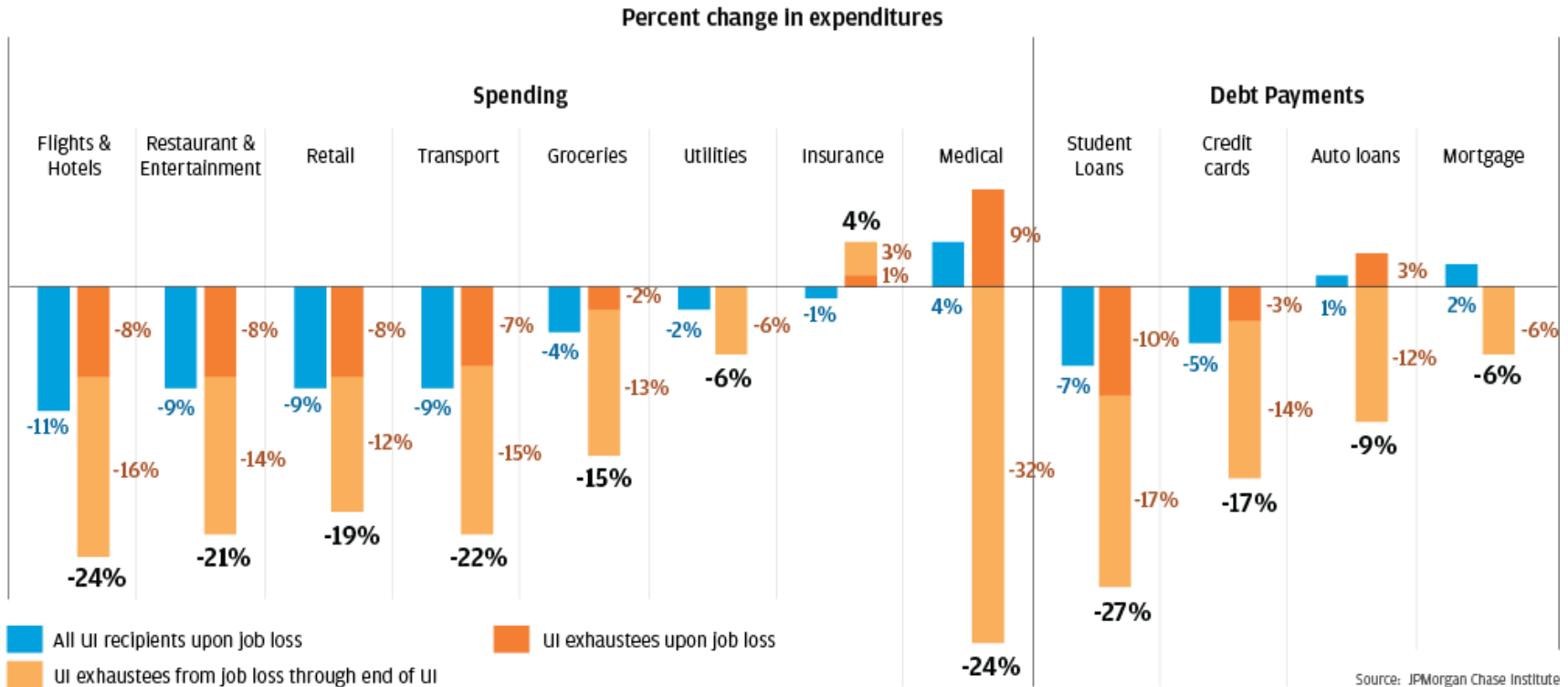
2. Expiration of unemployment benefits: Spending drops immediately at the start of a spell of unemployment, but then drops again when unemployment benefits run out (14 weeks in Florida and 26 weeks in other states)

Income and spending among UI recipients who exhaust UI benefits, in states with 14 versus 26 weeks of UI benefits*

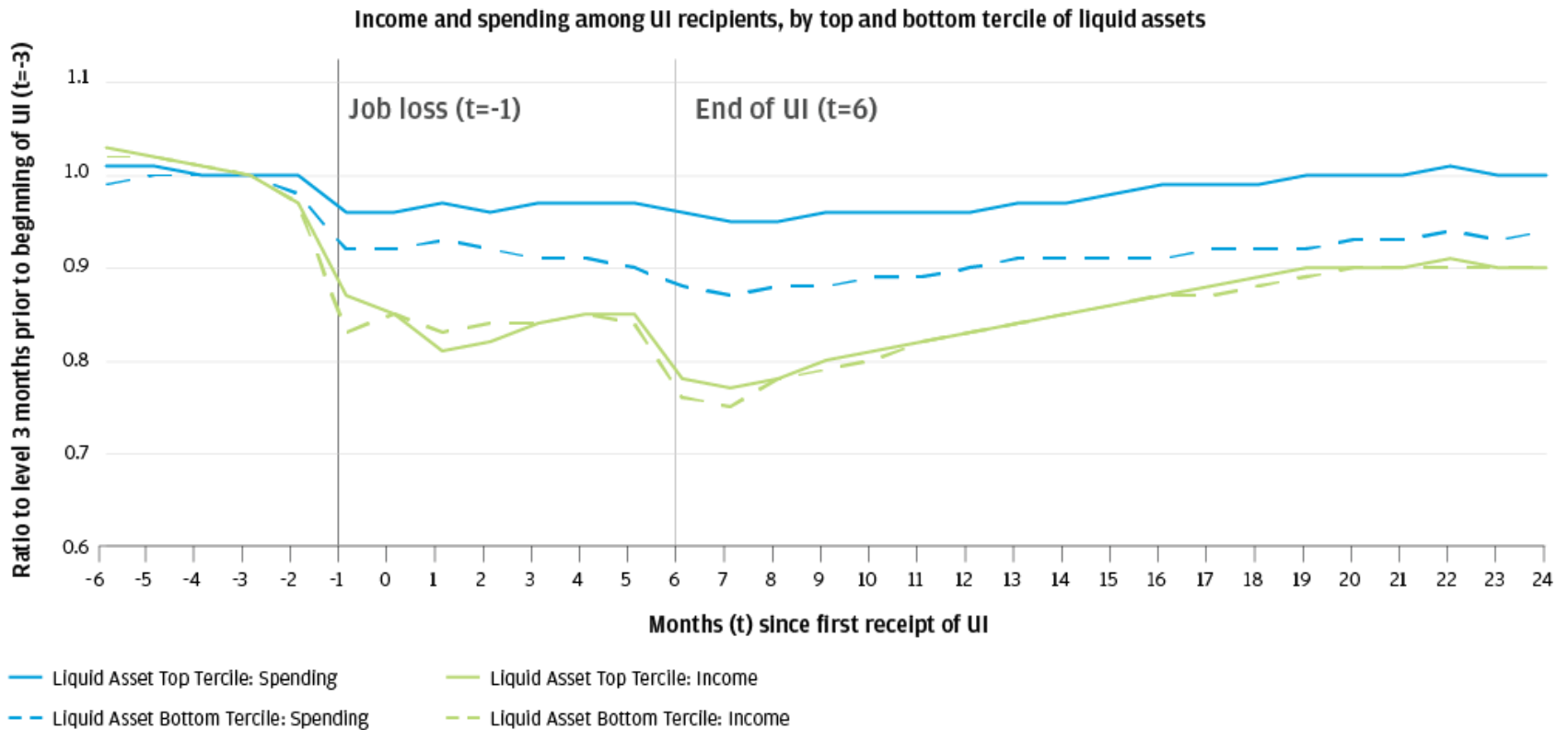


* In Florida UI benefits lasted 16 weeks in 2014 and 14 weeks in 2015. To ensure comparability between samples, this chart compares people who exhausted UI benefits in Florida (i.e. received 14 weeks of benefits) to those in states that offer 26 weeks of UI benefits who received UI for at least 14 weeks.

Job loss causes a drop in discretionary spending and student loan payments, but the long-term unemployed also cut essentials when UI runs out.



Families with high liquid assets reduce their spending upon job loss by roughly half as much as families with low liquid assets.



Source: JPMorgan Chase Institute

Implications

- 1. Short- and medium-run bumps in income and expenses feed through to families' economic position:** Even when families foresee changes in their income or expenses, they still do not adjust perfectly in anticipation of those changes. Cash flow matters more than one might expect.
- 2. There is variation in the impact of these bumps:** Some families seem to have better “shock absorbers” – or make to make more use of “shock absorbers” (bank account balances, credit cards, etc)
- 3. Families need a cash buffer:** We need better programs, financial products, and policies that help people build liquid assets.

Short- and medium-run bumps in income and prices feed through to families' economic welfare, *even when they are predictable*

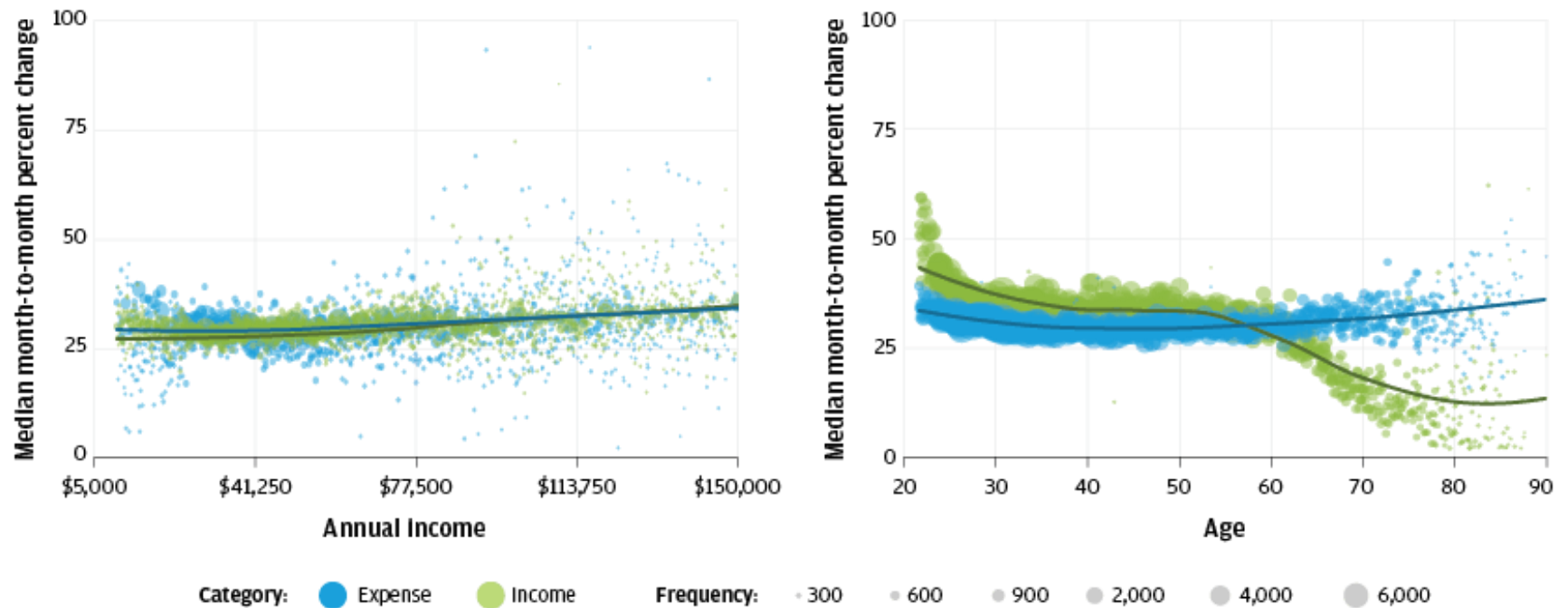
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Background: People experience high degrees of income and spending volatility on a month to month basis

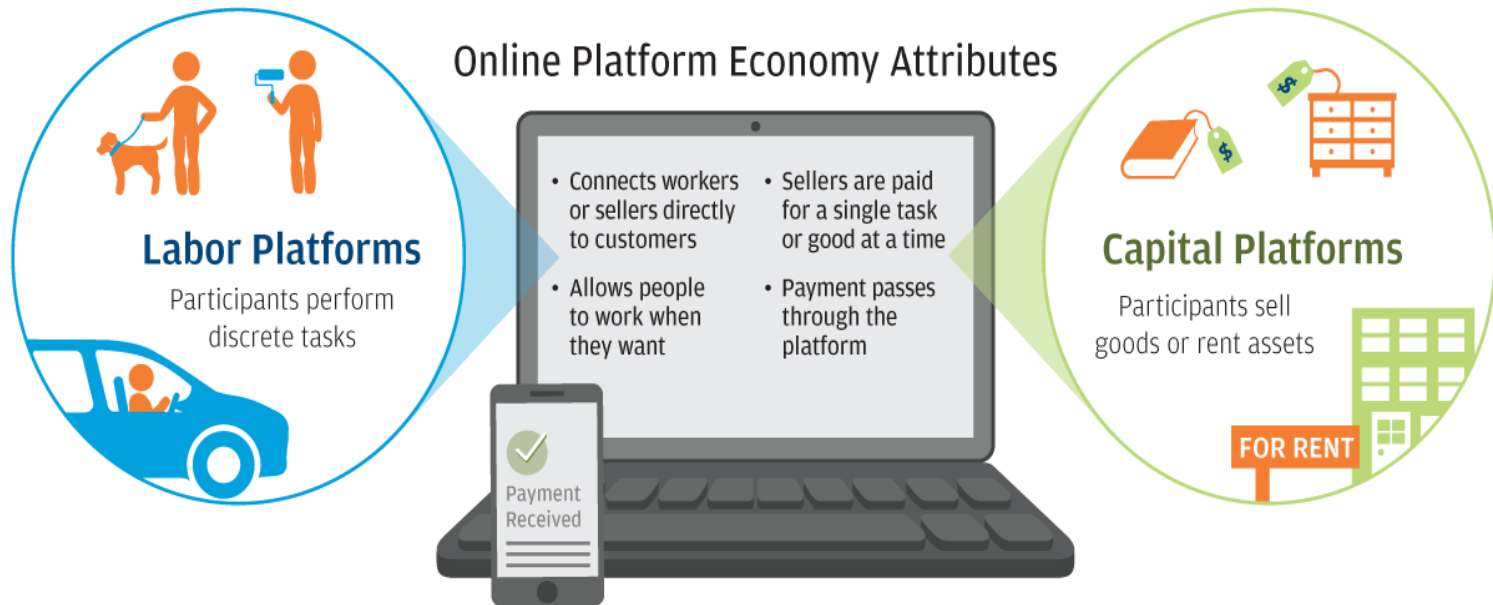
Month-to-month percent change in income and expenses, by income and age



Source: JPMorgan Chase Institute

The Online Platform Economy

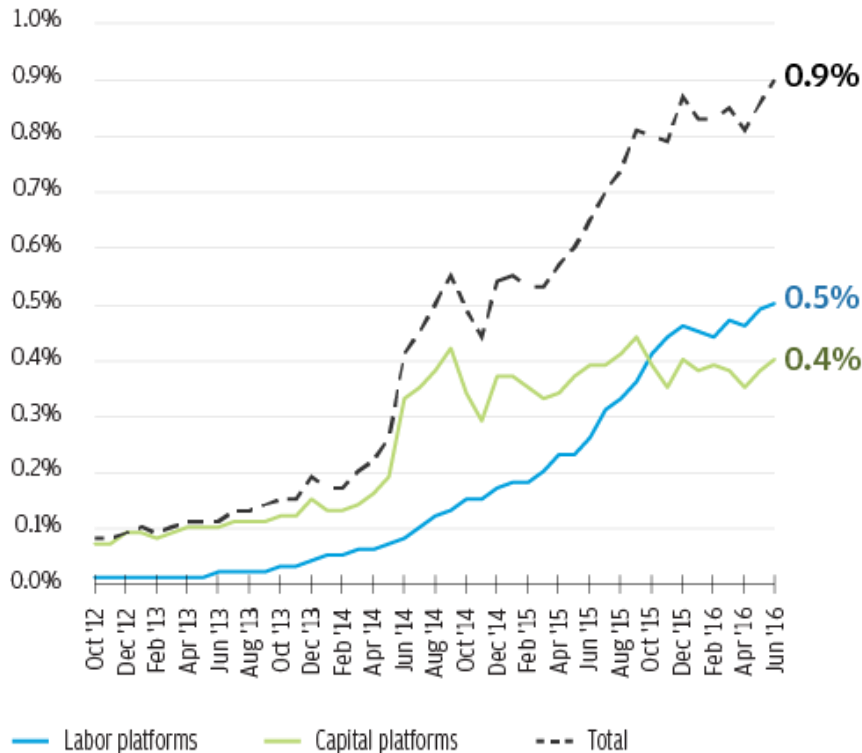
In defining the Online Platform Economy we distinguish between **Labor Platforms** and **Capital Platforms**



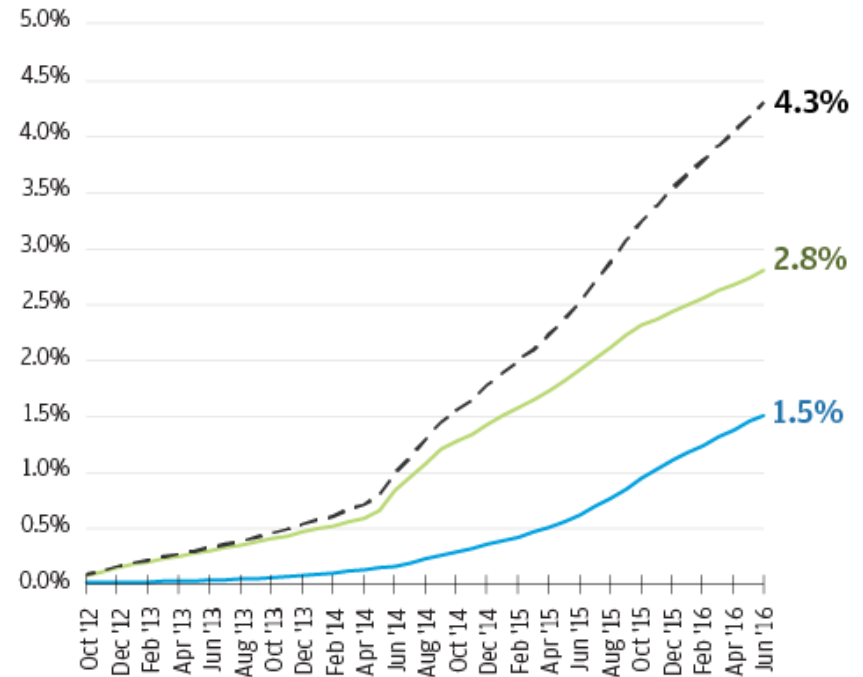
Data Asset: We identify income received by **over 240,000** anonymized individuals from **42 distinct platforms** between **October 2012 and June 2016**.

1. Tracking & analyzing participation in the online platform economy: Participation grew by 450 percent between June 2014 and June 2016

Percent of adults participating in the Online Platform Economy in each month

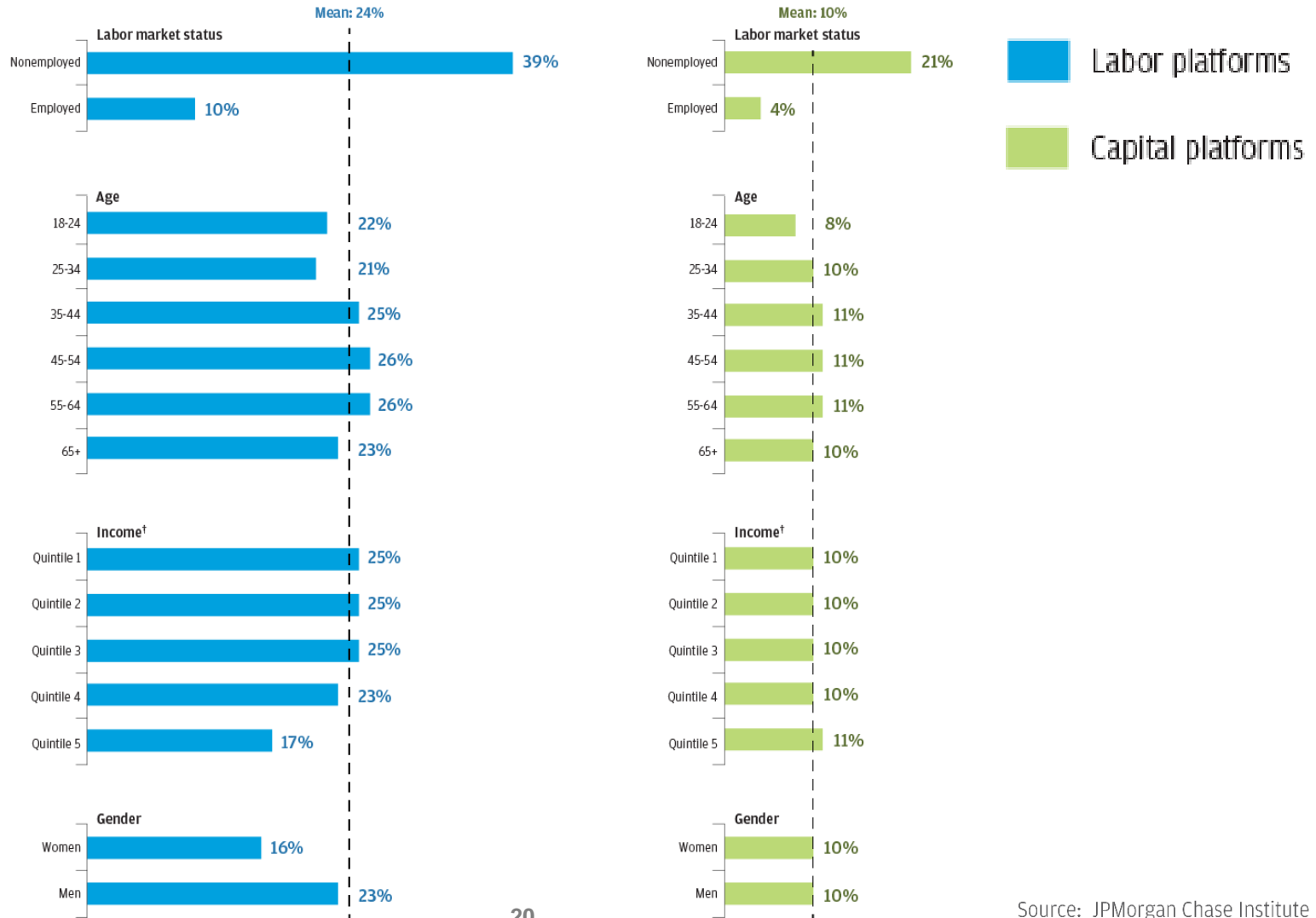


Cumulative percent of adults who have ever participated in the Online Platform Economy

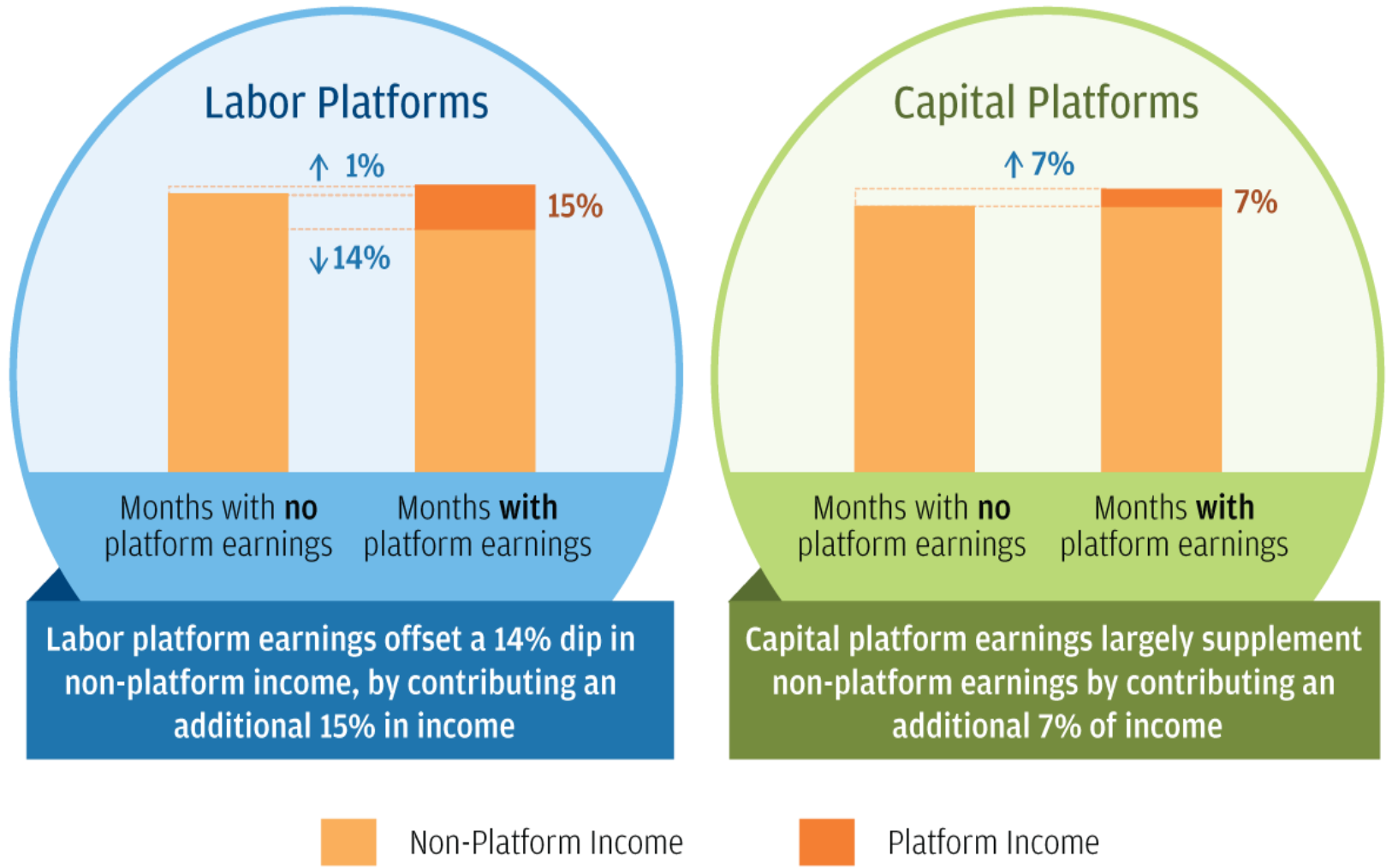


On average, participants earn 24% and 10% of their total income in labor and capital platforms respectively

Percent of total annual income earned on platforms among established platform participants in the 12 months ending in June 2016, by demographic group



Earnings from labor platforms offset dips in non-platform income, but earnings from capital platforms supplemented non-platform income



2. Tracking purchasing power at high temporal resolution: JPMCI is investing in building a “cash purchasing power index”

1. High frequency tracking of information on levels and/or growth of drivers of consumer purchasing power
 - Frequency target: monthly
 - Drivers: labor income, cash balances, total non-transfer inflows

2. Uniqueness
 - Measure take home income, not gross earnings
 - Measures are assembled from individual transactions, so can be aggregate or disaggregated flexibly

3. Questions about how we can make this most helpful
 - What aggregations/drivers to focus on? (Payroll income, other labor income, total inflows, average daily balances, others?)
 - Which temporal effects constitute “noise”? (Seasonal adjustment? Day-of-week adjustment?)

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