Johannes Beermann: Back to the roots - cash and its core functions

Remarks by Dr Johannes Beermann, Member of the Executive Board of the Deutsche Bundesbank, at the International Cash Conference, Munich, 10 September 2019.

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1 Introduction

Good morning ladies and gentlemen,

It is a great pleasure to welcome you to this year's International Cash Conference.

As the member of the Executive Board of the Deutsche Bundesbank responsible for cash management, I am particularly delighted to see the active research agenda that all of you are pursuing in the field of cash.

This made it both difficult and easy for us to put together this year's programme. Easy because we had many contributions to choose from, and who doesn't like choice? Difficult because who said that making choices was easy?

I would like to thank all of my colleagues from the Directorate General Cash Management who have helped organise this event or who are taking part as presenters.

Also, I would like to wish a particularly warm welcome to our keynote speakers, Lars Feld and Bill Maurer. We greatly value the insights that you are bringing to this year's conference and I look forward to being part of the discussion with you in the panel soon.

Today's first session especially benefits from the contributions of our guest of honour, De Nederlandsche Bank. The Dutch central bank is one the leading institutions with regard to research in the field of cash management in the Eurosystem and I look forward to hearing more about the various links between research and operational aspects.

No doubt, there is currently a rather active strand of research into distributed ledger technologies and various forms of digital money.

This interest is no longer confined to rather small IT start-ups. Central banks and international organisations are increasingly forming *innovation labs* to better understand how these technologies could be of "use to the greater public".

So far, these endeavours have been largely confined to conceptual proofs of concept and explorative, mostly theoretical considerations.

But they are important, and research into cash is bound to benefit from these insights as well:

• The closing session on Thursday will give us a first glimpse of the neurometrics applied to banknote design and the potentially digital future of cash.

As exciting as these new technologies may be, a key insight that I have taken away from the discussions I have had over the last couple of years is that people care a lot about the coins and banknotes they keep in their pockets.

Cash is something that everyone understands and has a view on.

Research, of course, has to go beyond mere expressions of opinion. Central bankers and researchers in the area of cash need to understand the fundamental drivers of cash circulation

and establish microeconomic evidence on cash usage.

Cash passed the conceptual stage centuries ago. It has been around ever since. Cash is the only legal tender and, as such, it forms the basis for its cashless alternatives.

Going "all cashless" without the backing of a national unit of account is difficult to imagine. There always has to be the option to convert deposits into legal tender and the other way around.

That is why research on cash is at least as relevant as ever. In a way, this means going back to the roots and asking the fundamental questions.

As the title of this year's conference suggests, we are living in the age of payment diversity.

Diversity is actually a concept derived from sociology. It implies that you recognise individual characteristics and allow for the inclusion of a range of people or objects.

Cash has several of those unique characteristics which greatly add to the diversity of existing payment instruments.

First and foremost, cash is money because it fulfills fundamental macroeconomic functions. It acts as a store of value, a medium of exchange and a unit of account.

Let us briefly go through these well-known textbook functions in turn to see what they imply with respect to cash usage.

2 Cash as a store of value

Ladies and gentlemen,

As we will be talking over the next couple of days about cash usage in different countries, allow me to set the scene a little bit for Germany.

Central banks "make money" in quite the literal sense. The physical banknotes we produce are our main output and, as such, straightforward to measure. The value of euro banknotes in circulation is growing. By the end of 2018, total banknote circulation exceeded 1.2 trillion euros, and it is still on the rise.

Just like any other commodity, cash gets around. It crosses borders and switches hands. A considerable chunk leaves the euro area altogether. At the end of the day, about one-quarter of the total value of banknotes in circulation remains in Germany, which is roughly in line with the domestic economy's share of aggregate euro area output.

Of course, households use cash for transactions, but they use it even more so as a store of value. Our estimates for Germany suggest that around three out of four banknotes held domestically end up under the proverbial mattress or – perhaps for greater security – in a safe deposit box.

The relatively high importance of the store-of-value function of cash has remained largely unchanged since the introduction of the euro as legal tender. German households value the existence of a safe and liquid asset.

Cash is especially reliable in that regard, and in an environment of low interest rates, the opportunity costs of holding this asset decrease.

While credit institutions' cash holdings are increasing, reflecting special monetary policy effects, we need to see matters in perspective:

- Banks' additional cash holdings in Germany since 2015 amount to 22 billion euros, or relative to current cumulative net issuance by the Bundesbank, about 3%.
- This leaves 97% of banknotes in circulation for foreign demand, use as a domestic store of value by households or overall domestic transactions demand.

3 Cash as a means of payment

Ladies and gentlemen,

That leads us directly to the second main function of cash, which is making payments.

Cash is unique in that it is the only means of payment which is non-electronic. This limits its typical use to point-of-sale transactions, where cash usage in countries such as Germany, Austria, Spain and Italy continues to be high by international standards.

Evidence for the euro area as a whole suggests that, in 2016, cash payments accounted for more than half of the total value of euro payments at the point of sale. 1

Payment technologies are continuing to evolve. The rise of contactless payments and the socalled stable coins are likely to shake up the relative market shares of payment instruments even further.

Does this mean that households are willing to give up cash as a means of payment altogether?

The empirical evidence I have seen and the conversations I have had do not leave me with that impression.

One reason which frequently comes up is concerns over the protection of personal privacy.

- People want to carry out a certain number of transactions without leaving a trace, making sure businesses and other institutions cannot "connect all of the dots at all times".
- In my view, this has nothing to do with potentially shady activities. I simply think that maintaining a certain level of personal privacy is a basic human desire.

Leaving the numerous and still open questions concerning operational aspects to one side, I therefore do not believe that stable coins such as Libra have the power to crowd out cash altogether any time soon.

Still, and in keeping with the spirit of diversity, I do see potential benefits behind such new payment instruments.

Those relate, in particular, to the segment of person-to-person payments, or P2P transactions. I find it remarkable that cash dominates to such an extent when it comes to payments between individuals, such as in-home services and giving money to relatives, friends, churches or other charity organisations.

Our latest payments study suggests that 93% of the value of all P2P transactions in euro was attributable to cash payments.²

This may also reflect the still fragmented payments landscape in Europe. To date, cash remains the one truly universal means of payment when it comes to P2P transactions in the euro area.

But again, we have to see matters in perspective: the total amount of P2P cash transactions in euro is fairly small, amounting to about 4% of all cash payments in the euro area.

4 Cash as a unit of account

Ladies and gentlemen,

Cash increases the diversity of payment instruments by offering several unique features: it is tactile and does not require any technical equipment.

It is this haptic nature of cash which, in my view, is an important element of ensuring financial inclusion.

Cash as a means of payment is easily understood across the generational divide.

To me, this is closely associated with the third core function of cash, which is serving as a unit of account.

Universally accepted currencies are not a new phenomenon: be it gold during the gold standard, the pound sterling during the Industrial Revolution or the US dollar to this day, all have served as major internationally accepted units of account.

Households value currencies they can count on and, more importantly, count with.

There is arguably an important element of economic education underlying physical legal tender.

We all have grown up playing board games, exchanging and counting paper money with our hands.

Cash bridges generations. When we at the Deutsche Bundesbank open our doors to the general public as part of our efforts to inform people about the tasks we perform within the Eurosystem, the display of actual cash and gold at our stalls attracts visitors both young and old. These physical items serve as the first point of entry into the often abstract world of monetary policy.

But, how is the increasingly widespread use of e-wallets and mobile payment apps impacting on households' financial literacy? Are children still able to grasp the educational aspect of cash in an increasingly digitalised payments landscape?

- After all, there may be parallels to the digital transformation of the reading experience.
 Research suggests that readers retain less information from e-books than from traditional paper books.
- I feel these are relevant questions which deserve further investigation, and I would urge all of you, too, to look into these at future meetings of the International Cash Conference.

5 Conclusion

Ladies and gentlemen,

Money is what money does.

Based on the core functions of money, cash is money.

That is not to say that there cannot and will not be other forms of money. True diversity implies co-existence.

Cash has unique features which point towards its continued high usage in the euro area.

- * As central bankers, it is our task to always maintain the public's trust in euro cash.
- * As researchers, we need to understand the core functions of money in the digital era.

Cash is the natural starting point and the relevant benchmark in comparisons with other payment instruments.

I now look forward to having fruitful discussions with all of you. I hope you have a great time at the conference here in Munich and are able to exchange many valuable insights and ideas.

Thank you.

H. Esselink and L. Hernández (2017), The use of cash by households in the euro area, ECB Occasional Paper Series, No. 201, November 2017.

Deutsche Bundesbank (2018), Payment behaviour in Germany in 2017 – fourth study of the utilisation of cash and cashless payment instruments.

H. Esselink and L. Hernández (2017), The use of cash by households in the euro area, ECB Occasional Paper Series, No. 201, November 2017.