

## Household finance on a day-to-day basis

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# Banking Data

Since the Covid-19 pandemic, the National Institute of Statistics and Economic Studies (Insee) has had access to banking data, available almost in real-time, which helps provide insight on the financial situation of households.

- ▶ Monitoring wealth, income, and consumption, but also banking-specific indicators like overdrafts
- ▶ Studying specific households (low-income households, welfare recipients, single-parents...)

## Previous Work on Banking Data (Insee)

Publication of indicators on the financial situation of households, as well as economic studies :

- ▶ The consumption response to unemployment
- ▶ Cross-border shopping for fuel at the France-Germany border
- ▶ Fuel demand response to price changes
- ▶ The financial situation of households in France during the Covid-19 pandemic
- ▶ ...

# Data description

- ▶ 2 major French banks : *La Banque Postale* and *Crédit Mutuel Alliance Fédérale*
- ▶ For each of them : 300,000 clients followed since 2019
- ▶ Anonymized data, at the client level :
  - monthly account balances
  - all transactions
  - socio-demographic variables (age, gender, region, occupation, marital status, etc.)

# Data limitations

## ► Multi-banking :

- a client may hold accounts in multiple financial institutions, leading to a partial view of their financial assets and transactions
- difficulty in aggregating bank clients belonging to the same household

## ► Identifying income and expenses :

- not all incoming flows are income, and not all outgoing flows are expenses
- but recent improvements now allow for the categorization of some incoming/outgoing flows

## ► Representativeness issues :

- specificity of the bank customer base + exclusion of unbanked individuals
- but **comparisons** with other (representative) sources, such as surveys, are very **reassuring**

# Household finance on a day-to-day basis

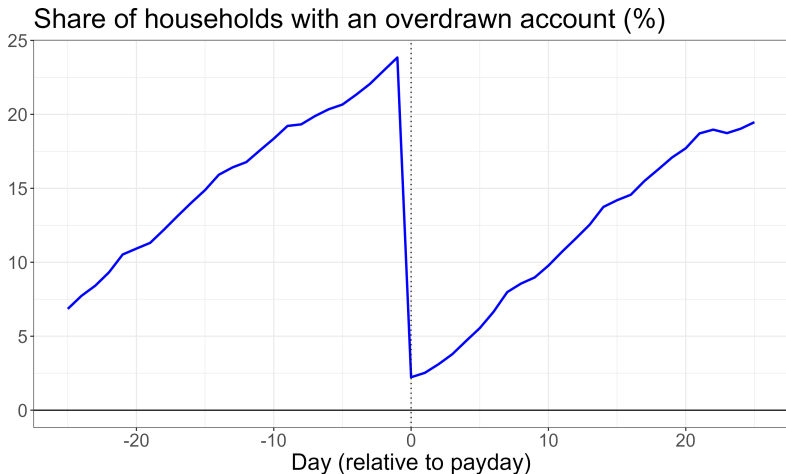
**How does the financial situation of households change throughout the month ?**

- ▶ Using bank account data from 300,000 clients of a major French bank (*La Banque Postale*), we analyze the day-to-day profile of **overdraft and spending**.
- ▶ Since not all individuals receive their income at the same time, we don't study this financial situation based on calendar days but **relative to payday**.

# Overdraft

- ▶ Overdraft = negative balance on current account
- ▶ The share of households with an overdrawn account peaks the day before payday :
  - On average, the day before payday, 1/4 of households have at least one overdrawn account.
- ▶ Heterogeneity : the share of households with an overdrawn account before payday is
  - higher for the low-income households (31%), single-parents or households whose earnings mainly include welfare benefits (>40%)
  - a little lower for the high-income households (23%)

# Overdraft

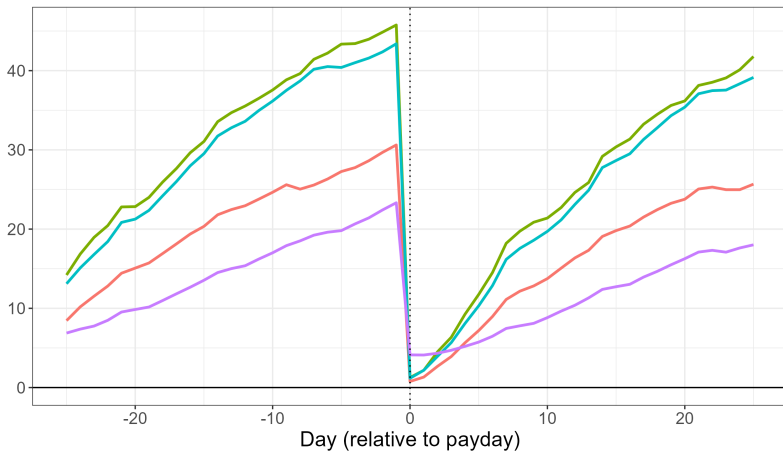


On average, the day before payday, 1/4 of households have an overdrawn account.



# Overdraft

Share of households with an overdrawn account (%)



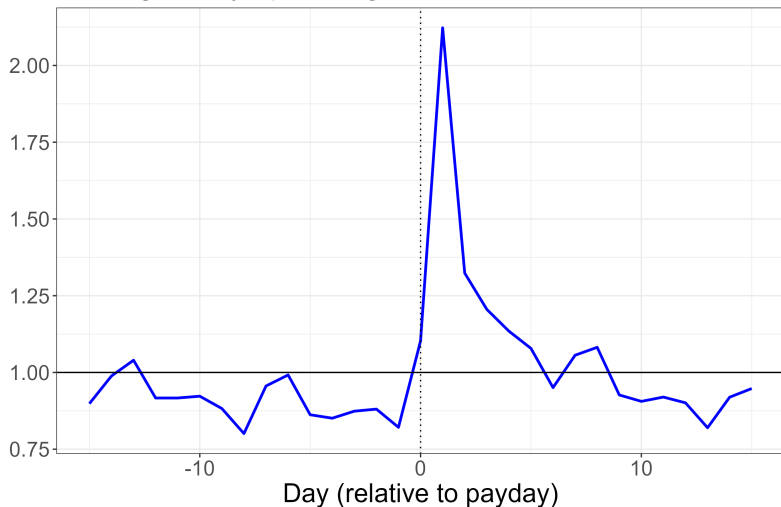
- Bottom 25% income earners
- Households whose earnings mainly include welfare benefits
- Single-parents
- Top 25% income earners

# Spending

- ▶ On average, the day after payday, household debit card spending is twice as high as on an average day.
- ▶ Heterogeneity : the peak of spending is
  - higher for the low-income households (3.6), single-parents (3.3) and households whose earnings mainly include welfare benefits (4.5)
  - lower for the high-income households (1.6)

# Spending

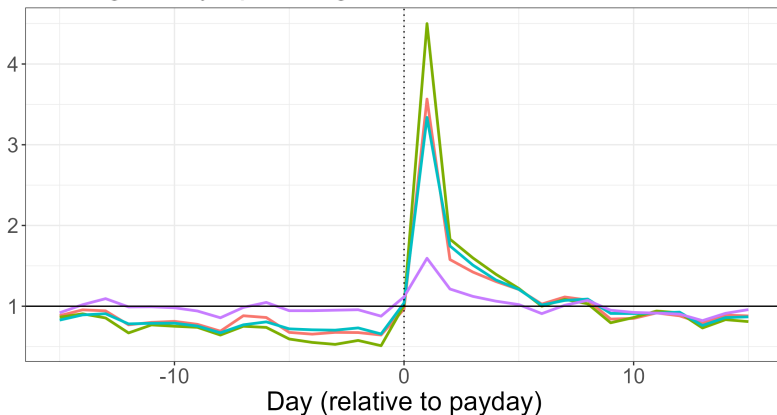
Average daily spending ratio



On average, the day after payday, household spending is twice as high as on an average day.

# Spending

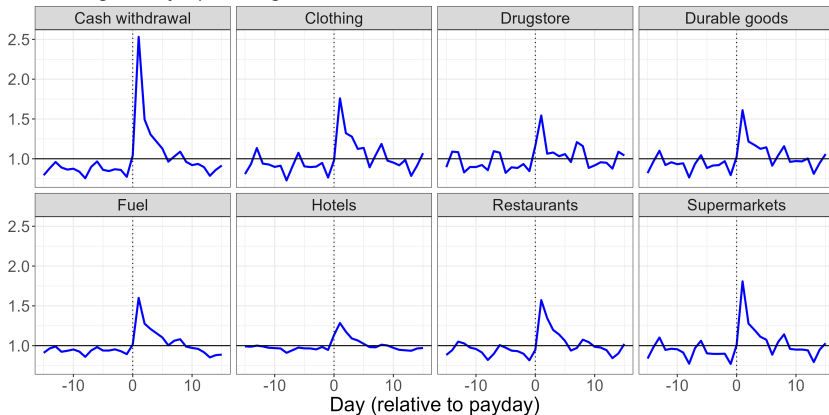
Average daily spending ratio



- Bottom 25% income earners
- Households whose earnings mainly include welfare benefits
- Single-parents
- Top 25% income earners

# Spending

Average daily spending ratio



Cash withdrawal : +150%, Supermarkets : +81%, Durable goods : +61%, Fuel : +60%, Drugstores : +54%, Hotels : +28%

# Conclusion

- ▶ Households are increasingly financially constrained before payday
  - 1/4 of households have an overdrawn account before payday
- ▶ As a result, some transactions are postponed until after payday
  - the day after payday, household card spending is twice as high as on an average day
  - the delayed transactions are typically cash withdrawals and supermarket expenses

Thank you !