



hochschule aschaffenburg
university of applied sciences

The fallacy of a cashless society

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Budapest, 14 May 2018

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The future of payments

What is the future of payments?

The answers:

Sweden

China

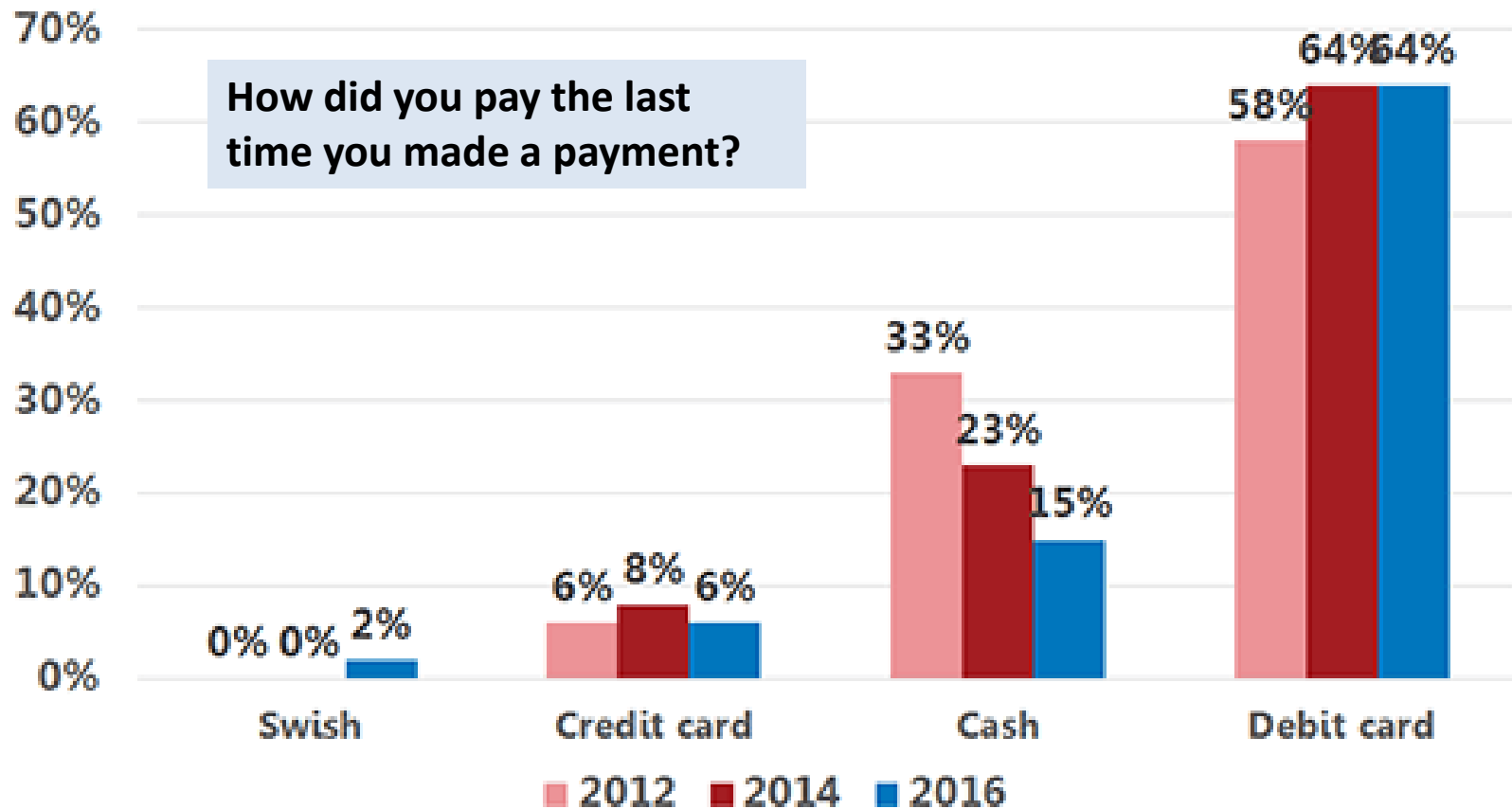
Sweden

China

...

The case of Sweden

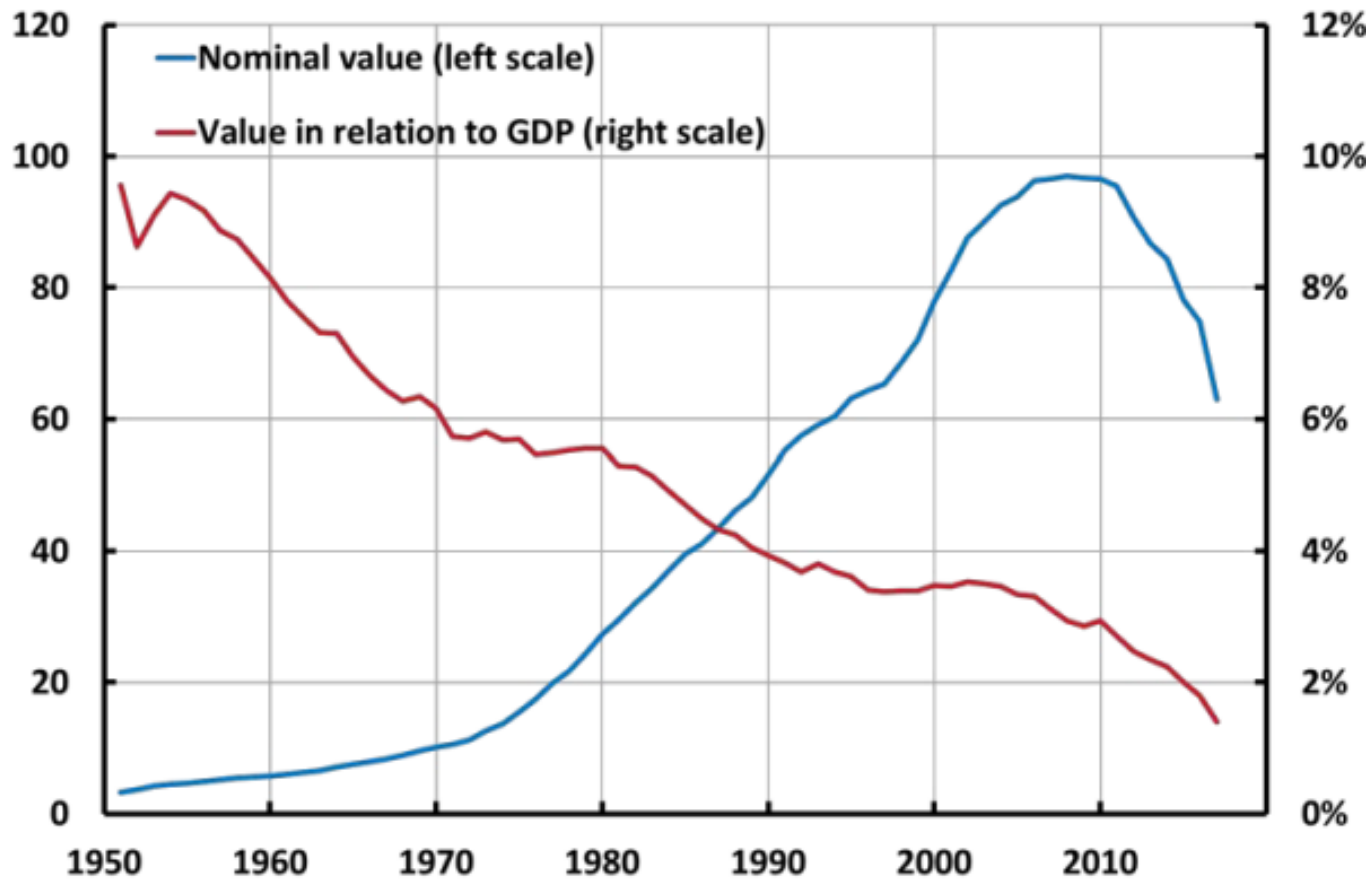
Declining use of cash in Sweden



Source: Sveriges Riksbank

The case of Sweden

Declining stock of cash in Sweden



SEK billion (annual average). Cash in circulation as a percentage of GDP.
Sources: Statistics Sweden and the Riksbank.

Germany an outlier?

There are only few hold-outs of cash



At least that
is how the
story goes!

The European view

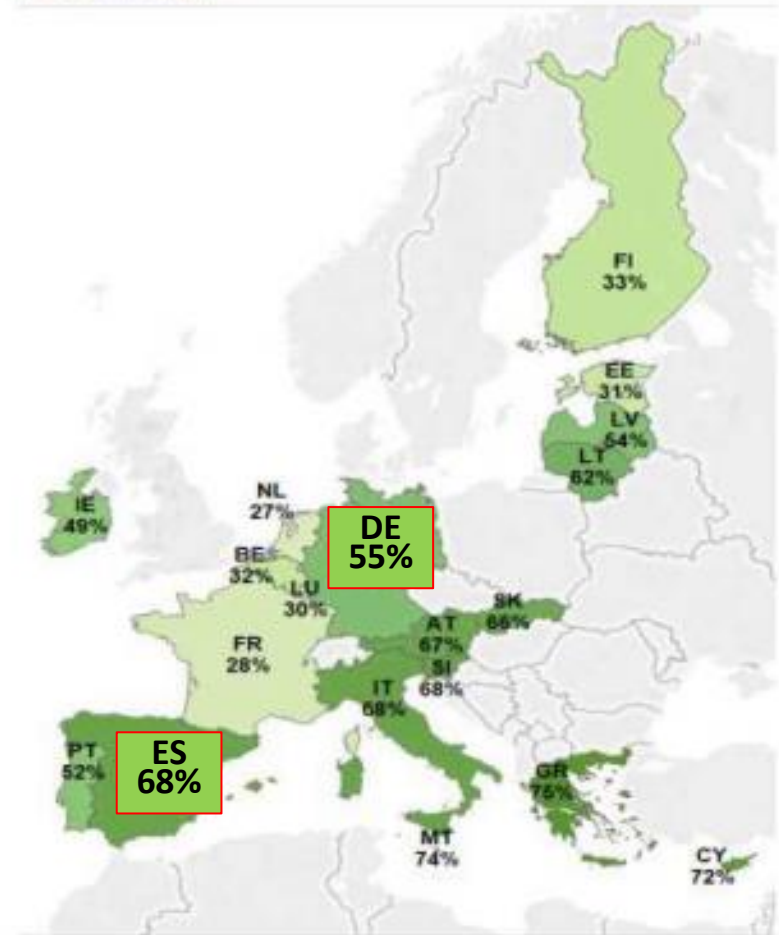
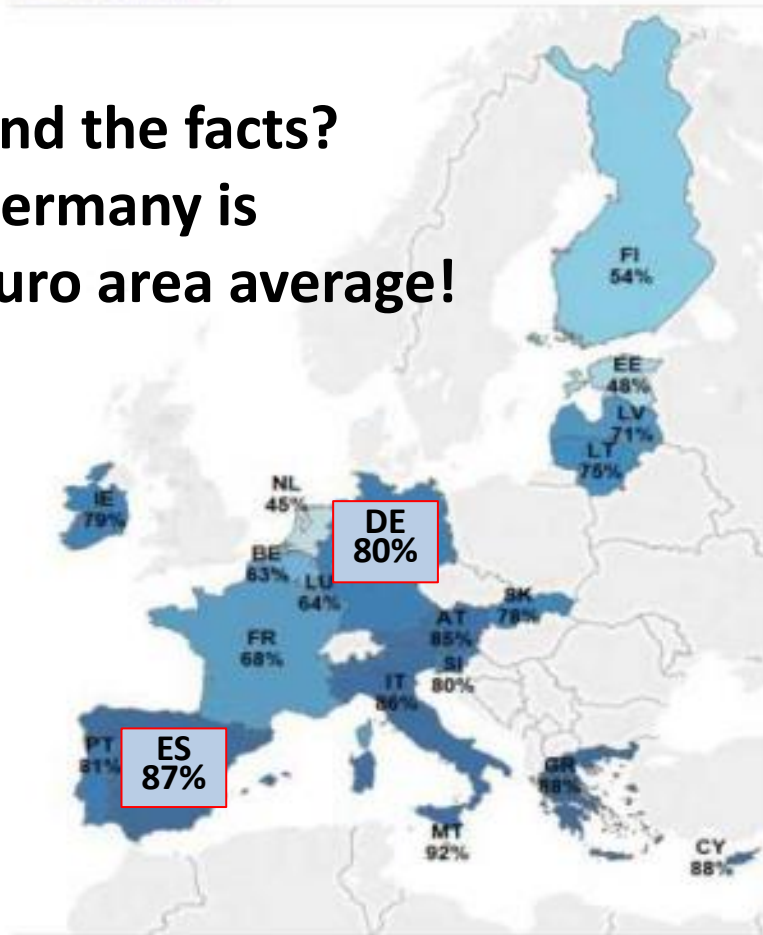
Share of cash transactions per country at points of sale

(number of transactions)

Share of cash transactions per country at points of sale

(value of transactions)

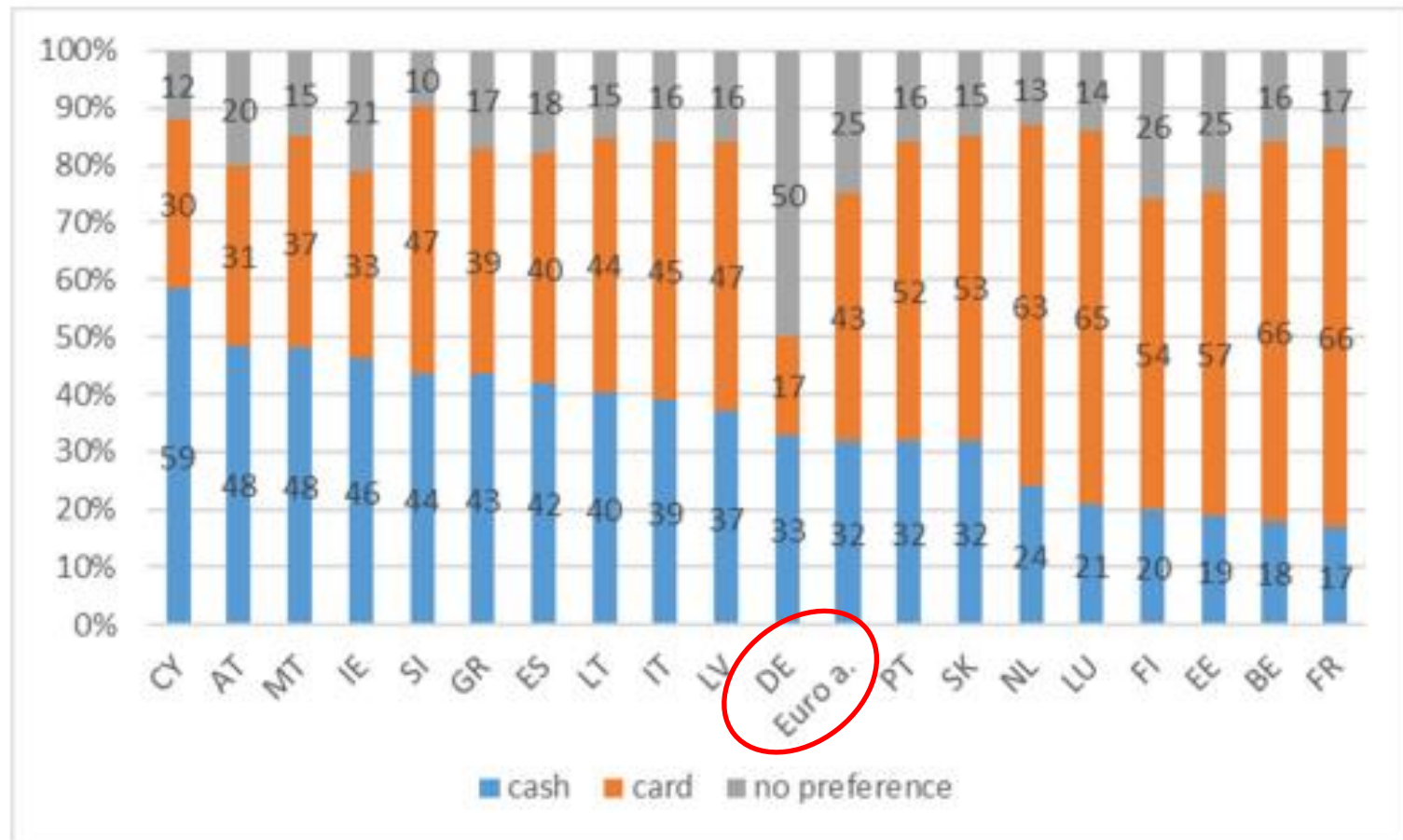
And the facts?
Germany is
euro area average!



Source: Henk Esselink, Lola Hernández, The use of cash by households in the Euro area, ECB Occasional Paper Series, No 201, November 2017.

The European view

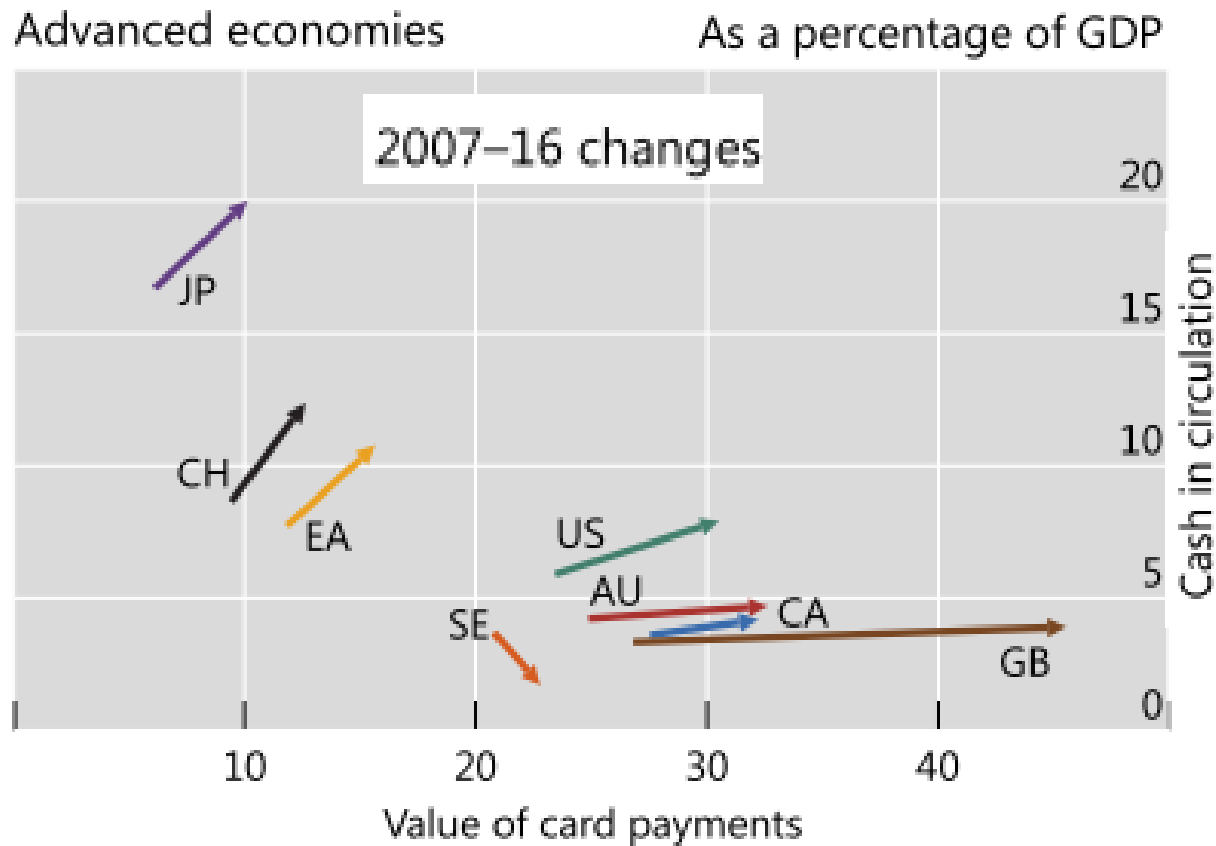
Payment preferences by country



Source: Henk Esselink, Lola Hernández, The use of cash by households in the Euro area, ECB Occasional Paper Series, No 201, November 2017.

Beyond the euro area

Globally cash is still in high demand

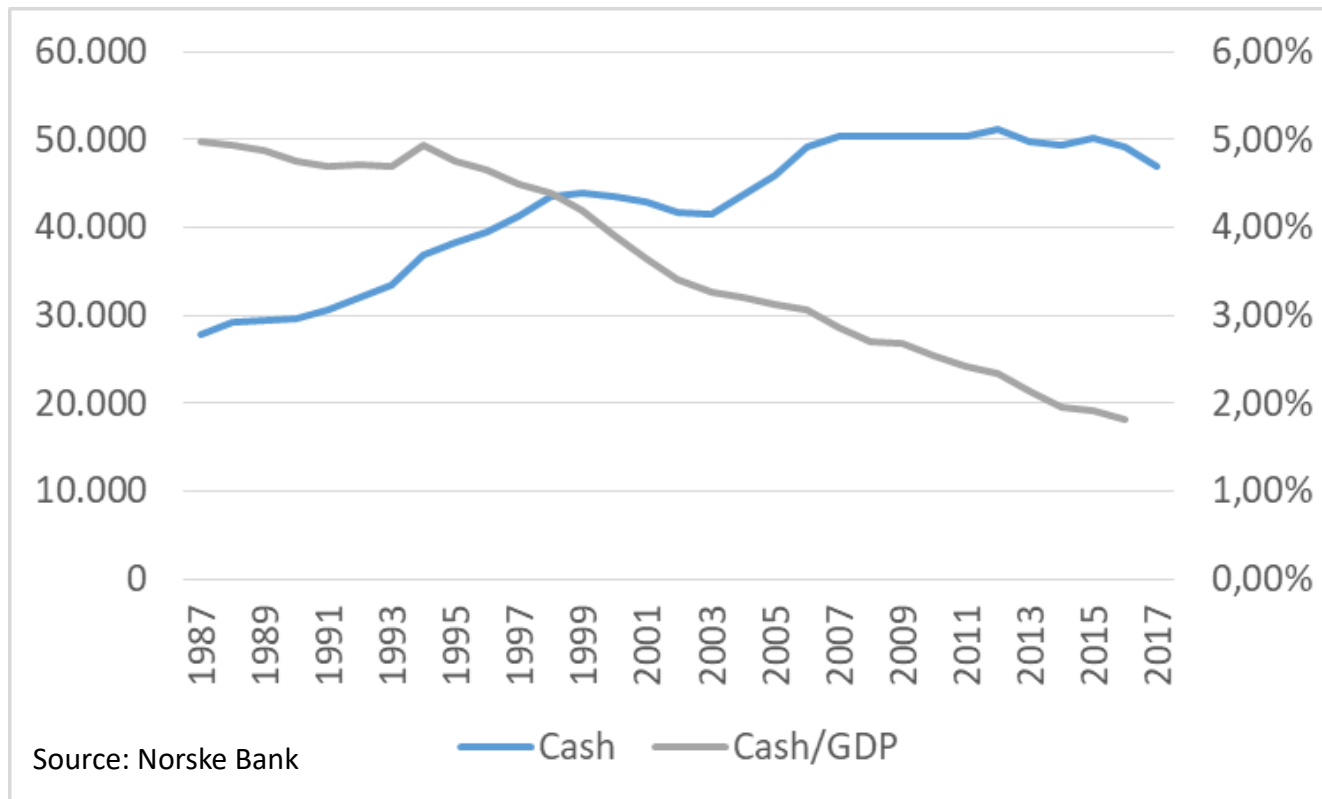


Source: Morten Linnemann Bech, Umar Faruqui, Frederik Ougaard and Cristina Picillo: Payments are a-changin' but cash still rules, Quarterly Review, March 2018.

Back to Scandinavia

Even Norway differs from Sweden (for now)

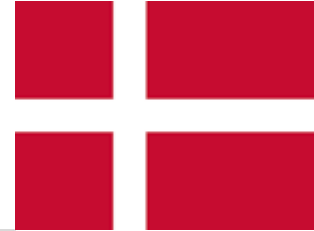
Cash in Norway



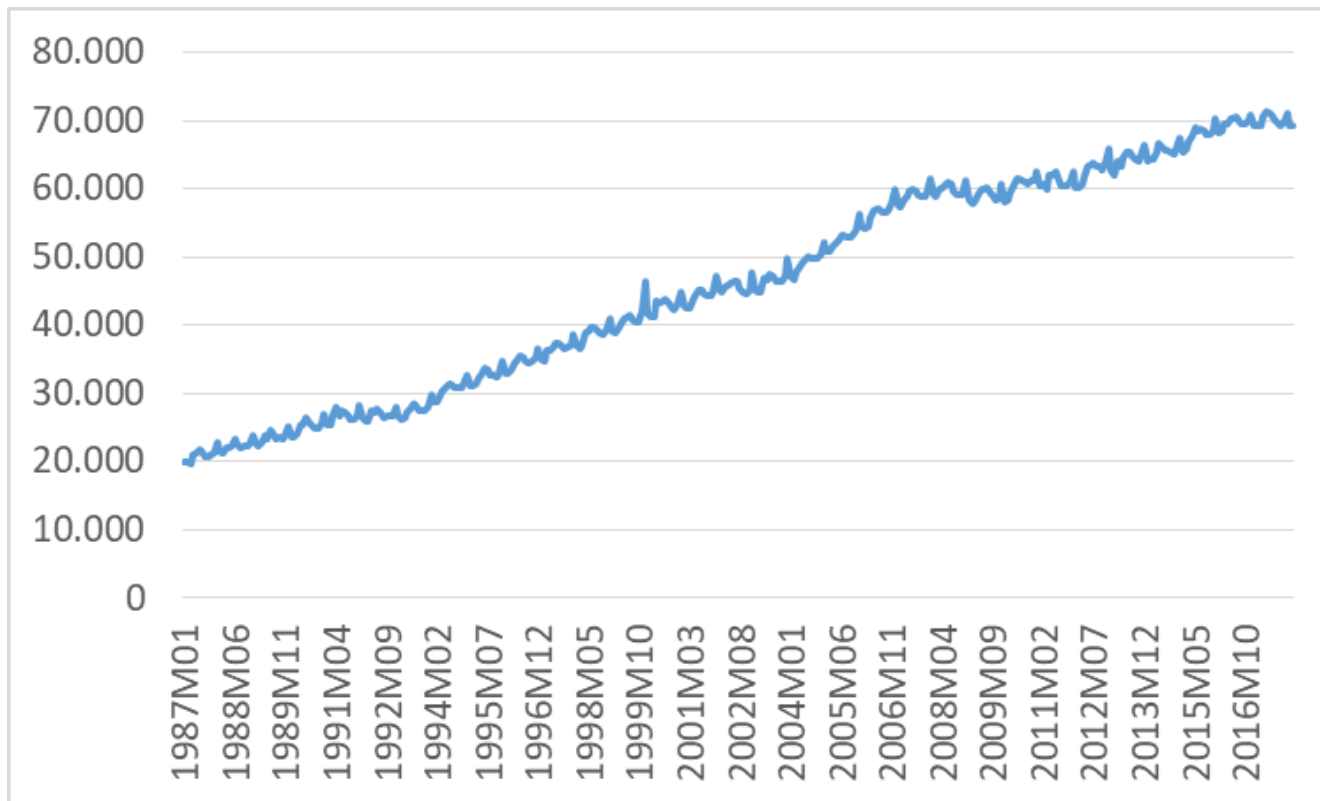
Cash in millions of NOK: left-hand scale, Cash-to-GDP ratio: right-hand scale

Back to Scandinavia

.. and Denmark as well



Cash in Denmark



Cash in millions of DKR, Source: Danmarks Nationalbank

Uncertain territory

Rising stocks and falling market share

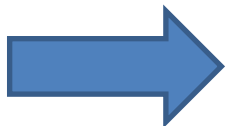
Cash in circulation  mostly rising

Cash in payments  losing market share

In some countries, the **cashless society is no mere mind game.**

Many non-banks do not like this outlook:

- Even in Scandinavia there are non-banks that would like to continue using cash.
- Not everyone trust the banks.



Scandinavian regulators are having second thoughts.

Scandinavian reactions



A cashless world: regulators start to worry

“In times of crisis, the general public has always sought refuge in **risk-free assets, such as cash**, that are guaranteed by the state. The idea of commercial agents shouldering the responsibility to satisfy public demand for safe payments at all times is unlikely.”

“The gap between the Riksbank Act and other legislation, created by rapid technological development, is quickly becoming increasingly problematic. **In the near term, this gap can to some extent be plugged by a legal requirement for banks to handle cash.**”

Governor of the Riksbank Stefan Ingves

Note: A parliamentary commission on a new Riksbank Act is currently under way.

Scandinavian reactions



A cashless world: regulators start to worry

“The commercial case, apart from regulation, for maintaining facilities for distributing and receiving cash may vanish. **We may be approaching a tipping point**, where cash is not only losing market share, but may be increasingly disappearing as an option.

... the payment system is a utility which must be accessible to everybody, not only the majority of people. It must be inclusive.

... Do we need new kinds of regulations on the right-to-access to electronic payments systems, or new regulations on the distribution and acceptance of cash?”

Governor of the Bank of Finland Erkki Liikanen

Scandinavian reactions



A cashless world: regulators start to worry ... and take action

Norwegian legislation on banks' obligations in the supply of cash.

The Act relating to Financial Undertakings and Financial Groups (from 1 Jan. 2016) states that:

- **Banks shall, in accordance with the expectations and needs of their customers, receive cash from their customers and make deposits available for the customers in cash.** The Ministry of Finance can give regulations on the responsibilities of the banks on this area.
- The banks must not necessarily do this through their branches, but must arrange the services in an appropriate way.

Beyond Scandinavia



Dutch National Forum on the Payment System

The Dutch position

“Agreement has been reached on a **cooperative approach**.

The major stakeholders in the cash cycle (retailers, consumers and banks) have agreed on **the same objectives as pursued in Norway**, and they have agreed to continue monitoring whether any specific measures are required in this respect.

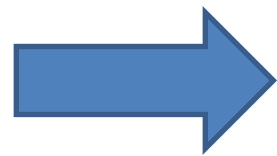
So far, the National Payments Forum has adopted general guidelines on the **continued acceptance of cash** and the major banks have developed a cooperative solution ensuring the **continued presence of ATMs in rural areas.**”

Bram Scholten: Decline management: the case of cash. Policy response in the Netherlands and the Nordic countries, Deutsche Bundesbank International Cash Conference, Mainau Island, 25 – 27 April 2017.

Preparing for the future

Some central banks are investigating new products:

 **Central Bank Digital Currency (CBDC)**



**The Riksbank's
e-krona project**

Report 1



Preparing for the future

Some central banks are investigating new products:

➔ **Central Bank Digital Currency (CBDC)**



➔ **We are not planning to create a central bank-issued digital currency. But we want to understand better the implications of a central bank issuing a digital currency.** We first raised the possibility of a central bank-issued digital currency in our **research agenda** in 2015. And more recently, we released the research questions we are looking at. We welcome contributions on this topic from the wider central banking and academic community to help us shape our research in this field.

Preparing for the future

Lithuania wants to try blockchain



Lithuania's central bank to issue the world's first digital collector coin

2018-03-06

Taking a groundbreaking step, the Bank of Lithuania is set to make history, issuing a one-of-a-kind digital collector coin already this year. The coin will be designed using blockchain or other equivalent technologies.

Preparing for the future

Singapore



Project Ubin:

Central Bank Digital Money using Distributed Ledger Technology

Focus:

Domestic inter-bank payments

Further applications:

- fixed income securities trading and
- cross border payments using central bank digital currency

Preparing for the future



Ecuador: CBDC that has come and gone

2014: The government of Ecuador announced that the Ecuadorian Central Bank (BCE) would soon begin issuing an electronic money (dinero electrónico).

2015: “Ecuador becomes the first country to roll out its own digital cash.” (dollar denominated central bank deposits)

2017: Ecuador’s National Assembly decides to discontinue the electronic money scheme

The scheme had been little used. Ecuadorians did not trust the government.

Conclusion

Is cash still relevant? It definitely is.

Globally stocks of cash are rising – with few exceptions.
General purpose CBDC still seems a long way off.

But that does not imply that cash is in a safe position.

In payments cash is losing market share.

Payments are a network good. Positive feed-back may lead to fast rise – or fast decline („tipping“).

Networks are no show cases for competition.

It seems reasonable to treat the role of cash as a public policy topic.

Conclusion



Thank you.

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