

Jens Weidmann: Opening remarks – "Fourth cash symposium of the Deutsche Bundesbank"

Opening remarks by Dr Jens Weidmann, President of the Deutsche Bundesbank and Chairman of the Board of Directors of the Bank for International Settlements, at the Fourth cash symposium of the Deutsche Bundesbank, Frankfurt am Main, 14 February 2018.

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1. Introduction

Ladies and gentlemen

Good morning and welcome to the Deutsche Bundesbank's fourth cash symposium.

I am delighted that this year, too, our cash symposium has met with such keen interest. Admittedly, we have once again put together a very attractive programme for you, and for that I would like to thank you, Mr Thiele, and, of course, all of my colleagues from Directorate General Cash Management who have helped to organise this event, not to mention all of our guest speakers.

My former colleague from the Bank of England, Mervyn King, mockingly wrote in his book *The End of Alchemy* that, "God may have created the universe, but we mortals created paper money."

And like everything we mortals invent, one could add that paper money also has its advantages and disadvantages. Nowadays, paper money, and cash in general, has to compete with other means of payment. Technological advances have made cashless payments more convenient and efficient. Nevertheless, cash still has an important role to play in today's payments landscape – of that I am absolutely certain.

The euro as a physical currency is an attractive and widely used means of payment, and that will continue to be the case in future. In Germany, approximately three out of every four payments are still settled in cash at the point of sale. Yet despite its affinity to cash, Germany is by no means the spearhead in terms of cash usage in the euro area. In Austria and the southern European countries, the share of cash payments is higher still. It is for this reason that the Governing Council of the ECB has also expressed a clear commitment to cash.

But I am also convinced that the use of cash will change over time – in Germany, too. Other forms of payment, such as cashless payments, will tend to gain in importance. However, these changes are likely to be gradual and they won't happen overnight.

Incidentally, I do not share the fear expressed by some that digital money, which is currently a subject of growing debate, is set to become a serious competitor for cash or bank deposits in the foreseeable future.

Nor am I convinced that central banks should begin issuing digital central bank money in the future. After all, such a step could have very far-reaching implications for the financial sector and thus also for monetary policy.

Nonetheless, current developments in this field are fascinating and are being discussed in depth in central bank circles and by the general public. In my welcome speech, I would therefore like to address the question of whether digital money could potentially supplant money as we know it today.

2. Virtual currencies

For many people, the concept of money is still strongly characterised by their visual perception of banknotes and coins. It is thus no coincidence that the best-known virtual currency is called Bitcoin. The word coin evokes an association with physical money.

In recent times, we have experienced a real Bitcoin hype, yet ultimately, the terms money and currency can only be applied to Bitcoin and the other approximately 1,500 "cryptocurrencies" to a very limited extent.

"Money is as money does" or, more specifically, "money is a matter of functions". These are common descriptions of how money can be categorised. There is broad consensus, however, is that money plays the role of a means of payment, a store of value and a unit of account.

Cryptocurrencies only fulfil these functions to a limited extent – with that in mind, the term crypto token is a better choice of word, which I will use from here on.

To date, Bitcoin and Co have rarely been used as a means of payment. The network effect, which comes to bear in the case of cash, for instance, does not exist for crypto tokens. This is due, not least, to the fact that using them to make a payment is a relatively arduous task as it takes several minutes to make a transaction. This may still be acceptable when buying a car, say, but not when paying for goods at the point of sale.

An important prerequisite for a monetary system to work is that its users have trust in its intrinsic value. In the case of banknotes, a central bank is the issuer of the notes, and this creates confidence. In the case of Bitcoin, an attempt has been made to artificially build trust in the currency by setting an upper limit on total Bitcoin supply and requiring miners to solve complicated mathematical problems.

These computational tasks are becoming more and more complex in order to make it increasingly difficult to create new Bitcoin. In your recently published op-ed for the Frankfurter Allgemeine Sonntagszeitung, you, Mr Thiele, impressively calculated that a Bitcoin transaction consumes – and I quote – as much as 460,000 times more power than a standard credit transfer. This is precisely why Bitcoin mining tends to gravitate towards countries with cheap electricity.

But the increased energy consumption does nothing to increase the stability of Bitcoin. Quite the opposite, in fact: the value of crypto tokens is highly volatile, as we have seen over the past few weeks. Indeed, even amid the market turbulence we have experienced recently, Bitcoin is currently around six times more volatile than the S&P 500, and 13 times more so than gold.

That naturally makes it less than ideal as a means of payment. After all, if you've got a payment instrument that's soaring in value, you'll want to keep it for yourself, and if its value is plummeting, you'll be hard pressed to find any takers. Bitcoin is inefficient, both economically and environmentally.

The price of Bitcoin is gyrating as much as it is because there's no value basis – unlike, say, a gold coin, crypto tokens have no intrinsic value. Nor is there any issuer who uses its assets to guarantee that customers can withdraw their bank deposits in cash on demand, or who stakes its entire reputation on keeping the value of money stable, as is the case with banknotes. In short, crypto tokens are more of a speculative plaything. Buy them and you risk losing some, or perhaps even all of your investment.

A growing chorus of voices, alarmed by the potential losses associated with digital currency, are calling for crypto tokens to be regulated, if not banned outright.

Yet potential losses in value alone do not warrant a ban. In the interests of consumer protection, however, I do think that more information needs to be made available for investors. That is why, for instance, Germany's financial watchdog BaFin has already issued a consumer warning highlighting the risks involved in what are known as initial coin offerings. ICOs, as they are also called, are essentially crowdfunding tools which finance projects by pre-selling digital tokens, in exchange for legal tender, to interested investors.

It is also important to ensure that the existing anti-money laundering provisions are upheld and to prevent crypto tokens from being used to finance terrorism, hence the ongoing revision of the EU Anti-Money Laundering Directive with a view to ensuring that currency exchange platforms and custodian wallet providers apply the same customer due diligence standards as other financial institutions.

That is also the reason why the acting Federal Finance Minister and I, together with our French counterparts, have proposed that the Argentinian presidency of the G20 add this topic to the G20 agenda. Seeing as transactions of this kind are offered worldwide, there's only so much that a national or European regime can achieve.

Potential financial stability risks might also merit regulatory intervention, which is why we need to keep track of the use of crypto tokens in the financial sector. As things stand, the risks are still limited, but that's not to say that things might change if banks begin to invest more in crypto tokens, investors recklessly speculate on digital tokens, or crypto exchanges start granting liquidity facilities. Banks would therefore have to set aside sufficient capital to cover these exposures. Given how risky they are, the capital requirements would undoubtedly be considerable.

We're also a long way from a situation where crypto tokens influence the monetary policy transmission process. One look at their value tells us that they are still a niche phenomenon – yesterday, the value of every single crypto token worldwide came to roughly US\$420 billion. That might sound a lot, but compared to a global money supply of US\$87,000 billion, it's not much. So there's no need for monetary policymakers to fret about policy effectiveness just yet.

Agustín Carstens, General Manager of the Bank for International Settlements (BIS), speaking here in Frankfurt last week, described Bitcoin as "a combination of a bubble, a Ponzi scheme and an environmental disaster". While I wouldn't go that far, I do not see crypto tokens as a compelling alternative to legal tender.

Central banks mandated to preserve price stability and effective banking regulations are what we need for a stable monetary and financial system, not crypto tokens. And we've got both those things in the euro area.

3. Central bank digital currency

One question the Bitcoin hype repeatedly throws up is whether it wouldn't make sense for central banks to issue digital currency of their own. And it is indeed the case that a number of central banks are mulling the idea of launching their own digital currency. One of them, Sweden's Riksbank, is considering whether to issue an "e-krona".

You might be aware that Sweden ranks among the countries where cash usage is declining rapidly, with demand for cash having contracted by 40% since 2008. That, of course, dramatically reduces cash's network effect. At some point, cash usage might fall below a critical threshold.

It's a self-perpetuating downward spiral – as more and more businesses refuse outright to accept payment in cash, banks respond by thinning out their ATM coverage, which in turn reduces the use of cash still further.

Even churches in Sweden are increasingly switching to digital collection plates as more and more churchgoers turn up to services without cash.

And yet cash is presently the only way for private individuals to hold central bank money. All other types of money holdings are based on private money creation.

For Stefan Ingves, Governor of Sweden's Riksbank, developments in the world of cash can be interpreted in two different ways. "Is it the case that the general public no longer wants central bank money? Or is it rather the case that it is only money made of pieces of paper (or cotton) that they no longer wish to hold in an increasingly digitalised world?"¹

Central bank digital currency would undoubtedly satisfy that demand. It would be a substitute for cash.

Some believe that it would even be beneficial. Unlike cash, digital central bank money could bear interest. It would even be possible for the interest rate to be negative if there was no way of turning to cash as an alternative; this would, in effect, do away with the zero lower bound. Digital central bank money would thus increase the room for monetary policy manoeuvre.

Marvin Goodfriend, for instance, who was recently nominated for the position of Governor of the Federal Reserve, spoke on this subject at the Jackson Hole conference in 2016.²

As I already said at the cash symposium two years ago, I am not in favour of abolishing cash for monetary policy reasons as that would be wrong and an entirely disproportionate response to the monetary policy challenges close to the zero lower bound.

Of course, the same goes for introducing digital central bank money with the aim of abolishing cash to enable central banks to enforce negative interest rates across the board.

But digital central bank money has another major catch. It can enter into direct competition with bank deposits – and it can do so much more easily than cash. Commercial banks would possibly then have to offer interest rate mark-ups to stop their customers rolling bank deposits over into digital central bank money. This would cause a further fall in margins in the deposit/lending business, which could have repercussions on financial stability.

However, the biggest threat in terms of financial stability is the possibility of a digital bank run. Of course, the analogue world has seen the odd bank run – an image of long queues forming in front of branches of the UK bank Northern Rock in 2007 springs to mind. But a digital bank run would be different.

In a classic bank run, customers have to find another way of storing the money that they withdraw, and this entails either risk or costs. In a digital bank run, all it takes is a few mouse clicks to transfer savings out of the private financial system and into a central bank account. Customers are less likely to think twice about doing that. It is fairly safe to say that, had such an option been available back then, it would not have been just Northern Rock's customers but also those of other UK banks that would have wanted to place their savings out of harm's way at the central bank just in case, and precisely this action would have completely destabilised the entire banking system.

But perhaps you also know that some critics of our monetary system believe that its Achilles' heel lies in commercial banks' ability to create money, which they consider to be a major cause of damaging credit cycles. In my opinion, however, it would be wrong to fundamentally call banks' business model into question. I am convinced that smart regulation is the best way to deal with risk in the financial system.

Past experience of a one-tier banking system with centralised lending by the central bank is

sobering to say the least. Former centrally planned economies demonstrated that neither the state nor the central bank is necessarily the better banker. The introduction of digital central bank money should therefore be carefully considered.

Incidentally, I am quite sure that a need for crypto tokens in general, and digital central bank money in particular, will not arise in the first place if we at the central bank ensure that the technology behind payment transactions is always up to date.

This is why the Eurosystem is working flat out to ensure that banks will be able to conduct payment transactions in central bank money in real time by the end of the year. The TARGET instant payment system will enable payments to be transferred between individuals in a matter of seconds, all day, every day, regardless of where their accounts are held. This would mean that delivery-versus-payment transactions could be settled in commercial bank money, ie without the buyer or seller having to pay or deliver upfront.

4. Conclusion

The economist John Kenneth Galbraith is credited with the following quote, which I think sums up cash perfectly:

"Money is a singular thing. It ranks with love as man's greatest source of joy. And with death as his greatest source of anxiety."

We needn't fear for the future of euro banknotes and coins. However, it is our duty as Eurosystem central banks and your duty as a player in the cash cycle to always maintain the public's trust in euro cash. We can do this together by continuing to provide the public at all times with the amount of stable-value, high-quality euro banknotes and coins that they need.

Thank you for your attention.

¹ S Ingves (2017), Do we need an e-krona?, Swedish House of Finance, 8 December 2017.

² M Goodfriend (2016), The case for unencumbering interest rate policy at the zero bound, paper presented at the Economic Policy Symposium at Jackson Hole.