



Cash: implications for monetary policy and crime

ESTA Business Conference 2017 –
Cash Delivers

Cascais, 16 May 2017

Agenda



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Cash in numbers

2

Cash and monetary policy

3

Cash and crime

Cash in numbers

How much and what for?



— EUR 1.2 trillion at end-2016

| Estimated cash use (2014) | Share | EUR bn |
|----------------------------------|--------------|---------------|
| Domestic transaction balance | 30% | 305 |
| Banks' vault cash | 6% | 61 |
| Holdings outside EMU | 30% | 300 |
| Domestic cash hoarding | 34% | 351 |
| Total euro notes in circulation | | 1,017 |

Sources: ECB, Fischer, B., Köhler, P., Seitz, F. (2004), Deutsche Bank Research

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Cash in the monetary system of the EMU

Bank run: Cash and financial stability



Commercial banks can become illiquid



Bank Run Risk

=> cash withdrawal

=> electronic transfer



Mitigation:

=> Prudential regulation, deposit insurance, lender of last resort

=> Cash abolition? No elimination of run risk (potential exception: system-wide crisis)

Cash is central bank money available to all

Cash in the monetary system of the EMU

Cash and zero lower bound – limitation of monetary policy



Cash is non-interest bearing money

- Cash limits expansionary monetary policy
=> **Zero Lower Bound: for good or for bad?**
- Suggestions how to **eliminate the Zero Lower Bound:**
 - Abolish physical cash
 - Substitute physical cash with digital cash
 - Depreciate cash vis-à-vis bank deposits (exchange rate below par)
- Possible side effect: **Loss of monetary power** for ECB
 - Will public accept abolition / restriction of cash?
 - Will people shift funds from euro into other currencies or assets?

Cash in the monetary system of the EMU

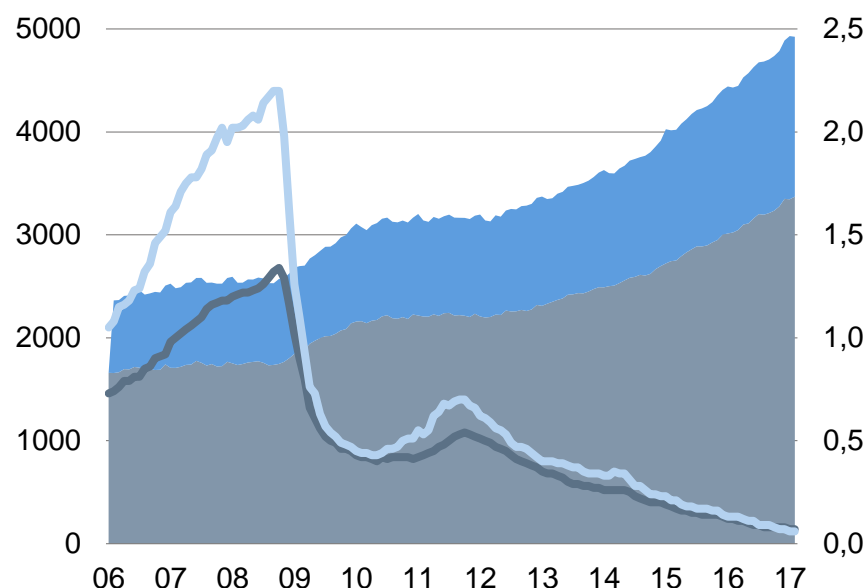
Have we reached the zero lower bound?



Where is the zero lower bound?

- Banks did not pass on negative ECB deposit rate to clients (graph)
- No withdrawal of deposits
- Cost of holding cash:
Vault, insurance, transport,
highest denomination note

Rates fall but deposits grow in the euro area



- Corporates' O/N deposits (EUR bn, left)
- Households' O/N deposits (EUR bn, left)
- O/N deposit rate for households (% , right)
- O/N deposit rate for corporates (% , right)

Sources: ECB , Deutsche Bank Reserach

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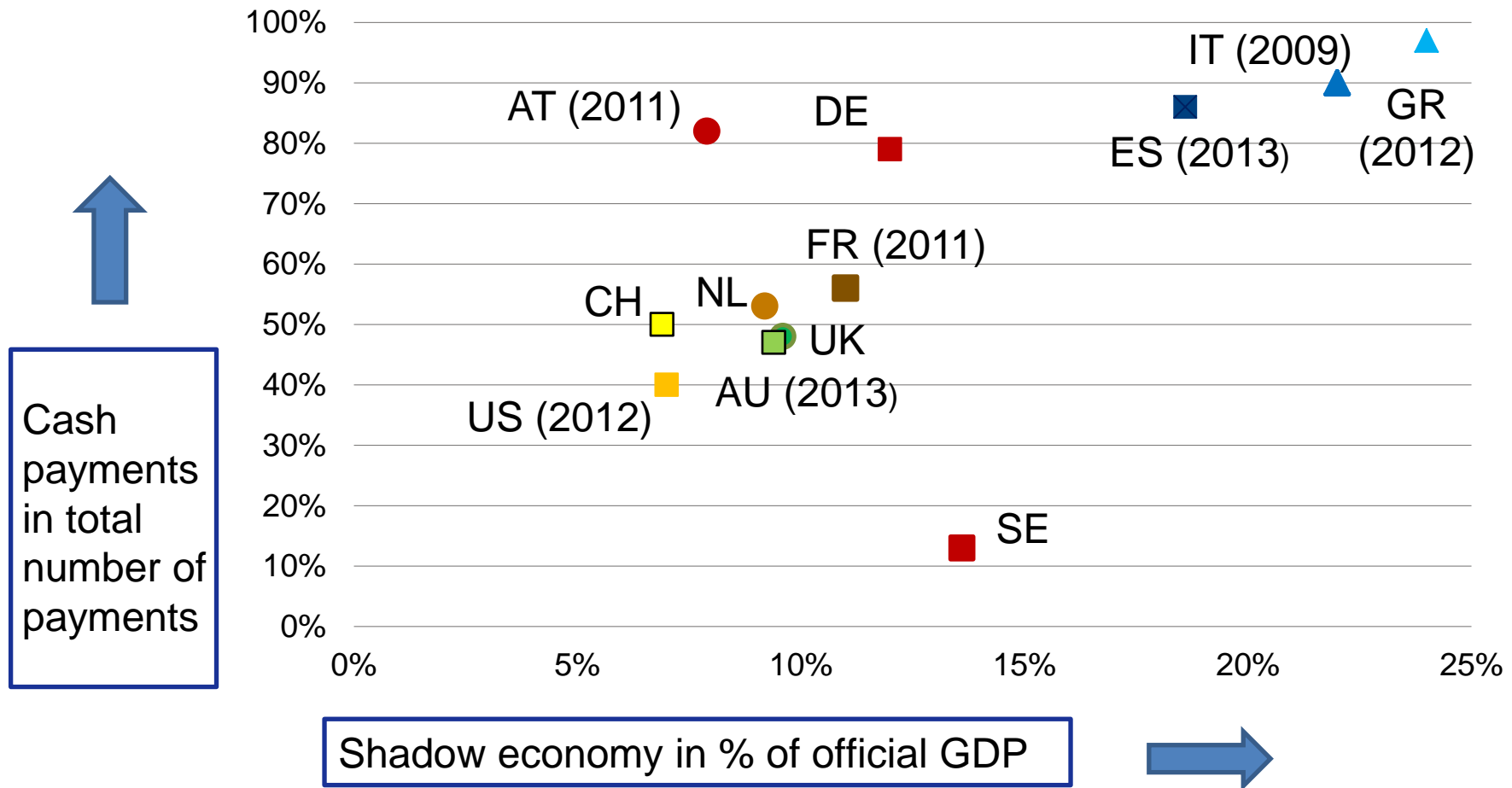
Cash and crime

Cash and crime

Cash use and shadow economy in 2014 (or latest available data)



Use of cash not a reliable indicator for size of shadow economy



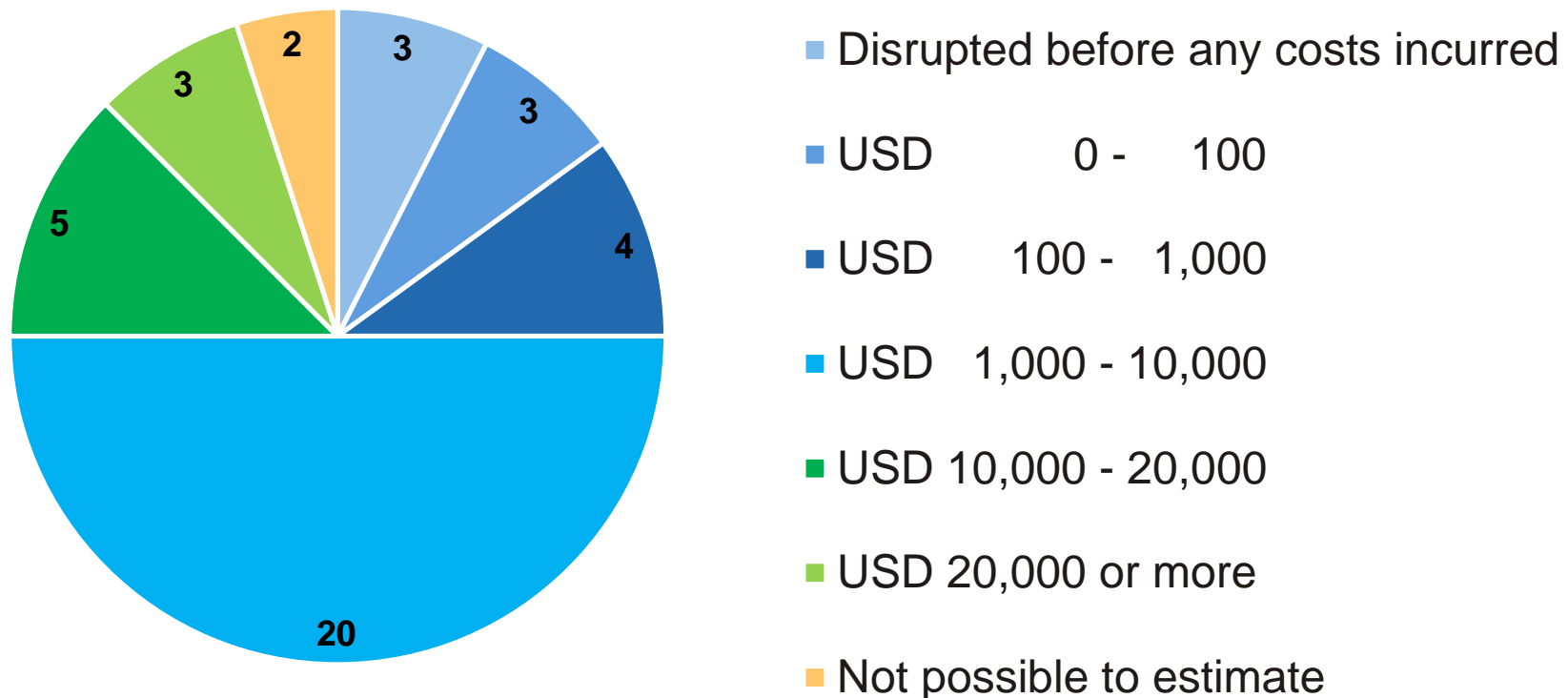
Sources: Schneider, F. and Boockmann, B. (2016); Bagnall, J. et al (2014), Deutsche Bundesbank, Payments Council, Banca d'Italia, Banco de Espana, De Nederlandsche Bank, Sveriges Riksbank, Verband Elektronischer Zahlungsverkehr, G4S, Federal Reserve Banks of Boston, Richmond and San Fransisco, Reserve Bank of Australia, Deutsche Bank Research.

Cash and crime



Most terrorist attacks in Europe in past 20 years cost less than USD 10,000 to carry out

Number of attacks by estimated cost



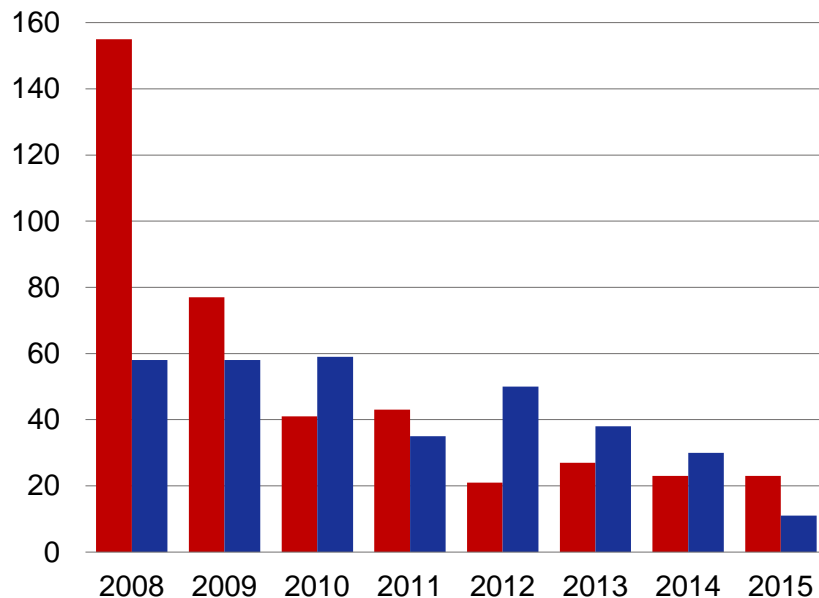
Sources: Norwegian Defence Research (FFI), Deutsche Bank Research

Sweden: fewer cash payments, more online card fraud



Sweden: less cash, less cash-related crime

Number of reported offences per year

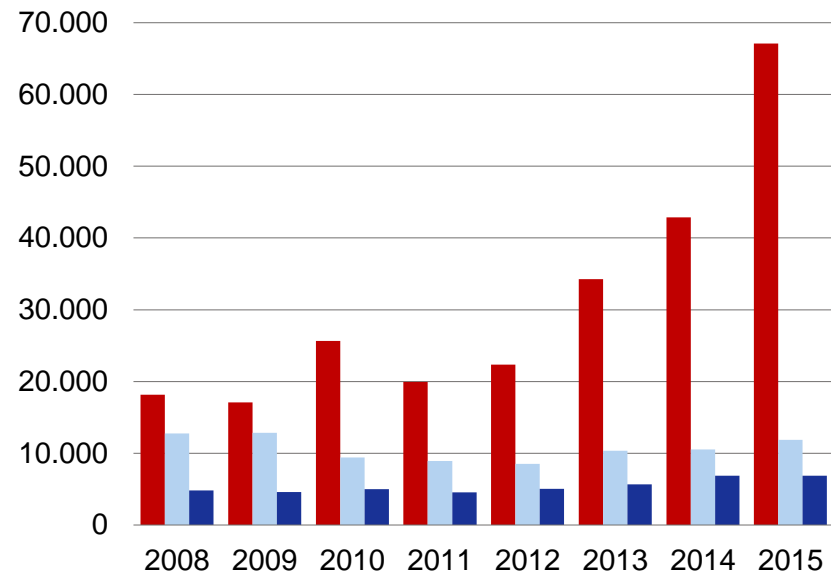


- Bank robbery
- Security van robbery

Sources: Brå / Swedish Ministry of Justice, Deutsche Bank Research

Sweden: less cash, but online card fraud on the rise

Number of reported fraudulent transactions



- Fraud with stolen debit/credit card data
- Card fraud at point of sale
- ATM fraud

Sources: Brå / Swedish Ministry of Justice, Deutsche Bank Research



PROFIT



CRIME

Cash facilitates (only)
anonymous transfer of value



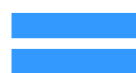
„No Cash!“



Gained:

Some crime reduction
due to higher
transaction costs

?



Lost:

Popular physical
payment option,
privacy, safe harbour

Conclusion



No cash / legal limits on cash ...

- Bank run still possible;
No limit on monetary policy by Zero Lower Bound,
negative interest on bank deposits possible
- Some reduction in profit-driven crime
- Loss of very popular payment option,
(only physical, anonymous, non interest-bearing money)
potential loss of trust in authorities

Instead of state action:

let individuals choose between cash and electronic deposits

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