

# Cashless, Less Cash, Or Even More?

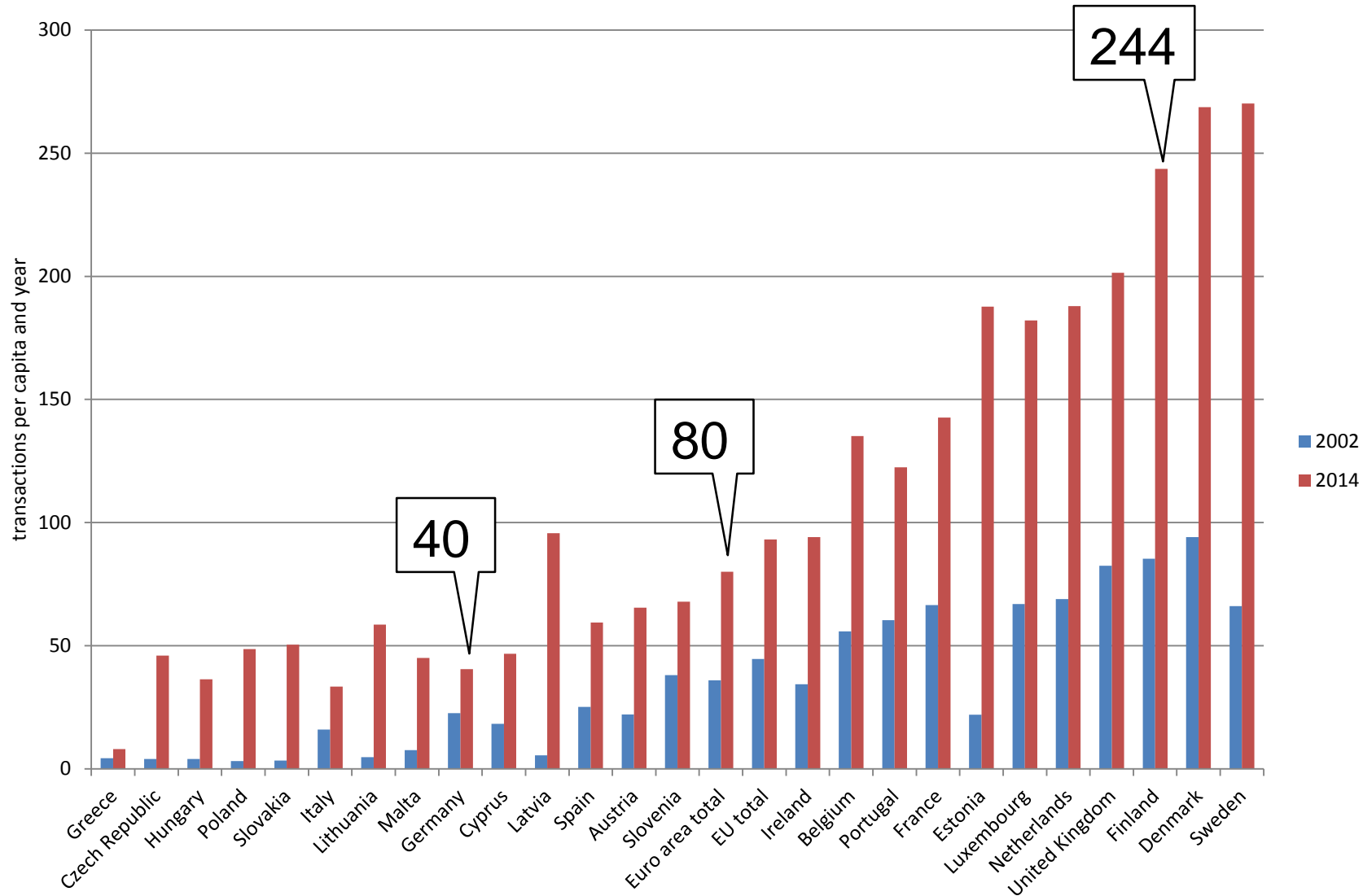
Some general reflections from a  
German perspective

*Prof. Dr. Franz Seitz*

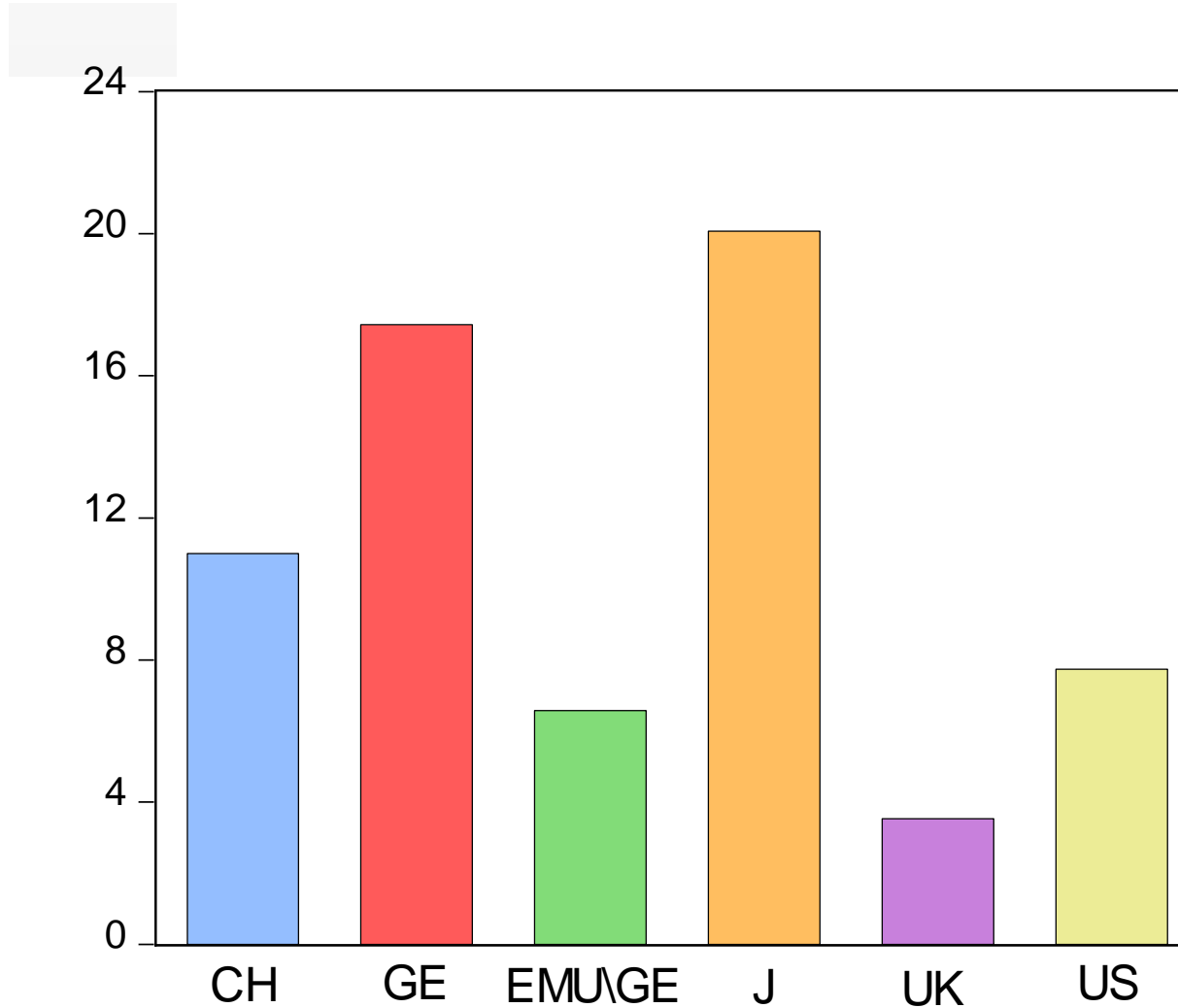
(Weiden Technical University of Applied Sciences)

*"...the demand for currency  
may have properties  
nothing like what one would  
expect from textbook  
models of money demand."  
(S. Sumner, 1994)*

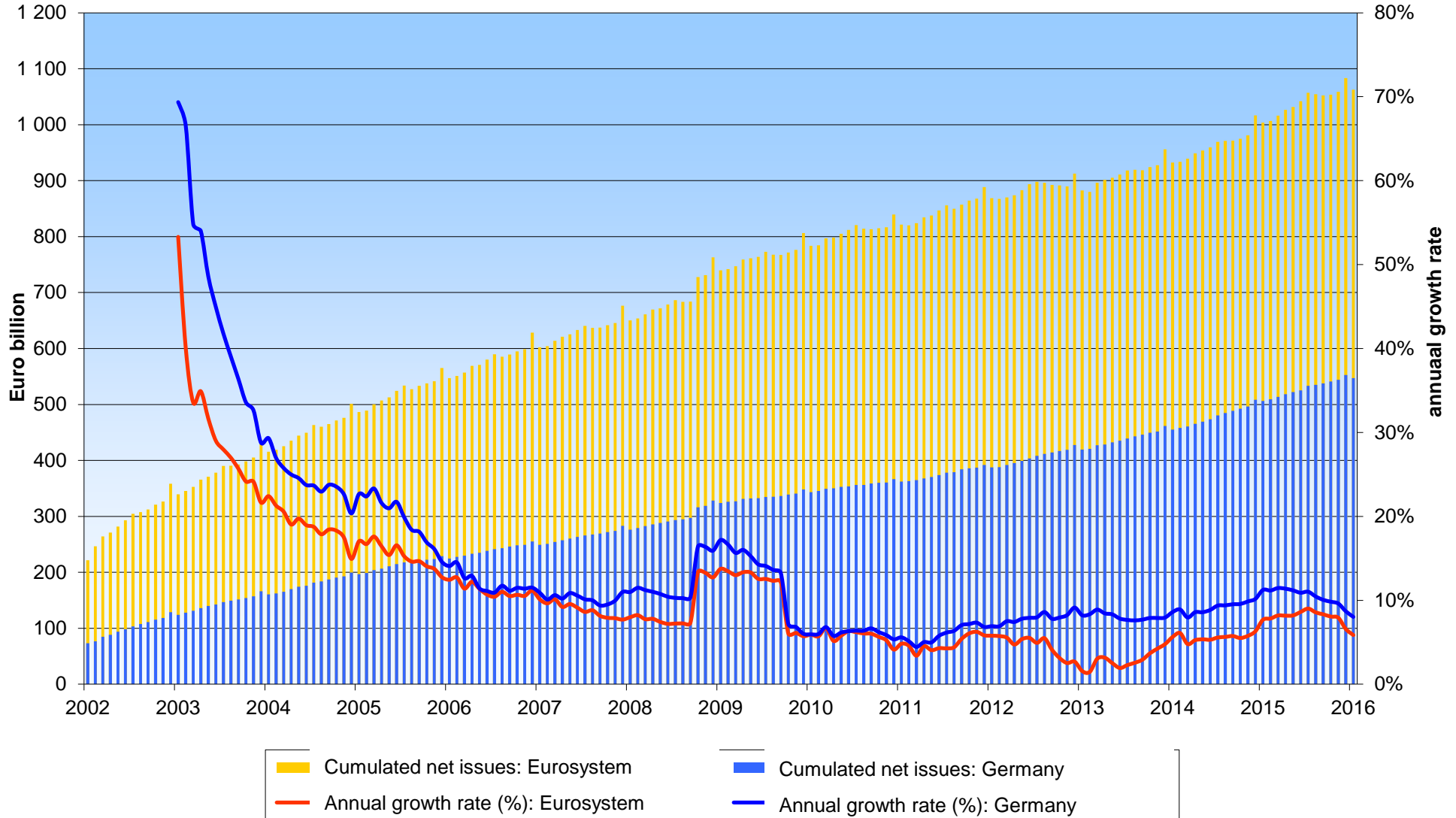
# Card payments per capita and year



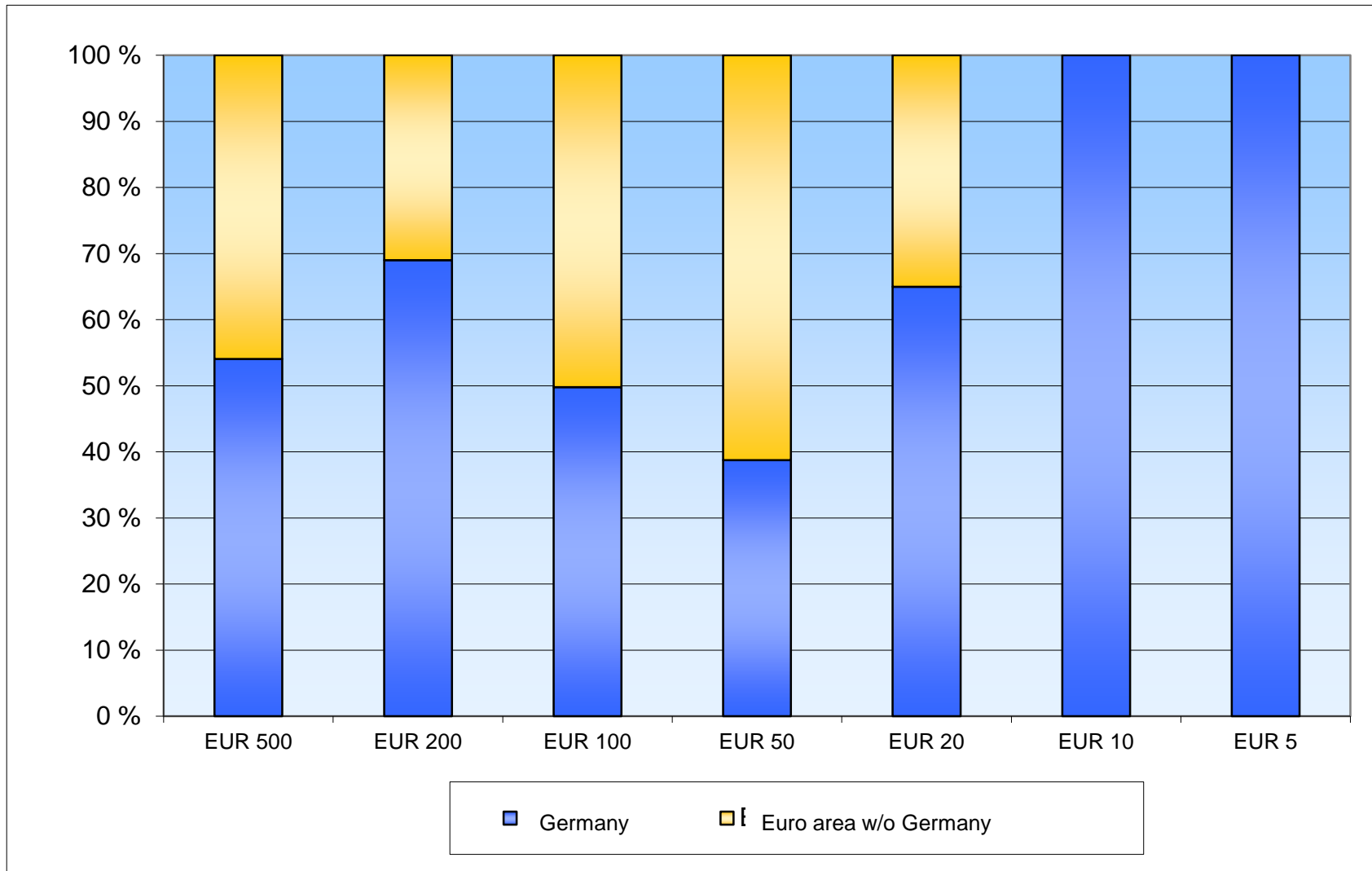
# Cash per GDP (% , 2014)



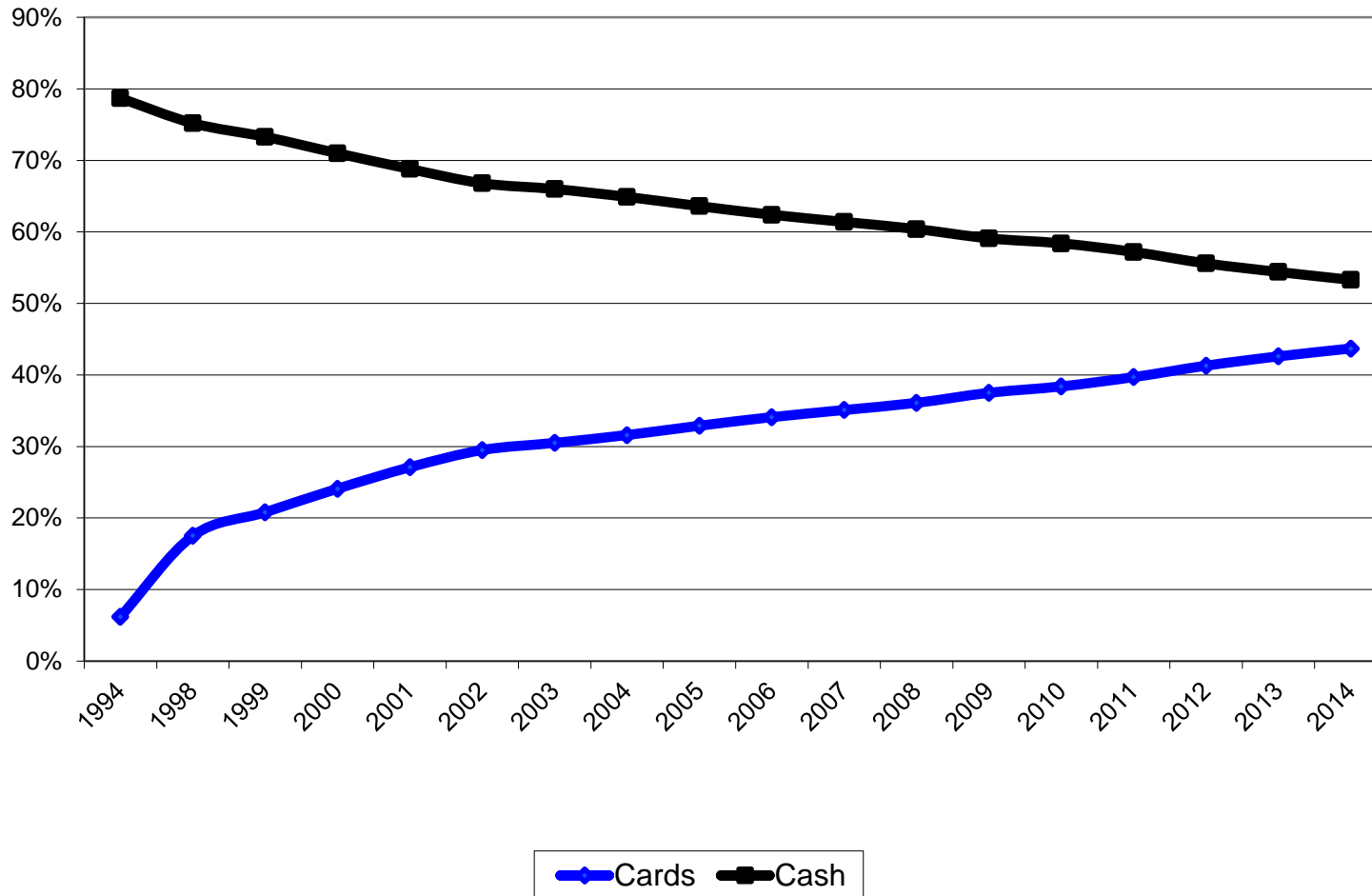
# EMU: Total cash in circulation



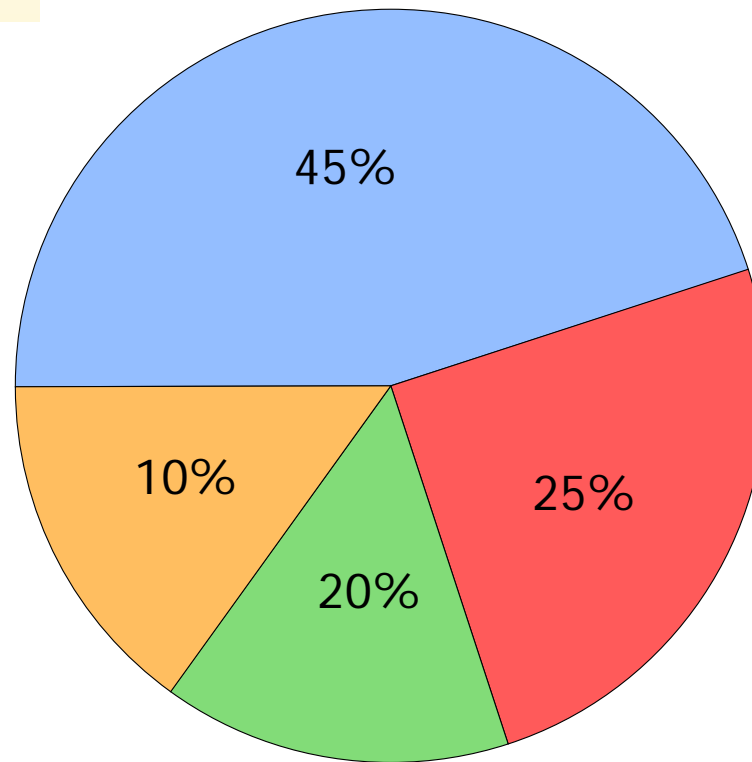
# Banknotes: (Net) issue shares



# Cards and cash at the POS (share in retail turnover)



# GE: Cash demand motives



- outside euro area
- other euro area countries
- hoarding
- transaction balances



## Cash characteristics

Cash has characteristics which make it hard to find a perfect electronic substitute

- ▶ **Anonymity in use,**
- ▶ Use without other service providers,
- ▶ Neither payer nor payee have to be **online,**
- ▶ Usable for **big** and **small** amounts,
- ▶ Payments are **easy, comfortable and quick,**
- ▶ Payment is **definitive** and **final,**
- ▶ Cash is relatively **secure against counterfeits**

# Cash abolition

## ► The **shadow economy** argument

- Size of **shadow economy** (?) and **cash in circulation** do not fit together (GE 2015: 11 % of GDP  $\approx$  340 bn. €): What are the real **causes**?
- Cash vs. cashless: illegal activities mainly cashless, especially big items (anti-money laundering measures and anti-terror-financing initiatives refer mostly to cashless payment instruments)
- Majority of cash transactions **legal**
- High denominations also abroad and for store-of-value purposes
- Countries without big **denominations** (e.g. US, UK) or countries with low cash usage (e.g. Sweden) do not necessarily have a lower size of the shadow economy. Switzerland, the country with the highest denomination note, has very low shadow economic activities
- Indicator function of the shadow economy
- An electronic payment medium which possesses all the **characteristics** of cash would be very attractive for those "working in the shadow" (also: terrorists)

# Cash abolition

## ► The **monetary policy** argument

- Constraints of zero lower bound and effectively enforcing **negative interest rates**
- Broadening the scope of monetary policy
- Is policy necessary and adequate? Which alternative transmission channels exist?
- **Alternatives** to cash? Investments in other assets/currencies; vouchers, cheques, (early) debt repayment, early tax payment
- **Changes in behaviour**, financial innovation, business models
- Incentives for substitution effects and arbitrage activities the greater, the longer the period with negative interest rates lasts and the more negative interest rates will be
- From a **welfare-theoretic** perspective it is especially harmful (compared to a capital income tax or inflation) to introduce negative rates and to excess-burden money holders and savers

# Cash abolition

## ► The **speed** argument

- **Payment study** of the Deutsche Bundesbank
  - 90 % of the German population betrachten assess cash as a comfortable and quick payment instrument (at the POS)
  - Card-only payers: cashless payment media are secure (26%) and quick (27%)
  - Cash-only payers: Cash secure (33%) and quick (29%)
- **EHI**: time of cash payment at the POS << time of card payment

# Cash abolition

## ► The **cost/(in)efficiency** argument

- Cash is an expensive payment instrument
- Purely partial equilibrium analysis (e.g., banks, card-issuing firms), no general equilibrium effects and total cost-benefit analysis
- But: even sectoral studies do not reveal higher costs of cash payments in general
  - Costs per transaction: Costs of cash unambiguously lower than those of debit and credit cards
  - Costs per turnover: debit card payments with lower, but credit cards with higher costs than cash
  - Multi-country study of the ECB: in some countries cash, in others cashless payments the least cost-intensive payment instrument
- With cash the private sector is able to pay with secure **central bank money** and **legal tender**



*"The existing literature shows that, in spite of recent efforts, there is still only **limited knowledge and information** available for making valid comparisons of the costs of making payments across European countries." (Schmiedel et al., 2012)*

# Cash abolition

## ► Security problems

- Nation-wide or world-wide introduction of electronic payment systems would mean that **everybody** must be able to pay and receive payments within such a system (incl. people with diminished cognitive abilities and fraudsters)
- If cash is to be completely abolished, access to electronic payment system becomes **fundamental right**
- System has to be **simple** and function **offline** (fall-back solution, costs)
- Moreover: "**risk of theft**": Incentives for criminal attacks the higher, the more comprehensive the system is

# Summary, conclusion

- ▶ Cashless society not in sight
- ▶ Importance: distinguishing different motives of holding cash
  - Diminishing role of transactions motive
  - Increasing role of other motives
- ▶ Not cash or cards, but cash **and** cards
- ▶ Arguments for abolition of cash not convincing, implementation problems
- ▶ Competition between cash and cards beneficial
- ▶ **Let the consumer decide!!**



**Thank you very much for your attention!**

**Any questions?**