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Tax Time

How families manage tax refunds and payments

Executive Summary

JPMorgan Chase & Co.
INSTITUTE

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Every spring, more than a half trillion dollars flow into and out of the financial accounts of American families as they reconcile taxes paid against taxes owed for the prior year. In this report, we analyze daily financial flows and balances for one million families who receive tax refunds or make tax payments. We find that tax reconciliation has a significant and long-lasting impact on spending and saving patterns of some but not all of them.

The vast majority of families receive tax refunds; the average refund is almost six weeks' income. For many of these families, that cash infusion fuels expenditures for more than half the year, and resets their spending and saving patterns. Even six months after the refund, average daily expenditures have settled to a new steady state which is 6.7 percent higher than the pre-refund steady-state, and account balances have settled 11 percent higher. Lower income families and those with lower cash balances are especially likely to time durable goods spending around their tax refund and carry higher revolving credit card debt until they receive it.

The minority of families who owe tax payments pay out an average of 2.5 weeks' income in a single day. However, for these families, the payment itself has no lasting impact on their flows or balances. Families with higher incomes and higher cash balances are over-represented in this group, and the payments they make represent a smaller cash flow event for them than tax refunds do for families who receive them.

JPMCI Tax Event Dataset

Sample

34.3 MILLION Families who had a Chase checking account in 2015, 2016, or 2017.

BASE SAMPLE

8.3 MILLION

Families that meet the following criteria:

- Received at least one tax refund direct deposit or made at least one electronic tax payment from their Chase checking account in the years 2015, 2016, or 2017
- Used their checking account for at least five expenditures in each of the six months before and after the tax refund or tax payment, and for at least $5,000 in income deposits during the calendar year
- Primary account holder is 24-64 years old

7.6 MILLION

Families who either:

- Received only tax refunds and made no tax payments (tax refund families)
- Made all of the year's tax payments on a single day and did not receive a tax refund (tax payment families)

EVENT STUDY SAMPLE (RANDOM DRAW)

Tax refund families

500,000 Refund events, representing the day the family receives its first tax refund of the year.

Tax payment families

500,000 Payment events, representing the day that a family makes its tax payments for that year.

Financial Outcomes

We analyze daily time series of account balances and categorized inflows and outflows. Our taxonomy of flows comprises three main categories (within these there are additional subcategories).

Expenditures: Outflows from Chase checking accounts:

- Purchases
- Debt and bill payments
- Cash or check withdrawals

Inflows: Inflows to Chase checking accounts:

- Income (labor, government, other)
- Cash, check, electronic deposits

Net Savings: Net transfers to Chase checking account from Chase or non-Chase savings accounts, money market, CD, other saving-oriented cash accounts.

Checking account balances

Revolving Chase credit card balances

Source: JPMorgan Chase Institute

Our findings underscore that fact that, whether by design or not, the tax system is a primary tool by which many families generate lump sums of cash. They raise questions about roles that families, financial service providers, and policy makers might play in creating cheaper and more flexible tools for this purpose.

Finding One

Four-fifths of sample families received one or more refunds and made no payments. Refund recipients tend to have lower average incomes and smaller cash buffers than families making tax payments.

TAX EVENTS EXPERIENCED	PERCENT OF BASE SAMPLE	AVERAGE TAKE-HOME INCOME	AVERAGE CASH BALANCES (WEEKS OF TAKE-HOME INCOME)	AVERAGE AGE OF PRIMARY ACCOUNT HOLDER
Tax Refund Families	78%	$49,992	7.3	41
Tax Payment Families	7.7%	$71,091	10.9	43

Source: JPMorgan Chase Institute

The vast majority of families in our base sample are "tax refund" families; they received one or more tax refunds and made no tax payments in a year. "Tax payment families" represent a small minority. In this study we focus on a subset of families making payments—those who make all of their payments in a single day. Tax payment families had higher take-home incomes and larger cash buffers than tax refund families.

Finding Two

Tax refunds amount to almost six weeks' take-home income for the average family receiving them. For families making a tax payment, the average payment is equivalent to 2.5 weeks' income.

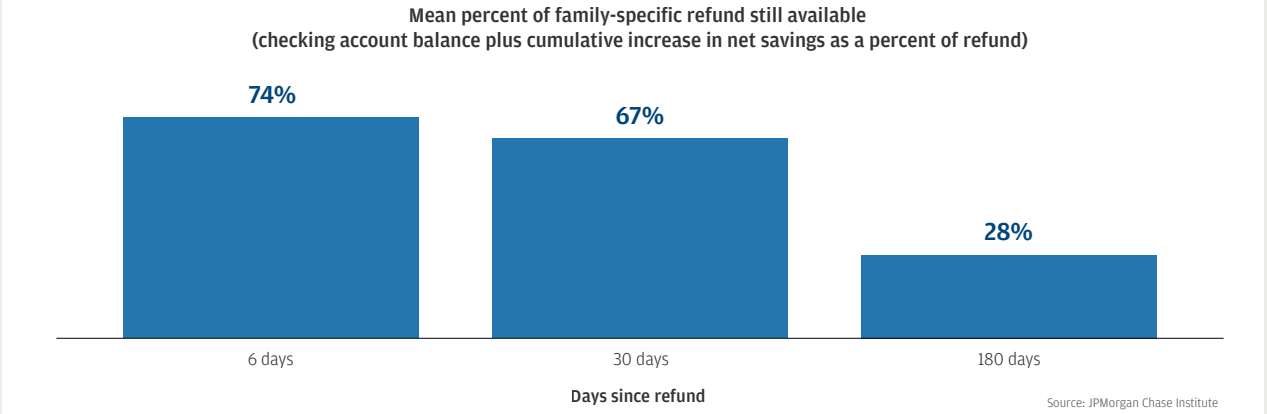
TAX EVENTS EXPERIENCED	REFUND OR PAYMENT AMOUNT (DOLLARS)		REFUND OR PAYMENT AMOUNT (WEEKS OF TAKE-HOME INCOME)	
	Average	Median	Average	Median
Tax Refund Families	$3,602	$2,601	5.7	3.3
Tax Payment Families	$2,923	$481	2.5	0.6

Source: JPMorgan Chase Institute

Tax refund families receive an average of 5.7 weeks' income in their tax refund, whereas tax payment families pay out an average of 2.5 weeks' income. This is not only because the magnitude of the average tax refund is larger than the magnitude of the average tax payment, but also because families who make a tax payment tend to have higher take-home incomes. Within each group, a majority of families experience much smaller than average impacts.

Finding Three

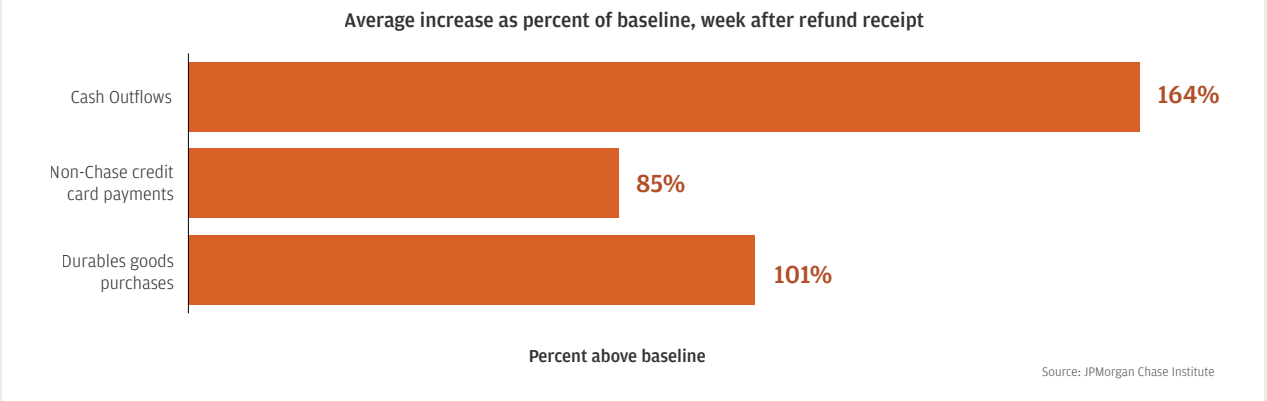
Among tax refund recipients, average expenditures increase sharply as soon as the refund is received. Six months after the refund, families still have an average of 28 percent of their tax refund remaining.



One week after receiving their first tax refund of the year, families on average have about 74 percent remaining either in their checking account or transferred to saving accounts. Six months later, they still have 28 percent of their tax refund remaining.

Finding Four

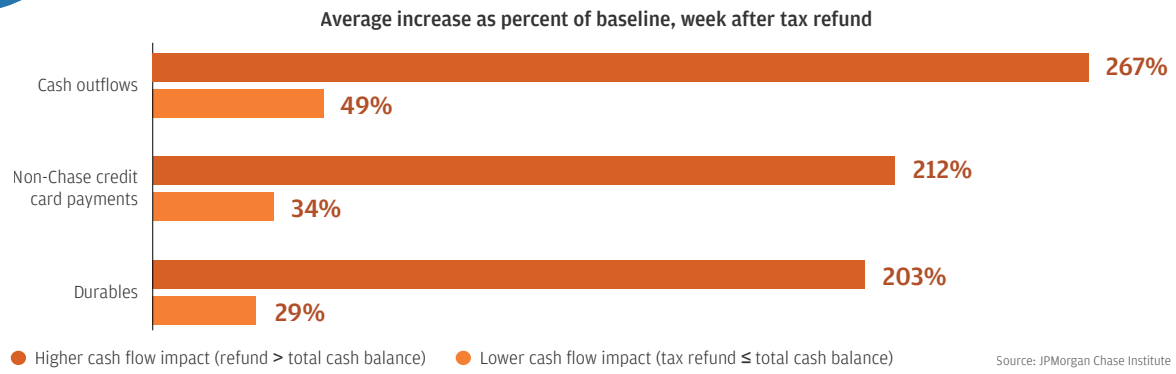
Expenditures on durable goods, credit card payments, and cash withdrawals increase most sharply upon receipt of a tax refund.



Average payments on non-Chase credit cards in the week after the refund is received are 85 percent higher than the average during a typical week prior to the refund. Average expenditures on durable goods double in the week after refund receipt, to $50 compared to $25 during a typical week. Families also use their tax refunds to deleverage; average revolving credit card balances are almost eight percent lower in the month after the tax refund relative to the month before.

Finding Five

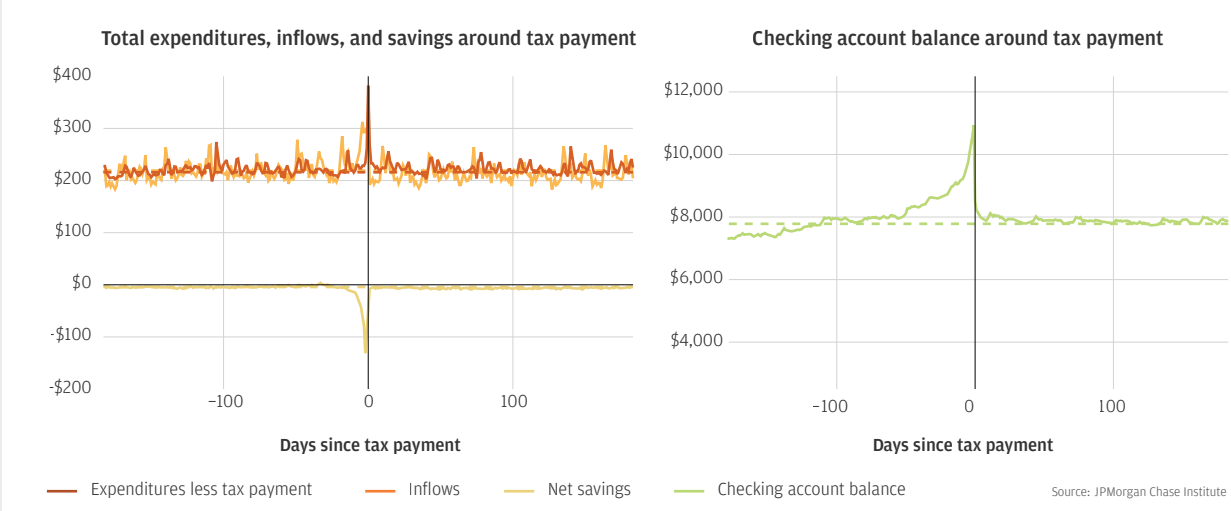
Families for whom the refund has a larger cash flow impact increase their spending and saving most sharply when it arrives.



For almost half of families receiving tax refunds, the refund exceeds the sum of pre-refund balances in all of their cash accounts. Among these families, cash withdrawals, non-Chase credit card bill payments, and durable goods purchases more than triple in the week after the first tax refund is received. Among the rest of families, these flows increase more modestly—by less than 50 percent. We also find that those who file earliest in the season increase their spending and saving most sharply when the refund arrives.

Finding Six

On average, families who make a tax payment cover that payment with cash already available when it is due. Once the payment is made, spending and saving patterns quickly return to their previous steady state.



Tax payment families in our sample do not cut expenditures or increase their labor income to cover the payment. Instead, they transfer cash into their checking accounts during the three weeks leading up to the payment. Unlike with tax refund families, tax payment families' expenditures and account balances settle quickly back to the original steady-state after the payment is made.