

Reinvesting Dividends

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Investor balance sheet before the payout

Securities	€2,000	Equity	€5,000
Cash	€3,000		

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€100 dividend




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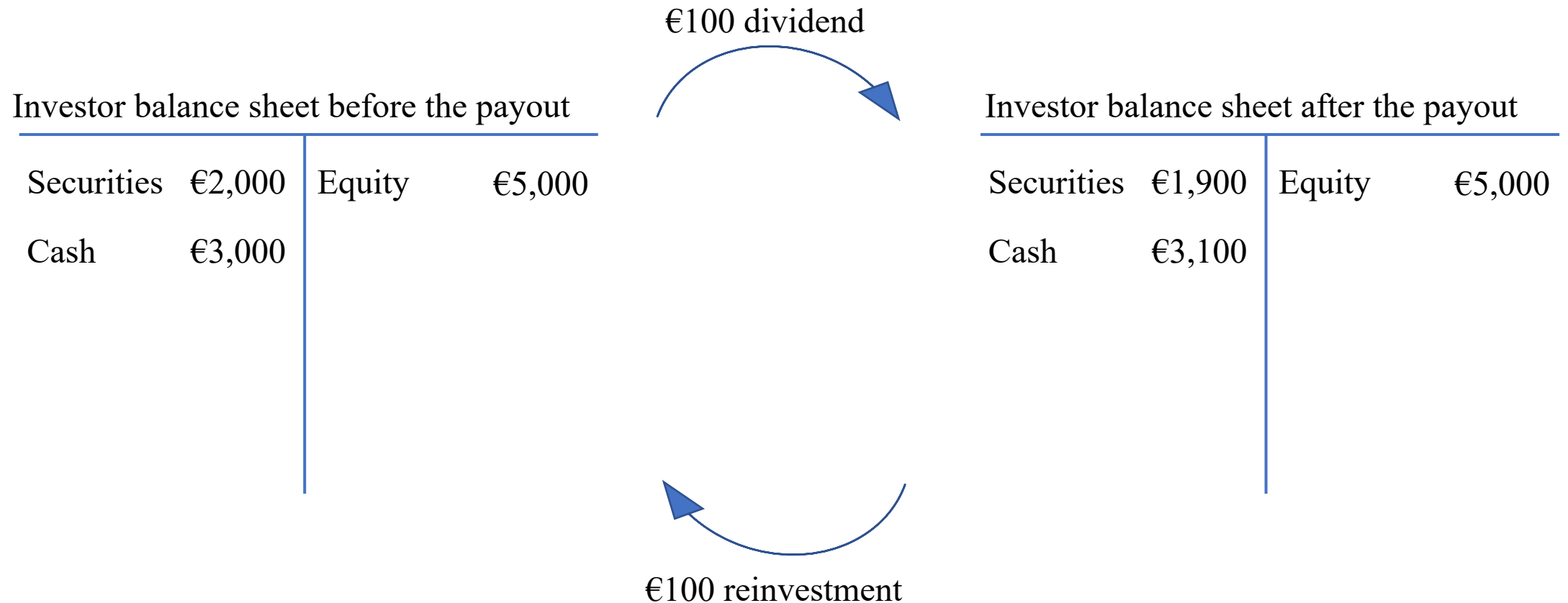
€100 dividend



Investor balance sheet before the payout			
Securities	€2,000	Equity	€5,000
Cash	€3,000		

Investor balance sheet after the payout			
Securities	€1,900	Equity	€5,000
Cash	€3,100		

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Yet, previous studies find relatively low dividend reinvestment rates and relatively high dividend consumption rates among retail investors.

Study	Data	Dividend reinvestment (in securities portfolios)	Dividend consumption
Baker, Nagel, and Wurgler (2007)	US households 1988-2001 US discount brokerage clients 1991-1996	18% (one month after payment; dividends paid by stocks)	Up to 75% (one year after payment)

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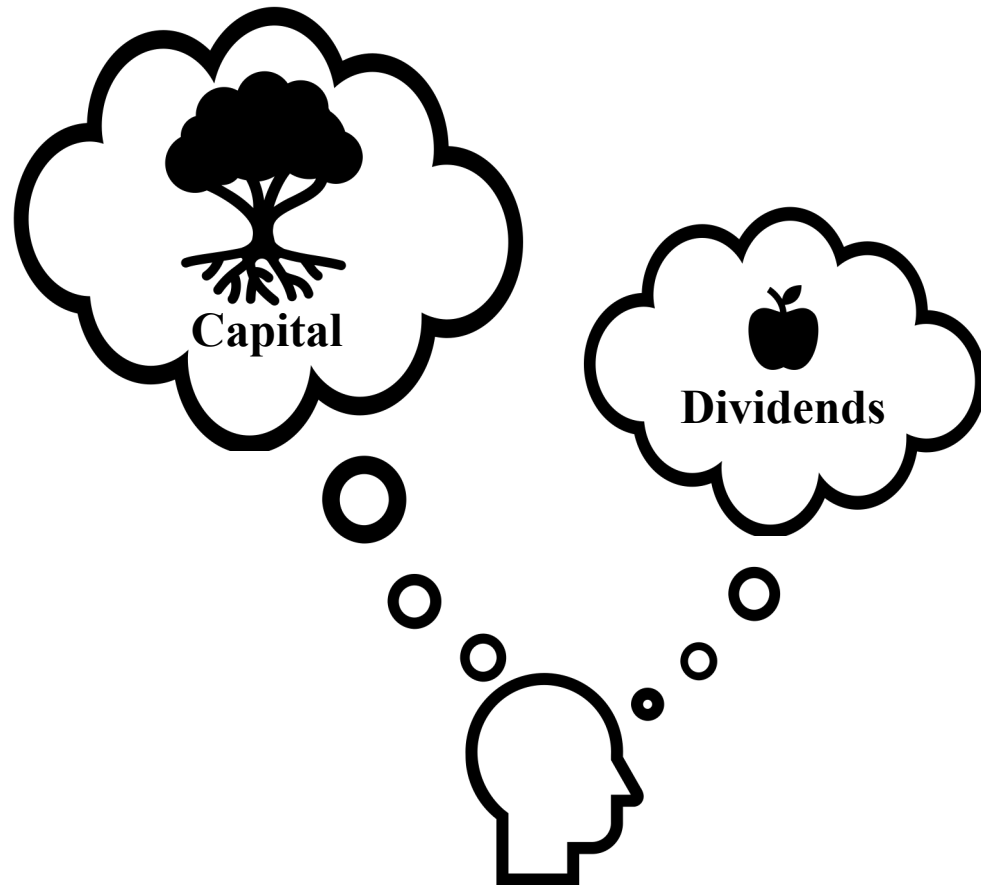
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Bräuer, Hackethal, and Hanspal (2022)	German online bank clients 2017-2019	9% (one week after payment)	14% (one week after payment)

Both, mental accounting and default effects may explain low reinvestment/high consumption rates.

Mental accounting (Shefrin and Statman, 1984):

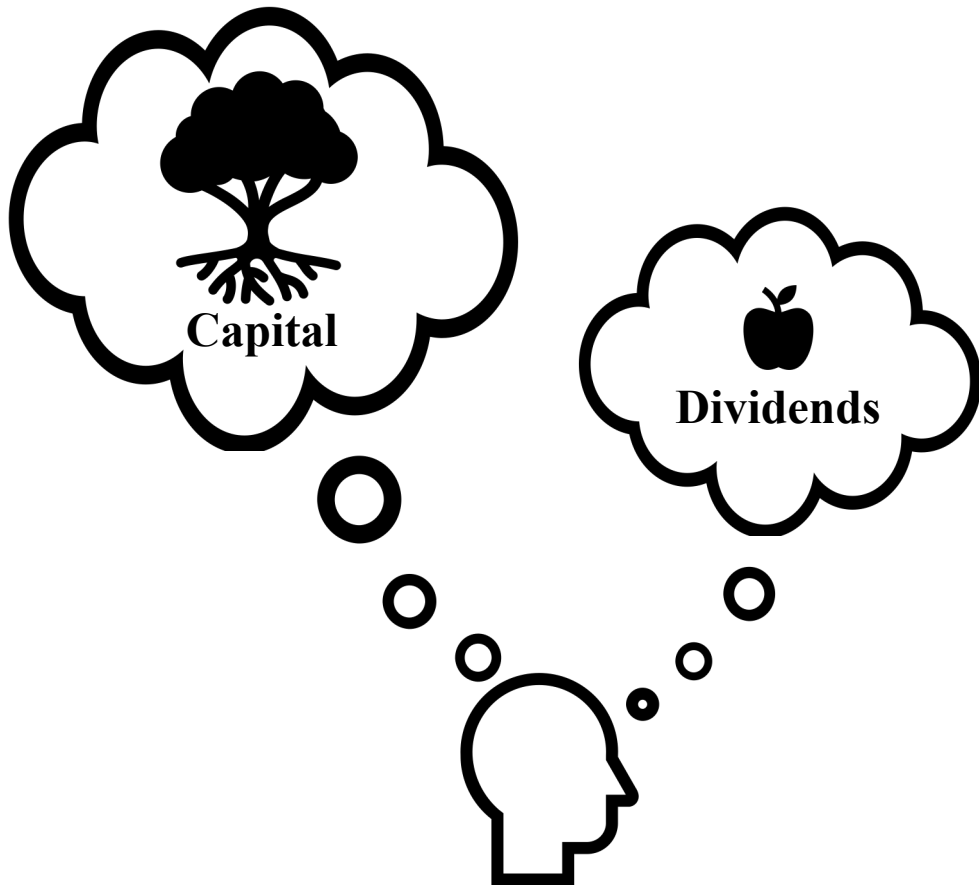
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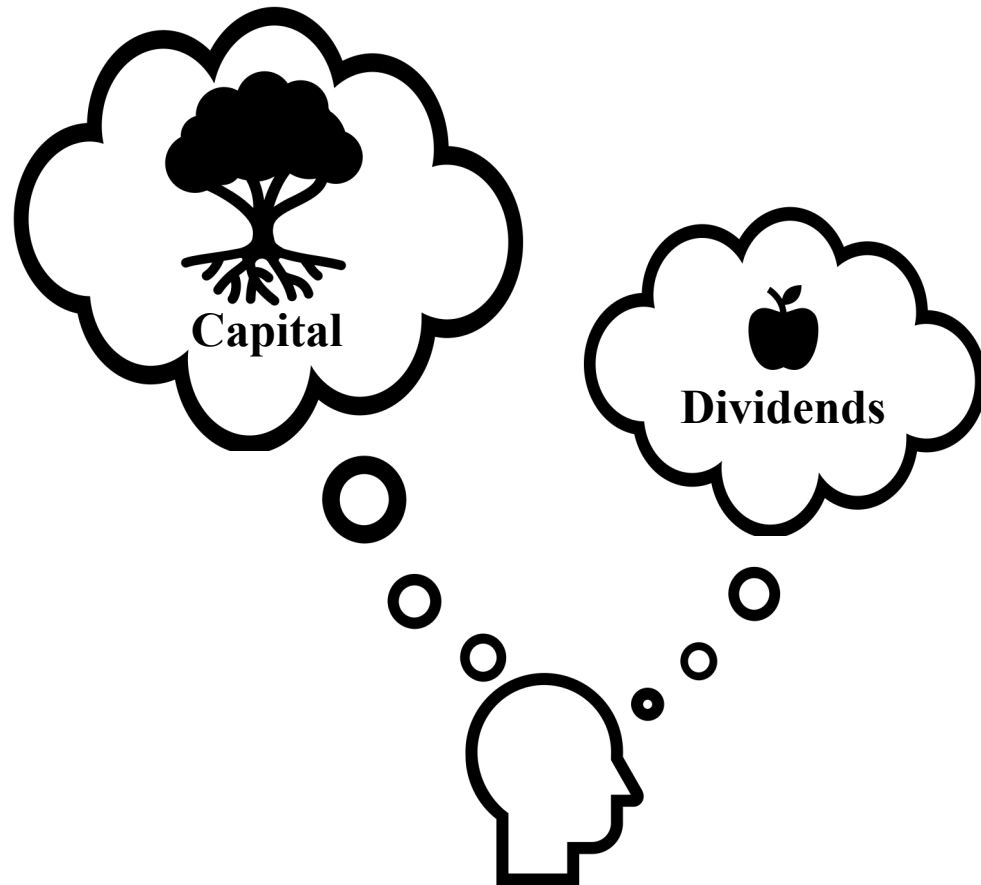
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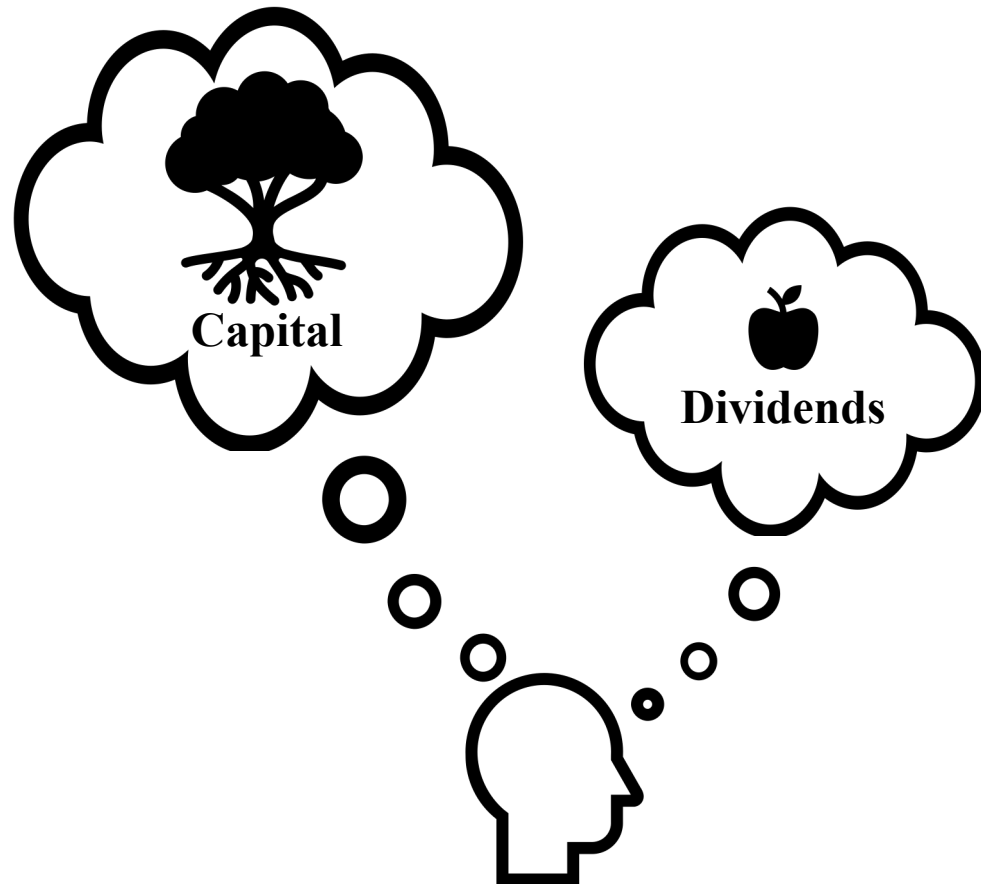
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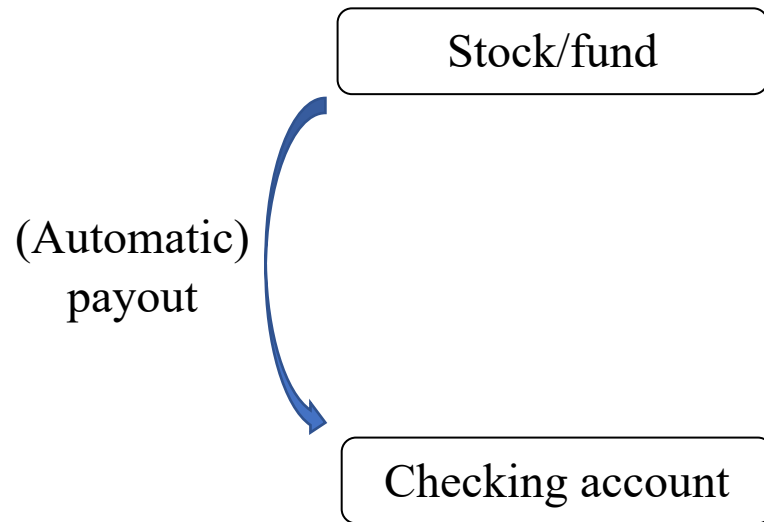


The end of the story?

We argue that default effects and mental accounting vary depending on the type of account that dividends are paid out to.

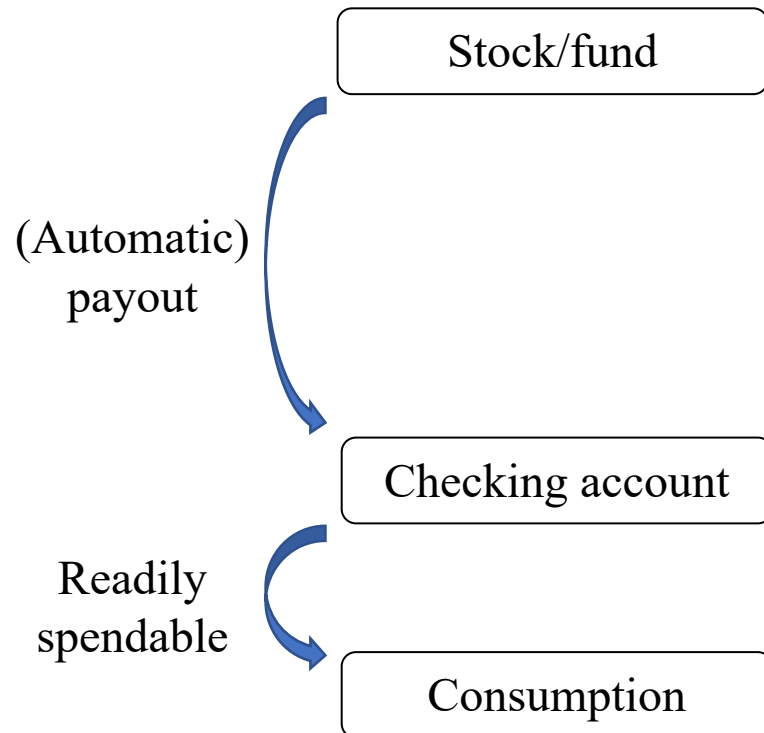
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Payout to the checking account



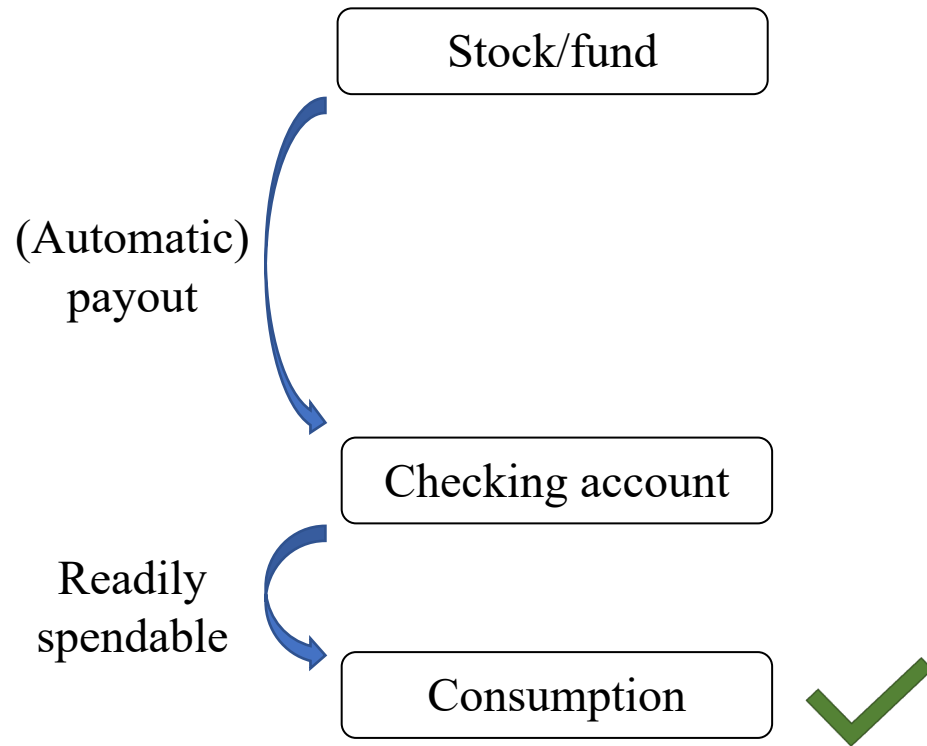
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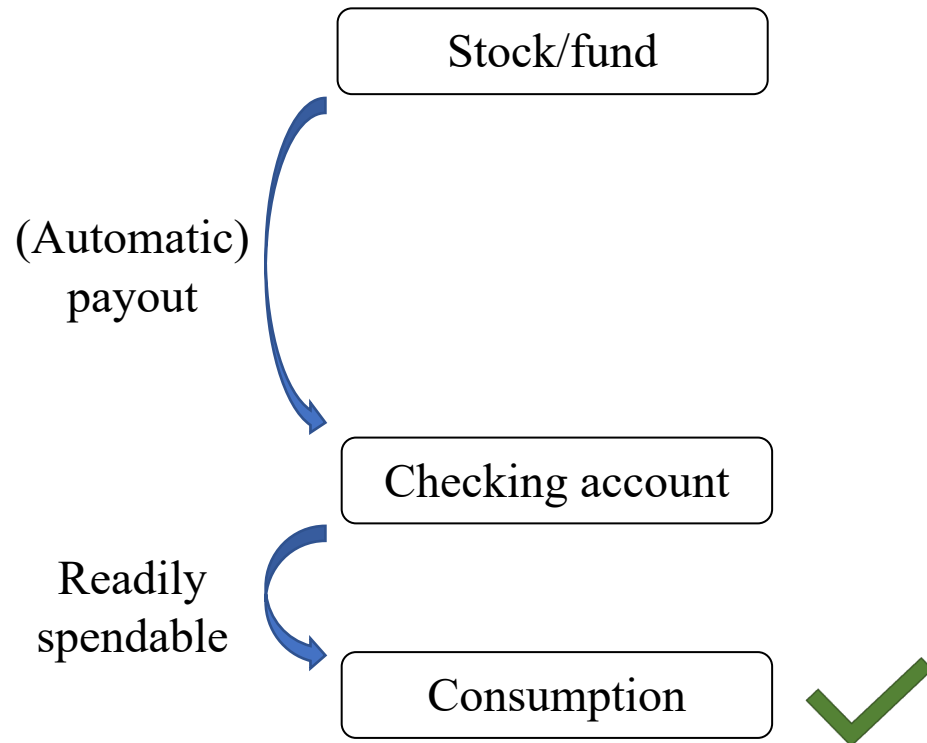
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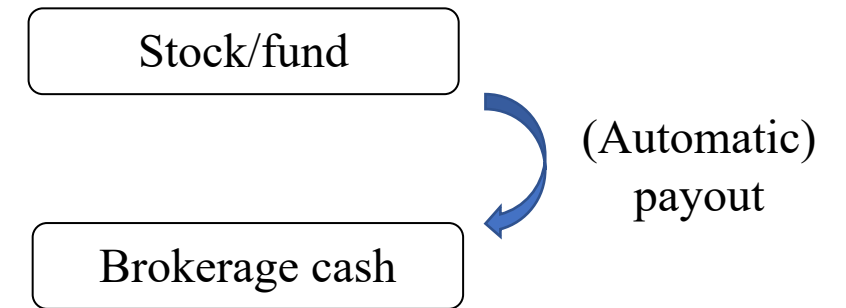


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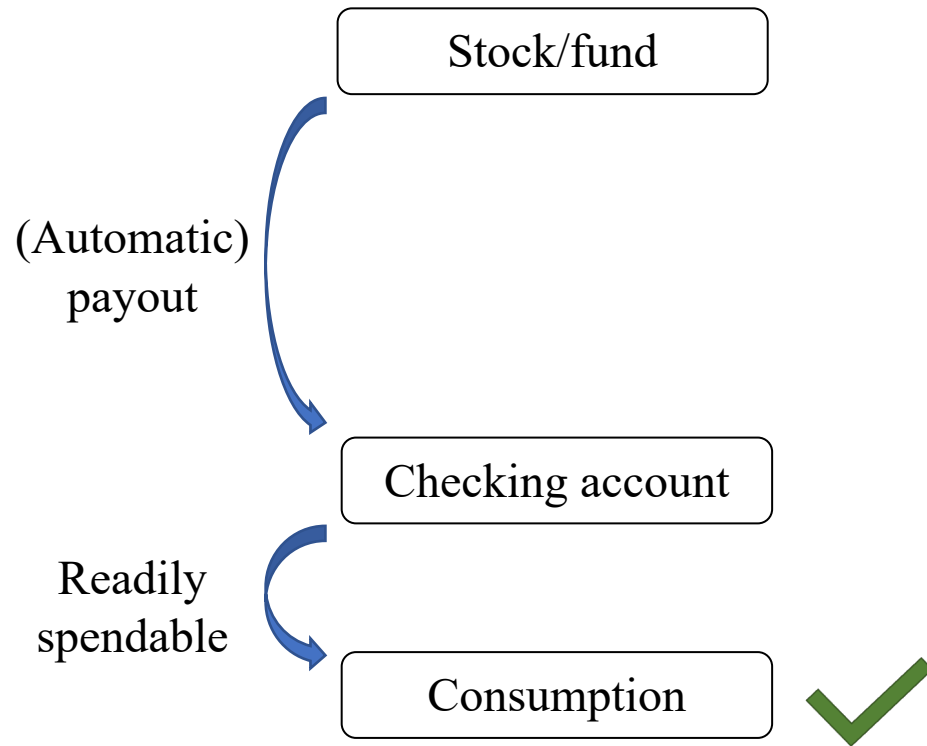


Payout to the brokerage cash balance

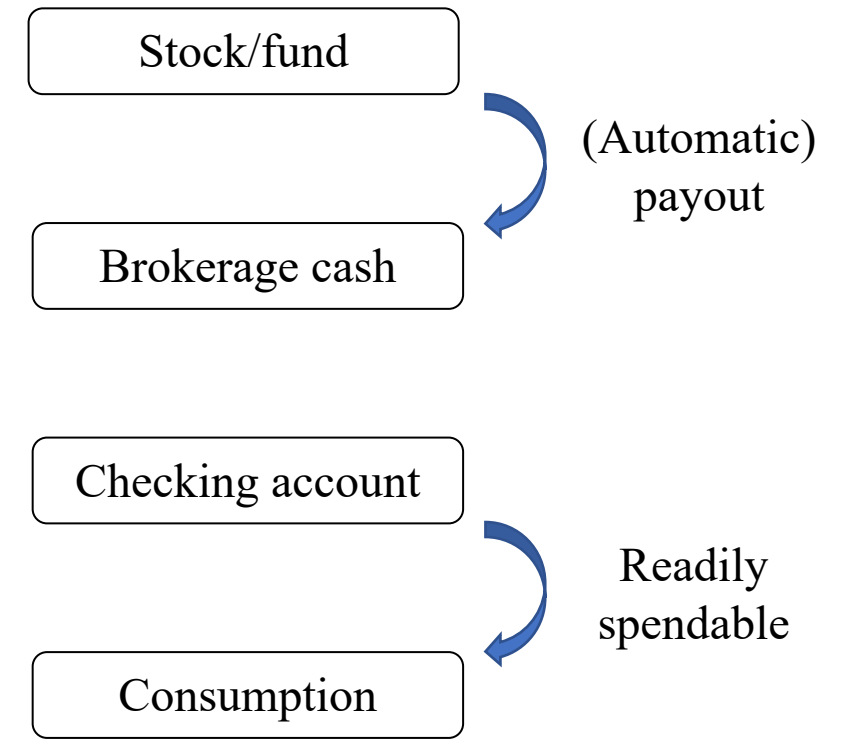


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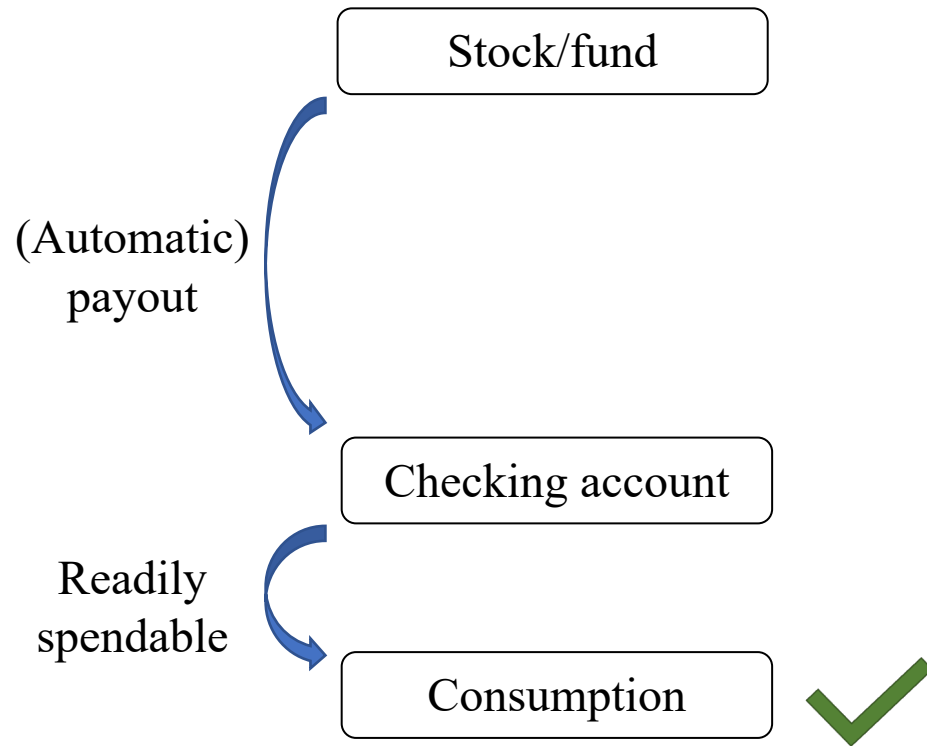


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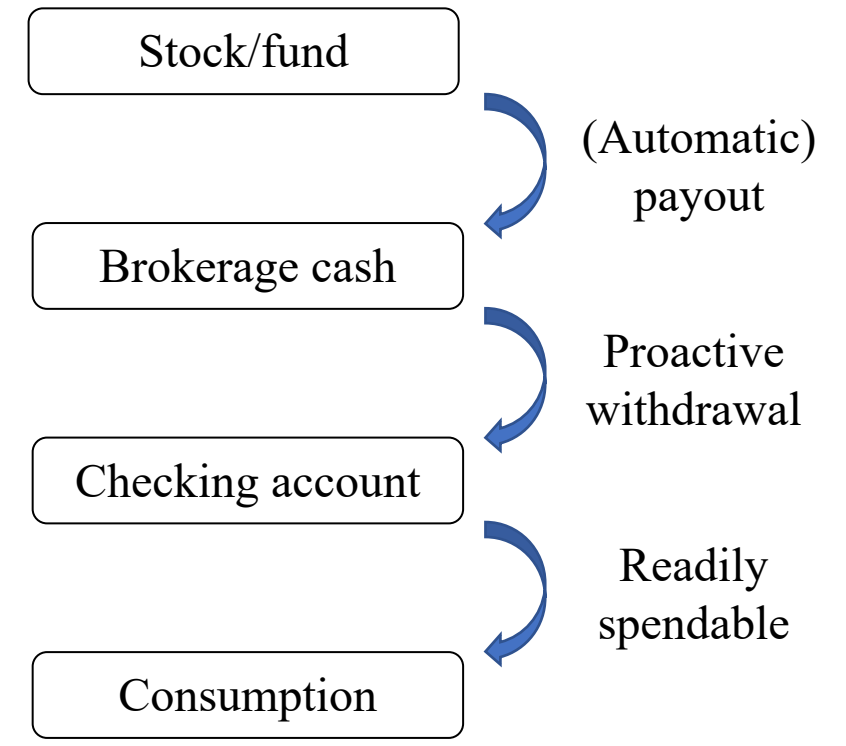


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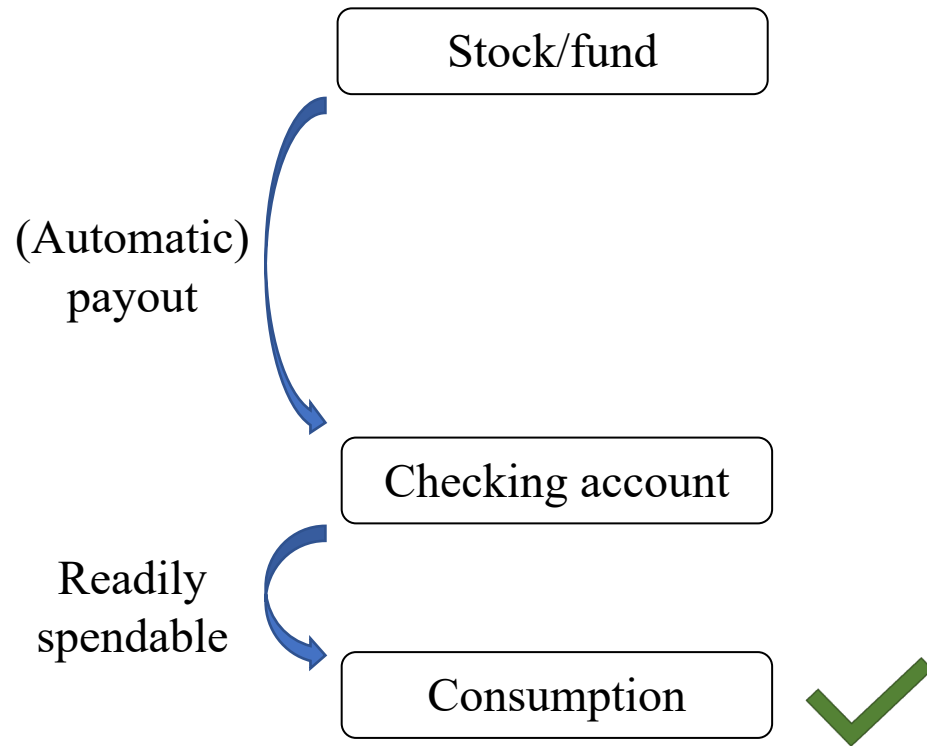


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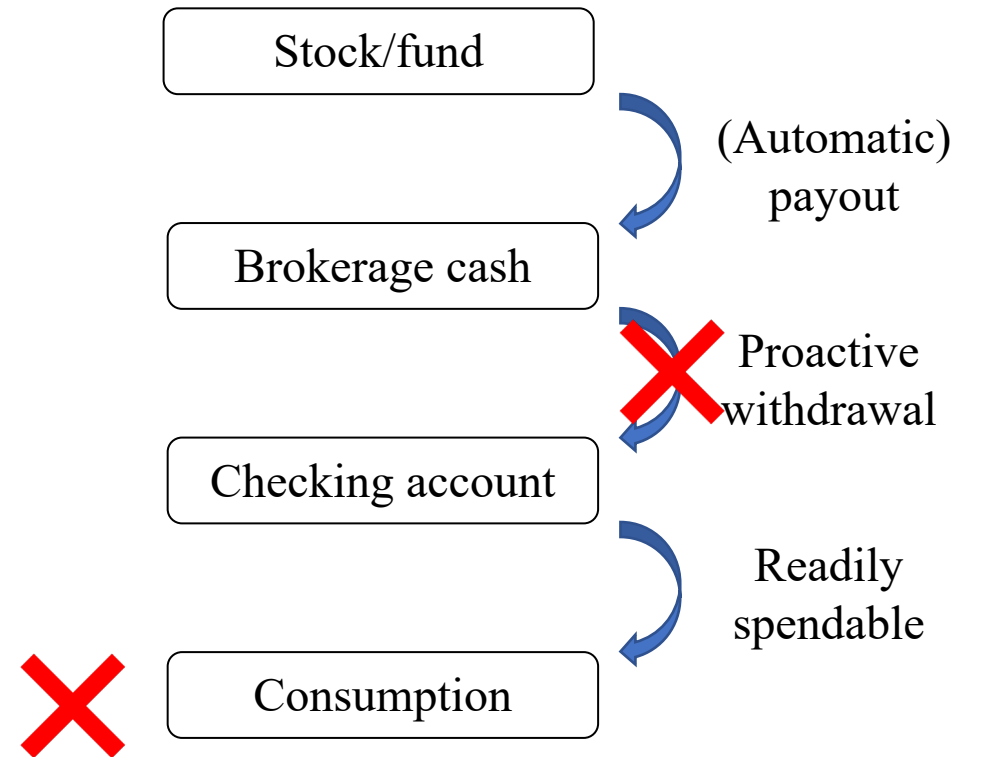


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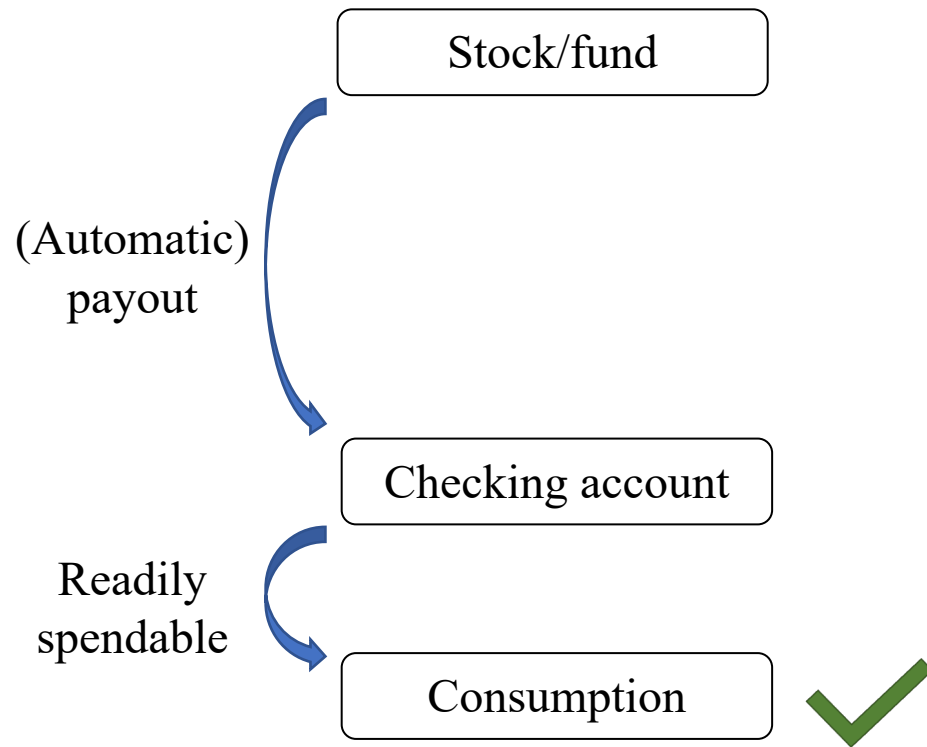


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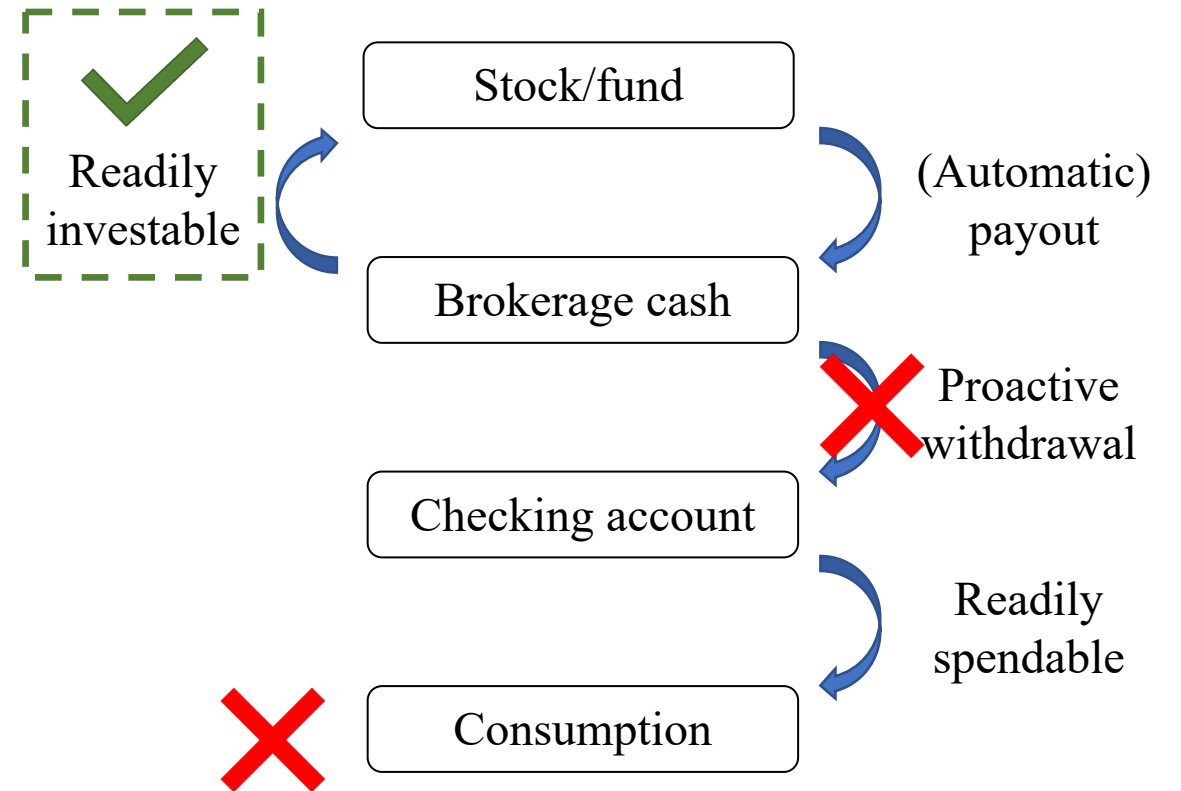


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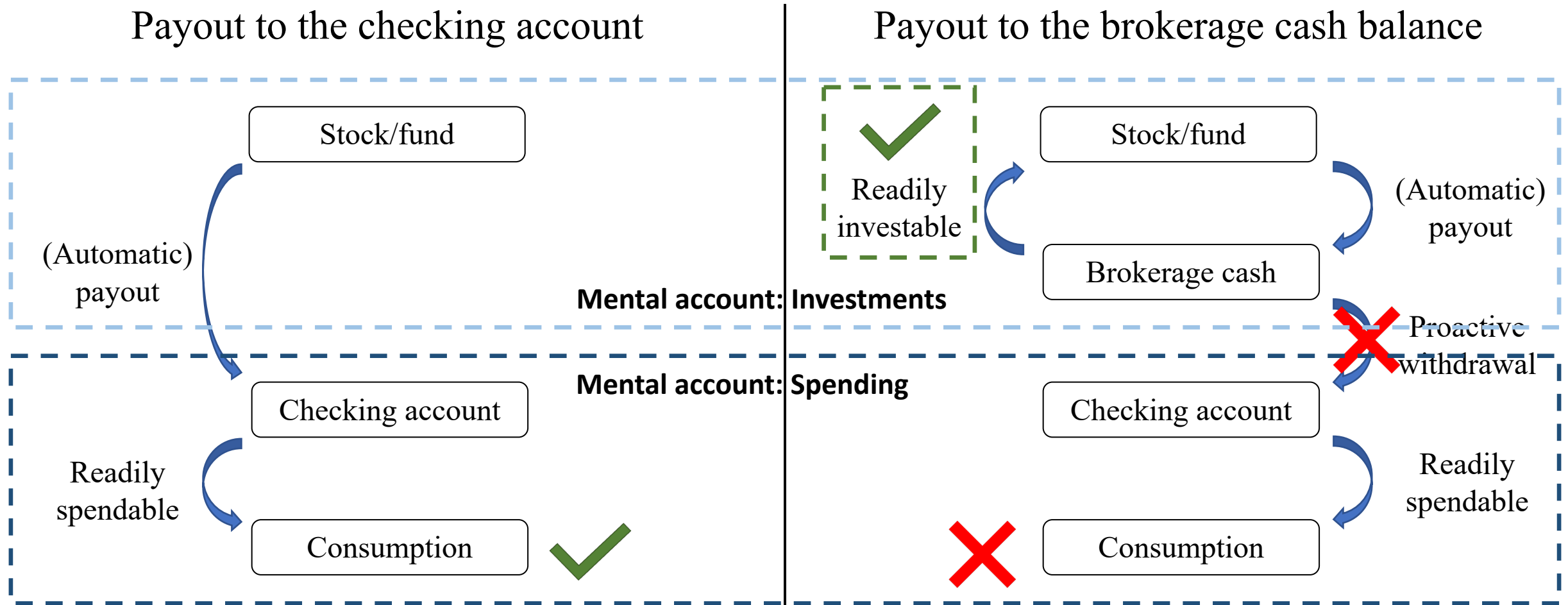
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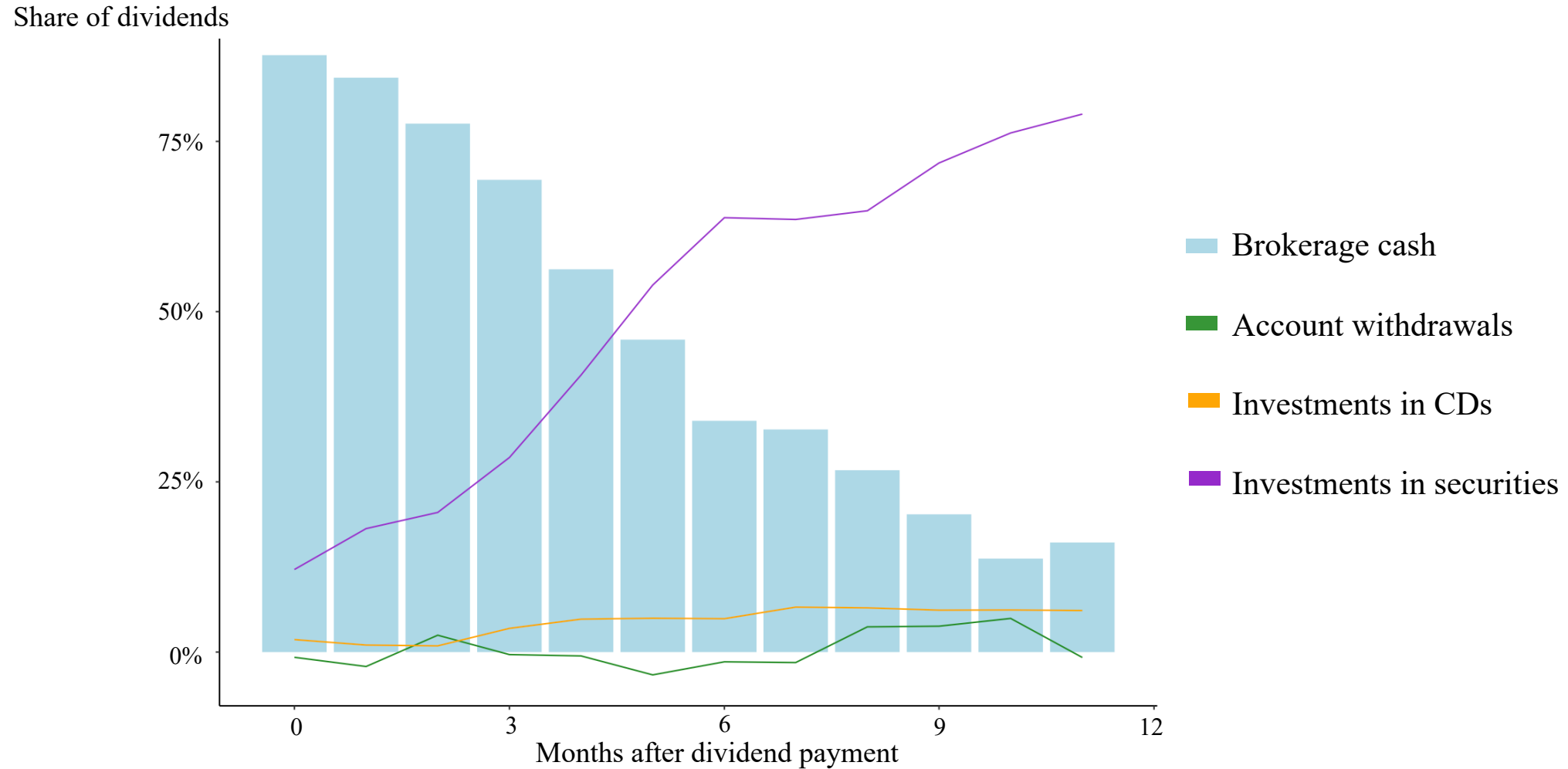
2) Self-collected survey data:

- 300 US-American and German stock market investors in 2022

3) Consumer expenditure survey:

- Representative US households from 1988-2012 (extending Baker, Nagel, and Wurgler, 2007)

Brokerage data (1/3): Dividends are initially parked as brokerage cash. Over time, dividends are then reinvested.



Brokerage data (2/3): Reinvestments mostly occur as an add-on to another investment.

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...in months with **high trading activity**.

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...outside of the **dividend-paying asset**.

Brokerage data (3/3): A subsample of dividends is directly paid out to checking accounts. These dividends are not reinvested.

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Interactions with checking-account dummies

	Inv _t	AccWd _t
Check _t *D _t	-0.21* (0.12)	1.22*** (0.23)
Check _{t-1} *D _{t-1}	-0.28* (0.14)	0.13* (0.08)
Check _{t-2} *D _{t-2}	-0.04 (0.13)	-0.08 (0.13)
Check _{t-3} *D _{t-3}	-0.03 (0.24)	-0.06 (0.25)
Check _{t-4} *D _{t-4}	-0.14 (0.23)	-0.53 (0.68)
Check _{t-5} *D _{t-5}	-0.11 (0.44)	0.11 (0.51)
Check _{t-6} *D _{t-6}	-0.20 (0.87)	0.06 (0.91)
Check _{t-7} *D _{t-7}	-0.43 (0.30)	0.32 (0.32)
Check _{t-8} *D _{t-8}	0.06 (0.22)	-0.17 (0.24)
Check _{t-9} *D _{t-9}	-0.04 (0.16)	0.16 (0.22)
Check _{t-10} *D _{t-10}	0.24 (0.37)	0.10 (0.45)
Check _{t-11} *D _{t-11}	0.35 (0.42)	-0.13 (0.47)
Sum	-0.83	1.13

Inv = Net Investments

AccWd = Brokerage Account
Withdrawals

Brokerage data (3/3): A subsample of dividends is directly paid out to checking accounts. These dividends are not reinvested.

	Baseline		Interactions with checking-account dummies			Inv = Net Investments AccWd = Brokerage Account Withdrawals
	Inv _t	AccWd _t		Inv _t	AccWd _t	
D _t	0.12** (0.05)	-0.01 (0.04)	Check _t *D _t	-0.21* (0.12)	1.22*** (0.23)	
D _{t-1}	0.06** (0.03)	-0.01 (0.04)	Check _{t-1} *D _{t-1}	-0.28* (0.14)	0.13* (0.08)	
D _{t-2}	0.02 (0.03)	0.05 (0.04)	Check _{t-2} *D _{t-2}	-0.04 (0.13)	-0.08 (0.13)	
D _{t-3}	0.08 (0.07)	-0.03 (0.04)	Check _{t-3} *D _{t-3}	-0.03 (0.24)	-0.06 (0.25)	
D _{t-4}	0.12** (0.05)	0.00 (0.04)	Check _{t-4} *D _{t-4}	-0.14 (0.23)	-0.53 (0.68)	
D _{t-5}	0.13* (0.07)	-0.03 (0.04)	Check _{t-5} *D _{t-5}	-0.11 (0.44)	0.11 (0.51)	
D _{t-6}	0.10* (0.05)	0.02 (0.04)	Check _{t-6} *D _{t-6}	-0.20 (0.87)	0.06 (0.91)	
D _{t-7}	0.00 (0.05)	0.00 (0.08)	Check _{t-7} *D _{t-7}	-0.43 (0.30)	0.32 (0.32)	
D _{t-8}	0.01 (0.04)	0.05 (0.05)	Check _{t-8} *D _{t-8}	0.06 (0.22)	-0.17 (0.24)	
D _{t-9}	0.07** (0.03)	0.00 (0.03)	Check _{t-9} *D _{t-9}	-0.04 (0.16)	0.16 (0.22)	
D _{t-10}	0.04 (0.03)	0.01 (0.06)	Check _{t-10} *D _{t-10}	0.24 (0.37)	0.10 (0.45)	
D _{t-11}	0.03 (0.03)	-0.06 (0.04)	Check _{t-11} *D _{t-11}	0.35 (0.42)	-0.13 (0.47)	
Sum	0.79	-0.01	Sum	-0.83	1.13	

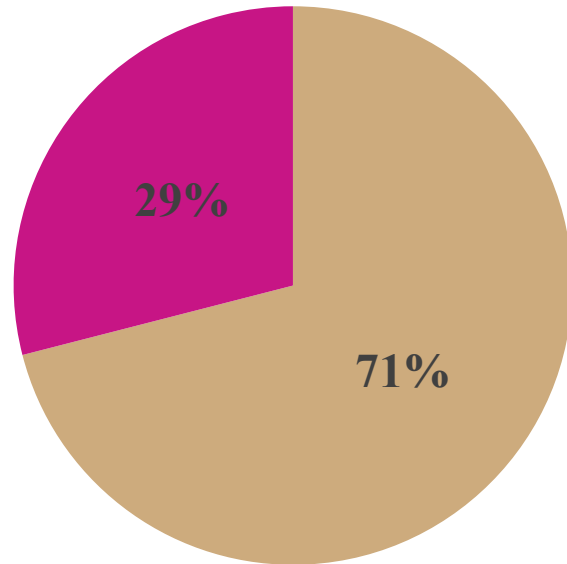
Survey data (1/1): The setting for which we find high reinvestment rates is faced by a large share of the retail investor population.

Survey among 300 German and US stock market investors in 2022

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External validity:

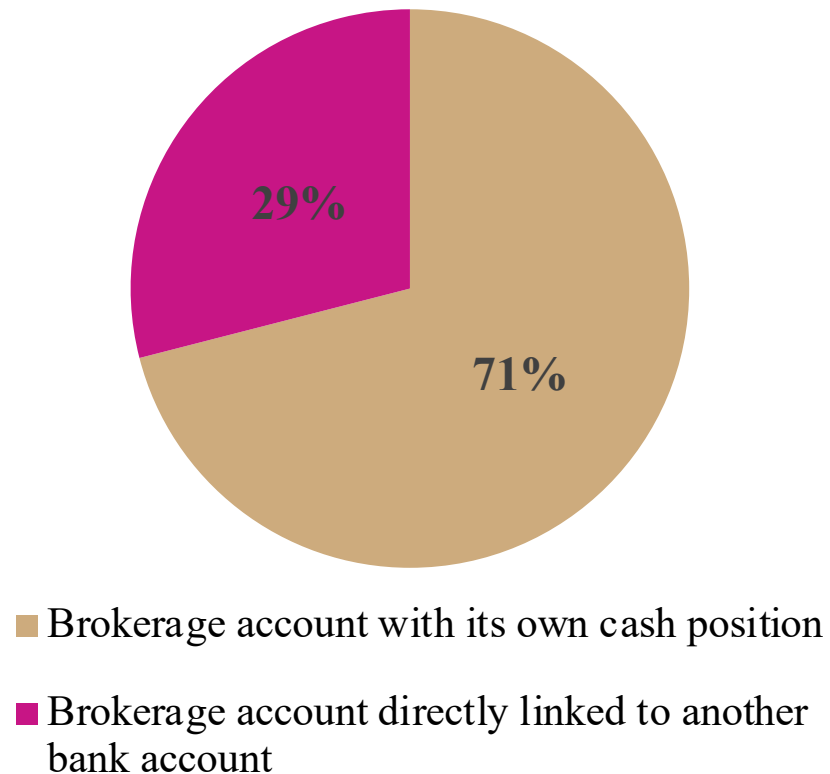


- Brokerage account with its own cash position
- Brokerage account directly linked to another bank account

Survey data (1/1): The setting for which we find high reinvestment rates is faced by a large share of the retail investor population.

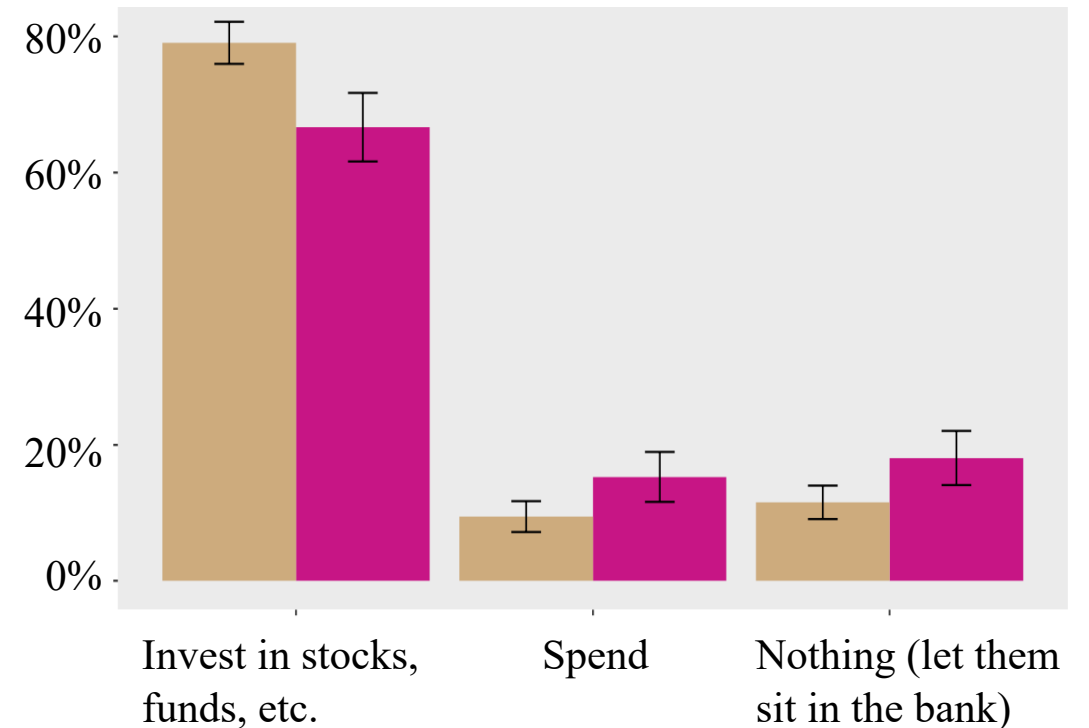
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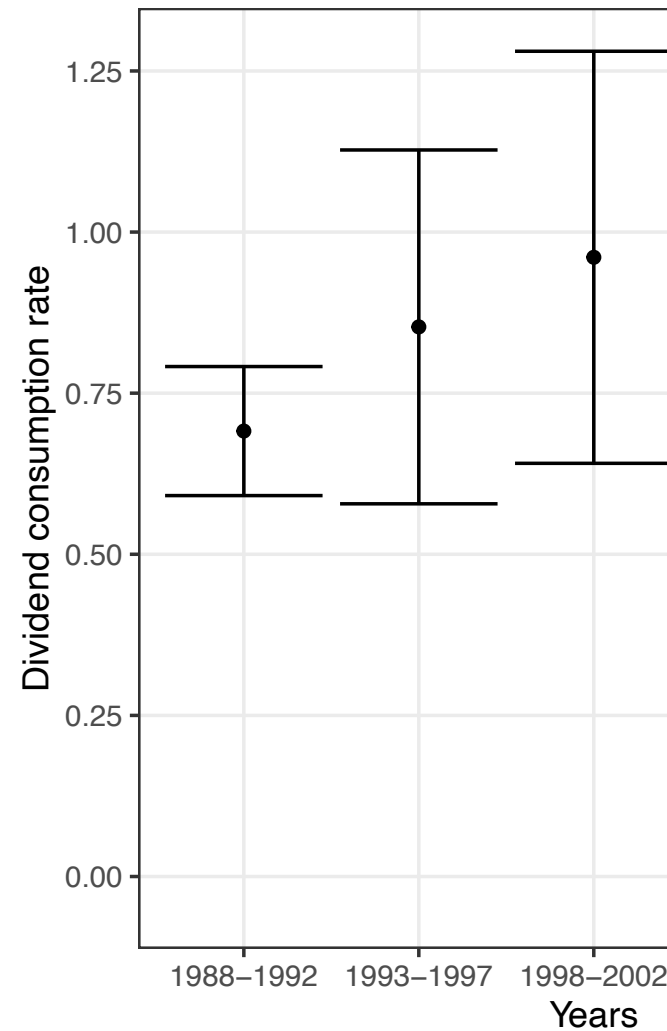


Reproduction of main results:

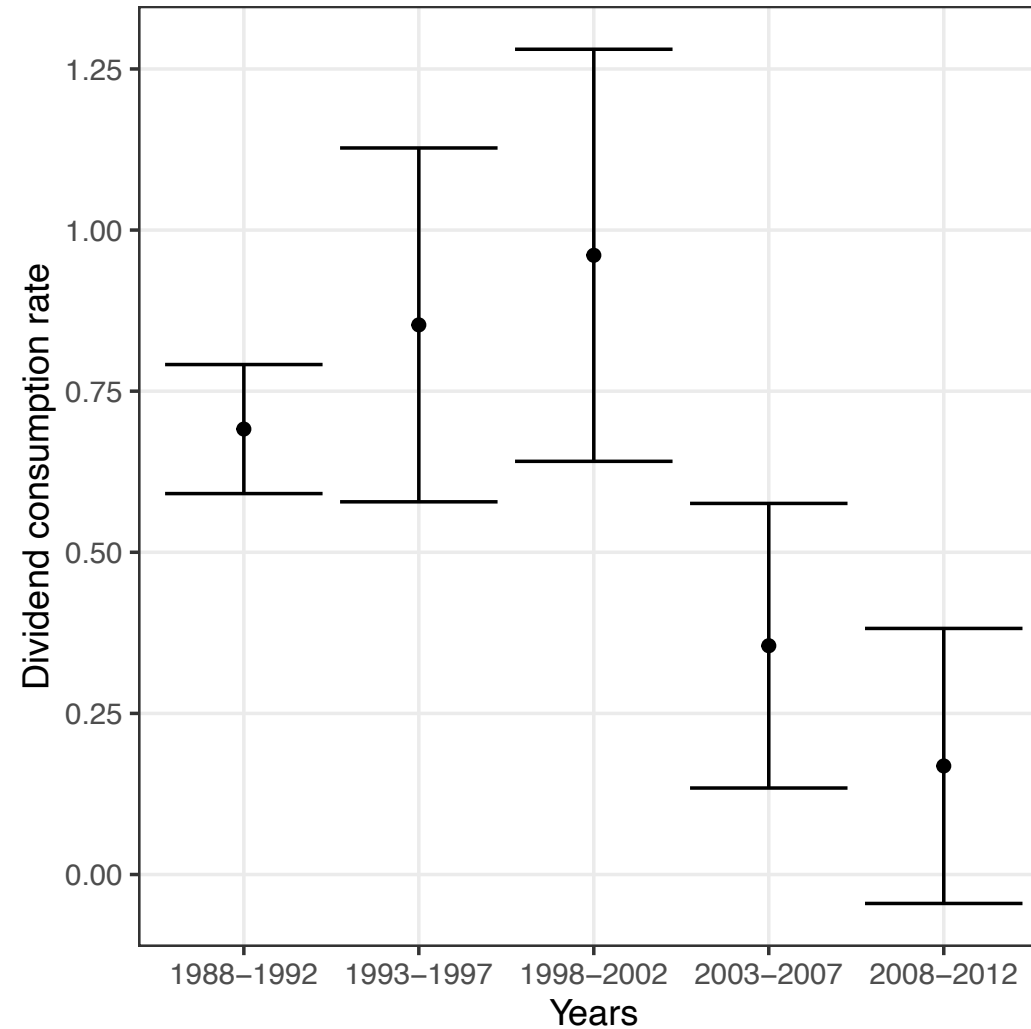
Long-run dividend uses (share of respondents)



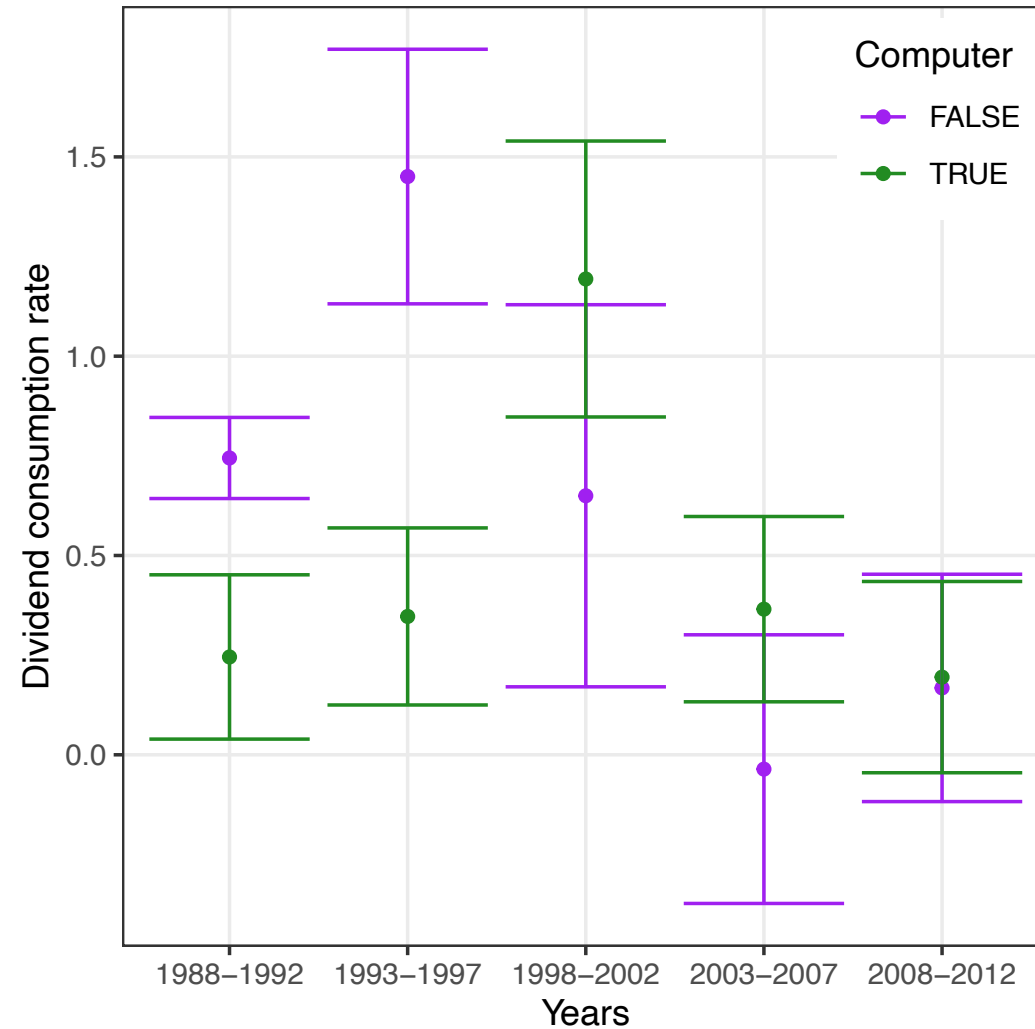
Consumer expenditure survey (1/2): Over time, aggregate dividend consumption rates have decreased.



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Consumer expenditure survey (2/2): Early adopters of computers were also early adopters of lower dividend consumption rates.



Conclusion

Key results

- Consumption vs. reinvestment of dividends is driven by payout modalities.
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An insight for the design of financial products

- Brokerage cash may serve as a buffer against the consumption of investment proceeds.

References

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